



Examining the Relationship between EFL University Students' Goal Orientations and Self-Regulation in Writing

Husain Abdulhay

Arak University, Iran

Moussa Ahmadian

Arak University, Iran

Hooshang Yazdani

Arak University, Iran

Majid Amerian

Arak University, Iran

The recent trend in foreign language education research is turning toward self-regulated learning and its linkage with goal orientations. Self-regulated learning is the learning propelled by self-induced thoughts, feelings, strategies, and behaviors toward goal attainment (Schunk & Zimmerman, 1998). Goal orientations attempt to identify personal and contextual reasons lying behind an action (Wolters, 2004). This study sought to examine the relationship between goal orientations (mastery-approach, mastery-avoidance, performance-approach, and performance-avoidance goals) and writing self-regulation of Iranian university EFL learners. Survey instrument, designed by Lichtinger, Kaplan, and Gorodetsky (2006), was administered to a sample of 116 sophomore students, attending essay writing courses. Pearson product-moment correlation and regression technique were used for data analysis. The strongest correlation was found between personal performance-approach and performance-avoidance goals. Personal mastery and performance goals and mastery goal structure were associated significantly and positively with self-regulation in writing. Efficacy was significantly related to goal orientation measures. Goal orientations contributed to the prediction of self-regulation in writing. Moreover, performance-approach goal structure was only found to predict positively the writing achievement. Overall, the findings imply that understanding the nature of goal orientations enables writing self-regulation and achievement to be aligned.

Keywords: EFL learners, academic writing, goal orientations, writing self-regulation

Introduction

Goal allows for a design toward which one decides to work and progress. Goal-setting is reported to relate to writing achievement, demonstrating that those students who establish goals and consecutively take stock of their writing progress gain higher grades (Zimmerman & Bandura, 1994). Second or foreign language students need to regulate their learning process in order to successfully handle the arduous task of writing (Graham & Harris, 2000; Kanlapan & Velasco, 2009). As Pipattarasakul and Singhasiri (2018)

put it, cognitive goal-setting has an important role in self-regulation. Bruning, Dempsey, Kauffman, McKim, and Zumbrunn (2013) believe that self-regulation in the writing process plays a determining role in writing quality. Self-regulation makes it possible for appraisal of syntactic and semantic goals and permits writers to keep focused, adopt appropriate writing strategies, and take the helm of their emotions during the writing process (ibid).

Achievement goal theory is spearheading as the most broadly adopted theoretical framework in academic motivation and achievement research (Butler, 2000; Retelsdorf & Gunther, 2011). This theory aims to demarcate the reasons why a person attends to an achievement task and the criteria against which s/he appraises his/her task performance (Pintrich, 2000a). Goal orientation, in the achievement goal theory, seeks to pinpoint personal and contextual reasons lying behind an action, which creates motivation and causes behavior (Wolters, 2004). Goal orientations are defined as the purposes for approaching a task in an achievement context (Dweck & Leggett, 1988; Elliot, 2005), per contra to achievement goals, which are conceived as more task-specific (Hulleman, Schrage, Bodmann, & Harackiewicz, 2010).

Goal orientation connotes two concepts of competence as an ending point or a reason for entering an action: the mastery concept—to expand or improve competence pertained to a task or self-related standards of success and the performance concept—to portray or prove one's competence to others (Dweck, 1986; Nicholls, 1989). Learners in mastery-run versus performance goal-conditioned classrooms report higher deployment of learning strategies, persistence, and more in-class and task-based effort investment (Wolters, 2004). Zimmerman (1990) asserts that self-regulated learners are cognitively, metacognitively, motivationally, and behaviorally predisposed to accomplish their goals. Noteworthy, setting goal, either mastery or performance, has its place in the forethought phase of Zimmerman's (1990) three-step cyclical model of self-regulation which is ordered by stage as 'forethought', 'performance', and 'self-reflection'. Forethought stage embraces self-examination and self-reaction in terms of goal-setting, outcome expectation, and preparation. Mastery-oriented students exhibit greater deals of motivation compared to their performance-oriented peers (Ames, 1992; Pintrich, 2000c; Schunk, 2001). However, some studies demonstrated that performance goal orientations make higher contribution to academic achievement (e.g., Harackiewicz et al., 2000; Kaplan & Middleton, 2002; Midgley, Kaplan, & Middleton, 2001; Pintrich, 2000b). Performance approach-oriented students enjoy extrinsic motivation by trying to outperform their counterparts and prove their competence through attainment of higher scores than their peers (Elliot & Harackiewicz, 1996) or shy away from tasks lest they should look inept, incompetent, and unintelligent (Elliot & Church, 1997).

Although past research evidenced the relationships between students' goal orientations and writing performance and achievement (Meece & Miller, 1999; Pajares, Britner, & Valinate, 2000), there are limited studies examining the relationship between goal orientations and writing self-regulation in college settings (Elliot & Church, 1997). Goal orientations and writing self-regulation have been assumed to significantly and positively relate, to a great length, to achievement on task (Pintrich, 2000c; Zimmerman & Bandura, 1994; Zimmerman & Risemberg, 1997). Hinged upon the scope obtained from the related literature, this study attempted to fill the gap in Iranian context through examining goal orientations and writing self-regulation of essay writing taken by university EFL learners. The present study, thus, aimed to answer the following question:

Q: Is there any relationship between EFL learners' goal orientations and self-regulation in writing?

Based on the research question, the following hypothesis was constructed to be tested out:

H: There will be a significant relationship between EFL learners' goal orientations and self-regulation in writing.

Literature Review

Goal is not realized in vacuum. It is inscribed and incarnated by twists and turns of thought patterns and belief system. Pajares and Cheong (2003) explored the relationship between 9 to 17 year old students' writing self-efficacy and achievement goals, taking performance-approach and performance-avoidance goals as distinct construct. The findings divulged that the writing mastery goals were positively related to writing performance and performance-approach writing goals were associated with writing performance, but not as strong as writing mastery goals. Both mastery and performance-approach goals for writing had positive relationship with writing behaviours, like planning, with an incremental strength of relationship with age. Additionally, performance-avoidance writing goals reported to be negatively related to writing performance, corroborating, studies which treat the two performance goal orientations as separate constructs.

Kaplan, Lichtinger, and Gorodetsky (2009) probed the relationship between ninth-grade middle school students' writing goal orientations, use of self-regulatory writing strategies, and their writing achievement. They used the 2 x 2 model, which is the bifurcation of mastery and performance both into approach and avoidance goals, positing a tetrad of mastery-approach, mastery-avoidance, performance-approach, and performance-avoidance goals. The students were assigned to groups to be given instructions on how to approach the writing task. A writing sample from each student was collected and scored, using standardized rubric for content, grammar, and thoroughness. The findings indicated that mastery-approach goals were strongly linked to writing achievement, more than any other goal orientations. However, the mixed results were observed for the mastery-avoidance, performance-approach, and performance-avoidance goals. Mastery avoidance, performance-approach, and performance-avoidance orientations delivered similar, non-significant results. Mastery-avoidance, performance-approach, and performance-avoidance goals were not significantly related to self-regulatory writing strategies and task achievement. This was for the way the study conducted, since the students were manipulated in approaching the task with a specific goal in mind to guarantee their participations.

Farsani, Beikmohammadi, and Mohebbi (2014) investigated the achievement goal orientations, self-regulation behaviors, and writing outcomes of a small sample of undergraduate English majors. The results denoted that self-regulated learning strategy use was not significantly related to writing performance. However, the use of self-regulated learning strategies was associated significantly and positively with mastery and performance-approach goal orientations.

