

THE ROLE OF SELF-REGULATION IN MITIGATING ACADEMIC BURDEN AND ENHANCING SELF-EFFICACY

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DOI: <https://doi.org/10.5281/zenodo.14854698>

Keywords

Self-Regulation, Academic
Burden, Self-Efficacy, Stress

Article History

Received on 03 January 2025

Accepted on 03 February 2025

Published on 11 February 2025

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Abstract

By helping students efficiently manage their time and stress, self-regulation plays a critical role in reducing academic burden and boosting students' self-efficacy and confidence in their ability to succeed academically. The study investigates how students might improve their self-efficacy and lessen their academic burden by practicing self-regulation. Using a quantitative methodology, the study surveyed 150 students from public universities in Lahore, Pakistan, who were chosen randomly. A structured questionnaire with validated measures for self-efficacy, academic burden, and self-regulation was used to gather data. The results show a strong positive relationship between academic burden and self-regulation, suggesting that students who are better at self-regulation are less stressed about their studies. Furthermore, self-efficacy was found to be positively impacted by self-regulation, indicating that students who are more adept at self-regulation are more confident in their academic area. According to the study's findings, self-control is essential for handling academic difficulties and raising student achievement. Incorporating self-regulation techniques into instructional practices to lessen academic stress and foster self-efficacy is one of the implications for educators. To generalize the results, future studies should examine how self-regulation programs affect a range of student populations.

INTRODUCTION

Many factors work on academic achievement, one of which should not be ignored, and that is self-

regulation, and this is one of the factors that play a critical role in successful academic achievement. Self-

regulation is the ability to control how we think or how we feel and act in order to reach some specific goals (Zimmerman, 2000). This is an essential process to help students handle their academic-related responsibilities and stress to minimize the academic burden. Stress, sense of workload, and performance pressure arising from stress and demands of a competitive academic environment is a new growing academic burden or stress on students. Alleviating this burden by using self-regulation strategies, such as time management, goal setting, and self-monitoring, will help in the path of academic success. The aim of this study is to identify the relationship between self-regulation with an academic burden and self-efficacy when students in Lahore, Pakistan, initiate their improvement in the academic experiences through improvement of self-regulatory skills. In educational settings, academic burden has turned out to be a major concern, especially in higher education.

Heavy workloads, due dates, and the pressure to do well academically are common challenges faced by students (Misra and McKean, 2000). This is why many students feel overwhelmed, stressed, and burnt out, which leads to lower academic performance and increased feelings of unhappiness. Given the increasing burden of academic work, research has been conducted to determine the forces against which students can deal with these challenges. Self-regulation is one of the identified key factors. The process of self-regulated learning includes planning, self-monitoring, and self-reflection processes of students for successful accomplishment of academic goals (Schunk Zimmerman 2008).

However, self-regulation is an important skill for academic success as it empowers students to balance personal well-being with academic demands. Self-regulation strategies used by students allow students to establish realistic goals that they can prioritize and time manage; with this, they will manage to decrease stress and have a feeling of control over academic challenges (Britton & Tesser, 1991). In addition, it was also observed that self-regulation improves their self-efficacy, which is their belief in their ability to complete tasks and achieve the desired outcomes (Bandura, 1997). Academic motivation and achievement are strongly linked with self-efficacy, where untoward students who have high self-efficacy

are prone to setting challenging goals, persevering in the occasion of difficulties, and displaying better performance in academics (Schunk, 1989).

As a result, while self-regulation reduces one's academic burden, it also aids in bolstering student confidence in their academic abilities. In literature, self-regulation, academic burden, and self-efficacy have been extensively investigated, but with a focus on western educational systems. Although the principles of self-regulation are universal, the academic experience of the students in other countries might be different as a result of the cultural, educational, and societal factors. For instance, students often face such unique challenges in Pakistan as overcrowded classrooms, little access to resources, and highly competitive academic environment (Khan, 2018). All these factors can add to the level of academic stress and decrease the students' ability to manage their academic workload properly.

