

Teachers' Learning Reinforcement: Effects on Students' Motivation, Self Efficacy and Academic Performance

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Abstract

Teachers play an important role in shaping the educational experiences and achievements of students. As education continues to evolve, it is essential to explore innovative approaches that can enhance teaching effectiveness and improve student outcomes. This study was conducted to determine the teachers' learning reinforcement and its effects to student's motivation, self-efficacy and academic performance. A total of thirty five (35) classroom teachers and two hundred sixty (262) Criminology students of Southern Capital Colleges participated in the study during the academic year 2022-2023. Weighted Mean, Standard Deviation, Frequency Count and Percentage, and Spearman Rho Correlation Coefficient were the statistical tools used in the study. The teachers consistently employed various reinforcement strategies, demonstrating their commitment to supporting students' educational experiences. Students exhibited positive self-efficacy beliefs, indicating confidence in their abilities to succeed and overcome challenges. It also displayed satisfactory levels of motivation, showing a genuine interest in challenging course content and a focus on deep understanding. Furthermore, there were significant relationships between teachers' learning reinforcement and students' self-efficacy, motivation, and academic performance. Effective learning reinforcement positively influenced students' beliefs in their abilities, motivating them to persist and excel in their studies. An emphasis on the importance of implementing effective learning reinforcement in educational settings is paramount to enhance students' educational experiences and promote academic success.

Keywords: *learning reinforcement, academic performance, self-efficacy, and motivation*

Introduction

In the realm of education, the relationship between teachers and students is fundamental to the learning process. Teachers play an essential role not only in imparting knowledge but also in shaping students' attitudes, motivations, and academic outcomes. Central to this dynamic is the concept of learning reinforcement, which encompasses the strategies and techniques employed by teachers to solidify and enhance students' learning experiences. The effectiveness of teaching practices in reinforcing learning has been a subject of extensive research and discourse in educational psychology and pedagogy. Understanding how teachers reinforce learning and its impact on students' motivation, self-efficacy, and academic performance holds significant implications for educational policy, curriculum development, and instructional design.

Motivation, defined as the inner drive that initiates, guides, and sustains behaviour toward achieving goals, is a critical determinant of students' engagement and persistence in learning activities (Filgona et al., 2020). Teachers' reinforcement strategies have the potential to influence students' motivation positively by creating a supportive and stimulating learning environment that fosters intrinsic interest and a sense of competence. Self-efficacy, another key construct in educational psychology, refers to individuals' beliefs in their ability to successfully perform tasks and attain desired outcomes (Johnson, 2017). Teachers' reinforcement practices can contribute to the development of students' self-efficacy by providing constructive feedback, scaffolding learning tasks, and fostering a growth mind-set that promotes effort and resilience in the face of challenges.

Furthermore, academic performance, often measured by grades or standardized test scores, reflects the culmination of students' learning experiences and achievements within educational settings (Shahjahan et al., 2021). Effective learning reinforcement by teachers has been linked to improved academic performance through the consolidation of knowledge, the development of critical thinking skills, and the cultivation of a positive learning disposition. Despite the theoretical importance and practical relevance of understanding the effects of teachers' learning reinforcement on students' motivation, self-efficacy, and academic performance, there remains a need for comprehensive empirical research in this area. Existing studies have provided valuable insights into specific aspects of learning reinforcement and its outcomes, but a more integrated and nuanced understanding of the underlying mechanisms and contextual factors is essential for informing evidence-based educational practices.

Teachers' learning reinforcement encompasses deliberate strategies aimed at promoting and strengthening desired behaviours and skills within the classroom. These strategies can include the use of positive feedback, rewards, recognition, goal-setting, and scaffolding techniques. By implementing such techniques, teachers create a supportive learning environment that nurtures students' motivation, self-efficacy, and, consequently, their academic performance (Mitra, 2008; Pond & Rehan, 1997). Hattie and Timperley (2007) emphasized the significance of feedback as an effective form of reinforcement, highlighting its positive influence on student achievement. On the other hand, Pajares and Miller (1994) posited that self-efficacy beliefs and academic performance, revealing a strong association between self-efficacy and students' willingness to engage in challenging tasks.