Tadlock (2016), in a quantitative, non-experimental design, studied the nexus between 107 college students' writing achievement goal orientations (mastery, performance-approach, and performance-avoidance goals), writing self-regulation, and writing grades. Only writing performance-approach orientation was related to college students' writing grades. Writing self-regulation did fully mediate the relationships between writing mastery and performance-avoidance goals and writing grades. However, writing self-regulation failed to mediate the relationship between writing performance-approach goal orientation and writing grades. These findings, though limited by the size and nature of the sample and the survey items used, contradicted some of the prior studies in literature on achievement goal orientations and self-regulation.

Malpique, VeigaSimão, and Frison (2017) examined 732 male and female Portuguese ($n = 372$, 165 male and 207 female) and Brazilian ($n = 360$, 158 male and 202 female), in transition to high school ($M_{age} = 14.3$), ninth-grade students' reported use of self-regulated strategies for writing. They aimed to find cross-cultural differences in the use of 12 self-regulated strategies for writing as yardstick tapping environmental, behavioral, and personal self-regulated processes. The multivariate analysis of variance with twelve dependent variables and two between-subjects variables (country and gender) revealed significant main effects for country with a medium effect size and significantly and statistically small main effects $d < 0.20$ for gender. Significant differences and medium effect sizes were observed within gender groups of all-male and all-female. The majority of the differences reported were across personal

self-regulated strategies. The findings implicated that initiating and controlling writing may be a contextualized bounded process.

Written communication is a must-have skill practiced at schools, institutes, and universities in many non-English-speaking countries including Iran for attainment and assessment of academic achievement. As Graham, Harris, and Santangelo (2008) put it, most learners struggle with the writing activity, a fact reinforced by Gonzalez (2010), reminding of this skill as an exhaustive undertaking for students and even teachers both. According to Hayes (1996) and Zimmerman and Risemberg (1997), academic writing is a self-sketched, self-ignited, self-regulated, and metacognitive process. Though students, during their education at schools, and even after admission to college, obtain an acceptable level of knowledge of language, that of vocabulary, subject matter, and grammar, they are not sufficiently well-gearred and well-invested to wage into writing tasks. To cope with such situations, students need to be equipped with self-regulatory faculties as personally and autonomously sustain their effort despite unappealing and demanding tasks of writing. Language learning context, hence, is in need of evaluation regarding the EFL learners' uses of self-regulatory strategies pertained to their goal adoptions and orientations and their impressions and perceptions of goal-based structure affecting their achievements on writing task. It is thus that the present study was designed to delve into the goal structures relating to writing self-regulated behaviors and achievements of Iranian EFL learners.

Methods

The present study used a cross-sectional research design, the most prevalent second language sampling method (Dörnyei, 2007), in the guise of survey data collection, which was administered immediately after taking a sample of the college students' in-class writing tasks on an argumentative essay. The timing of data collection was distributed throughout the final weeks of spring semester within one session, making sure the learners had undergone essay-writing instruction, especially argumentative one. The learners were assigned to write at least five paragraphs on the same given-topic essay and then fill in the questionnaire, while ensured that their responses being kept confidential. Pearson product-moment correlation and regression analyses were conducted to examine the relation between goal orientations and self-regulation in writing and prediction power of goal variables on writing self-regulation and achievement, respectively.

Participants

A total of 116 sophomore undergraduate state-run university students, from different classrooms with different teachers, majoring in English (37/6% male and 62/4% female), aged 19-23 years, attending essay writing course, participated in the study. They were chosen based on the availability of classrooms for the collection of writing samples and administration of surveys. All of the participants had already undertaken three two-credit courses, including English Grammar (1) and (2), and Paragraph Writing. Furthermore, Oxford Quick Placement Test (OQPT) (2004) was administrated to make sure of their homogeneity in order to reduce variations and ensure internal validity of data for the intended analyses. The participants were found to be at intermediate level of English language proficiency based on their scores one standard deviation above and below the mean of their scores.

Materials

The 83-item self-regulation in writing self-report questionnaire, adapted and validated by Lichtinger, Kaplan, and Gorodetsky (2006), was used in this study. It provides a measure for various applications of cognitive (reader awareness, verbalization, & eliciting context), metacognitive (attention regulation, planning ahead, content monitoring, organization, checking & correcting, planning during writing, & self-

evaluation), motivational (success encouragement, value encouragement, & self-praise), and behavioral strategies (help-seeking), as well as goal orientations (mastery-approach, mastery-avoidance, performance-approach, and performance-avoidance goals) and academic efficacy (See Appendix). Lichtinger et al. (2006) corroborated the validity of the subscales through correlation with the established self-regulated learning measure (e.g., Motivated Strategies for Learning Questionnaire, Pintrich, Smith, Gracia, & McKeachie, 1993) and through its administration to an independent sample of high school students. Lichtinger et al. (2006) adapted academic efficacy and goal orientation subscales from Patterns of Adaptive Learning Survey designed by Midgley et al. (2000).

Data Collection Procedure

Since the aim of the study was to measure the participants' goal orientations and self-regulation in writing, data was collected out of the participants' in-class writings. They were given the task with instruction on how to approach the writing task. The participants were required to write an argumentative essay on Gender Differences within 40 min in the classroom and then immediately fill in the self-report questionnaires. They were also given general instructions on the length of the essay and suggestions on the issues like sports, social life, and co-education to consider in their arguments. They were to write a five-paragraph argumentative essay (including a general introduction paragraph, three detailed body paragraphs, and a general conclusion paragraph). To encourage their participations, they were assured their responses would be kept confidential. One of the researchers was present to give direction when required. All the learners did the task at the same time within one class session.

Scoring of the writing

The scoring procedure for rating the overall quality of the essays was based on IELTS scoring Profile (Shaw & Falvey, 2008). Two raters, both with Doctoral degree in Applied Linguistics, were invited to score the writing performances. The average of the scores each participant received from the raters was considered as his/her final score for data analysis.

Results

Scales Validity and Reliability

Cronbach's alpha was calculated to appraise reliability of the scale for administration to Iranian context. The analysis revealed that coefficient alpha was (α) = .944, indicating a high value of internal consistency. The systematic relations found in this study between students' different types of goal orientations and their self-reported uses of self-regulation in writing strategies were deemed as a confirmation of the validity of their responses to the questionnaire.

Correlation Analysis

The major aim of the present study was to find the relationship between the students' goal orientations and self-regulation in writing. Pearson product-moment correlation analysis was run to test the relations. Table 1 displays the correlations and summary statistics for the goal orientations and writing efficacy.