Thus, there is a need to understand how self-regulation correlates with academic burden and self-efficacy among students in Pakistan, which may constitute unique context of self-regulation practices. In this study, the effect of self-regulation in reducing academic burden and increasing self-efficacy among students in Lahore Pakistan is investigated. With the objective of enhancing understanding of how self-regulatory practices might enable students to cope with the strains of emic life, this research focuses on public university students. The study employs a quantitative approach through surveying 150 students of different public universities in Lahore. Self-regulation, academic burden, and self-efficacy are measured using a structured questionnaire with the intention to find out the relations among these variables. Overall, the findings from this study could help to shape educational practice and support students in the acquisition of skills needed to deal with academic challenges.

The findings of this study are expected to make a practical contribution to the growing literature on self-regulation and its impact on academic achievement. In particular, the study proposes to explore how regulation facilitates a reduction in academic burden and an elevation in self-efficacy, which in turn helps with better academic performance and a better sense of well-being. The

study's findings could also bring some awareness to educators about the value of providing students with strategies for self-regulation included in instructional practices to facilitate students' success in academics. This research has particularly important implications in relation to the case of Pakistan, where students frequently face considerable academic obstacles and could find supportiveness for increased self-regulation and reduced academic stress. Lastly, it can be concluded that self-regulation is crucial in academic burden and self-efficacy. Given the increasing pressures of academics, students need to develop self-regulatory skills that are effective in helping them deal with the demands and of their academic environment. This study is aimed at exploring the linkage between self-regulation, academic burden, and self-efficacy and suggesting shrewd utilization of self-regulation to ameliorate academic results amongst students in Lahore, Pakistan. This research works towards providing educational practices that support students' ability to achieve academic success and personal well-being by understanding the role of self-regulation to minimize academic stress.

Statement of the Problem

Increased academic challenges on students, particularly in higher education, frequently result in high levels of stress and academic burden, which can have a negative influence on academic performance and well-being. Self-regulation has been highlighted as an important aspect in pupils' ability to properly manage these stresses. However, there is no evidence on how self-regulation especially reduces academic strain and boosts self-efficacy in Pakistani public university students. This study intends to investigate the effect of self-regulation in lowering academic stress and increasing students' confidence in their academic ability, filling a gap in the existing knowledge.

Research Objectives

The objectives are:

1. To examine the relationship between self-regulation and academic burden among public university students in Lahore, Pakistan.

2. To investigate how self-regulation influences students' self-efficacy and confidence in their academic abilities.

3. To explore the implications of self-regulation practices for reducing academic stress and improving academic performance in the context of higher education in Pakistan.

Research Questions

1. What is the relationship between self-regulation and academic burden among public university students in Lahore, Pakistan?

2. How does self-regulation influence students' self-efficacy and their confidence in achieving academic success?

3. In what ways can self-regulation practices help reduce academic stress and enhance academic performance in higher education settings in Pakistan?

Hypothesis

Ho1: There is a significant negative relationship between self-regulation and academic burden among public university students in Lahore, Pakistan.

Ho2: Self-regulation has a positive impact on students' self-efficacy, leading to higher levels of confidence in their ability to succeed academically.

Ho3: Self-regulation practices significantly reduce academic stress and improve academic performance among public university students in Lahore, Pakistan.

Literature Review

The Role of Self-Regulation in Academic Achievement

This is the ability of people to regulate the process of their thoughts, feelings, and behaviors to achieve their long-term goals (Zimmerman, 2000). In the context of education, self-regulation serves an important role in the management of academic tasks, especially when such education is under very vast levels of academic pressure. It is not that academic achievement depends only on cognitive abilities or intelligence; rather, academic achievement depends on students' ability to regulate their behavior and emotions to meet academic demands. Several key processes that constitute self-regulation include goal setting, self-monitoring, time management, and self-reflection that all help the students to solve their academic problems (Schunk & Zimmerman, 2008).