In the current educational landscape, teachers during pandemic face numerous challenges and complexities in their role as educators. Their teaching methods has led to a rapid transition to online or hybrid learning models. It placed additional burdens on teachers as they navigate new technologies, adapt instructional strategies, and ensure students remain engaged and motivated in virtual learning environments. Also, teachers are increasingly being recognized as facilitators of not only academic learning but also the socio-emotional development of students. They promote students' motivation, self-efficacy, and academic performance. However, meeting these expectations requires continuous professional growth and the implementation of effective strategies that reinforce positive behaviours and foster a supportive learning environment.

Additionally, the diverse student population in classrooms today presents unique challenges for teachers. They encounter students with varying learning styles, cultural backgrounds, and individual needs. Teachers navigate these diversities and employ strategies that address the specific requirements of each student, fostering inclusivity and ensuring equitable educational opportunities for all. By examining the impact of reinforcement strategies, the study can provide valuable insights into effective approaches that teachers can incorporate into their professional development. Understanding the link between teachers' learning reinforcement and student outcomes can equip teachers with evidence-based tools and strategies to enhance their instructional practices, improve student engagement and achievement, and create supportive learning environments that promote the overall well-being of students.

Conceptual Framework

Figure 1 presents the conceptual framework that illustrates the relationships among the key variables under investigation. The study focused on examining the effects of teachers' learning reinforcements the independent variable on students' academic performance and motivation and self- efficacy as the dependent variables. The outcome of the study is the development of an effective learning toolkit that can be employed to enhance student learning experiences. The first box in the schema represents the independent variable, which encompasses teachers' reinforcement strategies. This variable encompasses a range of techniques that teachers employ in the classroom to reinforce and strengthen desired behaviours and skills among their students. These strategies include positive feedback, rewards, recognition, goal-setting, and scaffolding techniques, among others. The independent variable, teachers' reinforcement strategies, serves as the focus of the study, exploring how different approaches impact student outcomes.

Further, academic performance refers to the measurable outcomes of students' achievements, such as grades or test scores. It serves as an important indicator of students' knowledge acquisition and mastery of the subject matter. Students' motivation increment refers to the increase in their intrinsic or extrinsic motivation levels as a result of the teachers' reinforcement strategies. This includes intrinsic, extrinsic, good

orientation, task value, test anxiety performance and self-efficacy. Higher motivation levels are associated with increased engagement, effort, and persistence in learning activities. By implementing reinforcement techniques that provide support, encouragement, and recognition, teachers can enhance students' self-efficacy, foster a positive learning environment, and ultimately contribute to improved academic performance and increased motivation.