TABLE 1
Correlation between Goal Orientations & Writing Efficacy Variables

	1	2	3	4	5	6	7	8
1. Mastery-approach goals	-							
2. Mastery-avoidance goals		.43**	-					
3. Performance-approach goals		.15	.09	-				
4. Performance-avoidance goals		.22**	.29**	.61**	-			
5. Mastery-goal structure		.43**	.13	-.01	.14	-		
6. Performance-approach goal structure		.11	.04	.36**	.34**	.18*	-	
7. Performance-avoidance goal structure		.15	.14	.44**	.52**	.14	.60**	-
8. Writing efficacy		.34**	.19*	.14	.07	.23**	.21**	.19*

Note. **Correlation is significant at the .01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

The correlation matrix (Table 1) showcases the associations between the variables. Accordingly, the strongest association can be observed between performance-avoidance and performance-approach goals (.61). A strong correlation can be seen between performance-approach and performance-avoidance achievement goals (.60). Mastery-approach goal was moderately correlated with mastery goal structure and mastery-avoidance goal both equally (.43) and related significantly to personal performance-avoidance goal (.22), while not showing correlation significantly with performance-approach and performance-avoidance goal structures (.11 and .15, respectively). Though mastery-avoidance was significantly associated with performance-avoidance goals (.29), it proved not to be related to performance approach goals (.09). Mastery goal structure reported a negative correlation with performance-approach goal (-.01) and proved no significant association with mastery-avoidance and performance-avoidance goals (.13 and .14, respectively). Performance-approach goal structure was significantly correlated with performance-approach and performance-avoidance goals (.36 and .34, respectively). Performance avoidance goal structure was significantly strongly related to performance approach goal structure (.60), significantly moderately to performance-avoidance and performance-approach goals (.52 and .44, respectively). Performance avoidance goal structure was not significantly associated with mastery-avoidance goal (.14). However, writing efficacy was not significantly related to performance-approach and performance-avoidance goals (.14 and .07, respectively).

As for the main part of the current study, inter-correlation among goal orientations, efficacy, task achievement, and self-regulation in writing were computed to discern more thoroughly the reciprocal relationships between the very variables. The results of correlation analysis for goal orientations, academic efficacy, self-regulation in writing, and writing achievement are presented in the Table 2.

TABLE 2
Correlations and Summary Statistics for Goals, Self-regulation, & Grade

Attention	23**	13	12	06	12	14	10	31**	-
Plan ahead	50**	31**	13	14	27**	07	14	50**	26**
Monitoring	40**	22**	19*	27**	23**	19*	20*	42**	26**
Organize	38**	15*	31**	29**	24**	17*	23**	63**	36**
Checking	26**	16*	01	06	12	07	07	23**	13
Planduring	48**	15	10	17*	24**	03	03	47**	37**
Evaluation	48**	29**	33**	36**	23**	15	22**	45**	31**
Success	40**	26**	37**	41**	26**	27**	33**	41**	28**
Task-value	55**	39**	30**	32**	48**	27**	21*	44**	29**
Self-praise	26**	32**	26**	19*	24**	32**	28**	34**	18*
Help-seek	25**	23**	32**	27**	02	20*	22**	14	16*
Readeraw	22**	21*	26**	22**	22**	39**	37**	20*	04
Verbalize	07	08	15	06	-01	38**	33**	07	02
Eliciting	22**	23**	17*	17*	18*	22**	21*	42**	11
Grade	03	-08	01	-02	12	17*	-05	06	-11

Note. **. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

As shown in Table 2, there were several statistically significant correlations among goal orientations, self-efficacy, self-regulation in writing, and achievement. Writing efficacy was significantly and positively linked with meta-cognitive, motivational, behavioral, and cognitive strategies. However, writing efficacy demonstrated no significant correlation with reader awareness (.20), help-seeking (.14), and verbalization (.07). Correlation between academic efficacy and achievement on task was not significant (.06).

The goal variables were found to correlate significantly with self-regulation in writing. The strongest moderate positive relationship was found between personal mastery-approach goal and task-value encouragement ($r = .55, p < .01$). Performance-approach goal structure was not associated significantly with meta-cognitive measures, namely, self-evaluation (.15), attention regulation (.14), checking and correcting and planning ahead both equally (.07), and planning during writing (.03). Mastery-goal structure was not correlated significantly with help-seeking (.02), attention regulation, and checking and correcting equally (.12), and was negatively associated with verbalization (.01).

Performance-approach goal structure only was correlated significantly and positively with task achievement ($r = .17, p < .05$). Mastery avoidance goal, performance-avoidance goal structure, and personal performance-avoidance goals were negatively associated with grade (.08, .05, and .02, respectively). Taking all the above-mentioned relations into account, we can infer that the hypothesis formulated for this study can be confirmed.

Linear Stepwise Regression Analysis

The stepwise regression analysis was executed to determine which of the selected categories of the independent variables contribute more or less to explaining predicted variables. The magnitude of contribution for each significant predictor was determined by its associated standardized regression coefficient β . Table 3 exhibits the results.

TABLE 3
Standardized Beta Coefficients of Predictors of Achievement on Task

Model	Unstandardized Coefficients		Standardised Coefficients			
	B	Std. Error	Beta	t	Sig.	
(Constant)	5.674	.733		7.741	.000	
Ma	-.006	.023	-.030	-.263	.793	
Mv	-.020	.029	-.071	-.674	.501	
Pa	.001	.020	.007	.056	.956	
Pv	.000	.026	-.001	-.007	.994	
MG	.013	.015	.092	.904	.368	
PaG	.052	.019	.312	2.758	.007	
PvG	-.038	.023	-.261	-2.138	.035	
Efficacy	.016	.023	.071	.709	.480	

a. Dependent Variable: Achievement on Task

Note. Ma=mastery-approach goal; Mv=mastery-avoidance; Pa=performance-approach goal; Pv=performance-avoidance goal; MG=mastery goal structure; Pag=performance approach goal structure; PvG=performance avoidance goal structure.

Model Summary

1	R	R ²	Adjusted R ²	SD. Error of estimate
	.311a	.097	.033	1.41888

Table 3 depicts the results of linear regression analysis with task achievement as a dependent variable predicted by goal orientations variables and also academic efficacy. This Table, also, shows that the largest beta weight, 0.312 was recorded for performance-approach goal structure. The predictive power for this variable was significant at the alpha value of 0.01. This significant predictive power made it the first strongest determinant of task achievement.

Multiple Linear Stepwise Regression Analysis

In order to identify which one of the goal orientations has a significant part in explaining the learners' meta-cognitive subcomponents, a series of multiple regression analyses were carried out, in which all the seven goal variables were entered into the model to estimate meta-cognitive strategy variances accounted for by these seven variables. The results are depicted in Table 4.

TABLE 4

Regression Analyses on Goal Orientations Predicting Use of Meta-cognitive Variables

Variables	Attention		Plan ahead		Content		Organization		Checking		Plan during		Self-evaluation	
	B	β	B	β	B	β	B	β	B	β	B	β	B	β
Mastery app	15	17+	26	43****	19	33****	17	29**	25	21*	28	48****	21	37****
Mastery avo	10	08	09	11	02	-03	-03	-03	16	10	-05	-06	05	06
Per app	12	09	06	12	03	06	13	26+	-01	-01	02	04	09	20*
Per avo	-10	-12	-08	-13	03	06	01	02	-06	-05	06	11	06	11+
Mastery g str	02	04	04	10	03	07	05	11	00	01	02	06	01	03
Per app g str	06	08	-02	-05	03	07	00	00	03	03	-00	-01	01	02
Per avo g str	01	01	02	05	-00	-00	00	00	07	06	-04	-11	-01	-03

Note. Attention=attention regulation; Content=content monitoring; Mastery app= mastery approach; Mastery avo= mastery avoidance; Per app = performance approach; Per avo= performance avoidance; g str=goal structure. + $p \leq .10$, * $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$, **** $p \leq .0001$.