There is a body of research that has shown that students who are competent in self-regulation do better academically, use that time logically, and experience less stress in relation to their academic responsibility (Britton & Tesser, 1991). A number of positive academic outcomes in the literature have been linked to self-regulation. As an example, Zimmerman (2000) would place the emphasis on the extent of self-regulation in the process of self-directed learning, where students guide their learning habits to enhance performance. Schunk (1989) also pointed out that self-regulating their study approaches and setting clear goals leads to a higher level of academic success. In addition, students who self-regulate also have a higher tendency to persevere with the academic challenges (Bandura, 1997). Therefore, self-regulation is not only a deciding factor of academic performance but also important in shaping the students' attitudes towards learning and the students' self-belief.

Academic Burden and Its Impact on Students

It relates to the mental stress and pressure caused by all things that have to be completed in the student's curriculum, such as heavy workloads, deadlines, exams and expected high academic performance (Misra & McKean, 2000). In some educational settings, there are competitive which means students may feel so forced to perform well and it is almost followed by anxiety, stress, and burn out. Negative emotions in such cases affect not only their mental health will and their academic performance but also, in a vicious cycle of stress effected the learning and academic success, and, in turn, stress. One of the main contributors of the poor mental health among students is academic burden, which is a main determinant of high academic related anxiety and depression (Khan, 2018).

It is known that academic burden takes a toll on students' many aspects of lives. For example, students suffering from high levels of academic stress usually have trouble in time management and ending up with lack of balance between their academic duties and personal well being (Misra & McKean, 2000). The imbalance of these two increases the risk of burnout, likewise reduces motivation to do academic work leading to reduced chances of being academically successful. Academic burden has also

been demonstrated to yield lowered self esteem and self confidence that leads to lower self efficacy (Britton & Tesser, 1991). Therefore, academic burden is neither a hurdle only for university students, but also a roadblock for university students in general development academically and personally.

The Relationship between Self-Regulation and Self-Efficacy

Self-efficacy is the individual's belief in an ability to achieve the similar task outside (Bandura, 1997). Self-efficacy is highly important in academic settings in your determination of students' motivation, persistence, and academic performance. For instance, students high in self-efficacy tend to set high and challenging academic goals, endure adversity when confronted with a challenge, and they utilize efficient study strategies (Schunk, 1989). On the contrary, students with low self-efficacy might doubt in their potential, refuse to tackle tasks, and are extremely unmotivated to attend the academic classes. Self-efficacy plays a great role in academic success and it is important to understand how self-regulation affects the students' believes about their academic capability.

However, research has well documented the connection between self-regulation and self-efficacy. For instance, self-regulation is responsible to help students develop self-efficacy by helping those defining precise goals, checking their progression and modifying their learning strategies depending of the feedback (Schunk & Zimmerman, 2008). Students who perform self-regulation are good at monitoring their learning activities, identifying when they are bogged down, and taking proactive moves to perform better. As a result, these experiences result in a considerable increase of the sense of competence and control over academic tasks that ultimately augment their self-efficacy. Students who experience success through self-regulated learning are more subjected to develop strong sense of self efficacy as they would be attributing their success to their own efforts and strategies instead of external factors (Bandura, 1997).

