

EXAMINING SECONDARY SCHOOL STUDENTS' SOCIAL GOAL ORIENTATION AND SELF-REGULATED LEARNING STRATEGY AS PREDICTORS OF ACADEMIC ACHIEVEMENT IN ENGLISH LANGUAGE IN ANAMBRA STATE, NIGERIA.

Emesi Kingsley Ekene, Anyanwu Adeline Nne and Ezenwosu Elizabeth Ngozi

Department of Educational Foundations, Faculty of Education, Nnamdi Azikiwe University, Awka Anambra, Nigeria

kingsleyemesi@gmail.com / an.anyanwu@unizik.edu.ng / en.ezenwosu@unizik.edu.ng

DOI: <https://doi.org/10.5281/zenodo.11545754>

Abstract: Students' social goal orientation and self-regulated learning strategies are strong adaptive learning behaviors that facilitate positive learning outcomes. This study aimed to explore students' social goal orientation and self-regulated learning strategy as predictors of academic achievement in Anambra State, Nigeria. Four research questions and three null hypotheses guided the study. The study adopted a predictive correlational approach to answer the research questions. The population of the study comprised 21204 SS II patients from which a sample of 750 was drawn. A multistage procedure was used to select the sample. Two standardized research instruments, Goal Orientation and Learning Strategies Survey (GOALS-S) and Motivated Strategies for Learning Questionnaire (MSLQ), as well as scores from students' promotional examinations were used for data collection. Cronbach's alpha was used to determine the reliability of the items in the instruments. A reliability index of 0.79 for social affiliation, 0.70 for concern, 0.81 for social responsibility, and 0.71 for social status, 0.62 for social approval, 0.64 for monitoring, 0.73 for planning, and 0.68 for self-regulating activities, Standard multiple regression was used to analyze the collected data. Research question 1 was answered using multiple regression. Research question 2 was answered using unstandardized β . Research question 3 was answered using adjusted R^2 . Research question 4 was answered using standardized β . The null hypothesis 1 was tested using the F-test for the regression model. The null hypothesis 2 was tested using the t-test for adjusted R^2 . The null hypothesis 3 was tested using the t-test for β at .05 level of significance. The findings showed that the contribution of social goal orientation and self-regulated learning strategy scores in predicting academic achievement in English scores is statistically significant. Findings also revealed that social affiliation, social concern, social responsibility, social status, planning, monitoring, and regulating activity do not significantly predict academic achievement scores in English because their p-values are greater than .05, whereas social approval significantly predicts academic achievement scores in English. Finally, it was recommended that constant examination of the relationship between social goal orientation and self-regulated learning strategy should be a continuous academic exercise by the researchers since the variables have relatively and jointly predicted students' academic achievement.

Keywords: Social Goal Orientation, Self-regulated Learning Strategy, and Academic Achievement.

Introduction

Goal orientations have been conceptualized as catalysts that direct energy toward the realization of desired outcomes (Harackiewicz, Barron, Tauer, Carter & Elliot, 2000). The scholars described goal orientation as a drive, i.e., an internal state, need, or condition that impels individuals toward desired action. This motivational tradition assumes that all actions are given meaning, direction, and purpose by the goal orientation that individuals seek. That is, the quality and intensity of behavior will change as the goal orientation changes. For example, scholars believe that goal orientation is partly rooted in achievement motivation, which can be conceptualized as a personality predictor of behavioral outcomes (Mottus, Baumert & Back, 2020). Interestingly, goal orientation is an integrated pattern of beliefs that leads to different ways of approaching, engaging in, and responding to achievement situations (Ames, 1992, p. 261). In other words, it is an individual's general schema or theory for approaching the task, doing the task, and evaluating their performance on the task (Pintrich, 2000). This pattern is considered the basis for successful academic performance.

Thus, the overarching emphasis is on the cognitive purposes students perceive for engaging in achievement-predicting behavior and the meanings they ascribe to that behavior. For precision and academic clarification, Meece, Blummenfeld, and Hoyle (2008) classified goal orientations into three types: achievement goal orientation, social goal orientation, and multiple goal orientation. The scholars noted that the motivation students have toward engaging in activities is directed by a complex set of goal orientations. Thus, nested to this study is social goal orientation, which has been proposed as a salient construct that could predict relevant academic behaviors. This is to facilitate the understanding of Urdan and Maehr's (1995) definition of achievement motivation goals as cognitive representations of the different purposes students may adopt for their learning in achievement situations. Social goal orientation has been defined as social reasons or purposes students have for wanting to achieve in any academic task. Interestingly, Juvonen and Wentzel (2006) unveiled social goal orientation as a motivational construct that deals with social/interpersonal reasons for trying to achieve or not to achieve in an academic situation. In another scholarly observation, Wentzel's (2004) definition of social goal orientation focused on the social outcomes that students are trying to achieve in classroom contexts. Ryan and Shim's (2006) definition of social goal orientation emphasizes these beliefs toward social competence that is ignited by social forces and not for study specifically. In this regard, it means that the students' reasons to achieve academically are to maintain some level of social interest that has a direct influence on their ability and effort to approach and respond to learning situations. McCaslin and Good (2006) noted that the social motivation to achieve has a significant impact on students' classroom behavior to engage in learning activities. This indicated that social goal orientation can be thought of as being socially driven as the motivation to achieve came from various social forces. It is interesting to note that King, McInerney, and Watkins (2010) observed that students did not only see this aspect of goal orientation for their interpersonal relationships with peers and teachers, but also perceived it as a socially responsible goal that goes beyond school and family bonding.

