



Core Self-Evaluation and Self-Regulated Learning on Academic Performance of Wollega University Students

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Abstract

This study aimed to investigate the impact of core self-evaluation and self-regulated learning on Wollaga University students' academic performance. The study includes 230 randomly selected sample students from different colleges. Data was collected using a 5-semester cumulative grade point average, core self-evaluation, and self-regulated learning questionnaire. The findings illustrate that core self-evaluation has a strong effect, while self-regulated learning has little bearing on students' academic achievement. Multiple regression analysis revealed that self-regulated learning and core self-evaluation accounted for 5.7% of the variance in students' academic achievement. Furthermore, stepwise regression analysis depicts that academic performance was primarily influenced by locus of control, followed by self-esteem. This suggests that self-esteem and internal locus of control were the biggest contributors to academic performance from core self-evaluation subscales, while self-regulated learning was not. This may be because of students' lack of awareness about the skills of self-regulated learning, such as setting learning goals and managing their time. Therefore, the university has to facilitate intervention training for the students to make them effective in their learning, which in turn improves the university's performance.

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INTRODUCTION

Academic performance is the extent to which students have attained their education to achieve their anticipated goals. The amount of knowledge they acquire in their educational performance and how much of this knowledge is utilised effectively in performing tasks determines the quality of their academic performance. The extent of academic performance a student achieves significantly affects their life because it indicates how far a student has progressed in his/her learning goal to bring behavioural modification and life satisfaction. Academic performance is linked to various factors and several variables, like teachers' subject

knowledge, students' learning skills, parental background, environmental causes, textbook and library access, peer influences, and others that can jointly or separately affect students' academic performance.

Previous studies stressed factors like class size, textbooks, homework, classroom environment, technology, exam systems, family, and work activities that affect academic achievement (Ozcan, 2021). Contrariwise, in recent times, scholars have been focused on students' psychological processes of self-regulated learning and an emerging personality variable of core self-evaluation. Self-

regulated learning promotes and fosters students' metacognition development, motivation, and deliberate action that bridges the gap between academic performance and cognitive abilities (Brenner, 2022).

The most effective way to enhance students' independent learning is self-regulation. Students emphasize their feelings, motivation, ideas, and actions in achieving their academic goals toward the realisation of their academic performance. Self-regulated learning is the students' self-directive and self-belief methods that assist in transforming their mental capacities into an academic performance skill (Zimmerman, 2008). It is a planned, judgmental, and flexible process of cognitively intrinsic features of learning and the capability to act according to one's objective in an adaptable manner (Kuhl, 1992). Self-regulated learners employ active learning techniques with strong self-efficacy and self-discipline.

Research indicated that self-regulated learning could be divided into three phases: performance, reflection, and foresight (Zimmerman, 2002). Zimmerman claims that during the forethought phase, students examine tasks, use their self-motivational beliefs to practice, and affect the initiation of learning techniques. Students complete their job during the performance stage while keeping track of their progress. They then employ a variety of self-discipline skills to sustain their cognitive interest and motivation to finish their task. Lastly, students assess their performance and assign responsibility for their accomplishments or shortcomings during the self-reflection phase. Students' self-reactions to these attributions can either favourably or unfavourably affect how they approach the job in subsequent performances.

Similar to self-regulated learning, core self-evaluation also affects students' academic success. Core self-evaluation is an essential broad personality variable that emphasizes how students think, feel, and behave in different circumstances and predicts students' academic performance. Judge et al. (1997) introduced the notion of core self-evaluation (CSE), which was later suggested as a dispositional source of job satisfaction and

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expanded into the classroom setting. It was hypothesized substantially correlated with students' grade point average (Broucek, 2005). Core self-evaluation is the higher-order aspect that enables learners to evaluate their performance in their surroundings. It is a person's basic intuitive assessment of one's own abilities, value, skill, and competence (Judge et al., 2005). It consists of four related but different personality dimensions. These are self-esteem, self-efficacy, locus of control, and neuroticism/emotional stability (Judge et al., 2005). The idea of core self-evaluations comprises the evaluation of one's ability, capabilities, and the conviction that life sounds so that it is more comprehensive than a self-worth assessment. Self-efficacy is the appraisal of one's capability in performing a wide range of tasks, while self-esteem is an overall assessment of one's self-worth. Locus of control is the belief that occasions in one's life come as a result of one's actions rather than by fate or other external factors, and emotional stability is the tendency to feel calm and safe or low neuroticism (Judge et al., 2004).