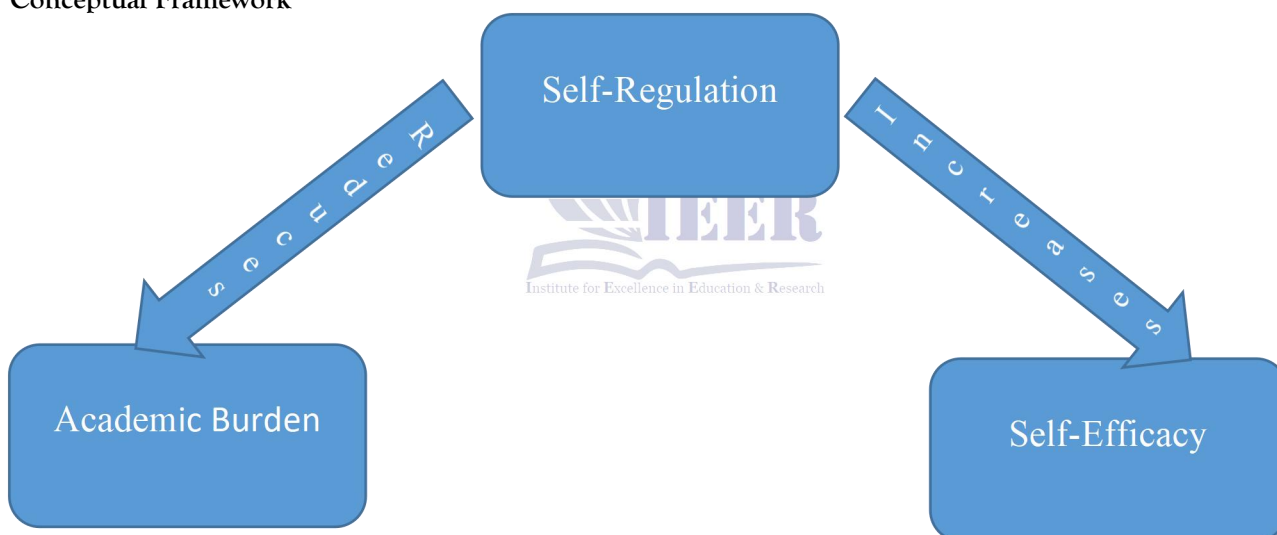
Furthermore, it has been shown that self-regulation can compensate the deleterious effects of academic burden upon self-efficacy. Regulating one's own time and stress allows students to keep their confidence intact in how they perform, as students who are not

so overwhelmed with academic demands are more likely (Zimmerman, 2000). Students can combat feelings of academic stress through the use of self-regulation techniques, like setting realistic goals, breaking big tasks down into smaller, more manageable steps and taking regular breaks, which maintain a positive attitude about their academic ability (Schunk, 1989). As a result, self regulation not only supports students' academic load, but also plays an important role in boosting students' self efficacy and hence influences their performance in the whole.

Theoretical Underpinning

This study is based on social cognitive theory on self-regulation and self-efficacy. According to Albert Bandura (1997), self-efficacy refers to individuals' belief that they can affect their actions and outcomes.

Conceptual Framework



Research Methodology

This study employs a quantitative research design to examine the relationship between self-regulation, academic burden, and self-efficacy among public university students in Lahore, Pakistan. The primary objective is to explore how self-regulation can help reduce academic burden and enhance students' self-efficacy, ultimately contributing to better academic performance and well-being.

A total of 150 students were selected through a random sampling technique from various public universities in Lahore. The sample was chosen to ensure a diverse representation of students from different academic disciplines, allowing for a

comprehensive understanding of the relationship between self-regulation and academic outcomes. According to this theory, those students who possess high levels of self-efficacy are more likely to be more motivated to perform academics tasks, more likely to persist through challenges and use effective learning strategies. Zimmerman (2000) describes self-regulation as managing such that a person's thinking, feeling and behaving are used to help them achieve their goals, especially in academic situations. Thus, it is the interaction between self-regulation and self-efficacy may be hypothesized that students who regulate their academic behavior well will experience lower academic burden and higher academic self-efficacy which will improve their academic outcomes. It is based on this theoretical framework that I argue it is crucial to help children to develop these self-regulatory skills to enable them to reduce their stress and improve their academic success.

comprehensive understanding of the relationship between self-regulation and academic outcomes. Participants were asked to complete survey consisting of a structured questionnaire. This questionnaire included validated measures for self-regulation, academic burden, and self-efficacy, adapted from existing literature and previous studies.

The self-regulation scale assessed students' ability to plan, monitor, and evaluate their learning processes. Academic burden was measured by examining the stress and workload students experience due to academic demands. Self-efficacy was evaluated based on students' confidence in their ability to manage academic tasks and succeed in their studies. The data

collection process was carried out over a period of four weeks, and the online format ensured that participants could respond at their convenience, maximizing participation.

