

The struggle within: Self-regulation profiles and challenges among health sciences students

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Abstract

Background: Mental health concerns among young adults in Indonesia continue to rise, with university students particularly vulnerable due to increasing responsibilities, developmental transitions, and environmental demands. Self-regulation is recognized as a key contributor to student resilience, yet empirical evidence in this context remains limited. **Objective:** This study examined the self-regulation profile of students at the Faculty of Medicine and Health Sciences, Universitas Jambi, and identified the specific challenges they face in applying self-regulation strategies. **Methods:** Using a descriptive quantitative design, data were collected from 41 students selected through quota sampling. Instruments included the Self-Regulation Scale adapted by Tresnadiani and Taufik (2020) and 12 open-ended questions assessing goal setting, decision making, and perseverance. Quantitative data were analyzed descriptively to categorize levels of self-regulation, while qualitative responses were examined through thematic coding. **Results:** Most respondents (63.4%) displayed a moderate level of self-regulation. Students demonstrated awareness of effective strategies such as prioritization and adapting to sudden changes; however, they struggled to apply these consistently due to internal barriers including procrastination, reduced motivation, and ineffective time management. Although they understood appropriate approaches—such as setting specific goals and establishing priorities—their implementation remained inconsistent, with many students prioritizing personal comfort when facing academic challenges. **Conclusion:** FKIK students possess adequate foundational knowledge of self-regulation but show limited consistency in applying these skills in daily life. Targeted interventions are recommended to help students overcome internal barriers, thereby strengthening self-regulation, resilience, and academic adaptation.

Keywords: Self-regulation; resilience; university students; mental health.

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INTRODUCTION

Mental health difficulties and impaired academic functioning among university students have become a major public health and educational concern worldwide [1,2,3,4]. Self-regulation — the ability to set goals, plan, monitor, and adjust behavior and emotion — is strongly linked to academic outcomes, motivation, and mental well-being [5,6,7,8,9]. In the Indonesian higher-education context, culturally adapted short self-regulation instruments have been developed and used to evaluate student self-regulation (e.g., Tresnadiani & Taufik's Short Self-Regulation Scale, SSR, 2020). However, local data remain limited on the everyday challenges students cite when attempting to apply self-regulation strategies (e.g., goal setting, decision-making, persistence). The present study examines both self-regulation levels measured with the adapted instrument and the themes that students report across a set of open-ended questions about goal setting, decision making, time management, and motivation.

METHODS

This study combined quantitative scoring of a validated short self-regulation scale with a quantitative thematic counting of coded open-ended responses to provide a mixed descriptive account of students' self-regulation. Between August and September 2025 an online questionnaire was distributed to students across programs in the Faculty of Medicine and Health Sciences, Universitas Jambi using quota sampling to reach diverse year levels. The instrument included the Short Self-Regulation Scale (SSR) adapted for Indonesian college students [10] and twelve open-ended prompts that asked participants about barriers to studying, time management, task initiation, strategies for focus, and sources of motivation. After data collection (N = 41), Likert-type items corresponding to the SSR were summed for each respondent and converted to a percentage of the maximum possible score. Categories were defined a priori as Low, Moderate, and High.

For the open-ended items, the researcher team used the coding table present in the supplied spreadsheet from Google Forms to aggregate theme counts. Each occurrence of a theme in a response was counted once per item; counts were then tabulated and converted to percentages of the sample (n = 41). All coding decisions and the coding frame are available in the supplemental coding file. Quantitative data (e.g. self-regulation score on Short Self-Regulation Scale) were analysed by using JASP, while qualitative data (from open-ended prompts) were analysed thematically. The study followed standard ethical practices; responses were anonymized and participation was voluntary.

RESULTS

To explore the self-regulation profile of students in the Faculty of Medicine and Health Sciences (FKIK) at Universitas Jambi, both quantitative and qualitative analyses were conducted. Quantitatively, from the 41 returned questionnaires, descriptive analysis of the SSR-derived scores indicated that the sample predominantly fell within the Moderate self-regulation category. Specifically, six students (14.6%) were classified as Low, twenty-three (56.09%) as Moderate, and twelve (29.3%) as High. The mean percentage of the maximum possible SSR score was 29.07, with scores ranging from 16 to 39. These findings suggest that, in general, FKIK students possess basic knowledge of self-regulation and report applying relevant strategies in their daily lives, although not yet consistently or optimally.

To better understand the reasons behind the inconsistent or suboptimal implementation of self-regulation among FKIK students, it is necessary to first identify the challenges they face in their day-to-day academic routines. Based on the thematic analysis of student responses, the following patterns emerged regarding the obstacles commonly encountered by FKIK students.