Model Summary

R ²	adj R ²	Attention		Plan ahead		Content		Organization		Checking		Plan during		Self-evaluation	
		.07	.02	.29	.24	.20	.16	.22	.18	.08	.03	.26	.22	.31	.27

As seen in Table 4, mastery approach goal had statistically significant positive contribution in explaining the variance in students' reported scores on measure for planning during writing, explaining about 22 percent of variance. The beta weight was 0.48. This significant predictive power made it the first strongest predictor of self-regulated learning. Secondly, planning ahead of writing was significantly and positively predicted by mastery approach goal ($\beta = .43$), explaining about 24% of the variance. Thirdly, both mastery approach goal served significantly positively in predicating self-evaluation ($\beta = .37$), explaining about 27 % of the variance. Fourthly, mastery approach goal contributed to the prediction of organization strategy ($\beta = .29$), explaining approximately 18 percent of the variance. Fifthly, mastery approach goal statistically significantly and positively contributed ($\beta = .21$) to explaining the variance in students' reported checking and correcting, explaining about 3 percent of variance. Lastly, attention regulation significantly and positively predicted by mastery approach goal ($\beta = .17$), though lower than the rest, explaining about 2% of the variance. However, from among the goal variables, performance approach goal was also found to statistically significantly predict self-evaluation strategy ($\beta = .20$) and organization ($\beta = .20$, $p \leq .10$). Performance avoidance goal was only found to predict self-evaluation ($\beta = .11$, $p \leq .10$), explaining about 27 % of the variance.

In order to ascertain which goal orientations made unique contribution to explaining each individual motivational, behavioral, and cognitive strategy variances, multiple stepwise regression analysis was applied to draw β coefficients so as to interpret the magnitude of predictive power of each significant variable. Table 5 lists regression coefficients.

TABLE 5
Regression Analyses Predicting Motivational, Behavioral, & Cognitive Variables

Variables	Success		Task-value		Self-praise		Help-seek		Reader-aware		Verbalization		Eliciting context	
	B	β	B	β	B	β	B	β	B	β	B	β	B	β
Mastery-app	10	.25**	22	.28***	02	.06	18	.18+	06	.06	04	.08	04	.09
Mastery-avo	05	.08	25	.23**	16	.28**	21	.16+	26	.16+	06	.10	11	.17
Per app	07	.20*	15	.23*	09	.27*	20	.25*	16	.17	02	.05	05	.13
Per avo	05	.13	-00	-.01	-11	-.25*	-04	-.04	-17	-.15	-12	-.25*	-02	-.05*
Master g str	02	.07	16	.27****	04	.14	-06	-.19	05	.06	-06	-.17*	02	.06*
Per-ap g str	03	.09	09	.14	07	.20*	06	.08	25	.27**	13	.32**	05	.13**
Per-avo g str	01	.03	-03	-.06	01	.05	03	.04	13	.16	08	.24*	00	.02*

Note. Success= success encouragement; Reader aware=reader awareness.

+ $p < .10$, * $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$, **** $p \leq .0001$.

Model Summary

R ²	adj R ²	Success	Task-value	Self-praise	Help-seek	Reader-aware	Verbalization	Eliciting context					
.31	.27	.47	.44	.23	.18	.17	.12	.23	.19	.20	.16	.11	.05

Table 5 shows the beta weight (0.28), evidencing the prediction power of mastery-approach goal on task-value encouragement, explaining 44 % of variance. Mastery-approach was found to statistically significantly predict success encouragement with the beta weight (0.25) and help-seeking which only approached significance ($\beta = .18$), as the second and third variables in order of magnitude. Mastery-avoidance goal was a positive predictor of students' self-reported self-praise and task-value encouragement ($\beta = .28$ and $\beta = .23$, respectively). The mastery-avoidance goal was the lowest significant predictor of help-seeking and reader awareness, both ($\beta = 0.16$, $p < .10$). Performance-approach goal achievement significantly contributed to self-praise, help-seeking, task-value encouragement, and success encouragement ($\beta = .27$, $.25$, $.23$, and $.20$, respectively). The predictive powers for these variables were significant at the alpha value of 0.05. Performance-avoidance goal achievement emerged as significantly negative predictor of self-praise and verbalization both equally ($\beta = .25$) and eliciting context ($\beta = .05$). Mastery goal structure predicted task-value encouragement, verbalization, and eliciting context ($\beta = .27$, $.17$, and $.06$) at the alpha level of $p \leq .0001$. Performance approach goal structure had statistically highest contribution in explaining the variance in the learners' uses of verbalization ($\beta = .32$), this means that each one-point increase on a 7-point Likert scale on performance-approach goal structure dimension predicted a .16 point increase on the use of this strategy by Iranian EFL learners. Reader awareness, verbalization, and self-praise were the other strategies predicted by this variable ($\beta = .27$, $.20$, and $.13$, respectively). The cognitive strategies of verbalization and eliciting context were predicted significantly and positively by performance avoidance goal structure. Therefore, based on the findings, the hypothesis for this study that goal orientations are the predictors of the self-regulation in writing can be supported.

Discussion

This study aimed to investigate the relationship between EFL university learners' goal orientations and self-regulation in writing. The results indicate that goal orientations are related to self-regulation in writing. The outcomes of this study bolster the proposition made by Boekaerts, Pintrich, and Zeidner (2000) that learning situations with mastery, performance-approach, and performance-avoidance goal structures invoke the application of similar self-regulated learning processes. The outcomes of the present study corroborate the findings from other studies (Kaplan et al., 2009), endorsing self-regulation in writing as a multidimensional construct. The reliability estimate of the instrument confirmed through Cronbach's alpha analysis attests to the integrative nature of self-regulation in writing inventory, indicating that its components are interwoven. Thus, teachers are encouraged to bring into focus this inventory as a whole to actualize its all-out effects on learners' motivation and performance. Goal gives a sense of direction, guided and nurtured by thinking and feeling during the course of action. Teachers are

also suggested to care for interaction effect of goal and self-regulation affecting learners' mental and emotional functions in completion of a task.

The results of correlation analysis revealed that only performance-approach goal structure was significantly and positively associated with the writing achievement, giving away the built-in reasons for the achievement on the task controlled by grade as an exterior motivator. Correspondingly, negative relationship between performance-avoidance goal structure and the writing achievement suggests that performance-avoidance structure is impediment to the achievement of task. This fact was consistent with erstwhile studies, endorsing predictive power of performance-approach goals contributing to writing self-regulatory strategies (e.g., Harackiewicz et al., 2000; Wolters, Yu, & Pintrich, 1996). It seems conspicuous that performance-approach goal is more likely to link with self-regulation in writing and achievement, especially in educational systems like Iran where grading system determines admission to higher education.

It was found that the students in the present study considered and pursued two types of goal orientations, mastery and performance goals, both at the same time, for a specific task, corresponding to the findings of the studies by Archer (1994), Greene and Miller (1996), and Somuncuoğlu and Yildirim (1999). Performance-approach goal structure significantly and positively explained the variance in the achievement on task. The findings support the claim made by Darnon et al. (2010) in that educational contexts are scarcely devoid of performance-approach goals. Senko et al. (2011) believe that in multiple goal frameworks in which students adopt mastery and performance goals together, both goals avail them, whereas performance goals benefit them more than mastery goals. Iranian EFL learners' self-regulatory writing behaviors were related, in predictable ways, to their goal orientations.

The students' responses on the scale reflected the reasons behind their writing behaviors and disclosed the liaison of their motivational orientations with their actions. The students' alternations of goal adoptions when attending to a task convey the volatile nature of goal endorsement at confluence of strategy employment. The correlations found across the variables in this study imply that mastery goals are favored and endorsed in tandem with performance goals for fulfilment of a task, categorically attesting to multidimensionality of goal structures. Success is accomplished with both mastery and performance goals (Elliot, 1999); hence, reflecting a cause and effect relationship. Efficacy was associated significantly higher with mastery goal structure than performance-approach and performance-avoidance goal structures. The correlation between self-efficacy and two types of goals, personal and environmental goal structures, resonates the relative importance of the beliefs in writing ability for engagement.

