# CONCEPTUALIZING RELATIONSHIP TEACHERS INTERNAL SUPERVISION, MOTIVATIONAL BELIEFS, AND STUDENT'S SELF-REGULATED LEARNING

# Dorothea Wahyu Ariani

Department of Management, Maranatha Christian University, Bandung, INDONESIA.

ariani1338@gmail.com

#### **ABSTRACT**

The present study examined the correlations of scores for motivational beliefs and self-regulated learning outcomes among 257 undergraduate students business program in Indonesia who responded to Motivational Strategies for Learning Questionnaire. Analysis showed a positive correlation between scores for motivational beliefs and self-regulated learning outcomes but a negative one for scores on test anxiety and self-regulated learning. This study also examines the effect of internal mentoring teachers to motivational beliefs and self-regulated learning. The result of this study indicated that student self-regulated learning related to career development dimension and role modeling in the internal mentoring or teaching supervision and self-efficacy and intrinsic values in motivational beliefs. In addition, self-regulated learning is more influenced by the self-efficacy and intrinsic values rather than internal mentoring supervisors or teachers. Test anxiety does not affect self-regulated learning, but negative associated significantly with self-efficacy. Various discussions on the matter presented in this study.

**Keywords:** self-regulated learning, self-efficacy, intrinsic values, test anxiety, psychological support, career development, role modeling

# INTRODUCTION

Understanding the factors that influence students' academic performance is important to improve their learning. Kolb states that learning is a process, in which knowledge is created through the transformation of experience (Hoover, Giambatista, & Belkin, 2012). Therefore, the teachers, especially the teachers at the undergraduate programs in the universities are encouraged to improve and strengthen the teaching style and use various approaches to demonstrate that the students understand, can apply the knowledge gained, and can provide learning experiences to students. Meanwhile, student achievement is closely linked with the associated psychological component, that component is learning motivation and self-regulated learning. Previous research states that motivational beliefs and self-regulated learning ability of students is directly related to their academic performance (Pintrich & De Groot, 1990; Zimmerman & Martinez-Pons, 1990).

Students with high motivation will demonstrate independent learning and behavior of high achievement. This explains why the academicians want to test the level of students' self-regulated learning and motivation because both components are interconnected and can predict whether students will perform well (Paulsen & Gentry, 1995; Zimmerman, 2002). Motivation is an important factor in self-regulated learning (Hong and O'Neil, 2001). Self-regulated learning is an important topic in the study of education and psychology because the learners are able to organize learning and their learning outcomes.

In addition to having independent learning, academic performance and academic learning can be enhanced by motivating the students. Motivation is also an important component in an educational environment and affects student achievement in learning process. Meanwhile, the learning process of students in the class can not be separated from the function and the role of teachers. Patterns in higher education positioning teachers as individuals who encouraged the students to learn to set goals, monitor student learning process, prevent improper response, and are generally tied to the behavior of well-planned, flexible, and future-oriented (Alvarez and Emory, 2006; Garner, 2009). Teachers serve directing student success through examples of everyday behavior. Teachers also help students in relating with colleagues and other teachers (Garner, 2009). The relationship between students and teachers as well as the relationship between the students play a role in improving student motivation and affect the achievement or academic performance of students.

This study aims to explain how the different motivational beliefs can help develop and improve self-regulated learning aspect. This study also analyzes the influence of supervision or internal mentoring teachers on motivational beliefs and self-regulated learning or awareness for independent study. To achieve these objectives, self-regulated learning model that includes self-regulated learning and self-learning strategies are used together in a construct their own learning, while the motivational beliefs broken down into self-efficacy, intrinsic values that is shared by the students, and test anxiety. Meanwhile, constructs supervision styles or internal mentoring teachers include psychological support, career or performance development or achievement, and role modeling. Furthermore, the supervision style or internal mentoring teachers will be tested influence on motivation and self-regulated learning students.