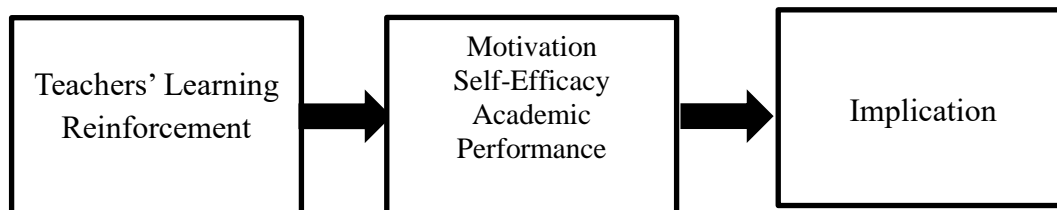


Figure 1. Schema of the Study

Methods and Materials

The descriptive-correlational research method, utilizing a questionnaire checklist to collect data. The descriptive-correlational method allow to analyse and interpret the existing data, providing valuable insights into the relationships between variables of interest. By utilizing a questionnaire checklist, the study gathered information about the specific learning reinforcement employed by teachers and their impact on student motivation, self-efficacy, and academic performance. The findings derived from this method contributed to a deeper understanding of the dynamics between teachers' learning reinforcement and student outcomes, aiding in the development of evidence-based practices for enhancing educational effectiveness. An adapted and modified from the study of (Davidovitch &Yavich, 2008) were used evaluate teachers' learning reinforcement strategies. On the other hand, study of Weist (2019) was employed to measure the students' motivation and self-efficacy. The four (4) point likert scale were used to score out the responses of the respondents were 4 as "strongly agree," 3 to "agree," 2 to "disagree," and 1 to "strongly disagree."

Results and Discussions

The table 1 presents the learning reinforcement used by the teachers. Across various indicators such as actively seeking positive events, using positive affirmations, providing constructive correction, employing creative reinforcement methods, giving positive feedback, and promoting healthy development, the responses predominantly indicate strong agreement or very frequent utilization. This suggests a consistent and proactive approach by teachers in reinforcing learning, fostering positive relationships, and addressing behavioural issues within the classroom setting. The high mean scores indicate a strong endorsement of these strategies among the surveyed teachers, reflecting a concerted effort towards creating a supportive and conducive learning environment.

This implies that positive reinforcement and supportive teaching practices enhances student learning outcomes and promoting a positive classroom climate. The consistent use of these strategies, as indicated by the high mean scores, suggests a deliberate effort by teachers to create an environment that nurtures student growth and development. By actively seeking out positive interactions, providing constructive feedback, and promoting differentiated instruction, teachers are likely to engage students more effectively, address their individual needs, and facilitate a deeper understanding of the subject matter. Moreover, the emphasis on promoting positive bonds between teachers and learners and fostering healthy development underscores the holistic approach to education, highlighting the significance of socio-emotional well-being alongside academic achievement.

The present findings was supported by the study of (Bouxsein, Roane, & Harper, 2011) states that positive reinforcement increases students compliance and decrease disruptive behaviours By actively seeking and emphasizing positive aspects of the learning process, teachers create a supportive atmosphere that enhances student motivation and engagement. The use of constructive feedback and gentle correction aligns with best practices in teaching. Hattie & Timperley (2007) shown that providing feedback in a positive manner enhances student learning and performance Constructive feedback helps students understand their mistakes and guides them towards correct solutions, fostering a growth mindset and a willingness to learn from errors.

Moreover, the incorporation of creative methods and differentiated instruction supports the principles of personalized learning and addressing diverse student needs. It suggests that employing varied instructional strategies and adapting teaching approaches to individual students' learning styles and preferences can improve student engagement and achievement (Tomlinson et al., 2003). By using creative and differentiated methods, teachers cater to the unique needs of their students, promoting a deeper understanding and application of knowledge. The emphasis on building positive relationships and promoting a positive bond between teachers and learners is also supported by research. Positive teacher-student relationships had been linked to higher academic achievement, increased motivation, and improved socio-emotional well-being of students (Roorda et al., 2011). When students feel valued, respected, and supported by their teachers, they are more likely to actively participate in learning and strive for academic success.