Having the underlying essential core self-evaluations is the basic evaluation of one's worthiness, effectiveness, and capacities because these four traits include evaluations of one's environment (Judge et al., 2003). These four traits account for a person's overall assessment of their personal worth (Judge et al., 1997). There are also many philosophical parallels between these characteristics. Low neuroticism, for example, has been interpreted as a sign of self-esteem, or the evaluation of one's value, whereas self-efficacy, or the belief in one's ability to perform well and have sufficient control over one's life, is conceptually related to locus of control (Bono & Judge, 2003).

It has been discovered that academic achievement and self-regulated learning emphasise cognitive processes, including students' metacognitive abilities (Entwistle & Entwistle, 2003). In order to control their learning objectives, highly self-regulated students can establish metacognitive methods, cultivate motives of positive self-efficacy, and adjust ineffective activities (Zimmerman & Labuhn, 2008).

Similarly, individuals with high core self-evaluations exhibit low levels of neuroticism but high levels of internal locus of control, self-efficacy, and self-esteem (Judge et al., 1998). According to Erez and Judge (2001), students who have a high core self-evaluation demonstrate a positive self-perception and are well-adjusted, self-assured, and successful in their lives. Conversely, self-regulated learners acquire abilities for lifelong learning that they need for their post-school lives.

This is because self-regulation controls personal, behavioural, and environmental interactions that mutually determine and influence human behaviour. Personal influences are cognitive, affective, belief, and ability factors; behavioural influence includes actions and reactions of persons, while environmental influence comprises social and physical factors. The control over social and physical settings will allow the students to structure their academic environment.

Studies have evidenced that core self-evaluation is directly and indirectly related to performance, being partially mediated by certain types of motivation (self-regulation) (Erez & Judge, 2001). Through self-regulation, a strong association between CSE and performance was proven. Academic performance is enhanced by self-regulation as an integrated concept, and performance self-efficacy is a significant association with it. The motivation of students for self-regulated learning is connected to their locus of control, which enhances self-efficacy and motivation for further learning. Similar to self-regulation, core self-evaluation also helps to judge one's global value.

As a result, self-regulation and core self-evaluation are not isolated concepts; rather, they are multifaceted in their characteristics, application context, and scope, and they are reliant on perceived results. Self-regulation and core self-evaluation help learners to improve and perform better in their learning. Besides, they enable students to control and track their progress as well as employ various strategies when assessing and choosing the best course of action for their learning. Thus, the current study will investigate how

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students' academic success is related to self-regulated learning and core self-evaluations.

Even though the aforementioned two variables are essential factors in improving students' academic performance, the idea has not been covered in the literature, integrating these two variables to examine the contribution they have on students' academic performance. Furthermore, there has not been much discussion of how either of these variables—core self-evaluation and self-regulated learning—contributes to learners' academic performance. On top of this, the degree of the connotation between subscales of core self-evaluation and students' academic success also got slight consideration, if any. Hence, based on the above-mentioned concepts, it can be said that there was no attempt made to look into how students' academic performance was affected by these variables in universities.

Research questions

In view of the aforementioned information gaps, an attempt was made to explore the degree of association between the variables and the role that self-regulated learning and core self-evaluation play in students' accomplishment in light of the research questions addressed.