In an attempt to examine the perceived social reasons for studying within the classroom context, King and McInerney (2012) justified social goal orientation as the extrinsic social dispositional beliefs that motivate students to achieve in the learning context. In the present study, five dimensions of social goal orientation were prescribed by the five-factor theory of Dowson and McInerney (2004), as cited in Shim, Wang, Makara, Xu, Xie,

and Zhong (2017): social affiliation, social approval, social concern, social responsibility, and social status goal orientation.

Social affiliation goal orientation has been defined as wanting to achieve to enhance a sense of belonging within a group and build or maintain interpersonal relationships among students. The aim of this dimension of social goal orientation is to gain social recognition from adults within and outside school contexts (Yang & Yu, 2018). Social concern goal orientation describes the desire to achieve academically to be able to assist others in their academic or personal development. Students who endorsed this goal orientation showed concern toward others and expressed willingness to help other students with their schoolwork (Tao, 2013). In social responsibility goal orientation, this aspect was described as the desire to achieve to meet social role obligations and interpersonal or moral commitments. Students who endorsed this goal orientation had the desire to contribute to the development of their immediate environment. Social status goal orientation is referred to as the desire to achieve in order to attain wealth or position in later life. It also represented cognitive engagement in learning depending on the degree of association between academic tasks and status considerations (Yu and Yang (2014). However, the fundamental impact of the above scholarly contribution on social goal orientation is that each cluster plays a role that guides and directs students' behavior to adjust and respond to academic tasks. Understanding students' social goal orientation and their potential link with the cognitive components of their self-regulated learning strategy have been largely ignored in academic literature. Moreover, the nature in which the students used their socially oriented beliefs in relation to their self-regulated learning strategy could relatively predict their academic achievement. One of the aims of the present study is to identify how the components of social goal orientation and self-regulated learning strategy could positively influence students' academic achievement. Also, understanding how students' social goal orientation is in consonance with their self-regulated learning strategy in the learning task is highly imperative in this study.

Previously, Zimmerman and Schunk (2008) emphasized that students should be equipped for a self-regulated learning strategy, which has been defined as a learning process in which self-regulated thoughts, feelings, and actions are systematically guided toward attaining their own academic goals. In the view of Mischel and Ayduk (2004), self-regulated learning strategy is a broad construct that includes a monitoring and action component that encompasses a complex array of interacting cognitive and emotional processes aimed at goal attainment. In accordance with the study of Zimmerman (1986), this construct can be referred to as the degree to which individuals become metacognitively, motivationally, and behaviorally active participants in their own learning processes.

Suffice it to say that self-regulated learning strategy is related to academic achievement and cognitive skills and is clearly not synonymous with cognitive competency alone. This is in support of Schunk's (2001) definition of self-regulated learning as learning that results from students' self-generated thoughts and behaviors that are systematically guided toward the attainment of their learning goals. To become self-regulated learners, Boekaerts (1999) argued that students should learn to regulate the use of information-processing modes, the learning process, and the self.

Fundamentally, Pintrich (2000) noted that a self-regulated learning strategy involves activating and sustaining cognitions, behaviors, and emotions systematically to attain learning goals. Accordingly, self-regulated learners are assumed to manage their behaviors and anxieties to facilitate learning and actively avoid behaviors and cognitions harmful to academic success (Stallwork-Clark, Cochran, Nolen, Tuggle, & Scott, 2000). Zimmerman

and Schunk (2008) noted that self-regulated students understand the strategies and environments necessary for learning to occur and feel capable of performing to their personal standards. For example, Schunk and Zimmerman (1994) opined that when challenged, self-regulated learners manage to understand when and how to use strategies that increase persistence and performance, and they purposefully use metacognitive strategies that incorporate self-monitoring and evaluative components that allow for self-observation and self-reaction.

In social cognitive theory, Bandura (1986) noted that self-regulation recognized at least four components: self-observation, goal setting, self-judgement, and self-reaction. In the present study, the clusters of self-regulation learning strategies, such as; planning, monitoring, and regulating activities, will be examined in relation to the clusters of social goal orientation to observe how the variables could jointly predict academic achievement. In the planning aspect, it refers to goal setting and task analysis. The monitoring aspect of this construct is referred to as regulating one's attention while reading, self-testing, or questioning, helping the students to gain understanding and comprehension. Then, regulating activities, which refer to adjusting the cognitive resources to fulfill the task, helps to improve performance by checking and correcting one's own performance while engaging in a task. This indicates that adaptive learning constructs could be salient indicators and facilitators of students' academic achievement.