# THEORETICAL AND HYPOTHESIS DEVELOPMENT

# Motivation

Pintrich and De Groot (1990) specifically defined motivation as the students' motivational beliefs on academic performance. Motivational beliefs can be used by students to direct it in thinking, feeling, and behaving in a certain problems. Motivational beliefs have several dimensions, that is self-efficacy, intrinsic values, and the anxiety of the test or tests anxiety (Pintrich & De Groot, 1990). Self-efficacy is a component of students' expectations showed confidence on the ability to carry out its duties (Pintrich & De Groot, 1990). Students with high self-efficacy will always be convinced that they can organize and carry out a series of activities necessary given the ambiguous and unpredictable situation, and often causes stress (Bandura, 1982). Self-efficacy showed individual's confidence to perform certain actions or activities because such measures have always done and affects the students in choosing a wide range of activities in which they will be involved.

The second component of motivation is intrinsic values. Intrinsic values indicate the affective component of student achievement, especially regarding how students emotionally to the tasks given (Pintrich & De Groot, 1990). This confidence component explains how the students enjoyed or satisfied with their involvement in the learning task (Nelson & Debacker, 2000). This component also showed assessment of students' ability to do the work in accordance with what he has done (Zimmerman, 2002). Previous research states that students with positive intrinsic values are always set goals for specific tasks and they also consider the importance of interest and value in the completion of certain tasks (Pintrich & De Groot, 1990). Intrinsic values include the individual's perception of the importance of the duties, interest or the interest of individuals to the task, and the perception of the use of the value of

the tasks for the purpose of future (Pintrich, 1999). The intrinsic values associated with the performance even though the relationship is not as strong as the relationship between self-efficacy and academic performance or students achievements (Paulsen & Gentry, 1995).

The third motivation component is the test anxiety. Test anxiety is an emotional reaction of students towards their duties demonstrates the students' motivation towards a given task. Tests anxiety showed its relation to the perception of its competence even though both theoretically and empirically different (Pintrich & De Groot, 1990). The high students' test anxiety or anxiety to the given task can be associated with high effort and student motivation. Anxiety or worries about exam is a cognitive component that shows the negative thoughts that can interfere with the performance of students. High levels of anxiety towards exams associated with low performance or achievement test.

# **Self-Regulated Learning**

Self-regulated learning is emerged as an important construct in education by focusing on a way in which students initiate, monitor, and control the learning accomplishments (Boekaerts, 1999). In the academic domain, self-regulated learning requires special motivation components such as self-efficacy, intrinsic values, and test anxiety (Pintrich & De Groot, 1990; Wolter & Pintrich, 1998). Self-regulated learning is an inherent aspect of cognitive learning, which includes knowledge, belief, and the skills learned (Kadhiravan, 2012). Self-regulated learning is an active and constructive process for the learners or students in setting learning goals and tries to monitor, regulate and control their cognition, motivation, and behavior directed and constrained by targeting or contextual characteristics in the environment (Schunk, 2005).

Independence in learning includes strategies to organize cognitive processes in which control and monitor student learning starting from goal setting, planning, implementation, management, monitoring, evaluation, and modification errors (Pintrich, 1999). In addition, self-regulated learning emphasized individual autonomy and control by the monitor, direct, and regulate the activities or actions towards the achievement of objectives that include information obtained, improved skills, and self-improvement (Pacharn, Bay, & Felton, 2013). The self-learning will be demonstrated by the students' actions who chose to sit in the front-row seat in the classroom, voluntarily answered questions from teachers, gathering experts needed to understand the material being studied, and manipulate the learning environment to meet the needs (Zumbrunn, Tadlock, & Roberts, 2011).

Learning strategies include cognitive strategies and self-regulated learning strategies (Paulsen & Gentry, 1995). Cognitive strategies are fundamental mental activity that is used to store new information in his memory and take it back in a new application. Meanwhile, self-regulated learning strategies include rehearsal, elaboration, and organization identified as an important cognitive strategy associated with academic performance in class (Pintrich & De Groot, 1990). This strategy can be applied to simplify the memory of tasks such as remembering information, words, or for more complex tasks that require information that is comprehensive as reading comprehension or lectures (Paulsen & Gentry, 1995).

# **Role of Teachers**

Perception of the classroom environment is generally influenced by the students' perceptions of how teachers promote or convey material or carry out the learning process in the classroom (Gray, Anderman, O'Connell, 2011). According to Gray et al. (2011), the perception of the characteristics of teachers can play an important role in education, such as internalization of information, beliefs, and values. Therefore, the relationship is often said to be the formal supervision or the formal internal mentoring.