A notable result was the negative association between performance-avoidance goal structure and writing achievement, which endorsed the findings on goal orientations in making performance approach and avoidance goals as sequestered construct. Mastery-approach was correlated with all of the self-regulation in writing except verbalization strategy. As Church, Elliot, and Gable (2001) put it, mastery-oriented students are more probable to feel for writing tasks as they crave more for the promotion of their writing skills. Kaplan, Lichtinger, and Gorodetsky (2009) proclaim that situational characteristics may cause certain strategies more or less agreeable based on the purposes pursued. The ambivalence found in achievement goals is also the result of convergence of mastery and performance-approach goals. Students combine mastery and performance-approach goals to mismatch the values in defiance of teachers' promotional discourse for competition and at the same time to match the very value of marking and grading pursuing academic performance and success (Darnon, Butera, & Harackiewicz, 2008).

The results of the current study indicated that attention regulation was not correlated with any goal variables but mastery-approach goal. It can be inferred that attention-regulation is unaffected and object-targeted with goals based on the foundations of mastery. Performance goals may defy attention-regulation no matter how much it is needed where competing factors and luring distractions would brook no short respite from disturbances. Checking and correcting, except for mastery-approach and mastery-avoidance goals, were not related to all of the goal orientations. Kaplan et al. (2009) evidenced that none of the goal orientations was correlated with checking and correcting. Classroom time distress, corrective in-expertise,

inconvenience to find faults or even pride in one's ability may stand as some reasons why one evades checking and correcting of their pieces. Elliot and McGregor (2001) and Pintrich (2000b) believed that perfectionist students, who never try anything unless they are sure-fire of being best in it, endorse mastery-avoidance goals. The association found between mastery-approach goal and both task-value encouragement and attention regulation implies the students' affinity with mastery, no matter how an environment planted by the instructor.

The results of this study showed that planning ahead except personal mastery-approach, mastery-avoidance goals, and mastery-goal structure was not correlated with other goal orientation measures. The students during task performance may miss or prioritize some strategies over others. Planning during writing except for mastery-approach, mastery-goal structure, and performance-avoidance goals was found to have no correlation with the other goal orientations. Planning during writing, in the study by Kaplan et al. (2009), likewise, was found to have no link with personal performance goal variables.

Of the seven goal orientations, only mastery goal structure was found to have no link with help-seeking as adaptive behavior, supporting the notion made by Regner, Escribe, and Dupeyrat (2007) that mastery goals are also related to social comparison orientation. It seems that the students in the present study preferred not to weather the emotional storm of appearing imperfect and mediocre to ask for help or wanted not to enter a situation in which they were uncertain of the result, expecting too much of themselves. Students could also have the pretexts of standing on their own feet and masquerading of an able person (Butler & Neuman, 1995). In mastery goal structure, learners are not under duress so as to want to go to any length to obtain knowledge compared to performance-related environments where social determiners like loss of approval and face and value-laden grading push them to take an action more seriously. Apparently, the students had no compulsion to master materials in contrast to performance-based conditions where they had to strive in for getting a pass.

Help-seeking was significantly and negatively predicted by performance avoidance goal as a maladaptive behavior, corroborating the findings of previous research (Roussel, Elliot, & Feltman, 2011). Harackiewicz et al. (2000) discovered that perceived performance-avoidance goals were negatively correlated with help-seeking. Lichtinger et al. (2006) found that help-seeking was not related to performance goal structure variables. The students eschewed the situations where they might find any chance of being judged as needy of knowhow. Organization in writing was correlated significantly and positively with the goal orientations, in the present study, and with mastery-approach goals reporting the highest association than the rest. The association of organization in writing with both approach and avoidance goals underscores the importance of exercising this tactic for self-regulation of writing process, either internally or externally motivated.

The current results revealed that verbalization had no connection to other goal orientations than performance-approach and performance-avoidance goal structures, this is in line with the findings from the study done by Kaplan, Lichtinger, and Gorodetsky (2009). According to Dembo (2004), self-talk (or self-verbalization) helps steer emotions and behavior and is a significant determinant of attitudes, feelings, and behavior. Self-talk enhances motivation and helps avoid procrastination. Students may let go of attempt to insist on goals since they are either unfamiliar with drastic strategies or they are discomfort in using them for contextual contingency and appropriateness and are not prepared, extemporaneous, and flexible enough to extrapolate them. Mastery-approach rather than performance-approach can be construed as a less compelling condition for using self-talk where one needs to meet a task. Performance necessities one to resort to even self-talk as a means to an end lest should leave any strategy unused as to miss the least chance of success. To put another way, performance in an exam is a one-time event impossible to recur or, if possible, it has to be regained with hardship in comparison to mastery which is liable to acquisition in other times and occasions and with lower cost. Mastery-based goal achievement may be taken less serious where reward or punishment is more self-defined and self-related compared to performance-based goal in which achievement is being monitored and judged by the third parties.

In this study, self-evaluation was found to correlate with all goal orientations except performance-approach goal structure. Self-evaluation is the hallmark of self-regulation; that is, no regulation is realized

unless a least amount of sizing up and noticing of oneself and one's actions comes into effect (Zimmerman, 1990). Performance-based environments, ipso facto, promote instantaneous goals like course success, with superficial sought-after solution put as first priority instead of deep-rooted fixing of shortcomings as to permanently terminate a problem to pre-empt the recurrence of similar situation. Self-evaluation makes the students' balance disturb when they notice that their inured habits are in need of review and change if progress is desired. In performance-conditioned classrooms where short-shelf goals like passing of exam are set, learners feel no need to go any further length to overhaul themselves to get rid of a problem. The association between performance-avoidance goal structure and meta-cognitive measure of self-evaluation suggests that the students were concerned about their self-image and set actions against internal and external values or that they felt this certain task had no gain for them so that they overlooked it. Moreover, the in-class writing assignment, which is a quick once-over task assigned on a time limit, pressurizes and puts the learners in time distress to go over and scope out their scripts scrupulously, be it a performance-based environment or mastery goal structure.

The findings of the present study give insights into the disuse of some strategies for self-regulation of writing in relation to goal structures. The non-uses of some strategies make it possible to find and ameliorate any misunderstanding in terms of goal adoption that causes learners to make a retreat from deployment of self-regulation, equipped with the contention made by Kimmel and Volet (2010) that goal orientations exhibit the same patterns across cultures. The outcomes highlight the notion made by Zimmerman (2000) that a self-regulated learner, besides being an efficacious performer and user of diverse self-regulatory strategies, is the adopter of sundry and simultaneous goals. Language learning by its very nature urges the use of self-regulation. Sadeghi and Khezrlou (2012) evidenced frequent use of self-regulation by learners of language rather than students of other field of studies. Disclosure of perceived classroom goal structures helps teachers keep on balance concerning goal promotion and establishment as to cater and care for the students' tastes, values, and beliefs in pursuit of academic self-regulation.