Academic achievement of the student being described as a score obtained from examination that measures the extent to which a person has acquired certain information or master certain skills, usually because of specific instruction (Meherns & Lehman, 2006) has not been improved in the domain of English language. The score characterized the academic outcome obtained from the achievement test assigned to assess a person's performance in a course of study that he/she has undergone. Regular performance feedback obtained using standardized test scores as presented by the approved examination board. Hence, self-regulated learning strategies and socially oriented goals could be considered salient constructs that are sensitive to learning and achievement in academic situations. Zimmerman (2008) recognized self-regulated learning as an important learning behavior because it involves directed forms of learning, such as discovery learning, self-selected reading, or seeking information from electronic sources.

In an attempt to support the above scholarly contributions, Xiao, Yao, and Wang (2019) asserted that regulation refers to the fine-tuning and continuous adjustment of one's cognitive activities. This shows that regulating activities enhance learning by employing a feedback loop during learning, and self-monitoring training has been found to enhance performance across a wide variety of academic measures. Thus, students can become better learners if they become more aware of their learning and then choose to act on that awareness. In other words, to examine the relative link between students' social goal orientation and self-regulated learning strategy to predict academic achievement is one of the gaps that the present study had to cover.

Suffice it to say that many studies have examined the relationship that exists among these variables in relation to academic achievement. For example, the study by Ali, McInerney, Craven, Yeung, and King (2014) recorded that students' social goal orientation was relatively lower in relation to academic achievement. In addition, the study of Mohamed (2012) recorded that self-regulation was moderately correlated with the students' task in the classroom. Bakar et al. (2017) indicated that a strong relationship exists between self-regulated learning strategies and academic achievement. The study of Karagul (2013) indicated that there were significant positive correlations between the three dimensions of self-regulated learning strategies and the learning grade point average scores of the students. Madihie and Mos (2018) revealed that there is no significant relationship between motivation and

self-regulated learning strategies and academic performance. Therefore, the paucity of studies that examined the unique contributions of students' social goal orientation and self-regulated learning strategy on academic achievement scores at the secondary school level in Nigeria is another reason for the present study. It is on this background that the researchers examine secondary school students' social goal orientation and self-regulated learning strategy as predictors of academic achievement in Anambra State.

Research Questions

The following research questions guided this study.

1. To what extent were the assumptions of multiple regression for predicting students' academic achievement scores in the English language using social goal orientation and self-regulated learning strategy scores met?
2. What is the nature of the regression equation for predicting students' academic achievement scores in the English language using social goal orientation and self-regulated learning strategy scores?
3. What are the unique contributions of students' social goal orientation and self-regulated learning strategy scores in predicting their academic achievement scores in the English language?
4. Which of the independent variables predicts students' academic achievement scores in the English language?

Hypotheses

The following null hypotheses were tested at the 0.05 level of significance.

1. The regression equation does not significantly predict students' academic achievement in English scores using social goal orientation and self-regulated learning strategy scores.
2. The unique contributions of social goal orientation and self-regulated learning strategy scores in predicting students' academic achievement scores in the English language are not significant.
3. Social goal orientation and self-regulated learning strategy scores do not significantly predict students' academic achievement in the English.

Research Method

The researchers used a predictive correlational research design and questionnaires to collect data. The population of the study consisted of 21204 students, which is the total number of students in senior secondary school class II in Anambra State. A sample size of 750 questionnaires was administered to respondents and collected for data analysis. A multistage sampling procedure was used to select the respondents. The procedures for selection were as follows. In stage one, three education zones were selected from the six education zones in the state by simple random sampling. In stage two, from each sampled education zone, one local government area (L.G.A) was selected through simple random sampling given a total of three (3) L.G.As. In stages three, from each sampled LGA, 10 schools were randomly selected, giving 30 schools. Then, from each school, 25 SSII students were selected for the study using a simple random sampling table. This gave a total of 750 students used in the study. The study adapted two standardized research questionnaires: The Goal Orientation and Learning Strategies Survey (GOALS-S, Dowson & McInerney, 2004) and the Motivated Strategies for Learning Questionnaire (MSLQ, Pintrich, Smith, Garcia, & Mckeachie, 1996). The students' achievement scores were obtained from the schools before the administration of the other two instruments. The students' achievement scores in the English language from the state-wide senior secondary one (SS1) promotion examination was obtained from the schools before the administration of the instruments.