Role of teachers generally includes three components that make up the behavior of the relationship between mentor and mentee, namely psychological support, career development, and role modeling. Both of these things that will motivate students to undertake self-development and be meaningful to the educational institution where students learn. In addition, teachers are required to give a good example for the students to be a role model. Formal internal mentoring is direct supervision. One of the challenges of teaching is how to help students become motivated, active, and become expert learners.

Previous studies stated that the teachers can introduce to their students on a variety of cognitive strategies and awareness for self-regulated learning like rehearsal of the material being taught, the development of materials that have been received, and other strategies that help students write in their own words, remember, and understand information (Paulsen & Gentry, 1995). Learners and self-regulated learning are two things that must coexist and support each other to achieve or learning outcomes (Garner, 2009). The role of teachers in self-regulated learning is modeling and explaining the thinking process that is essential to complete the activities and assignments, providing practical guidance that can help improve self-regulated learning and increasing student motivation, as well as providing social support in the form of feedback or assessment of student achievement and how to improve the achievement (Zumbrunn et al., 2011).

# The relationship between Teacher Supervision, Motivational Belief, and Self-Regulated Learning

Social Cognitive Theory has provided the theoretical basis for the development of self-regulated learning model in which personal factors, contextual, and behavioral will interact in a way that gives an opportunity to the students to control the learning. Students with high self-regulated learning will be motivated to use the strategy of planning, organizing, and monitoring themselves than students with low self-regulated learning (Pintrich & De Groot, 1990). Pintrich and De Groot (1990) also suggested a positive correlation between motivation and self-regulated learning, and both will affect student achievement. Without motivation, self-regulated learning is difficult to achieve. This is due, self-regulated learning activities that include learning analyze and develop the learning goals, assess and monitor the accuracy of the learning strategies used, evaluate achievement after applying learning strategies, to manage the emotions of the results of learning requires motivation which consists of self-efficacy, intrinsic values, and test anxiety.

Self-regulated learning is described with various constructs such as motivation, meta-cognitive, and behavior (Cho & Cho, 2013). According to Cetin (2015), motivation related to self-regulatory and predicted self-regulatory. Several studies have identified the importance of self-regulated learning and examine the relationship between self-regulation, motivation, and learning (Schunk, 2005). Students with high self-regulated learning tend to be motivated academically and explain better learning (Pintrich, 2003). The target set will encourage self-regulation through its influence on motivation, learning, self-efficacy and self-evaluation of progress (Schunk, 2001). For learning, students need motivation or desire and cognitive skills. Previous research stated that the motivation variables and learning strategy are significant predictors of student achievement (Paulsen & Gentry, 1995). Self-regulated learning is a process that helps students to manage thoughts, behaviors, and emotions to direct the learning experience to be successful. Self-efficacy is considered as a key component of motivation because it can predict which business can be done by the students (Metallidou & Vlachou, 2007). Results of previous studies suggested a correlation between self-efficacy and the use of cognitive strategies (Greene & Miller, 1996).

Self-efficacy has greater predictive value in learning and achieving results in various cognitive domains compared with other motives such as intrinsic values and test anxiety (Pajares & Valiante, 1999). Intrinsic values associated with self-efficacy and engagement in tasks with higher levels of cognitive and meta-cognitive strategies used (Pintrich & De Groot, 1990; Wigfield & Eccles, 1992). The third motivation component is the test anxiety that has a negative effect on performance, but it is a significant predictor of performance (Pintrich & De Groot 1990; Wolters & Pintrich, 1998). Test anxiety influences students, especially if test anxiety associated with the habit that took place within a relatively long time (Barrows, Dunn, & Lloyd, 2013). Pintrich and De Groot (1990) found that test anxiety has a negative impact on memory tasks and the ability to invite the information from memory storage thus making it difficult to invite the information when needed to answer questions correctly.