1. How significantly do core self-evaluation and self-regulated learning correlate with students' academic performance?
2. What was the nature of the relationships that exist between core self-evaluation subscales, self-regulation, and academic achievement?
3. To what extent do core self-evaluation and self-regulated learning predict students' academic success?
4. Among CSE subscales, which variable most contributes to academic performance?

MATERIALS AND METHODS

To predict the relationship between variables, a quantitative, correlational research design was employed. Self-regulated learning and core self-evaluation are the predictor variables, while academic performance (GPA) is the dependent variable. Third-year Wollega University Nekemte

campus students were the target population. Using simple random sample methods, the Business and Economics, Natural and Computational Science, and Education and Behavioural Science colleges were selected from the campus. Then, using the stratified simple random sampling technique, a proportional number of students from both genders were selected. Accordingly, 230 student respondents, 86 from the Business and Economics department, 91 from the Natural Science department, and 53 from the Education and Behavioural Science department were sampled.

Instruments employed

The data was gathered using self-regulated learning and core self-evaluation questionnaires. Accordingly, 23 items that measure core self-evaluation were adapted from Judge et al.'s (2008), and 29 items, which measure SRL, were used from Barnard et al. (2009) after being modified through pilot tests. 6-point Likert scales, ranging from 1 (not at all) to 6 (always), were used to analyse both factors. Cronbach's alpha was used to calculate the reliability of the instrument. The internal consistency of the sub-scales items for core self-

Sci. Technol. Arts Res. J., July. –Sep, 2025, 14(3), 144-153 evaluation was calculated. Consequently, self-esteem: 6 items with a reliability of .71; self-efficacy: 6 items with a reliability of .82; neurosis (emotional stability): 5 items with a reliability of .80; and locus of control: 6 items with a reliability of .85 were found. Self-regulated learning was measured using 29 items with a reliability of .89. For academic success, self-reported followed by Registrar confirmation of the five-semester cumulative result (CGPA) of the sample college students was collected.

To maintain confidentiality, privacy, and strict anonymity, no identification of information was stated. Then, after explaining the purpose of the research, the questionnaire was distributed to the respondents, and data were collected.

RESULTS AND DISCUSSION

Results

The response rate of this study was 230 (91%) out of the total 252 questionnaires distributed to third-year student respondents of Wollega University. Then the following analyses and interpretation were produced using the data gathered (Table 1).

Table 1

Characteristics of Respondents

Variables		Frequency	Percentage
Sex	Male	147	63.9
	Female	83	36.1
	Total	230	100
	< 20	8	3.5
Age	21-25	215	93.5
	26-30	6	2.6
	31 and above	1	.4
	Total	230	100.0
College	Business and accounting	86	37.4
	Natural Science	91	39.6
	Education and Behavioral Science	53	23
	Total	230	100
GPA	2.00 to 2.74	85	37.0
	2.75 to 3.24	73	31.7

Table 1 continues.

3.25-3.74	38	16.5
3.75 to 4.00	3	1.3
Total	230	100.0

Out of 230 participants, 83 (36.1%) were female and 147 (63.9%) were male. This indicates that Wallega University had a higher proportion of male students than female students. As for the age group, 8 (3.5%) of the respondents were under 20, 215 (93.5%) were between 21 and 25, 6 (2.6%) were

between 26 and 30 years old, and 1 (0.4%) was over 31 years old. This suggests that the vast majority of students were between the ages of 21 and 25 years. Multiple regression and correlational statistical analyses were used to answer the fundamental study issues.