Conclusion

The present study highlighted the multidimensionality of learners' achievement goal profiles in domain-specific task of writing. Notwithstanding, the students perceived their social environments as performance-based structure, they were concerned about mastery goals simultaneously when performing writing task. More specifically, in this study performance-approach goal structure was found to be the only predictor of achievement on task of writing. Additionally, performance-avoidance goal structure was reported to be negatively related to writing performance, which provides support for treating the two performance goal orientations as partitioned constructs. The findings encourage teachers to enter learners in goal-setting condition as to find a sense of direction and apply self-regulation.

The current study evidences significant relationship between self-regulation in writing and goal orientations, supporting the formulated hypothesis for this study. The students' adaptive writing behaviors, namely meta-cognitive strategies, were predicted significantly and positively by all goal orientation variables. The findings illuminated the process of self-regulation students went through when performing the writing task directed by set goals. It was identified that self-regulated learning is not a unified band of strategies but consist of multiple strategies deployed in accordance with adopted goals. In view of the effect of goal orientations on self-regulation in writing and task achievement, teachers and researchers are invited to identify, understand, and discuss the nature of students' goal orientations as to revamp their writing self-regulatory behaviors for self-actualization purposes through conscious-raising. It calls for educators to encourage students to take responsibility and helm of their own learning by taking appraisal of writing self-regulation on a regular basis. As long as language achievement in Iranian context is found to positively relate to self-regulation (Ghasemi & Dowlatabadi, 2017), self-examination of one's own tactics to pinpoint weak points and potentialities, for preventive and reinforcement purposes, is

advised as part of the pathway to become an autonomous learner. By using writing self-evaluation inventory, learners no longer need to wait until others tell them about their drawbacks or to experience any chance of feeling discomfort. Interestingly, the study done by Ahmadian, Yazdani, and Mehri (2019) evidenced that the preferred feedback more than un-preferred ones facilitated language learners' accuracy development in writing.

Extracting approach and avoidance behaviors help students find unproductive justifications for eschewing an action to come up with a countermeasure through cultivation and substitution of new insight. However, the values set by socio-cultural environment outside classroom like self-identity, self-determination, and self-concept affect goal adoptions. Socio-cultural values are also school-related variable like grade norms, deserving further study. Schooling system and admission to higher education tied up to rating and grading may inadvertently heighten and intensify competitive than cooperative spirit among students, dictating and instilling the adoption of performance-oriented goals, no matter how much mastery goal structure is striven to be established by instructors. By and large, every learning situation infiltrates goals and intentions, identification of which helps one discern circumstances that encourage follow-ups so as to secure a solution to the problem and eliminate barriers to progress. In nutshell, this study implies that teachers can harness goal orientations to promote students' strategic self-regulation for success in writing.

The Authors

Husain Abdulhay is currently a Ph.D. student at Arak University, Iran. He served as a lecturer at Payame-noor University, Iran. His research interest includes self-regulated learning.

Moussa Ahmadian (corresponding author) is currently an associate professor of Department of English Language and Literature in Arak University, Arak, Iran. He received his Ph.D. from Sheffield University, UK in 1995. His fields of interest are applied linguistics and second language acquisition studies, translatology, and comparative literature. He has published and presented a number of papers in inter/national journals and conferences.

Department of English Language and Literature
Faculty of Literature and Foreign Languages
Arak University
Arak 38156-8-8349, PO. Box: 879, Iran
Tel: +988633135111
Email: M-ahmadian@araku.ac.ir

Hooshang Yazdani is currently an assistant professor of Department of English language and literature at Arak University, Arak, Iran. He received his Ph.D. from Essex University, UK. His fields of interest are SLA and reading/writing. He has published several articles in inter/national journals and examined many theses and research projects.

Dept. of English Language and Literature
Faculty of Foreign Languages
Arak University
Arak 38156-8-8349, PO. Box: 879, Iran
Tel: +988632777402
Email: H-yazdani@arakuac.ir

Majid Amerian is an Associate Professor of Applied Linguistics at Arak University, Iran. His major areas of interests include cultural studies, pragmatics, discourse analysis, assessment and testing, and materials development.

Dept. Of English Language and Literature
Faculty of Literature and Foreign Language
Arak University
Arak 38156-8-8349, PO. Box: 879, Iran
Tel: +988632777402
Email: M.amerian@arakuac.ir

References

- Ahmadian, M., Yazdani, H., & Mehri, E. (2019). The effectiveness of preferred and unpreferred written corrective reedback: A think-aloud study. *The Journal of Asia TEFL*, 16(2), 448–467.
- Ames, C. (1992). Classrooms: Goals, structures, and student motivation. *Journal of Educational Psychology*, 84, 261–271.
- Archer, J. (1994). Achievement goals as a measure of motivation in university students. *Contemporary Educational Psychology*, 19, 430–446.
- Boekaerts, M., Pintrich, P., & Zeidner, M. (2000). *Handbook of self-regulation*. San Diego, CA: Academic Press.
- Bruning, R., Dempsey, M., Kauffman, D. F., McKim, C., & Zumbrunn, S. (2013). Examining dimensions of self-efficacy for writing. *J. Educ. Psychol.* 105: 25.
- Butler, R. (2000). What learners want to know: The role of achievement goals in shaping information seeking, learning, and interest. In C. Sansone & J. M. Harackiewicz (Eds.), *Intrinsic motivation and extrinsic motivation: The search for optimal motivation and performance* (pp. 161–194). San Diego, CA: Academic Press.
- Butler, R., & Neuman, O. (1995). Effects of task and ego achievement goals on help-seeking behaviors and attitudes. *Journal of Educational Psychology*, 87, 261–271.
- Church, M. A., Elliot, A. J., & Gable, S. L. (2001). Perceptions of classroom environment, achievement goals, and achievement outcomes. *Journal of Educational Psychology*, 93(1), 43–54.
- Darnon, C., Butera, F., & Harackiewicz, J. M. (2008). Toward a clarification of the effects of achievement goals. *International Review of Social Psychology*, 21, 5–18.
- Darnon, C., Dompnier, B., Gillieron, O., & Butera, F. (2010). The interplay of mastery and performance goals in social comparison: A multiple-goal perspective. *Journal of Educational Psychology*, 102, 212–222.
- Dembo, M. H. (2004). *Motivation and learning strategies for college success: A self-management approach*. Mahwah, NJ: Erlbaum.
- Dörnyei, Z. (2007). *Research methods in applied linguistics: Quantitative, qualitative, and mixed methodologies*. Oxford: Oxford University Press.
- Dweck, C. S. (1986). Motivational processes affect learning. *American Psychologist*, 41, 1040–1048.
- Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological Review*, 95, 256–273.
- Elliot, A. J. (1999). Approach and avoidance motivation and achievement goals. *Educational Psychologist*, 34, 149–169.
- Elliot, A. J. (2005). A conceptual history of the achievement goal construct. In A. J. Elliot & C. S. Dweck (Eds.), *Handbook of competence and motivation* (pp. 52–72). New York, NY: Guilford Publications, Inc.
- Elliot, A. J., & Church, M. A. (1997). A hierarchical model of approach and avoidance achievement motivation. *Journal of Personality and Social Psychology*, 72, 218–232.
- Elliot A. J., & Harackiewicz J. M. (1996). Approach and avoidance achievement goals and intrinsic motivation: a mediational analysis. *J. Pers. Soc. Psychol*, 70, 461–475.
- Elliot, A. J., & McGregor, H. (2001). A 2_2 achievement goal framework. *Journal of Personality and Social Psychology*, 80, 501–509.