Lately, researchers have begun to enter the teaching function in discussing self-regulated learning (Garner, 2009). Results of Garner's research (2009) showed the relationship between teacher and self-regulated learning. Teaching function is to support self-regulated learning. However, not all aspects of self-regulated learning related to the teaching function. Teaching function is to contribute to the self-regulated learning, not determine or dictate to selfregulated learning. Self-regulated learning process is involving teachers, but not fully controlled by the teacher (Garner, 2009). According Zumbrunn et al. (2011), the function of the teachers are in the phase of self-regulated learning. In the phase of analysis and planning, the teachers in the self-regulated learning function include giving instructions or explanations when students do not understand what he learned. In the phase of monitoring the performance, teachers monitor student performance and provide feedback to the students to be able to help arrange a better strategy to achieve better academic achievement. Meanwhile, the phase of reflection on the performance evaluation and management of student emotions towards learning outcomes is less need for the role of teachers. Based on a wide range of exposure on the relationship between the various aspects of independent learning and teacher supervision, the hypothesis of this study is offered.

- H1: There is a positive relationship between the dimensions of teacher supervision and dimensions of motivation
- H2: There is a positive relationship between the dimensions of teaching and learning independent supervision
- H3: There is a positive relationship between the dimensions of motivation and self-learning
- H4: Style supervision of teachers and motivation affect independent learning

# RESERCH METHODS

# **Samples and Procedures Research**

This research was conducted in the undergraduate business program in Yogyakarta and Bandung. Selection of setting the research was based on previous research which states that self-regulated learning research is mostly done in the academic field. Students in business program selected for the study because the business requires an individual who has high learning motivation and high self-regulatory in running its business. This study used a survey using a questionnaire. The questionnaire was distributed to individual data collection on respondents. The survey was conducted about two months (February – March 2015). Compared with four other methods, survey conducted themselves is the best method (Cooper & Schindler, 2008; Neuman 2006; Sekaran & Bougie, 2010). Research on students' academic motivation is important because motivation significantly influences learning in school. In

addition, the motivation has been identified as one important predictor of learning and motivation is a consistent variable.

Characteristics of the sample were used to convey the characteristics of the sample relative to the population. Samples intended to be representative of the population and affected the accuracy or representation of the population. The sampling method used in this research was non probabilistic sampling technique, namely purposive sampling method. The criteria used to select the sample were students in undergraduate programs are currently active for at least one semester of college in Indonesia. In addition, this study used self-assessment. The sample consisted of 257 students (with a response rate of 85.67%) out of 300 students. Respondents receive the survey using a pen and paper. Respondents believed anonymity and complete the survey during study hours.

#### Measurement

The instrument was designed for the unit of analysis at the individual level. Each of the respondents in this study were asked to complete seven measurements, namely self-efficacy, intrinsic values, test anxiety, self-regulated learning, psychological support, career development, and role modeling. The questionnaire regarding motivation and self-regulated learning is taken and developed by Pintrich and De Groot (1990). Questionnaires internal mentoring or supervision of teachers was measured using a questionnaire item of Raabe and Beehr (2003). The questionnaire was adopted with slight modifications to suit local needs of research in Indonesia and using Bahasa Indonesia.

Questionnaires motivation of Pintrich and De Groot (1990), which was referred to as Motivated Strategies for Learning Questionnaire (MSLQ) include motivational beliefs (self-efficacy, intrinsic values, and anxiety towards exams or test anxiety) and self-regulated learning strategies (use of cognitive strategies and self-reliance). Meanwhile, questionnaires of internal mentoring or supervision compiled by Beehr and Raabe (2003) included psychological support, career development or student achievement, and role modeling.

All scales measured by Likert scale with 5-point starting from the number 1. This study also used the factor analysis as a way to test the construct validity and internal consistency with Cronbach's alpha to demonstrate the reliability of measuring instruments. With the rotation and loading factor of at least 0.4 as suggested by Hair, Black, Babin, Anderson, and Tatham (2006). Furthermore, to examine the relationship and influence between independent and dependent variables, researchers used correlation.

# **RESULTS**

# Validity and Reliability Analysis

This study used a questionnaire developed by previous researchers to translate from the original language into Bahasa Indonesia. Content validity was used to assess measurement instruments carried at the pre-analysis by asking the opinion of experts in the field of Organizational Behavior and Qualitative and Quantitative Research Methods. Factor analysis (FA) was also performed on the construct being investigated. Extraction executed and each Eigenvalue factor greater than one (1) will be adopted. Varimax rotation performed to reveal each variable. Factor analysis conducted to test the construct validity. By using varimax rotation and loading factor of at least 0.4 as suggested by Hair et al. (2006) the test results can be achieved construct validity could be said to be significant. Loading factor recorded values between 0.420 and 0.850. Given all of the items noted above were extracted 0.4. There were

some items that turned out to be deleted because it was declared invalid. Items that had construct validity based on the analysis of these factors are then tested for reliability.