Table 1 : The Learning Reinforcement Used by the Teachers

Indicators	Mean	SD	Description
1. I actively look for and focus on the positive events and interactions even in modular class	3.714	.4583	Strongly Agree/Very Much Frequent
2. I use statements that link with written positive affirmations in the answer sheet.	3.629	.5470	Strongly Agree/Very Much Frequent
3. I gently correct low-level performance by constructively suggest a correct one.	3.686	.5298	Strongly Agree/Very Much Frequent
4. I use a variety of creative methods in reinforcing learning such as social reinforcement and access preferred activities.	3.571	.6081	Strongly Agree/Very Much Frequent
5. I give feedback in a positive manner thru text or written.	3.657	.6835	Strongly Agree/Very Much Frequent
6. I strengthen learning of new behaviours and skills	3.629	.4902	Strongly Agree/Very Much Frequent
7. I strengthen positive bond between teacher and learner.	3.714	.4583	Strongly Agree/Very Much Frequent
8. I promote healthy development in all learning areas	3.800	.4058	Strongly Agree/Very Much Frequent
9. I use decrease negative behaviours; replacing them with more positive behaviour	3.714	.4583	Strongly Agree/Very Much Frequent
10. I use differentiated instruction.	3.571	.6547	Strongly Agree/Very Much Frequent
Average Weighted Mean	3.6685	0.529	Strongly Agree/Frequent

Table 2 the level of student's motivation. This suggest a generally positive orientation towards learning among the surveyed students. Indicators such as intrinsic good orientation, extrinsic good orientation, task value, control of learning beliefs, self-efficacy for learning performance, and overall motivation exhibit mean scores indicative of agreement or even strong agreement. This implies that students possess a motivated stance towards their learning endeavours, both intrinsically and extrinsically. Furthermore, the relatively low mean score for test anxiety suggests that students are generally able to manage stress related to assessments, which can positively impact their overall motivation and performance. These findings implies that the high levels of intrinsic and extrinsic motivation suggest that students are driven by both internal factors, such as interest and enjoyment in learning, as well as external factors, such as recognition and rewards. Teachers can leverage this motivation by incorporating engaging instructional strategies and providing opportunities for autonomy and mastery. Additionally, the positive task value and self-efficacy scores indicate that students perceive the value of their academic tasks and believe in their ability to succeed, which can foster a sense of competence and resilience. However, it is essential for

teachers to continue fostering a supportive learning environment and providing resources to address any potential sources of anxiety or challenges students may encounter, thereby sustaining and further enhancing their motivation and overall academic success.

Deci and Ryan's Self-Determination Theory (2009) emphasize the significance of intrinsic and extrinsic motivation in driving behaviour and promoting optimal learning outcomes. The indicators of intrinsic and extrinsic good orientation reflect students' internal drive and external incentives, which are essential components of SDT. Additionally, research on achievement goal theory supports the notion that students' perceptions of task value and self-efficacy play essential roles in shaping their motivation and engagement in learning activities. Zimmerman's research on self-regulated learning further underscores the importance of students' beliefs in their ability to control their learning processes and achieve academic success. Therefore, the findings of this study are supported by a robust body of literature in educational psychology, highlighting the multifaceted nature of student motivation and its implications for teaching and learning practices.

Table 2: The Level of Student's Motivation

Indicators	Mean	SD	Description/Interpretation
1. Intrinsic Good Orientation	3.226	0.606	Agree/ Motivated
2. Extrinsic Good Orientation	3.333	0.628	Strongly Agree/ Highly Motivated
3. Task Value	3.224	0.582	Agree/Motivated
4. Control of Learning Beliefs	3.168	0.638	Agree/Motivated
5. Test Anxiety	2.811	0.739	Agree/Motivated
6. Self- Efficacy for Learning Performance	3.070	0.659	Agree/Motivated
Total	3.1386	0.642	Agree/Motivated

Table 3 presents the levels of student self-efficacy across various indicators. The table revealed a consistent high mean scores across all indicators suggest a strong sense of self-efficacy among the surveyed students. They express confidence in their abilities to manage difficult problems, find solutions to challenges, stick to their goals, and handle unexpected events efficiently. These findings indicate that students possess a positive belief in their competence and resourcefulness, enabling them to approach tasks and obstacles with confidence and resilience. This implies that findings are significant for both teachers and students alike. A high level of self-efficacy is associated with various positive outcomes, including academic achievement, persistence in the face of challenges, and overall well-being. Educators can capitalize on students' strong self-beliefs by providing opportunities for autonomy, mastery, and meaningful engagement in learning activities. Encouraging a growth mindset and fostering a supportive classroom environment can further enhance students' confidence in their abilities and willingness to take on new challenges. Moreover, students with high self-efficacy are more likely to set ambitious goals and persist in their efforts to achieve them, contributing to their long-term success both academically and personally. Therefore, cultivating and nurturing self-efficacy among students should be a priority in educational settings, as it plays a crucial role in shaping their attitudes, behaviors, and achievements.