- Farsani, M. A., Beikmohammadi, M., & Mohebbi, A. (2014). Self-regulated learning, goal-oriented learning, and academic writing performance of undergraduate Iranian EFL learners. *The Electronic Journal for English as a Second Language*, 18(2), 1–19.
- Ghasemi, A. A., & Dowlatabadi, H. R. (2017). Investigating the role of task value, surface/deep learning strategies, and higher order thinking in predicting self-regulation and language achievement. *The Journal of Asia TEFL*, 15(3), 664–681. <http://dx.doi.org/10.18823/asiatefl.2018.15.3.7.664>
- Gonzalez, E. F. (2010). *The good language learner*. Retrieved from <https://www.birmingham.ac.uk/Documents/collegeartslaw/cels/essays/secondlanguage/essayGLLSThompson.pdf>
- Graham, S., & Harris, K. R. (2000). The role of self-regulation and transcription skills in writing and writing development. *Educational Psychologist*, 35, 3–12.
- Graham, S., Harris, K. R., & Santangelo, T. (2008). Using self-regulated strategy development to Support students who have “trubol giting changes into werds.” *Remedial and Special Education*, 29(2), 78–89.
- Greene, B. A., & Miller, R. B. (1996). Influences on achievement: Goals, perceived ability, and cognitive engagement. *Contemporary Educational Psychology*, 21, 181–192.
- Harackiewicz, J. M., Barron, K. E., Tauer, J. M., Carter, S. M., & Elliot, A. J. (2000). Short-term and long-term consequences of achievement goals: Predicting interest and performance overtime. *Journal of Educational Psychology*, 92, 316–330.
- Hayes, J. R. (1996). A new framework for understanding cognition and affect in writing. In C. M. Levy & S. Ransdell (Eds.), *The science of writing: Theories, methods, individual differences, and applications* (pp. 1–27). Hillsdale, NJ, US: Lawrence Erlbaum Associates, Inc.
- Hulleman, C. S., Schrage, S. M., Bodmann, S. M., & Harackiewicz, J. M. (2010). A meta-analytic review of achievement goal measures: Different labels for the same constructs or different constructs with similar labels? *Psychological Bulletin*, 136, 422–449.
- Kaplan, A., Lichtinger, E., & Gorodetsky, M. (2009). Achievement goal orientations and self-regulation in writing: An integrative perspective. *Journal of Educational Psychology*, 101(1), 51–69.
- Kaplan, A., & Middleton, M. J. (2002). Should childhood be a journey or a race? Response to Harackiewicz et al. (2002). *Journal of Educational Psychology*, 94, 646–468.
- Kanlapan, T. C. E., & Velasco, J. C. (2009). Constructing a self-regulation scale contextualized in writing. *TESOL Journal*, 1, 79–94.
- Kimmel, K., & Volet, S. E. (2010). Culture in motivation research: A challenging and enriching contribution. In B. McGaw, E. Baker, & P. Peterson, (Eds.), *International encyclopaedia of education* (pp. 576–584). Oxford, UK: Elsevier.
- Lichtinger, E., Kaplan, A., & Gorodetsky, M. (2006). *Exploring self-regulation in writing among junior high-school students: A stimulated recalls study*. Paper presented at the 10th International Conference of the EARLI Special Interest Group on Writing, Antwerp, Belgium.
- Malpique, A., Veiga Simão A. M. V., & Frison, L. M. B. (2017). Self-regulated strategies for school writing tasks: A cross-cultural report. *Psychology of Language and Communication*, 21, 244–265.
- Meece, J. L., & Miller, S. D. (1999). Changes in elementary school children’s achievement goals for reading and writing: Results of a longitudinal and an intervention in study. *Scientific studies of reading*, 3, 207–229.
- Midgley, C., Kaplan, A., & Middleton, M. (2001). Performance-approach goals: Good for what, for whom, under what circumstances, and at what cost? *Journal of Educational Psychology*, 93, 77–86.
- Midgley, C., Maehr, M. L., Hruda, L. Z., Anderman, E., Anderman, L., Freeman, K. E., et al. (2000). *Patterns of adaptive learning survey (PALS)*. Ann Arbor: University of Michigan.
- Nicholls, J. G. (1989). *The competitive ethos and democratic education*. Cambridge, MA: Harvard University Press.
- Oxford University Press, University of Cambridge, & Association of Language Testers in Europe. (2004). *Quick placement test: Paper*.
- Pajares, F., Britner, S. L., & Valiante, G. (2000). Writing and science achievement goals of middle school students. *Contemporary Educational Psychology*, 25, 406–422.

- Pajares, F., & Cheong, Y. F. (2003). Achievement goal orientations in writing: A developmental perspective. *International Journal of Educational Research*, 39, 437–455.
- Pipattarasakul, P., & Singhasiri, W. (2018). Metastrategies employed by science and engineering EFL Learners in a Speaking Task. *The Journal of Asia TEFL*, 15(1), 66–81. <http://dx.doi.org/10.18823/asiatefl.2018.15.1.5.66>
- Pintrich, P. R. (2000a). An achievement goal theory perspective on issues in motivation terminology, theory, and research. *Contemporary Educational Psychology*, 25, 92–104.
- Pintrich, P. R. (2000b). Multiple goals, multiple pathways: The role of goal orientation in learning and achievement. *Journal of Educational Psychology*, 92, 544–555.
- Pintrich, P. R. (2000c). The role of goal orientation in self-regulated learning. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 451–502). San Diego: Academic.
- Pintrich, P. R., Smith, D. A. F., Garcia, T., & McKeachie, W. J. (1993). Reliability and predictive validity of the Motivated Strategies for Learning Questionnaire (MSLQ). *Educational and Psychological Measurement*, 53, 801–813.
- Regner, I., Escribe, C., & Dupeyrat, C. (2007). Evidence of social comparison in mastery goals in natural academic settings. *Journal of Educational Psychology*, 99, 575–583.
- Retelsdorf, J., & Günther, C. (2011). Achievement goals for teaching and teachers' reference norms: Relations with instructional practices. *Teaching and Teacher Education*, 27(7), 1111–1119.
- Roussel, P., Elliot, A. J., & Feltman, R. (2011). The influence of achievement goals and social goals on help-seeking from peers in an academic context. *Learning and Instruction*, 21, 394–402.
- Sadeghi, K., & Khezrlou, S. (2012). Glossing mode in self-regulated vocabulary learning, and its relationship with gender, age, and field of study. *The Journal of Asia TEFL*, 9(3), 51–74.
- Senko, C., Hulleman, C. S., & Harackiewicz, J. M. (2011). Achievement goal theory at the crossroads: Old controversies, current challenges, and new directions. *Educational Psychologist*, 46, 26–47.
- Schunk, D. H. (2001). Social cognitive theory and self-regulated learning. In B. J. Zimmerman & D. H. Schunk (Eds.), *Self-regulated learning and academic achievement: Theoretical perspectives* (pp. 125–151). Mahwah, NJ: Erlbaum.
- Schunk, D. H., & Zimmerman, B. J. (Eds.). (1998). *Self-regulated learning: From teaching to self-reflective practice*. New York: The Guilford Press.
- Shaw, S., & Falvey, P. (2008). *The IELTS writing assessment revision project: Towards a revised rating scale*. Retrieved from http://www.cambridgeesol.org/assets/pdf/research_reports_01.pdf
- Somuncuoglu, Y., & Yildirim, A. (1999). Relationship between achievement goal orientations and use of learning strategies. *Journal of Educational Research*, 92, 267–277.
- Tadlock, J. (2016). *The influence of writing achievement goals and writing self-regulation on college students' writing grades* (Doctoral dissertation). Virginia Commonwealth University.
- Wolters, C. A. (2004). Advancing achievement goal theory: Using goal structures and goal orientations to predict students' motivation, cognition, and achievement. *Journal of Educational Psychology*, 96(2), 236–250.
- Wolters, C. A., Yu, S. L., & Pintrich, P. R. (1996). The relation between goal orientation and students' motivational beliefs and self-regulated learning. *Learning and Individual Differences*, 8, 211–238.
- Zimmerman, B. J. (1990). Self-regulated learning and academic achievement: An overview. *Journal of Educational Psychology*, 25(1), 3–7.
- 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). San Diego, CA: Academic Press.
- Zimmerman, B. J., & Bandura, A. (1994). Impact of self-regulatory influences on writing course attainment. *American Educational Research Journal*, 31(4), 845–862.
- Zimmerman, B. J., & Risemberg, R. (1997). Becoming a self-regulated writer: A social cognitive perspective. *Contemporary Educational Psychology*, 22(1), 73–101.