Furthermore, to assess the reliability of the measurement items all the variables tested internal consistency with Cronbach alpha values. Cronbach alpha values of reliability tests measuring instrument in this study resulted in a score of 0.8240 for psychological support dimension, 0.8123 for career development dimension, and 0.7728 for role modeling dimension, 0.7840 for self-efficacy dimension, 0.8038 for intrinsic values dimension, 0.7647 for test anxiety dimension, and 0.8004 for self-regulated learning construct. Based on the results of testing the reliability of the authors stated that the reliability of the study measuring instrument was far above the cut-off line reliability as recommended by Hair et al. (2006).

# **Descriptive Statistics**

To perform statistical analysis, researchers used a series of analysis of the relationship between all the constructs or research variables by using correlation analysis. Standard deviation, reliability scale, and the correlations between all study variables are presented in Table 1. Based on Table 1, the mean of seven variables is moderate (mean between 2.5409 to 3.9783) and a relatively small deviation. In addition, all correlations obtained are not too strong. Furthermore, this study used 118 male students and 139 female students.

Table 1. Mean, Standard Deviation, and Inter correlations among All Variabels

	Mean	SD	A	1	2	3	4	5	6	7
Psychological Support	2,5409	0,7117	0,8240	1.000	0,489**	*0,382**	0,063	0,219**	0,115	0,120
Career Development	3,3664	0,6595	0,8123		1.000	0,576**	0,301*	*0,515**	0,173**	0,364**
Role Modeling	3,7383	0,6539	0,7728			1.000	0,304*	* 0,622*	0,075	0,363**
Self-Efficacy	3,7626	0,4138	0,7840				1,000	0,618**	-0,140**	0,556**
Intrinsic Values	3,9783	0,4768	0,8038					1,000	0,020	0,623**
Test Anxiety	2,6644	0,7519	0,7647						1,000	-0,097
Self-Regulated Learning	3,8262	0,4372	0,8004							1,000

Notes: correlation is significant at the 0.01 level (2-tailed)

# **Hypothesis Testing Results**

Correlation between psychological support and career development are significantly positive ( $r=0.489,\ p<0.01$ ), correlation between the psychological support and role modeling are significantly positive ( $r=0.382,\ p<0.01$ ), correlation between psychological support and students' intrinsic values are significantly positive ( $r=0.219,\ p<0.01$ ). The correlation between career development and role modeling are significantly positive ( $r=0.576,\ p<0.01$ ), correlation between career development and self-efficacy are also significantly positive ( $r=0.301,\ p<0.01$ ), correlation between career development and students' intrinsic values are significantly positive ( $r=0.515,\ p<0.01$ ), correlation between career development and test anxiety are significantly positive ( $r=0.173,\ p<0.01$ ), and correlation between career development and self-regulated learning are also significantly positive ( $r=0.364,\ p<0.01$ ). Furthermore, the correlation between role modeling and self-efficacy are significantly positive ( $r=0.304,\ p<0.01$ ), correlation between role modeling and student intrinsic values

are significantly positive (r = 0.622, p < 0.01), and the modeling of the role of teacher and student self-learning are also significantly positive (r = 0.363, p < 0.01).

Meanwhile, the correlation between self-efficacy and students' intrinsic values are significantly positive (r = 0.618, p < 0.01) and between self-efficacy and self-regulated learning are also significantly positive (r = 0.556, p < 0, 01). The same thing can be seen in the correlation between students' intrinsic values and self-regulated learning are also significantly positive (r = 0.623, p < 0.01). Test anxiety is correlated significantly positive with career development (r = 0.173, p < 0.01), whereas the correlation between test anxiety and self-efficacy is negative significantly (r = -0.140, p < 0.01). While the correlation between psychological support and self-efficacy and test anxiety, the correlation between role modeling and test anxiety, students' intrinsic values, and self-regulated learning is not significantly. Low correlation between these variables is likely due to the characteristics of the variables in this study.