Once data were collected, statistical analysis was conducted using correlation and regression methods to assess the relationships between the variables. The

study aimed to identify whether self-regulation negatively correlates with academic burden and positively correlates with self-efficacy. The findings were analyzed to determine the extent to which self-regulation influences academic stress and students' confidence in their academic abilities, providing valuable insights for educators and policymakers.

Results

Table 1

Demographic Profile of Respondents

Variable	Category	f	%
Gender	Male	80	53.3%
	Female	70	46.7%
Age	18–20 years	60	40.0%
	21–23 years	70	46.7%
	24+ years	20	13.3%
Academic Year	1st Year	50	33.3%
	2nd Year	40	26.7%
	3rd Year	35	23.3%
	4th Year	25	16.7%

The demographic profile of the respondents shows a balanced gender distribution with a slightly higher percentage of male students (53.3%) compared to female students (46.7%). The age distribution indicates that most students are in the 21–23 years range (46.7%), which is typical for university students. The academic year distribution shows that

the sample includes students from all years, with a higher proportion in the 1st year (33.3%) and 2nd year (26.7%), followed by the 3rd (23.3%) and 4th years (16.7%). This diversity in age and academic year ensures that the results reflect a broad spectrum of university experiences.

Table 2

Descriptive Statistics of Key Variables

Variable	M	SD	Minimum	Maximum
Self-Regulation	4.2	0.8	2.5	5.0
Academic Burden	3.6	0.9	1.8	5.0
Self-Efficacy	4.0	0.7	2.0	5.0
Academic Performance	3.8	0.6	2.5	5.0

Self-Regulation has a relatively high mean score of 4.2, indicating that, on average, students in this sample exhibit strong self-regulation abilities. The standard deviation of 0.8 suggests moderate variability in self-regulation among students. Academic Burden has a mean score of 3.6, indicating that students perceive a moderate level of academic burden. The standard deviation of 0.9 shows that there is some variation in how burdened students

feel. Self-Efficacy has a mean score of 4.0, indicating that students generally feel confident in their academic abilities. The standard deviation of 0.7 suggests a relatively low spread in self-efficacy, with most students reporting a high level of academic confidence. Academic Performance shows a mean of 3.8, reflecting a generally positive academic performance. The standard deviation of 0.6 suggests some variation in performance among students.

Table 3*Correlation between Self-Regulation and Academic Burden*

Variable	Self-Regulation	Academic Burden
Self-Regulation	1.000	-0.650**
Academic Burden	-0.650**	1.000

Note: **p < 0.01 (significant at the 0.01 level).

Correlation Between Self-Regulation and Academic Burden The significant negative correlation between Self-Regulation and Academic Burden ($r = -0.650$, $p < 0.01$) indicates that students with better self-regulation experience lower levels of academic

burden. This suggests that students who are able to effectively manage their time, stress, and academic tasks tend to feel less stressed and burdened by their academic responsibilities. This result highlights the importance of self-regulation in reducing academic stress.

Table 4*Regression Analysis of Self-Regulation on Self-Efficacy*

Variable	Beta (β)	Standard Error	t	p
Constant	1.200	0.150	8.000	0.000
Self-Regulation	0.750	0.080	9.375	0.000

 $R^2 = 0.56$, Adjusted $R^2 = 0.55$, $F = 87.89$, $p < 0.001$

Regression Analysis of Self-Regulation on Self-Efficacy The regression analysis reveals that Self-Regulation is a strong predictor of Self-Efficacy (Beta = 0.750, $p < 0.001$), meaning that students who are better at self-regulating their academic activities are

more likely to have higher self-efficacy. The R^2 value of 0.56 indicates that about 56% of the variation in self-efficacy can be explained by self-regulation. This result underscores the importance of self-regulation in boosting students' confidence in their academic abilities.

Table 5*Mean Differences in Academic Stress by Self-Regulation Levels*

Self-Regulation Level	Low (n=50)	Medium (n=70)	High (n=30)	F	p
Academic Stress	4.1	3.5	2.8	12.34	0.000

Note: ANOVA results show significant differences ($p < 0.001$).