Appendix

Writing Self-Regulation Inventory Developed by Lichtinger, Kaplan, & Gorodetsky (2006)

Instructions: If you think the statement is very true of you, please check 7; if a statement is not at all true of you, check 1. If the statement is more or less true of you, find the number between 1 and 7 that best describes you.

Not at all true of me 1 2 3 4 5 6 7 Very true of me

Mastery–Approach Goals

1. It's important to me that I learn as much as I can from the writing assignment.
2. In writing the assignment, it was important to me that I improve my skills and knowledge.
3. One of my goals when I did the writing assignment was to learn as much as I could.
4. It was important to me to really understand what there was to learn from the writing assignment.
5. One of my goals when I did the writing assignment was to develop deep understanding of what we were learning.

Mastery–Avoidance Goals

1. I was worried that I won't learn all there is to learn from the writing assignment.
2. I was afraid that I might not learn all that I could from the writing assignment.
3. I was concerned that I might not learn as deeply as I could from the writing assignment.

Performance–Approach Goals

1. When I did the writing assignment, it was important to me to look smart in comparison to the other students in my class.
2. When I did the writing assignment, one of my goals was to look smart compared to others in my class.
3. One of my goals in writing was to show others that this assignment was easy for me.
4. When I was writing, it was important to me that other students in class think I am good at it.
5. One of my goals in doing the writing assignment was to show others that I'm good at this work.

Performance–Avoidance Goals

1. It was important to me that I didn't look stupid when I did the writing assignment.
2. When I did the writing assignment, it was important to me that my teacher didn't think that I know less than others in class.
3. One of my goals in the writing assignment was to keep others from thinking I'm not smart.
4. One of my goals in the writing assignment was to avoid looking like I have trouble doing the work.

Mastery Goal Structure

1. My writing teacher thinks mistakes in this writing assignment are okay as long as we are learning.
2. My writing teacher wanted us to understand our work, not just simply write it.
3. My writing teacher really wanted us to enjoy writing this assignment.
4. My writing teacher gave us time to really explore and understand new ideas in this assignment.
5. My writing teacher helped us see how what we are writing about relates to real life.
6. My writing teacher encouraged us to find interesting and different ways for doing the writing assignment.

Performance–Approach Goal Structure

1. My writing teacher points out those students who get good grades in writing assignments as an example to all of us.

2. My writing teacher lets us know which students get the highest scores on writing assignments.
3. My writing teacher told us how we compare to other students in writing.
4. My teacher told us that our main goal in writing this assignment should be to get the best scores.
5. In this class, it is very important to get the highest scores in writing assignments.

Performance–Avoid Goal Structure

1. My writing teacher said that one of our goals should be to show others that we are not bad in writing.
2. My writing teacher told us that it is important that we do the writing assignment so it doesn't look like we can't do the work.
3. In our writing class, it is very important to students to show others that they are not bad in writing.
4. In our writing class, it is very important not to make mistakes in writing when others are watching.
5. In our writing class, it is very important not to get lower scores than others.
6. In our writing class, it is important that we don't look stupid.

Writing Efficacy

1. I was certain I could do well in the writing task.
2. I can do even the hardest writing assignments if I try.
3. If I had enough time, I could have done a good job on the writing assignment.
4. Even if the writing assignment was hard, I could have done it.
5. If I don't give up, I can do well on the most difficult writing assignments.

Attention regulation

- a. While writing, I focused on the page so that I wouldn't be distracted by other things.
- b. During writing, I made sure to concentrate on the work and not to think about other things.
- c. During writing, I didn't really make sure to focus on the work and not think about other things.
- d. While writing, I told myself that I need to focus on the work and not to think about other things.

Planning ahead of writing

- a. Before I wrote, I planned an outline of what I'd be writing about.
- b. Before I wrote, I decided what would be the main idea I'd write about.
- c. Before I wrote, I made a plan of what I'd do during the writing.

Content monitoring

- a. While writing, I checked to see whether what I wrote was correct.
- b. During writing, I checked to see if what I was writing fit with what I wrote before.
- c. During writing, I went back to the instructions to see if what I wrote was related to the topic.

Organization

- a. I wrote an ending that summarized the topics I wrote about.
- b. I wrote the main idea and later I elaborated on it.
- c. I wrote an introduction in which I presented the topic.

Checking and correcting

- a. After I finished writing a section, I read to see whether what I had written was good.
- b. At the end of writing, I didn't really go back to see whether everything was OK.
- c. After I finished writing a section, I didn't really go back to fix what was not good.
- d. At the end of writing a section, I went back and read the section to make sure it was OK.
- e. After I finished writing a section, I went back to fix what I didn't think was good.

Planning during writing

- a. During writing, I stopped to think how to phrase what I was going to write.
- b. While writing, I thought about what I was going to write next.
- c. During writing, I thought about how to connect one topic to the next.

Self-evaluation

- a. After I finished writing a section or part of it, I thought about whether what I had written was correct.
- b. After I finished writing a section or part of it, I thought about whether what I had written was good.

Success encouragement

- a. While writing, I reminded myself that if I work correctly, I'll succeed.
- b. During writing, I told myself that I could succeed in this task.

Value encouragement

- a. When I was writing, I was reminding myself that I have to do this task.
- b. When I was writing, I was reminding myself that this task is important to me.
- c. When I was writing, I told myself that I need to invest effort in this task.
- d. When I was writing, I said to myself that it is important to me to get a good grade.

Self-praise

- a. When I felt that I succeeded, I said to myself that I was good.
- b. When I felt that I succeeded, I gave myself a reward.

Help seeking

- a. When I was writing and didn't know enough about the subject, I asked for help from my friends.
- b. When I didn't know how to write, I talked about it with my friends.
- c. When I didn't know enough about the subject, I asked for help from my teacher.
- d. When I was writing and didn't know how to write, I asked my teacher for help.

Reader awareness

- a. When I was writing, I thought about who was going to read this, and it affected my writing.
- b. When I was writing, I imagined who was going to read this.
- c. When I was writing, I didn't think about who was going to read this.
- d. When I was writing, I thought about where the text was going to be, and it affected my writing.
- e. When I was writing, I was trying to persuade my readers.

Verbalization

- a. When I was writing, I told myself out-loud the words I was going to write.
- b. When I was writing, I read to myself out-loud parts of the instructions or of the text I already wrote.

Eliciting context

- a. When I was writing, I imagined pictures of what I was writing about.
- b. When I was writing, I felt again my emotions about what I was writing about.