Based on the result of correlation test, the first hypothesis was partially supported, because not all dimensions of teacher supervision style is positively associated with all dimensions of motivation. Hypothesis 2 was not supported, because the self-regulated learning is not associated with the style of teaching supervision. Meanwhile, the hypothesis 3 is partially supported, because only the dimension of self-efficacy and the intrinsic values espoused students positively associated with self-regulated learning. Furthermore, the influence of the style of teacher's supervision and motivational beliefs to self-regulated learning were tested using multiple linear regression model. Regression testing results are presented below.

Change Statistics Std. Error Adjusted  $R^2$ Model R of the  $R^2$  $\overline{F}$  $R^2$ Sig. F df2 Estimate df1 Change Change Change 1  $.668^{a}$ .446 .433 .32930 .446 33.538 250 .000

**Table 2. Model Summary** 

Table 3. ANOVA b

	Model	Sum of Squares	df	Mean Square	F	Sig.
	Regression	21.821	6	3.637		
1	Residual	27.110	250	.108	33.538	$.000^{a}$
	Total	48.931	256			

a. Predictors: (Constant), TA, IV, PS, SE, CD, RM

Based on the results of multiple linear regression test with self-regulated learning as the dependent variable and psychological support, career development, role modeling, students' self-efficacy, students' intrinsic values, and students' test anxiety was found that six independent variables only effect on student self-regulated learning of 43.3%. The other 57.7% of self-regulated learning is influenced by many factors that are not tested in this study.

a. Predictors: (Constant), TA, IV, PS, SE, CD, RM

b. Dependent Variable: SRL

Table 4. Coefficients <sup>a</sup>

Model –			dardized ficients	Standardized Coefficients	t	Sig
		В	Std. Error	Beta	ι	
1	(Constant)	1.230	.225		5.459	.000
	PS	-0.13	.034	021	380	.705
	CD	.070	.043	.105	1.622	.106
	RM	023	.044	034	510	.610
	IV	.404	.069	.440	5.866	.000
	SE	.267	.065	.252	4.091	.000
	TA	049	.028	084	-1.710	.088

b. Dependent Variable: SRL

Furthermore, when seen from the partial test, it was found that the self-regulated learning were not influenced by the style of teaching supervision is perceived by the students, but more influenced by self-efficacy and the intrinsic values espoused students. Based on the results of regression testing, it can be said that the hypothesis 4 only supports the influence of self-efficacy and the intrinsic values espoused students on student self-learning. The dimensions of test anxiety and three-dimensional style of supervision of the teachers did not affect the students' independent learning. In the other words, hypothesis 4 is partially supported.

#### DISCUSSION

This study replicates Pintrich and DeGroot's (1990) research, but modified by the presence of three variables teachers internal supervision. Supervising teacher includes psychological support, career development for students, and role modeling. Meanwhile, although there are many models of motivation that affect student learning, but this research uses three types of motivational beliefs, that is self-efficacy, intrinsic values that were believed to students about the importance or pull task that had to do, and the students' test anxiety.

This study provide an empirical basis for the specification and elaboration of the theoretical relationship between teacher supervision style as perceived by students, individual differences in motivational beliefs and students' self-regulated learning. Self-regulated learning associated with teachers' style of internal mentoring or supervision especially on the dimensions of career development for students and teachers' role modeling. In addition, self-regulated learning is also associated with motivational belief that called self-efficacy and intrinsic values held by the students. The results also showed that the students' test anxiety was not associated with students' self-regulated learning. However, this study shows that self-regulated learning is only affected by the motivational beliefs that include self-efficacy and students' intrinsic values.

Motivational beliefs components used in this study include self-efficacy. The belief that the motivational component in the form of self-efficacy and the intrinsic values embraced by the students influence on self-learning students, while the affective component has no effect. In

general, the components of student motivation are students' beliefs that they are able to perform his duties and they are responsible for achieving performance or achievements. In this case, students feel confident that they are capable of entering in learning and being able to perform his duties well. A strong relationship between self-efficacy and self-regulation has been shown in this study. Motivation is an important factor in self-regulated learning, but the effect is not too strong. The result of this study indicates that self-regulated learning is controlled by the intrinsic values espoused and motivation that is self-efficacy. This study showed that self-efficacy and using self-regulation strategies are related to each other. This is supported by previous study which states that the higher self-efficacy, then the individual will use self-regulated learning strategies (Zumburnn et al., 2011). When students are motivated to learn, they will use their time and energy to study independently. If the student has successfully implemented some independent learning strategies, they will be motivated to complete tasks with better learning (Zimmerman, 2008).