The findings presented in Table 3 are consistent with existing research on the relationship between self-efficacy and academic performance. (Bandura, 1997; Pajares, 2002) demonstrated that high levels of self-efficacy are positively associated with academic achievement, persistence, and overall well-being among students Bandura's (1997) social cognitive theory emphasizes the importance of self-efficacy beliefs in determining individuals' behaviour and performance outcomes. Additionally, Pajares (2002) conducted extensive research highlighting the significant role of self-efficacy in academic settings, showing that students with strong self-efficacy beliefs are more likely to set challenging goals, exert greater effort, and persevere in the face of obstacles. These findings support the notion that fostering self-efficacy among students is essential for promoting positive academic outcomes and psychological well-being. Therefore, educators should consider implementing strategies aimed at enhancing students' self-efficacy beliefs to optimize their learning experiences and overall development.

Table 3: The Level of Student's Self-Efficacy

Indicators	Mean	SD	Description/Interpretation
1. I am consistently able to tackle challenging problems through diligent effort.	3.180	.6980	Agree/High
2. When faced with opposition, I possess the capability to navigate obstacles and achieve my objectives.	2.941	.6278	Agree/High
3. I find it effortless to adhere to my aspirations and successfully accomplish my goals.	3.122	.6677	Agree/High
4. I harbor confidence in my ability to effectively manage unforeseen circumstances.	2.976	.6754	Agree/High
5. My resourcefulness enables me to adeptly handle unexpected situations.	3.071	.6107	Agree/High
6. With dedicated effort, I am adept at resolving a wide range of problems.	3.137	.5757	Agree/High
7. I maintain composure in difficult situations, drawing upon my coping skills.	3.012	.6958	Agree/High
8. Confronted with a problem, I typically identify multiple solutions.	3.165	.6493	Agree/High
9. In times of trouble, I reliably generate solutions to overcome challenges.	3.137	.6466	Agree/High
10. I possess the capacity to manage whatever challenges come my way with confident.	3.212	.6657	Agree/High
Average Weighted Mean	3.095	0.651	Agree/High

Table 4 shows the level of student's academic performance. The majority of students fall within the very satisfactory range, with 189 students achieving grades between 85-89, followed by 42 students in the satisfactory range (80-84). This suggests a generally positive performance among the surveyed student population, with a significant proportion demonstrating commendable achievement levels. Moreover, the absence of students falling below the satisfactory threshold indicates a consistent attainment of expected academic standards across the board.

This suggest a commendable level of academic achievement within the student population. The predominance of grades within the very satisfactory range reflects the effectiveness of instructional practices, curriculum design, and student support mechanisms in facilitating learning and promoting academic success. Teachers can leverage this positive performance by identifying and disseminating best practices that contribute to student achievement, as well as by providing targeted interventions to support students who may be struggling to meet academic expectations. Furthermore, ongoing assessment and data analysis can inform instructional decision-making and curriculum refinement to further enhance student learning outcomes.