Table 2

Correlation between self-regulated learning and subscales of core self-evaluation with students' total grade point average

S.No	Variables	1	2	3	4	5	6
1	Grade point average	1					
2	Self-worth	0.092	1				
3	Self-efficacy	0.03	.677**	1			
4	Emotional Stability	0.069	-.236**	-.249**	1		
5	Locus of control	.161*	.558**	.673**	-.218**	1	
6	Self-regulated learning	0.079	.569**	.667**	-.419**	.656**	1

* 1-tailed significant at 0.05 level, ** 2-tailed significant at 0.01 level

Table 2 shows that locus of control was significantly correlated ($r = .161$, $p < .05$) with academic achievement, while core self-evaluation measuring subscales and self-regulated learning were positively associated with academic performance. It proves a favourable and significant correlation of self-regulated learning and self-efficacy ($r = .667$), locus of control ($r = .656$), and self-esteem ($r = .569$), whereas negatively and significantly correlated with emotional stability ($r = -.419$) at the significance level $p < .001$. Additionally, the finding demonstrated that locus of control had a high positive connection with both self-efficacy ($r = .673$) and self-esteem ($r = .558$; $p < .001$). There is also a significant positive association between self-efficacy and self-esteem (r

$= .677$, $p < .001$). Contrary to this, self-esteem and self-efficacy have a substantial negative connection with emotional stability/neuroticism ($r = -.236$ and $-.249$), respectively.

Table 3 illustrates that core self-evaluation positively and significantly correlated ($r = .241$, $p < .05$) with academic performance, while self-regulated learning had a marginal positive correlation ($r = .079$) with students' academic performance. Further, the two independent variables were strongly and positively associated with each other, with the value of ($r = .577$; $p < .001$).

Regression analysis has been computed to examine the influence of independent variables on dependent variables.

Table 3

The relationship between students' grade point average with self-regulated learning and core self-evaluation

S.No	Variables	1	2	3
1	Cumulative grade point average	1	.079	.241*
2	Self-regulated learning	0.079	1	.577**
3	Core self-evaluation	0.241*	0.577**	1

* 1-tailed significant at 0.05 level, ** 2-tailed significant at 0.01 level

The results of [Table 4](#) depicted that core self-evaluation and self-regulated learning have a minor but significant contribution to students' academic progress, 5.7% at $F(2,227) = 2.081$, $p = .043$.

Table 4

Standardized multiple regression of self-regulated learning and core self-evaluation on students' academic success

Variables	Un standardised Coefficients		Standardised Coefficients	Sig.	R ²
	B	Std. Error	Beta		
(Constant)	1.212	.412	-	.004	.057
Core self-evaluation	.008	.005	.245	.024	
Self-regulated learning	.000	.003	.004	.961	

In the stepwise regression analysis result of [Table 5](#), the model demonstrates that locus of control and self-esteem substantially contributed 32.4% to students' academic accomplishment at $F(4, 225) = 2.696$, $p = .032$. It was also revealed that locus of control contributes .421 standardized beta, followed by .177 standardized beta of self-esteem.

Table 5

Analysis of stepwise regression to identify the significant contributors of core self-evaluation subscale measures to academic success

Variables	Beta	R ²	Adjusted R ²	R ² Change
Locus of Control	.412**	.306	.304	.326
Self-esteem	.177*	.324	.321	.143

$N = 230$, $p < .05$

Discussions

This research examined the association of core self-evaluation and self-regulated learning with the academic accomplishment of Wollega University students. Core self-evaluation was found to be positively and considerably associated with students' academic successes, whereas self-regulated learning demonstrated a negligible

-relationship ($r = .079$) with students' academic performance. In relation to this finding, the previous finding of [Ningrum et al. \(2018\)](#) claimed that self-regulated learning and academic achievement had a weak positive correlation ($r = 0.256$, $p > 0.05$). With respect to the core self-evaluation result, [Nguyet et al. \(2017\)](#), previous

findings examined a significant correlation that predicts adults' learning performance. Additionally, other researchers have also revealed a positive association between core self-evaluations and academic success. For instance, Judge and Hurst (2008) and Judge (2009) revealed a positive correlation between students' learning satisfaction and core self-evaluations. Furthermore, research has shown that self-regulated learning significantly improves academic performance (Hakiki and Rembulan, 2018 & Sahranavard et al., 2018), which reveals that there was a positive correlation between students' academic accomplishment, self-regulated learning, and core self-evaluations.