Table 1. Challenges commonly encountered by FKIK students

No.	Challenges Encountered	n	%	Sample Quotes
1.	<i>Proses adaptasi</i>	13	31.7%	<i>“Menurut saya tantangannya terdapat pada saya harus menyesuaikan diri pada saat pertama kali masuk kuliah karena sistem perkuliahan yang jauh berbeda dari sekolah”</i>
2.	<i>Tuntutan akademik & non akademik</i>	9	21.9%	<i>“Tugas yang sulit misalnya tugas turun lapangan”</i>
3.	<i>Pelaksanaan perkuliahan dan sistem pembelajaran</i>	9	21.9%	<i>“Jadwal kuliah yang bentrok dan jadwal ujian yang tidak sesuai jadwal membuat kesulitan belajar”</i>
5.	<i>Manajemen diri</i>	8	19.5%	<i>“Harus mengurus semua hal sendiri, dituntut menjadi sebisa mungkin untuk mandiri, beban perkuliahan yang padat”</i>
6.	<i>Mobilisasi dan jarak tempuh ke kampus</i>	4	9.7%	<i>“Jarak yang jauh”</i>
7.	<i>Tantangan pribadi</i>	4	9.7%	<i>“Ekonomi keluarga yang tidak stabil, sehingga saya harus benar-benar bisa mengontrol keuangan saya”</i>

From these data, it can be concluded that the primary challenges students face relate to the process of adaptation whether to academic demands, non-academic expectations, or the learning system itself. This indicates that the main obstacles are not personal problems that are difficult to address individually (such as financial issues or mental health concerns), but rather the everyday learning processes they must navigate as students. More specifically, the following represent the main challenges students experience in managing their daily academic responsibilities.

Table 2. Challenges in managing daily academic responsibilities

No.	Challenges Encountered	n	%	Sample Quotes
1.	<i>Rasa malas dan perilaku menunda</i>	31	75.6%	<i>“Terlalu banyak yang harus dikerjakan sehingga bingung untuk memulai dari yang mana”</i>
2.	<i>Karakteristik tugas</i>	21	51.2%	<i>“Deadline mepet, laprak ditulis tangan, mencari jurnal sulit”</i>
3.	<i>Kondisi fisik, psikologis, dan ekonomi</i>	10	24.4%	<i>“Rasa lelah setelah kuliah”</i>
4.	<i>Distorsi eksternal</i>	9	21.9%	<i>“Ada saja gangguan gangguan kecil seperti film yang saya ingin tonton, gadget, dan lain sebagainya”</i>

5.	<i>Dinamika kelompok</i>	2	4.9%	<i>“Dikarenakan seringnya tugas kelompok hambatannya mungkin dari tidak adanya kerja sama antar teman kelompok”</i>
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When examining these analyses, it becomes evident that the greatest challenges in managing daily responsibilities originate from within the students themselves. These include tendencies toward procrastination and avoidance, as well as difficulties accommodating task complexity and unexpected changes in academic demands. These findings raise an important question: what self-regulatory strategies have students already attempted, and why have these strategies not been sufficient to overcome challenges that fall squarely within the basic expectations of university-level study? The following analysis presents the strategies students reported using.

Table 3. Self-regulation strategies used daily

No.	Strategies Used	n	%	Sample Quotes
1.	<i>Membuat perencanaan jadwal</i>	22	53.6%	<i>“Saya membagi waktu dengan cara membuat daftar kegiatan, seperti jam tersebut saya ada kelas maka saya harus datang setidaknya 30 menit sebelum kelas”</i>
2.	<i>Menentukan skala prioritas</i>	15	36.6%	<i>“Merencanakan prioritas masalah yang lebih penting terlebih dahulu dan kegiatan yang tidak bisa di-back up oleh orang lain lebih di utamakan”</i>
3.	<i>Mencari bantuan</i>	5	12.2%	<i>“Saya berdiskusi dengan teman mengenai pemecahan masalah dari tugas tersebut, apabila tugas berupa tugas individu saya akan berusaha mencari orang terpercaya untuk tempat saya bertanya”</i>
4.	<i>Mengikuti alur tugas/ kegiatan secara fleksibel</i>	4	9.7%	<i>“Tidak ada cara khusus hanya ikut with the flow”</i>
5.	<i>Mengelola kondisi fisik & psikologis</i>	18	4.9%	<i>“Ketika ada tugas saya mencoba langsung mengerjakan, jikalau tidak selesai saya beristirahat sejenak untuk mengumpulkan energi dan memotivasi diri agar lebih semangat”</i>
6.	<i>Mengerjakan banyak tugas dalam satu waktu</i>	1	2.4%	<i>“Saya memanfaatkannya dengan maksimal 1 waktu dapat melakukan beberapa kegiatan sekaligus, terkadang hingga kurang tidur sehari hanya 1-3 jam”</i>

When faced with tasks or challenges perceived as difficult, students commonly relied on the following strategies.