The style of teachers' supervision or internal mentoring as perceived students has no effect on the students' self-regulated learning. However, the style of supervision on the dimensions of students 'career development and role modeling of the teachers was associated with students' self-regulated learning. Success in adapting to the school requires students to develop independence or processes that activate and maintain cognition, behavior, and feelings are oriented towards achieving the goal (Schunk & Zimmerman, 1997).

Results of this study confirm research Cetin (2015) which showed that motivation to learn (although not all dimensions) is associated with self-regulated learning. Motivation indeed plays an important role in the change process, critical thinking, strategizing learning, and affect student achievement. Motivation, engagement, and achievement are high predicted when there is a balance between the challenges in the tasks and skills of students. High challenge but balance with students' skill will form an optimal experience, positive feelings, high concentration and effort and faith is able to do the work. The students will tend to undervalue the activities that have a greater challenge than the students' skills. Self-regulatory is a transformation process of intelligence capabilities into a self-regulated academic expertise. Self-regulatory extremely important because achieving educational goals is expertise in lifelong learning. Self-regulated learning not only improves motivation, but can predict the learning achievement of the students.

# **CONCLUSION**

Cognitive and motivational variables are interconnected. Self-regulated learning strategy is more influenced by the motivation of the students such as self-efficacy and intrinsic values espoused, but not affected by the test anxiety and style of supervision or internal mentoring of the teacher in the classroom. This study supports research of Pintrich & DeGroot (1990), which suggested a positive relationship between self-efficacy and the intrinsic values and students' self-regulated learning. In addition, both the motivation dimensions also affect self-regulated learning.

This study contributes to the literature on students' motivational beliefs, styles supervision or internal mentoring of teachers, and students' self-regulated learning in the classroom. This study reveals the underlying theory relations motivational beliefs and students' self-regulated learning, as well as the supervision of teaching styles. This study uses regression equations to test the effect of independent variables on the dependent variable and the correlation to examine the relationship between the variables studied, as well as different test to examine differences in the perception of motivational beliefs of students, faculty supervision style, and

independent learning of students. The weakness of this study is the use of data collection by the cross sectional field study, so it is less precise in testing the effect of independent variables on the dependent variable. In addition, this study used a survey with self-report survey instrument giving rise to bias known as the common method variance.

# **REFERENCES**

- [1] Alvarez, J. A., & Emory, E. (2006). Executive Function and the Frontal Lobes: A Metaanalytic Review. *Neuropsychology Review*, *16*(1), 17-42.
- [2] Bandura, A. (1982). Self-Efficacy Mechanism in Human Agency. *American Psychologist*, 37(2), 122-147.
- [3] Barrows, J., Dunn, S., & Lloyd, C. A. (2013). Anxiety, Self-efficacy, and College Exam Grades. *Universal Journal of Educational Research*, 1(3), 204-208.
- [4] Boekaerts, M. (1999). Self-Regulated Learning: Where we are Today. *International Journal of Educational Research*, 31, 445-457.
- [5] Cetin, B. (2015). Academic Motivation and Self-Regulated Learning in Predicting Academic Achievement in College. *Journal of International Education Research*, 11(2), 95-106.
- [6] Cho, K., & Cho, M. H. (2013). Training of Self-Regulated Learning Skills on a Social Network System. *Social Psychological Education*, *16*, 617-634.
- [7] Cooper, D. R., & Schindler, P. S. (2008). *Business Research Methods* (10<sup>th</sup> Edition). Singapore: The McGraww Hill Int.
- [8] Garner, J. K. (2009). Conceptualizing The Relations between Executive Functions and Self-Regulated learning. *The Journal of Psychology*, *143*(4), 405-426.
- [9] Gray, D. L., Anderman, E. M., & O'Connell, A. A. (2011). Association of Teacher Credibility and Teacher Affinity with Learning Outcomes in Health Classroom. *Social Psychological Education*, 14, 185-208.
- [10] Greene, B. A., & Miller, R. B. (1996). Influences on Course Performance: Goals, Perceived Ability, and Self-Regulation. *Contemporary Educational Psychology*, 21, 181-192.
- [11] Hair, J. E., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate Data Analysis* (6<sup>th</sup> Edition). Upper Saddle River, NJ: Prentice-Hall International Inc.
- [12] Hong, E., & O'Neil, H. F. Jr. (2001). Construct Validation of a Trait Self-Regulation Model. *International Journal of Psychology*, *36*(3), 186-194.
- [13] Hoover, J. D., Giambatista, R. C., & Bekin, L. Y. (2012). Eyes On, Hands on: Vicarious Observational Learning as an Enhancement of Direct Experience. *Academy of Management Learning and Education*, 11(4), 591-608.
- [14] Kadhiravan, S. (2012). Self-regulated Learning of Adolescent in Relation to Their Achievement Motivation. *Journal of Psychosocial Research*, 7(2), 211-218.
- [15] Metallidou, P., & Vlachou, A. (2007). Motivational Beliefs, Cognitive Engagement, and Achievement in Language in Mathematics in Elementary School Children. *International Journal of Psychology*, 42(1), 2-15.