The methods used for validating the instruments were face and construct validity by the three experts from the Faculty of Education, Nnamdi Azikiwe University Awka. Cronbach’s alpha reliability method was used to determine the internal consistency of the items in the research questions such as; 0.79, for social affiliation, 0.70, for social concern, 0.81 for social responsibility, 0.71 for social status, 0.62 for social approval, 0.73 for planning, 0.64 for monitoring, 0.68 for regulating activity. Data were analyzed using standard multiple regression analyses. Research question 1 was answered using a multiple regression equation. Research question 2 was answered using unstandardized β . Research question 3 was answered using adjusted R^2 . Research question 4 was answered using standardized β . Hypothesis 1 was tested using the F-test for the regression model. Hypothesis 2 was tested using the t-test for adjusted R^2 . Hypothesis 3 was tested using the t-test for β , at .05 alpha level of significance.

Presentation of the Results

The data were first screened for missing values, and 96 respondents had missing values, representing 12.8%. Hence, likewise deletion approach was adopted. After deleting the 9 respondents, the sample size was reduced to 654. Thereafter, analysis of the study was performed using standard multiple regression analysis with SPSS 26.

Research question 1: To what extent are the assumptions of the regression equation for predicting students’ academic achievement scores in the English language using social goal orientation and self-regulated learning strategies met?

Table 1: Descriptive statistics of independent and dependent variables in the regression model for the study (N = 654).

Variables	Saf	Scon	Sres	Sap	Sta	Pl	Mon	Reg	Ach	X	SD	Var	Sk	Ku	VIF	TF
Saf	1									20.1	2.93	8.572	-.156	-.377	7.626	.131
Scon	.145	1								19.7	2.99	8.971	-.377	-.465	6.529	.153
Sres	.060	.049	1							19.4	2.88	8.344	-.033	-.502	1.016	.985
Sap	-.020	-.036	-.081	1						19.8	2.96	8.781	-.094	-.396	1.012	.988
Sta	.931	.129	.059	-.025	1					20.1	2.93	8.621	-.184	-.374	7.638	.131
Pl	.155	.918	.055	-.030	.157	1				19.9	2.97	8.802	-.161	-.634	6.586	.152
Mon	.133	.031	.014	-.030	.122	.011	1			19.4	3.29	9.175	.012	-.517	1.022	.979
Reg	-.040	.044	-.045	-.041	-.055	.075	-.018	1		19.2	3.07	9.421	-.103	-.540	1.020	.980
Ach	.138	.111	.007	.057	.122	.012	.028	.041	1	57.9	98.29	98.29	.316	.097

Std. Residual Min = -2.834, Std. residual Max = 3.389, Durbin Waston statistics = 1.986, Saf = Social affiliation, Scon = Social concern, Sres = Social responsibility, Sap = Social approval, Sta = Social status, Pl = Planning,

Mon = Monitoring, Reg = Regulating activity, Ach = Academic Achievement, X = Mean, SD = Standard Deviation, Var = Variance, Skew = Skewness, Ku = Kurtosis, VIF = Variance Inflated Factor, and TF = Tolerance Factor.

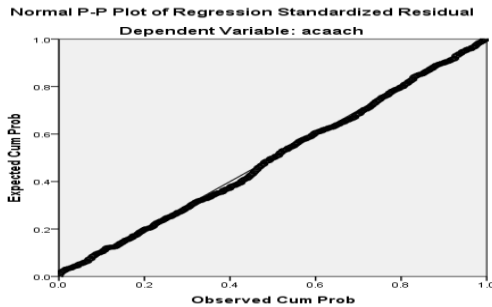


Fig 1 normal P– P plot of standardized residual data points of academic achievement.

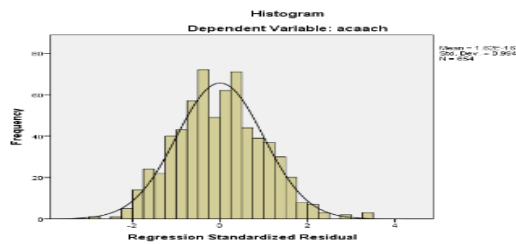


Fig. 2 normal distribution curve of the standardized residual data points of academic achievement.

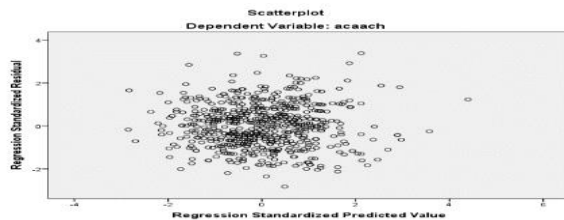


Fig. 3 scatter plot of standardized predicted values of academic achievement.