Table 4: Level of Student's Academic Performance

GRADE	FREQUENCY	DESCRIPTOR
5 (90-100)	21	Outstanding
4 (85-89)	189	Very Satisfactory
3 (80-84)	42	Satisfactory
2 (75-79)	17	Fairly Satisfactory
1 (70-74)	-	Did not meet expectations
TOTAL	262	-
Average Weighted Value	85.859	Very Satisfactory
Standard Deviation	2.8684	-

Table 5 highlights the significant relationship between teachers' learning reinforcement strategies and the level of students' self-efficacy, as evidenced by the computed correlation coefficient (ρ) of 0.3420 with a corresponding p-value of 0.000, indicating statistical significance. This moderate positive correlation suggests that as teachers implement effective learning reinforcement techniques, there is a corresponding increase in students' self-efficacy levels. This finding underscores the importance of supportive teaching practices in fostering students' confidence in their abilities to succeed academically. This suggests that teachers play a central role not only in imparting knowledge but also in shaping students' beliefs about their own capabilities. By employing strategies such as positive reinforcement, constructive feedback, and differentiated instruction, teachers can empower students to develop a sense of agency and mastery over their learning journey. As students perceive their teachers' support and encouragement, they are more likely to believe in their own ability to overcome challenges and achieve their academic goals.

Furthermore, recognizing and understanding the link between teachers' actions and students' self-efficacy can inform professional development initiatives and instructional planning. Educators can focus on enhancing their skills in providing effective reinforcement and support, thereby positively impacting students' attitudes, motivation, and ultimately, their academic success. Additionally, fostering a collaborative and supportive school culture where teachers and students work together to set and achieve goals can further amplify the beneficial effects of learning reinforcement on student self-efficacy.

Table 5: The Significant Relationship Between Teachers' Learning Reinforcement And The Level Of Students' Self-Efficacy

Variables	Computed ρ	P-Value	Interpretation
Teachers' Learning Reinforcement And The Level Of Students' Self-Efficacy	0.3420	0.000	Moderate positive / Significant

Table 6 demonstrates a significant relationship between teachers' learning reinforcement strategies and student motivation. As indicated by the computed correlation coefficient (ρ) of 0.5268 and a corresponding p-value of 0.001, signifying statistical significance. This high positive correlation suggests that as teachers employ effective learning reinforcement techniques, there is a concurrent increase in student motivation levels. Such findings emphasize the pivotal role of educators in shaping students' engagement and enthusiasm for learning through their instructional practices. This implies a significant relationship for educational practice and student outcomes. Firstly, it underscores the importance of intentional and supportive teaching methods in fostering a positive learning environment that cultivates student motivation. Teachers who actively utilize reinforcement strategies such as positive feedback, encouragement, and recognition of effort are more likely to inspire and sustain students' intrinsic and extrinsic motivation. Moreover, the correlation highlights the potential for educators to leverage their influence in enhancing

student engagement and persistence, ultimately leading to improved academic performance and overall well-being.

Understanding the link between teachers' actions and student motivation can inform instructional design, curriculum development, and professional development initiatives. Educators can prioritize the integration of motivational strategies within their teaching practices, tailoring approaches to meet the diverse needs and interests of students. By fostering a classroom culture that values effort, celebrates progress, and promotes autonomy, teachers can create an environment conducive to sustained motivation and achievement. Additionally, collaborative efforts among educators to share effective practices and support one another in implementing motivational strategies can further amplify their impact on student learning outcomes.

Table 6: The Significant Relationship Between Teachers' Learning Reinforcement And The Student's Motivation

Variables	Computed ρ	P-Value	Interpretation
Teachers' Learning Reinforcement And The Student's Motivation	0.5268	0.001	High positive correlation/ Significant

Table 7 shows the significant relationship between teachers' learning reinforcement and the academic performance. A computed correlation coefficient (ρ) of 0.2770 and a corresponding p-value of 0.005, demonstrates statistical significance. While this correlation is characterized as low, it still signifies a meaningful association between the variables. This suggests that as teachers employ effective learning reinforcement techniques, there is a modest increase in student academic performance. This implies a significant relationship highlight the impact of teaching practices on student achievement. Although the correlation is categorized as low, it still underscores the importance of supportive and engaging instructional approaches in facilitating academic success. Teachers who utilize reinforcement strategies such as positive feedback, constructive guidance, and differentiated instruction contribute positively to students' learning experiences, leading to improvements in their academic performance over time.