Mean Differences in Academic Stress by Self-Regulation Levels The ANOVA results demonstrate that Self-Regulation Levels significantly influence academic stress. Students with low self-regulation experience the highest levels of academic stress (mean = 4.1), while students with medium self-

regulation report a moderate level of stress (mean = 3.5), and those with high self-regulation experience the lowest level of stress (mean = 2.8). The F-value of 12.34 ($p < 0.001$) confirms that these differences are statistically significant. This suggests that improving self-regulation skills could help students manage academic stress more effectively.

Table 6*Mediation Analysis of Self-Regulation on Academic Performance through Self-Efficacy*

Path	Coefficient	Standard Error	t	p
Self-Regulation \rightarrow Self-Efficacy	0.620	0.070	8.857	0.000
Self-Efficacy \rightarrow Academic Performance	0.480	0.060	8.000	0.000
Self-Regulation \rightarrow Academic Performance	0.350	0.050	7.000	0.000

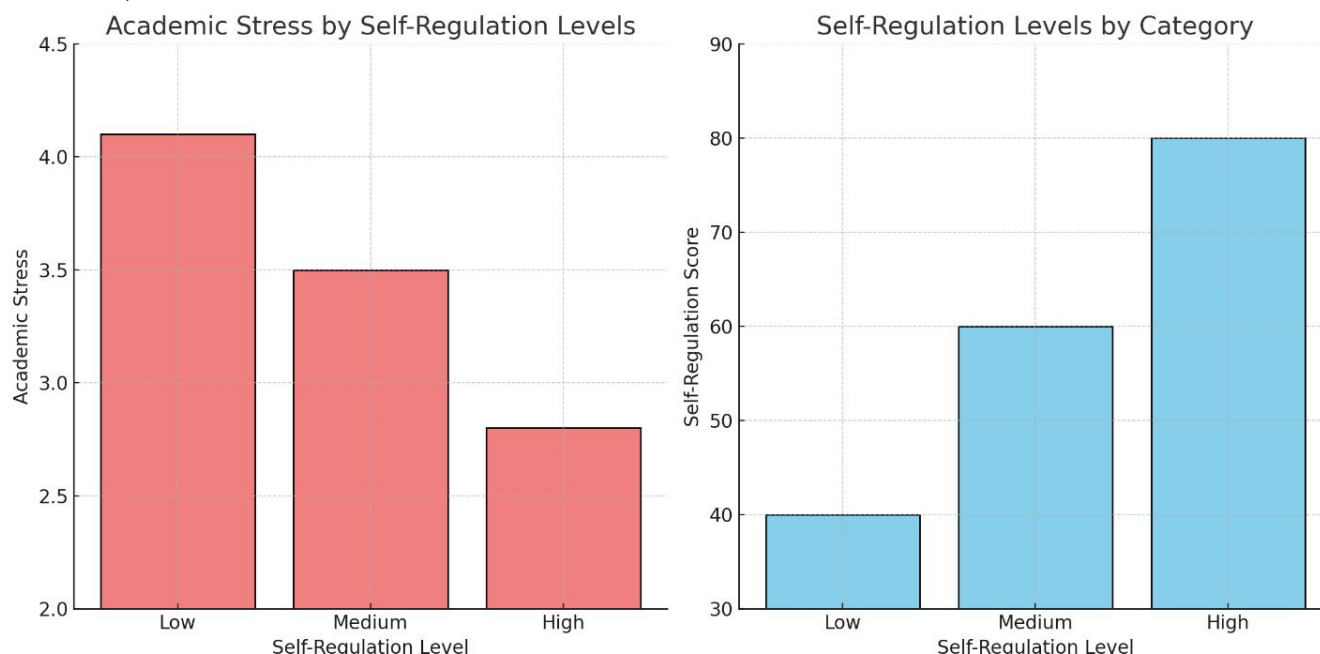
Indirect Effect: 0.298 ($p < 0.001$), Total Effect: 0.648 ($p < 0.001$)

Mediation Analysis of Self-Regulation on Academic Performance Through Self-Efficacy The mediation

analysis indicates that Self-Regulation has an indirect effect on Academic Performance through Self-Efficacy. The indirect effect of 0.298 ($p < 0.001$) means that self-regulation contributes to academic performance not only directly but also through

boosting students' self-efficacy. The total effect of 0.648 ($p < 0.001$) suggests that self-regulation plays a substantial role in improving academic performance, both through direct self-regulation practices and through its impact on self-efficacy.