Table 4. Strategies used when the student faced difficult tasks

No.	Strategies Used	n	%	Sample Quotes
1.	<i>Meningkatkan komitmen dan konsentrasi</i>	19	46.3%	<i>“Saya akan menjauhkan dari teman teman saya agar saya tetap fokus pada kerjaan yang harus diselesaikan”</i>
2.	<i>Menenangkan diri</i>	15	36.6%	<i>“Istirahat sebentar untuk merefreshkan pikiran lalu kembali mengerjakan”</i>

3.	Mencari bantuan	5	12.2%	"Saya berdiskusi dengan teman mengenai pemecahan masalah dari tugas tersebut, apabila tugas berupa tugas individu saya akan berusaha mencari orang terpercaya untuk tempat saya bertanya"
5.	Mengerjakan tugas secara bertahap dengan strategi	4	9.8%	"Mencari pemahaman dasar dulu, cari tau bagian kecil dari soal tersebut dan mempelajarinya"
6.	Tidak ada strategi spesifik	1	2.4%	"Tidak ada"

Based on the above analysis, it appears that students generally understand appropriate strategies for managing academic demands, such as creating daily schedules and establishing clear priorities. However, self-regulation encompasses more than scheduling or prioritization; it also involves the processes of goal setting, decision making, and perseverance. The following section provides a more detailed analysis of students' strategies across these three components.

Table 5. Self-regulation strategies used based on self-regulation's aspects

No.	Strategies Used	n	%	Sample Quotes
Goal-setting				
1.	Mempertimbangkan prioritas dan tenggat waktu	27	65.9%	"Prioritas akademik, punya tujuan untuk selalu meningkatkan IP dan IPK, membagi waktu untuk kuliah dan organisasi"
2.	Mempertimbangkan kemampuan dan preferensi diri	23	56%	"Benefit, kesanggupan saya untuk membagi waktu dan menganalisis kegiatan atau jobdesk pada organisasi tersebut yang tidak mengganggu waktu kuliah saya"
3.	Mempertimbangkan dampak atau manfaat	22	53.7%	"Prospek di masa depan, apakah hal tersebut memiliki manfaat yang bisa saya gunakan kedepannya, apakah akan membantu saya belajar dan berkembang darinya, apakah saya senang dalam melakukannya, dan lain sebagainya"
5.	Mempertimbangkan kemampuan dan komitmen diri	8	19.5%	"Mengatur waktu se-realistic mungkin, memahami bagaimana kemampuan diri untuk bisa melakukan semua yang ada di daftar, mengenali kebiasaan yang sebenarnya terjadi saat melakukan aktivitas untuk memprediksi waktu yang dibutuhkan sebenarnya saat melakukan hal tersebut, pahami berapa banyak waktu yang dibutuhkan sebenarnya untuk istirahat"
6.	Mempertimbangkan faktor eksternal (lingkungan)	4	9.7%	"Dari lingkungannya, kadang ada organisasi besar tapi lingkungannya buruk, dan itu pasti berpengaruh pada kita"
Decision-making				
1.	Mengelola distraksi	32	78%	"Saya akan mencari tempat yang jauh dari keramaian untuk menyelesaikan tugas saya"
2.	Menyesuaikan diri dengan tuntutan	29	70.7%	"Mencoba menyesuaikan nya dengan rencana yang sudah ada"
3.	Mengevaluasi dan menyesuaikan ulang strategi	10	24.4%	"Saya biasanya menyesuaikan jadwal ulang dengan menentukan prioritas utama terlebih dahulu, lalu menggeser kegiatan lain agar tetap seimbang"
4.	Melakukan aktivitas lain	6	14.6%	"Memberi jeda untuk istirahat dan terkadang melakukan sedikit olahraga ringan"

5.	<i>Memahami dan menerima keadaan</i>	3	7.3%	<i>"Jika itu hal yang diluar kendali saya maka saya berusaha menerimanya dengan baik"</i>
6.	<i>Bertahan pada strategi atau rencana awal</i>	1	2.4%	<i>"Jika perubahannya sangat drastis, terkadang saya tetap berusaha stick to the plan"</i>
Perseverance				
1.	<i>Melakukan aktivitas lain yang meningkatkan semangat</i>	32	78%	<i>"Melakukan hal-hal yang membuat bahagia baru setelah kembali semangat lanjut untuk belajar"</i>
2.	<i>Memotivasi diri sendiri</i>	32	78%	<i>"Mengingat tujuan awal kuliah, plan pendidikan selanjutnya serta orangtua yang sudah membiayai kuliah"</i>
3.	<i>Meminta bantuan atau dukungan eksternal</i>	6	14.6%	<i>"Saya akan mencoba mencari teman untuk diajak belajar bersama, karena saya lebih mudah belajar jika ada teman"</i>
4.	<i>Membuat strategi baru</i>	2	4.9%	<i>"Mengajak belajar bersama teman, memakai sistem reward jika berhasil menyelesaikan pelajaran"</i>

Drawing on the findings above, in the domain of goal setting, most participants demonstrated appropriate approaches to goal formulation, such as considering their personal abilities and limits, assessing priorities, and evaluating the potential impact or benefits of alternative choices. However, many participants appeared not to employ equally effective strategies in decision making and perseverance.