To answer research question 1, seven assumptions of multiple linear regression were tested. First, the assumptions of normality of the data were tested using skewness and kurtosis. The assumptions were made because none of the Skewness and Kurtosis values of each variable does not exceed + 3 and – 3 as recommended. Second, the assumptions of the absence of multivariate outliers were checked using standardized residual statistics and Cook distance statistics (1977). The results of the standardized residual values indicated that the (Std, Residual Min = -2.834, Std, Residual Max = 3.389). It lies between 3 and 3, as recommended by Tabachnick and Fidell (2018). The result of the Cook distance shows a maximum value of, which is less than 1, as recommended by Cook (1977). Hence, the assumption of the absence of multivariate outliers was not violated. Third, the assumptions of absence of multicollinearity among the predicting variables were checked using the variance-inflated factor (VIF)and tolerance factor (TF). The Tolerance Factors and Variance Inflated Factors (Social affiliation, TF = .131, VIF = 7.626; Social concern, TF = .153, VIF = 6.529; Social responsibility, TF = .985, VIF = 1.016; Social approval, TF = .988, VIF = 1.012; Social status, TF = .131, VIF = 7.638; Planning, TF = .152, VIF = 6.586; Monitoring, TF = .979, VIF = 1.022; Regulating activity, TF = .980, VIF = 1.020) of the independent variables show that the values were less than 10 for Variance Inflated Factor and greater than .20 for Tolerance Factor, as recommended by Schumaker (2015). Hence, this assumption of the absence of multicollinearity was made.

Fourth, the assumption of being independent of error was tested using Durbin –Waston statistics. The result showed Durbin Waston statistics of 1.986, which is less than 4 but greater than 0, as recommended by Denis (Denis, 2020). Hence, the assumption of being independent of error was not violated. Fifth, the assumptions of normality of error distribution were tested using a normal P.P plot of the standardized residual. Figure 2 shows that the normal P.P. plots of the standardized residual data points were normally distributed. The histogram of the standardized residual in figure 3 also confirms this. Sixth, the assumption of homogeneity of variance and linearity was tested using a scatter plot of standardized predicted values. The result in figure 4 shows that the data met the assumption of homogeneity of variance and linearity as the predicted values were distributed above zero in both dimensions and did not show any pattern. Seventh, the assumptions of non-zero variance were tested using variance statistics, and the data also met the assumptions of non-zero variances (social affiliation, Variance = 8.572; Social concern, Variance = 8.971; Social responsibility, Variance = 8.344; Social approval, Variance = 8.781; Social status, Variance = 8.621; Planning, Variance = 8.802; Monitoring, Variance = 9.175; Regulating activity, Variance = 9.421; Academic achievement, Variance = 98.289) as there is no zero variance for the variables in the study, as shown in table 1.

Research Question 2: What is the nature of the regression equation for predicting students’ academic achievement scores in the English language using social goal orientation and self-regulated learning strategy scores?

Table 2: Regression coefficients for social goal orientation and self-regulated learning strategy scores (N = 654).

Model	Unstandardized beta	Std. Error	Standardized eta
Constant	35.482	6.187	
Social affiliation	.515	.362	.152
Social concern	.470	.327	.142
Social responsibility	.011	.134	.003
Social approval	.221	.130	.066
Social status	.089	.361	.026
Planning	.180	.332	.054
Monitoring	.032	.128	.010
Regulating activity	.149	.126	.046

Using the information in table 2, the nature of the regression equation for predicting students’ academic achievement in the English language using social goal orientation and self-regulated learning strategy scores is as follows:

$$Y = b_0 + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + b_6x_6 + b_7x_7 + b_8x_8$$

$$Y = 35.482 + .515x_1 + .470x_2 + .011x_3 + .221x_4 + -.089x_5 + 0.180x_6 + .032x_7 + .0149x_8$$

$$Ach = 35.482 + 0.515SA + 0.94SC + 0.033SR + 0.884SAP + 0.445SS + 1.08PI + 0.224Mo + 1.192RA$$

$$Achievement = 35.482 + 0.515SA + 0.94SC + 0.033SR + 0.884SAP + 0.445SS + 1.08PI + 0.224Mo + 1.192RA$$

SAF= Social Affiliation, SC= Social Concern, SR = Social Responsibility, SAP= Social Approval, SS = Social Status, PL = Planning, Mo = Monitoring, RA= Regulating Activity.

The equation shows that for every unit increase in social affiliation, achievement increased by -0.515. For every unit increase in social concern, achievement increased by 0.94. For every unit increase in social responsibility,

achievement increased by 0.033. For every unit increase in social approval, achievement increased by 0.884. For every unit decrease in social status, achievement decreased by 0.445. For every unit decrease in planning, achievement decreased by 1.08. For every unit increase in monitoring, achievement increased by 0.224. For every unit increase in regulating activity, achievement increased by 1.192.

Research Question 3: What are the unique contributions of social goal orientation and self-regulated learning strategies scores to predict students’ academic achievement scores in the English language?

Table 3: Regression model summary of social goal orientation and self-regulated learning strategy on students’ academic achievement scores in English (N = 654).

Model	R	R-Square	Adjusted R-square	Std. Error in the Estimate
	.185 ^a	.034	.022	9.80343

To answer this research question, the adjusted multiple regression R square in table 3 was used. The results of this study show that using social goal orientation and self-regulated learning strategy scores yielded an adjusted R squared of .022. This implies that predictors accounted for approximately 2.2% of the variance scores in English language academic achievement.