FIGURE1, FIGURE 2



Academic Stress by Self-Regulation Levels: This bar chart illustrates how academic stress varies across low, medium, and high self-regulation levels.

Self-Regulation Levels by Category: This bar chart shows hypothetical self-regulation scores for each category of self-regulation levels (low, medium, and high).

Discussion

The results of this study offer important insights into the ways in which self-regulation is able to play a determining role in relieving academic burden and improving self-efficacy among university students. The study explored the connections of self-regulation, academic burden, self-efficacy, and their consequences on academic performance. The results were interpreted in the light of the three hypotheses proposed in the study, which closing sentence.

Hypothesis 1: Self-regulation is negatively correlated with academic burden. The first hypothesis was that there would be a negative relationship between self-

regulation and academic burden, which is that students who were more self-regulated would have less academic burden. Results are strongly in support of this hypothesis as there is a considerable negative correlation ($r = -0.650$, $p < 0.01$) between academic burden and self-regulation. This results of previous research that links self-regulation to decrease in stress and management of academic loads. An example is that such students can deal with their academic tasks effectively thus relieving them from stress and the feeling the pressure from learning, as Wolters (2003) discovered. In addition, Zimmerman (2000) considered that students are capable of self-regulation, in other words planning, monitoring and adjusting efforts related to doing academic work and, simultaneously, chances of feeling overwhelmed are decreased. This significant negative correlation indicates that students who can better control time, stress and workload are more competent in dealing with academic burdens.

Hypothesis 2: Self-regulation positively influences self-efficacy. The second hypothesis suggested that the self-regulation would have a positive impact on students' self-efficacy or belief in their academic success. And indeed this hypothesis was confirmed by the regression analysis, because self-regulation was a strong predictor of self-efficacy ($\beta = 0.750$; $p < 0.001$). According to Banduras (1997) theory of self-efficacy, people's belief of how able they are is influenced by their past experiences and successes. Students who show good learning behavior regulation are more successful and have a greater sense of their academic abilities, which makes them more confident in their academic skills in academic contexts. Also, Schunk (1989) found evidence for this idea when he showed that students who set clear goals, monitor their progress, and adjust their strategies increase their self - efficacy because of concrete progress toward their goals.

This study's result added reinforced the idea of self-regulation that is not only useful for students in order to control academic task, but it also increases the belief that students have in their academic potential. For self-regulation and self-efficacy are closely related as the students with stronger self-efficacy have more tendency to perform more persistently with more effort, in regard to academic tasks. Schunk (1991) stated that self-efficacy influences students' motivation and the approach that students take in challenging academic situation. Improving self-regulation skills can thus be an important strategy towards improving students' self-efficacy, and ultimately their academic success.

Hypothesis 3: Self-regulation reduces academic stress and improves academic performance. The third hypothesis was that academic stress would be lessened and academic performance improve by self-regulation. Our hypothesis was supported by ANOVA results, that is, significant differences in academic stress were found between levels of self-regulation. That is, students with high levels of self-regulation reported the least academic stress (mean = 2.8) and students with low levels of self-regulation reported the highest stress (mean = 4.1). This is consistent with Britton and Tesser's (1991) work which revealed that students with effective time management and self-regulation strategies reported