From core self-evaluation subscales, self-esteem and locus of control showed a positive and substantial correlation with students' academic performance. Previous findings by Khir et al. (2015) witnessed a strong correlation between students' academic achievement and locus of control, which corroborated this finding. Additionally, it was demonstrated that self-regulated learning and core self-evaluation had a positive, substantial link ($r = .577$; $p < .001$). This finding was also consistent with earlier research, OZER (2016), who tested and found a moderate relationship ($r = 0.263$, $p < 0.05$) between self-regulation skills and core self-evaluation of vocational and technical high school students' performance.

The results also showed that self-regulated learning was positively and substantially connected with core self-evaluation subscales (locus of control, self-efficacy, and self-esteem), whereas self-regulated learning was negatively and significantly connected with emotional stability. This implies that positive self-worth is correlated with an internal locus of control that has a positive effect on the students' attainment, while emotionally unstable students may not be able to regulate themselves to learn their education effectively.

The finding depicted that self-efficacy and self-esteem had a strong positive correlation ($r = .677$, $p < .001$). In support of this finding, Nwankwo et al. (2012) noted a significant positive relationship

Sci. Technol. Arts Res. J., July. –Sep, 2025, 14(3), 144-153 between high levels of self-esteem and internal locus of control in older adolescent students. A modest relationship between academic success and self-esteem was found in earlier research, much of which concluded that there is a positive and significant association between academic achievement and self-esteem (Aryana, 2010; Al-Doulat, 2018; Subon et al., 2020).

The finding of regression analysis disclosed that both self-regulated learning and core self-evaluation substantially contributed 5.8% to students' academic performance with $F(4, 225) = 2.696$, $p = .032$. From the findings, it was depicted that core self-evaluation contributes a high standardized beta of .245, but beta is almost zero in the case of self-regulated learning. Considering self-regulated variables, this finding reveals a negligible relationship, and almost no contribution was made to the academic accomplishment of students. This is quite different from the previous study, which shows a significant relationship and contribution of self-regulated learning to academic attainment. The reasons behind this variability may be because of different factors that are manifested in the students, like students' lack of appropriate study skills, excessive self-criticism, lack of intrinsic reinforcement, and inability to set goals, as well as fewer opportunities for careers after graduation, which are some cases that may be considered as factors that distort students' self-regulated learning.

Regarding the analysis of stepwise regression, locus of control contributes a high .412 standardized beta to students' academic performance, followed by self-esteem standardized beta of .177. This finding was supported by Das and Pattanaik (2013), who found that adolescents' academic achievement is significantly affected by locus of control and self-esteem. This reveals that locus of control, especially students who attribute success or failure to their own behavior, have positive self-esteem and can be effective in their achievement.

CONCLUSION

The finding discloses a considerable positive relationship and contribution of core self-

evaluation to students' achievement. Therefore, one can conclude that self-esteem, locus of control, and self-efficacy were significant contributors to students' accomplishment, while neurosis or emotional instability affected students' success negatively. Previous findings stressed the significant contribution of self-regulated learning to students' achievement; however, this study reveals a positive but negligible relationship. The case most probably seems to be that even though self-regulated learning empowers learners and helps them to be effective, it can be affected by different obstacles like students' lack of motivation for their learning, inability to set their study goals, and lack of interest.

Recommendations

Self-regulated learning and core self-evaluation variables are essential for students to advance their knowledge toward their success, so that the students have to get the skills on how to be self-evaluative and get strategies of self-regulated learning. Hence, the university has to facilitate intervention training for the students to raise awareness about these variables and to make students use it in their learning to be effective, which in turn improves the university's performance.

CRedit Authorship Contribution Statement

The author affirms sole responsibility for the conception of the study, the presentation of results, and manuscript preparation.

Declaration of Competing Interest

The author declares that there is no conflict of interest.

Ethical approval

Not Applicable

Data Availability

The data used in this study are available upon request.

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