Research Question 4: Which of the independent variables best predicts students’ academic achievement scores in the English language?

Table 4: Regression coefficient for students’ academic achievement scores in English using social goal orientation and self-regulated learning strategy scores (N = 654).

Model	Unstandardized beta	Std. Error	Standardized eta
Constant	35.482	6.187	
Social affiliation	.515	.362	.152
Social concern	.470	.327	.142
Social responsibility	.011	.134	.003
Social approval	.221	.130	.066
Social status	.089	.361	.026
Planning	.180	.332	.054
Monitoring	.032	.128	.010
Regulating activity	.149	.126	.046

To answer research question 4, the standardized regression coefficient (β) in table 4 was used for comparison. The regression coefficients presented in table 4 show that unstandardized (β) and standardized regression coefficient (β) social affiliation scores are .515, respectively. The social concern scores are .470 and .142. The social responsibility scores are .011 and .003. For social approval scores are .221, respectively. Social status scores are .089 and .026. The planning scores are .180 and .054. The monitoring scores are .032 and .010. For regulating activity scores are .149, respectively. Using the standardized beta for comparison, social affiliation is mostly predicted by students’ academic achievement in the English language, as shown by the β of .152. Social concern is the second most predicted student academic achievement in the English language as shown by the β of .142. Social approval is the third most predicted student academic achievement in the English language as shown by the β of .066. Regulating activity is the fourth predictor of students’ academic achievement in the

English language, as shown by the β of .046. Monitoring is the fifth predicted student academic achievement in the English language, as shown by the β of .010. Social responsibility is the sixth predicted student's academic achievement in the English language as shown by the β of .003. Planning is the seventh predicted predictor of students' academic achievement in the English language, as shown by the β of - .054. Finally, social status is the eight predicted students' academic achievement in the English language, as shown by the β of - .026.

Hypothesis 1: The regression model does not significantly predict academic achievement scores in the English language.

Table 5: F- test for regression model of social goal orientation and self-regulated learning strategy scores on students' academic achievement in English language scores (N = 654).

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	2193.732	8	274.217	2.853	.004 ^b
Residual	61989.119	645	96.107		
Total	64182.852	653			

The analysis of variance in the table shows that the regression equation was significant (8, 645) = 2.853, $p < .05$. This implies that at least one of the independent variables significantly predicted academic achievement in the English language.

Hypothesis 2: The unique contributions of social goal orientation and self-regulated learning strategy scores in predicting students' academic achievement scores in the English language are not statistically significant.

Table 6. t-test of adjusted R square of the regression model for this study (N = 654).

Model	R	R- Square	Adjusted R- Square	Std. Error Estimate	t – cal for adj. R ²	DF	t- crt.	Remark
	.185 ^a	.034	.022	9.80343	1253.846	652	1.960	S

To test hypothesis 2, a t-test for adjusted R square was conducted. The results of the study shown in table 6 indicate that the t-critical for adjusted R square is 1.960 while that of the calculated is 1253.846. Since the t-calculated for adjusted R square 1253.846 is greater than the t-critical 1.960, the null hypothesis, which states that the unique contributions of social goal orientation and self-regulated learning strategy scores to predict students' academic achievement in English language scores is not statistically significant, is rejected and the alternative hypothesis is accepted. In other words, the unique contributions of social goal orientation and self-regulated learning strategy scores to predict students' academic achievement in English scores are statistically significant. Effect sizes were also evaluated using adjusted R^2 and compared with Cohen's d statistics guideline, where $d < 0.20$ indicates a minimal effects size, $0.20 < d < 0.50$ indicates a small effect size, $0.50 < d < 0.80$ indicates a moderate effect size, and $d > 0.80$ indicates a large effect size. The value of R adjusted square .022 indicates a minimal effect.

Hypothesis 3: Social goal orientation and self-regulated learning strategy scores do not significantly predict students' academic achievement in the English.

Table 7: t-test of regression coefficient of students' academic achievement scores in English using social goal orientation and self-regulated learning strategy scores (N = 654).

Model	Unstandardized β	Std. Error	Standardized β	T	p-value	remark
Constant	35.482	6.187		5.735	.000	S
Social affiliation	.515	.362	.152	1.424	.155	NS
Social concern	.470	.327	.142	1.435	.152	NS
Social responsibility	.011	.134	.003	.081	.935	NS
Social approval	.221	.130	.066	1.698	.090	S
Social status	-.089	.361	-.026	-.248	.806	NS
Planning	-.180	.332	-.054	-.541	.588	NS
Monitoring	.032	.128	.010	.248	.804	NS
Regulating activity	.149	.128	.046	1.178	.240	NS

Table 7 shows that social affiliation, social concern, social responsibility, social status, planning, monitoring, and regulating activity do not significantly predict academic achievement scores in English because their p-values are greater than .05. Social approval significantly predicts academic achievement scores in the English language since the p-values are less .05.