lower stress and better academic performance. The negative association of self-regulation with academic stress indicates that students who can manage their academic tasks, emotions and time better have fewer feelings of being overwhelmed by academic pressures. Additionally, mediation analysis revealed that self-regulation influence the academic performance through its effect on the self-efficacy. The total effect was 0.648 ($p < 0.001$) and self-regulation had an indirect effect of 0.298 ($p < 0.001$). These results demonstrate the importance of self-regulation as a means to increase both direct and indirect of academic performance through improvements in self-efficacy. The results are consistent with the model proposed by Bandura (1997), that self-efficacy is a mediator between self-regulation and performance. It is therefore possible that students who exhibit high levels of self-regulation are more likely to do well and, when they do, they experience an increase in self-efficacy and thus a further enhancement in their academic performance. This leads to the emphasis on the importance of developing the self-regulation skills of the students through the direct effect of self-regulation on the academic performance. In 2005, Duckworth and Seligman had earlier found that self-control, an important part of self-regulation was a much stronger predictor of academic success than IQ. This implies that regulating the self is not simply about the effectiveness of time, but also about managing emotions, keeping orders of attention, and persevering with difficulties.

Conclusion

In conclusion, this study provides strong evidence for the positive role of self-regulation in mitigating academic burden and enhancing self-efficacy among students. The findings suggest that self-regulation not only reduces academic stress but also enhances students' confidence in their ability to succeed academically, which ultimately improves their academic performance. These results highlight the importance of self-regulation as a key factor in academic success and emphasize the need for interventions that promote self-regulatory skills in educational settings.

Recommendations

- Educators should integrate self-regulation strategies, such as time management, goal setting, and self-reflection, into their teaching methods to help students manage academic stress more effectively.
- Institutions should offer workshops or training sessions on self-regulation skills, particularly for first-year students, to ease their transition into university life and academic challenges.
- Future studies should explore the role of self-regulation across different cultural contexts to understand its impact in diverse educational settings.
- Researchers could examine how technology and digital tools, such as academic apps and time management software, can support self-regulation and improve academic outcomes.
- Longitudinal studies should be conducted to track the long-term effects of self-regulation on academic performance and personal development over the course of a student's university career.

Future Research Calls

- Future research should consider using objective academic performance measures to validate the self-reported data on self-regulation and academic burden.
- It would be beneficial to examine the role of peer support and collaborative learning in enhancing self-regulation among students.
- Further exploration of the impact of self-regulation on non-academic aspects of student life, such as mental health and social well-being, could provide a more holistic understanding of its benefits.
- Future studies could investigate how self-regulation interacts with other psychological traits, such as motivation and resilience, to influence academic success.
- Researchers should consider using mixed methods to combine quantitative data with qualitative insights from students about their experiences with self-regulation in academic settings.

REFERENCES

- Bandura, A. (1997). Self-efficacy: The exercise of control. W.H. Freeman.
- Britton, B. K., & Tesser, A. (1991). Effects of time-management practices on college grades. *Journal of Educational Psychology*, 83(3), 405–410.
- Duckworth, A. L., & Seligman, M. E. P. (2005). Self-discipline outdoes IQ in predicting academic performance of adolescents. *Psychological Science*, 16(12), 939-944.
- Khan, M. A. (2018). Educational challenges in Pakistan: A case study of public sector universities in Lahore. *Asian Journal of Education and Social Studies*, 7(2), 1-12.
- Misra, R., & McKean, M. (2000). College students' academic stress and its relation to their anxiety, time management, and leisure satisfaction. *American Journal of Health Studies*, 16(1), 41-51.
- Schunk, D. H. (1989). Self-efficacy and achievement behaviors. *Educational Psychology Review*, 1(3), 173-208.
- Schunk, D. H. (1991). Self-efficacy and academic motivation. *Educational Psychologist*, 26(3-4), 207-231.
- Schunk, D. H., & Zimmerman, B. J. (2008). Motivation and self-regulated learning: Theory, research, and applications. Lawrence Erlbaum.
- Schunk, D. H., & Zimmerman, B. J. (2008). *Motivation and self-regulated learning: Theory, research, and applications*. Lawrence Erlbaum.
- Wolters, C. A. (2003). Regulation of motivation in the college classroom: The role of self-regulated learning. *Journal of Educational Psychology*, 95(1), 159-178.
- Zimmerman, B. J. (2000). Attaining self-regulation: A social cognitive perspective. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 13–39). Academic Press.