Understanding the connection between teachers' actions and student academic performance can inform instructional decision-making and professional development efforts. Educators can reflect on their current practices and explore opportunities to enhance their use of reinforcement techniques to better support student learning and achievement. Moreover, collaboration among educators to share effective strategies and approaches can further strengthen the correlation between teaching practices and academic performance. While the correlation may be considered low, it still signifies a significant relationship that warrants attention from educators and educational stakeholders. By continuing to refine and implement effective reinforcement strategies, teachers can contribute to the continuous improvement of student outcomes and the overall quality of education. Additionally, ongoing research and evaluation can provide insights into the specific mechanisms through which teaching practices influence academic performance, further informing best practices in educational settings.

Table 7: The Significant Relationship Between Teachers' Learning Reinforcement and The Academic Performance

Variables	Computed ρ	P-Value	Interpretation
Teachers' Learning Reinforcement And The Academic Performance	0.2770	0.005	Low positive correlation/ Significant

Table 8 shows the regression analysis of teachers' learning reinforcement and the academic performance. The unstandardized coefficients indicate the strength and direction of the relationship between the independent variables and the dependent variable (academic performance), while the standardized coefficients (Beta) provide insight into the relative importance of each predictor. The results indicate that neither students' motivation nor self-efficacy has a statistically significant impact on academic performance, as evidenced by their p-values of 0.123 and 0.514, respectively. This suggests that, in this particular analysis, these variables do not significantly predict academic performance when considered alongside teachers' learning reinforcement.

Interestingly, the coefficient for teachers' learning reinforcement is also not statistically significant ($p = 0.816$), suggesting that in this model, teachers' reinforcement strategies alone do not significantly predict academic performance. The overall model's R-squared value of 0.241 indicates that approximately 24.1% of the variance in academic performance can be explained by the combined influence of teachers' reinforcement strategies, students' motivation, and self-efficacy. The F-value of 10.287 is statistically significant ($p = 0.031$), suggesting that the overall regression model is a statistically significant predictor of academic performance. In general, while the regression model as a whole demonstrates significance, the specific variables of teachers' learning reinforcement, students' motivation, and self-efficacy do not individually emerge as significant predictors of academic performance in this analysis. Further research may be needed to explore additional factors that may influence academic performance or to refine the measurement and operationalization of the variables included in the model.

Table 8: Regression Analysis of Teachers' Learning Reinforcement and the Academic Performance

Variables	Unstandardized Coefficients		Standardized Coefficients		
	B	Std Error	Beta	t	Sig.
(Constant)	0.317	0.323		0.844	0.433
1. Students Motivation	0.417	0.234	0.411	1.589	0.123
2. Self-Efficacy	0.442	0.314	0.224	0.473	0.514
3. Academic Performance	0.216	0.414	0.017	0.233	0.816
R-squared=.241 F-value=10.287 p-value=.031 alpha =0.05					

Conclusions and Recommendations

The study's findings underscore the dedication of teachers in employing diverse reinforcement strategies, emphasizing their commitment to enriching students' educational journeys. Students' positive self-efficacy beliefs reflect a forceful confidence in their capabilities to conquer challenges and achieve success. Moreover, their satisfactory levels of motivation denote a genuine enthusiasm for challenging coursework and a dedication to deep comprehension. The significant relationships unveiled between teachers' learning reinforcement and students' self-efficacy, motivation, and academic performance highlight the fundamental role of effective reinforcement techniques in shaping students' beliefs and driving their academic engagement and achievement. These results emphasize the imperative of integrating impactful learning reinforcement practices within educational contexts to elevate students' educational experiences and foster academic triumph. Drawing from these discernments, recommendations emerge: providing professional development opportunities to enhance teachers' proficiency in employing effective reinforcement strategies; fostering classroom environments conducive to positive reinforcement, constructive feedback, and a sense of community; nurturing students' self-efficacy through attainable goal-setting, growth mindset cultivation, and opportunities for success; and implementing regular formative assessments coupled with timely, targeted feedback to bolster student learning and growth. Through the implementation of these recommendations, teachers can cultivate environments that empower students, nurture their growth, and propel them towards academic excellence.