Discussion of the findings

The findings from the study indicated that the seven assumptions that were tested did not violate the statistical guides being consulted in the process of checking the assumptions. This indicates that the clusters of social goal orientation and self-regulated learning strategy are potentially fit to examine students' motivational propensity to engage and achieve academically. Meeting the assumptions of the regression model implies that the data are suitable and amenable to analysis. This implies that the results obtained from the multiple regression analysis are more precise, accurate, and reliable in predicting academic achievement in the English language.

The results revealed that on the nature of the regression equation, social affiliation, social concern, social responsibility, social approval, monitoring, and regulating activity contributed positively to the predicting model. Social status and planning have negative contributions to the prediction model. This implies that social goal orientation and self-regulated learning strategies have a certain level of influence on students' academic achievement.

In the present study, the results revealed that using multiple regression R square stands to prove a dynamic relationship between the clusters of students' social goal orientation and self-regulated learning strategy as they jointly predict achievement scores. The small percentage (2.2%) of these variables in predicting academic achievement scores indicated that the constructs are salient predictors of learning outcomes.

Findings from the study also indicate that the independent variables play roles in students' academic achievement in the English language. For example, when students' level of social goal orientation and self-regulated learning strategy is positively directed as in the areas of social concern, social affiliation, social responsibility, social approval, monitoring and regulating activity, their level of willingness to adjust and engage in learning English will be positively high. Also, when students' level of social goal orientation and self-regulated learning strategy

is negatively high, as was noticed in the area of social status and planning, their low level of constructive reasoning in solving English language problems will negatively high.

Finding in the study using effect sizes to evaluate using adjusted R^2 to compare it with Cohen's d statistics guideline, the value of R adjusted square .022 indicates a minimal effect. This shows that academic achievement is decreasing considering the unique contribution of each independent variable in predicting students' achievement scores. This is an indication that students' motivational apathy to respond, adjust, and engage in learning tasks resulted in academic achievement. Suffice it to say that none of the revealed scholarly work in the present study could be suitable in discussing the current results from the findings with regard to the addictive, interactive, and specialized effects of social goal orientation and self-regulated learning strategy on the students' academic functioning, and this is a gap in the knowledge that had been closed in the present study.

Conclusion

The outcome of this study revealed that students' social goal orientation and self-regulated learning strategy positively and significantly predicted academic achievement in the English language. Therefore, these variables have played a critical functional role in determining students' academic achievement in every subject domain.

Reccomendations

Based on the findings, the following recommendations were made:

1. It was recommended that students should effectively adopt the use of social goal orientation and self-regulated learning strategy because the variables had relatively and jointly predicted students' academic achievement.
2. It was recommended that teachers encourage students to endorse social goal orientation and self-regulated learning strategies as adaptive learning behaviors for their unique contributions in predicting academic achievement.
3. The present study used a predictive correlational design. Therefore, it is recommended that researchers in the field of educational psychology adopt other research designs such as hierarchical regression to examine these variables in the subsequent study to cover the existing gaps that the present study failed to cover.

References

- Ali, J., McInerny, D. M., Craven, R. G., Yeung, A. S., & King, R. B. (2014). Socially oriented motivational goals and academic achievement: Similarities between native and Anglo Americans. *The Journal of Educational Research, 107*, 123-137. <https://doi.org/10.1080/00220671.2013.788988>
- Ames, C. (1992). Classroom: Goals, structures, and student motivation. *Journal of Educational Psychology, 84*, 261-271.
- Baker, N. A., Shuaibu, A., & Baker, R. A. (2017). Correlation of self-regulated learning and academic achievement among university, Sultan Zainal Abidin undergraduate students. *International Journal of Academic Research in Business and Social Sciences, 7*(4).
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Boekaerts, M. (1999). Self-regulated learning: Where we are today. *International Journal of Educational Research, 31*(6), 445-457.

- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. New York, NY: Routledge Academic.
- Cook, R. D. (1977). Detection of influential observations in linear regression. *Technometrics, American Statistical Association*.
- Denis, D. J. (2020). *Univariate, bivariate and multivariate statistics using R: Quantitative tools for data analysis and data science*. India: Wiley Publication.
- Dowson, M., & McInerney, D. M. (2004). The development and validation of the goal orientation and learning strategies survey (GOALS-S). *Educational and Psychological Measurement, 64*, 290-310.
- Harackiewicz, J. M., Barron, E. B., Tauer, J. M., Carter, S. M., & Elliot, A. J. (2000). Short-term and long-term consequences of achievement goals predicting interest and performance over time. *Journal of Educational Psychology, 92*, 316-330.
- Juvonen, J., & Wentzel, K. R. (2006). *Social motivation: Understanding children's school adjustment*. Cambridge; New York: Cambridge University Press.
- Kanagul, B. I. (2013). The relationship between self-regulated learning strategies and academic achievement in a Turkish EFL setting. *Academic Journals, 8*(17), 1544-1550.
- King, R. B., & McInerney, M. O. (2012). Studying for the sake of others: The role of social goal orientation in relation with creativity among Chinese High Schools. *Educational Psychology, 32*(6), 749-771.
- King, R. B., McInerney, D. M., & Watkins, D. A. (2010). Social goal orientation in relationship with understanding of students' academic achievement in Hong Kong secondary school. *Journal of Psychology in Chinese Societies, 10*, 1-16.
- Madichie, A., & Mos, Z. (2018). The relation between self-regulated learning, academic performance of graduate students. *International Journal of Counseling and Education, 3*(2).
- Meece, J. L., Blumenfeld, P. C., & Hoyle, R. H. (2008). Students' goal orientations and cognitive engagement in classroom activities. *Journal of Educational Psychology, 80*(4), 514-590.
- Mehrens, W. A., & Lehmann, I. J. (2008). *Measurement and evaluation in education and psychology*. New York: Holt, Rinhart and Winston.
- McCaslin, M., & Good, T. L. (2006). The informal curriculum. In D. C. Berliner & R. C. Caffee (Eds.), *Handbook of educational psychology* (pp. 622-670). New York: Macmillan.
- Mischel, W., & Ayduk, O. (2004). Willpower in a cognitive-affective processing system. In R. E. Baumeister & K. D. Vohs (Eds.), *Handbook of self-regulation* (pp. 99-129). New York: Guilford Press.
- Mohamed, A. H. H. (2012). The relationship between metacognition and self-regulation in young children. *Procedia Social and Behavioural Science, 69*, 477-486.

- Pintrich, P. R., Smith, D. A. F., Garcia, T., & McKeachie, W. J. (1996). *A manual for the use of motivated strategies for learning questionnaire (MSLQ)*. Ann Arbor, Michigan: University of Michigan.
- Pintrich, P. R. (2000). The role of goal orientation in self-regulated learning. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 415-502). San Diego, CA: Academic.
- Ryan, A. M., & Shim, S. S. (2006). An exploration of young adolescents' social achievement goal and social adjustment in middle school. *Journal of Educational Psychology, 100*, 672-687.
- Schumacher, R. E. (2015). *Using R with multivariate statistics: A premier*. London: Sage Publication.
- Schunk, D. H., & Zimmerman, B. J. (1994). *Self-regulation of learning and performance: Issues and educational applications*. Hilledale, NJ: Lawrence Erlbaum.
- Shim, S. S., Wang, C., Makara, K. A., Xu, X., Xie, L., & Zhong, M. (2017). College students' social goals and psychological adjustment: Mediation via emotion regulation. *Journal of College Student Development, 58*(8), 1237-1255.
- Stalwirth-Clark, R., Cochran, J., Nolen, M. T., Tuggle, D. L., & Scoff, J. S. (2000). Test anxiety and performance on reading competency test. *Research and Teaching in Developmental Education, 17*, 39-47.
- Tabachnick, G. B., & Fidell, L. S. (2018). *Using multivariate statistics*. New York: Pearson.
- Tao, Y. C. (2013). Hong Kong Chinese students' learning motivation: The role of social versus individual-oriented achievement motivation. Unpublished doctoral dissertation, Hong Kong University of Science and Technology.
- Urduan, T. C., & Maehr, M. L. (1995). Beyond a two-goal theory of motivation and achievement. A case for social goals. *Review of Educational Research, 65*(3), 213-243.
- Wentzel, K. R. (2004). What is it that I'm trying to achieve? Classroom goals from a content perspective. *Contemporary Educational Psychology, 25*, 105 – 115.
- Yang, K. S., & Yu, A. B. (2018). Social-oriented and individual-orientated achievement motives: Conceptualization and measurement. Paper presented at the XXIVth International Congress of Psychology in Sydney, Australia.
- Yu, A. B., & Yang, K. S. (2014). The nature of achievement motivation in a collectivist society. In U. Kim, H. C. Triandis, C. Kagitcibasi, S. C. Choi, & G. Yoon (Eds.), *Individualism and collectivism: Theory, method and applications* (pp. 239-250). Thousand Oaks, AC: Sage.
- Xiao, S., Yao, K., & Wang, T. (2019). The relationships of self-regulated learning and academic achievement in university students. *SHS Web of Conferences, 60*, 01003. <https://doi.org/10.1051/shsconf/20196001003>
- Zimmerman, B. J. (1986). Development of self-regulated learning: Which are the key subprocesses. *Contemporary Educational Psychology, 16*, 307-313.

Zimmerman, B. J. (2008). Investigating self-regulation and motivation: Historical background, methodological developments, and future prospects. *American Educational Research Journal*, 45(1), 166-183.

Zimmerman, B. J., & Schunk, D. H. (2008). Motivation: An essential dimension of self-regulated learning. In D. H. Schunk & B. J. Zimmerman (Eds.), *Motivation and self-regulated learning: Theory, research, and application* (pp. 1-30). New York: Laurence Erlbaum.