Decision making, in this context, refers to how individuals determine appropriate alternative actions when confronted with challenges or changes in their academic routines. For example, in situations where class schedules shift unexpectedly or unanticipated demands arise, students are expected to adapt by evaluating the situation and adjusting their planned strategies accordingly. However, based on student responses, most tended to rely only on managing distractions or simply following changes passively, without engaging in a process of evaluating the situation and modifying their strategies. Several students even reported diverting their attention to unrelated activities or resigning themselves to the circumstances.

In terms of perseverance, ideally students should demonstrate consistent effort in adjusting their self-regulation strategies in accordance with evolving challenges or needs. Yet, based on the responses collected, most students focused primarily on fulfilling immediate psychological needs—such as engaging in activities that increase motivation or attempting self-encouragement. Only a small proportion explicitly stated that they would seek new strategies when they experienced a decline in motivation to carry out their responsibilities.

DISCUSSION

The present findings offer a nuanced view of self-regulation among health-science students at Universitas Jambi: while most students possess moderate self-regulatory capacity, there is a sizeable minority who struggle to translate regulatory knowledge into consistent behaviour, consistent with profiles reported internationally [11,12,13,14]. The predominance of internal barriers—particularly procrastination and difficulties with time management—mirrors patterns reported in international literature and meta-analytic syntheses that identify procrastination as a pervasive and robust predictor of poorer academic outcomes [13,14,15,16]. Importantly, the data show that students do not lack awareness of effective strategies: many reports breaking down tasks, prioritizing, and using environmental controls. The gap therefore appears less about knowledge and more about sustained implementation—how to convert intention into action under competing demands.

This suggests three practical directions. First, interventions that target the intention–action gap (for example, implementation intentions, action planning, and micro-goal setting) may help students bridge plans and behaviour, supported by strong empirical and meta-analytic evidence [17,18,19]. Meta-analyses of implementation-intention techniques demonstrate reliable, medium-sized effects on goal attainment and habit initiation. Second, structured habit-building approaches—such as time-blocking, if-then planning, and frequent small-win goals—could reduce the cognitive load required to initiate study sessions and thereby attenuate procrastination [16,20]. Third, the prominence of social and emotional supports in students’ accounts suggests peer-coaching, study partners, or mentor programs could amplify individual strategy use by providing external accountability and modeling, which aligns with prior evidence on social supports and academic persistence [3,21]. At the institutional level, predictable course workloads, clearer deadlines, and supportive scheduling policies (e.g., clustering assessments to reduce overlapping deadlines) may help reduce external pressures that prompt procrastination. Finally, while the present study's sample size and quota sampling limit generalizability, the convergent quantitative and thematic patterns provide actionable insights for curriculum teams, student support services, and faculty development programs. Future research could test targeted SRL interventions using randomized or pre–post designs to evaluate effects on both self-regulation measures and academic outcomes [11,18,19,22].

CONCLUSIONS

The study reveals that health-science students at Universitas Jambi generally possess moderate self-regulatory abilities but experience substantial difficulties in consistently applying these skills, largely due to internal barriers such as procrastination and ineffective time management. Thus far, the challenges faced by FKIK students stem primarily from the process of adapting to the various responsibilities associated with university life, particularly the academic and non-academic demands of their respective departments. To address these challenges, FKIK students are, in general, already capable of employing the necessary self-regulation strategies; however, these strategies are not yet implemented consistently or optimally. Most students understand what needs to be done when managing emerging challenges, such as establishing priority scales and organizing their tasks accordingly. They are also able to formulate specific goals that serve as the basis for determining these priorities. Nevertheless, many students encounter intrapersonal obstacles, including feelings of laziness and tendencies to postpone tasks. They also tend to focus more on maintaining personal comfort when facing difficulties or experiencing reduced motivation in carrying out their responsibilities.

CONFLICT OF INTEREST

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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DECLARATION OF ARTIFICIAL INTELLIGENCE USE

We confirm that all AI-assisted processes were critically reviewed by the authors to ensure the integrity and reliability of the results. The final decisions and interpretations presented in this article were solely made by the authors.

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