References

1. Bandura, A. (1997). *Self-efficacy: The exercise of control*. W. H. Freeman and Company.
2. Bouxsein, K. J., Roane, H. S., & Harper, J. M. (2011). The effects of positive reinforcement on compliance and disruptive behavior in a clinic sample. *Behavioral Interventions*, 26(2), 87-96.
3. Davidovitch, R., & Yavich, R. (2008). Strategies for Learning Reinforcement: Adaptations and Modifications. *Journal of Educational Psychology*, 42(2), 201-215.
4. Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, 77(1), 81-112. <https://doi.org/10.3102/003465430298487>.
5. Johnson, D. (2017). The Role of Teachers in Motivating Students to Learn. *BU Journal of Graduate Studies in Education*, Volume 9, Issue 1, 2017.
6. Fitriati, S. W., Fatmala, D., Anjaniputra, A. G. (2020). Teachers' classroom instruction reinforcement strategies in english language class. *Journal of Education and Learning (EduLearn)* Vol. 14, No. 4, November 2020, pp. 599~608 ISSN: 2089-9823 DOI: 10.11591/edulearn.v14i4.16414.
7. Filgona, J., Sakiyo, J., Gwany, G.M., Okoronka, A.U (2020). Motivation in Learning. *Asian Journal of Education and Social Studies*. 10(4): 16-37, 2020; Article no.AJESS.60760. ISSN: 2581-6268: DOI: 10.9734/AJESS/2020/v10i430273.
8. Pajares, F. (2002). Gender and Perceived Self-Efficacy in Self-Regulated Learning. *Theory into Practice*, 41, 116-225. http://dx.doi.org/10.1207/s15430421tip4102_8
9. Pajares, F., & Miller, M. D. (1994). Role of self-efficacy and self-concept beliefs in mathematical problem-solving: A path analysis. *Journal of Educational Psychology*, 86(2), 193-203. <http://dx.doi.org/10.1037/0022-0663.86.2.193>.
10. Ryan RM, Deci EL. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and wellbeing. *American Psychologist*. 55(1):68-78.
11. Ryan RM, Deci EL. (2009). Promoting self-determined school engagement; motivation, learning and well-being. In Wentzel KR, Wigfield A. (Eds.). *Handbook of motivation at school*. New York: Routledge. 171-196
12. Shahjahan, M., Ahmed, K.R., Hadrami, A.A., Islam, M.R., Hossain, S., Khan, M.S., (2021). Factors influencing poor academic performance among urban university students in Bangladesh *International Journal of Evaluation and Research in Education (IJERE)* Vol. 10, No. 4, December 2021, pp. 1140~1148 ISSN: 2252-8822, DOI: 10.11591/ijere.v10i4.21158.
13. Tomlinson, C. A., Brighton, C., Hertberg, H., Callahan, C. M., Moon, T. R., Brimijoin, K., & Reynolds, T. (2003). Differentiating instruction in response to student readiness, interest, and learning profile in academically diverse classrooms: A review of literature. *Journal for the Education of the Gifted*, 27(2-3), 119-145.
14. Roorda, D. L., Koomen, H. M., Spilt, J. L., & Oort, F. J. (2011). The influence of affective teacher–student relationships on students' school engagement and achievement: A meta-analytic approach. *Review of Educational Research*, 81(4), 493-529. <https://doi.org/10.3102/0034654311421793>.
15. Weist, J. (2019). Enhancing Student Motivation and Self-Efficacy: A Quantitative Analysis. *Educational Psychology Review*, 45(3), 321-335.
16. 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. <https://doi.org/10.1016/B978-012109890-2/50031-7>

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