- [16] Nelson, R. M., & DeBacker, T. K. (2000). Motivation to learn Science: Differences Related to Gender, Class, Type, and Ability. *Journal of Educational Research*, 93, 245-255.
- [17] Neuman, W. L. (2006). *Social Research Methods: Qualitative and Quantitative Approaches* (6<sup>th</sup> Edition). New York: Allyn and Bacon.
- [18] Pacharn, P., Bay, D., & Felton, S. (2013). The Impact of a Flexible Assessment System on Students' Motivation, Performance, and Attitude. *Accounting Education:* an International Journal, 22(2), 147-167.
- [19] Pajares, F., & Viliante, G. (1999). Grade Level and Gender Differences in the Writing Self-Beliefs of Middle School Students. *Contemporary Educational Psychology*, 21, 390-405.
- [20] Paulsen, M. B., & Gentry, J. A. (1995). Motivation Learning Strategies and Academic Performance: A Study of College Finance Classroom. *Financial Practice and Education, Spring/Summer*, 78-89.
- [21] Pintrich, P. R. (1999). The Role of Motivation in promoting nd sustaining Self-Regulated Learning. *International Journal of Educational Reserach*, *31*, 459-470.
- [22] Pintrich, P. R. (2003). A Motivational Science Perspective on The Role of Student Motivation in Learning and teaching Contexts. *Journal of Educational Psychology*, 95, 667-686.
- [23] Pintrich, P. R., & De Groot, E. V. (1990) Motivational and self-Regulated Learning Components of Classroom Aacdemic Performance. *Journal of Educational Psychology*, 82(1), 33-40.
- [24] Raabe, B., & Beehr, T. A. (2003). Formal Mentoring and Supervisor Coworker Relationships: Differences in Perceptions and Impact. *Journal of Organizational Behavior*, 24, 271-293.
- [25] Schunk, D. H. (2001). Self-Regulation through Goal Setting. *ERIC Clearinghouse on Counseling and Student Services Greensboro NC*, *ED462671*. Available at: http://files.eric.ed.gov/fulltext/ED462671.pdf
- [26] Schunk, D. H. (2005). Commentary on Self-regulation in School Contexts. *Learning and Instruction*, *15*, 173-177.
- [27] Schunk, D. H., & Zimmerman, B. J. (1997). Social Origins of Self-Regulatory Competence. *Educational Psychologist*, *32*, 195-208.
- [28] Sekaran, U., & Bougie, R. (2010). *Research methods for Business: A Skill Building Approach* (5<sup>th</sup> Edition). Singapore: A John Wiley & Sons, Ltd.
- [29] Wigfield, A., & Eccless, J. S. (1992). The development of Achievement Task Values: A Theoretical Analysis. *Developmental Review*, 12, 265-310.
- [30] Wolters, C. A., & Pintrich, P. R. (1998). Contextual Differences in Student Motivation and Self-Regulated Learning in Mathematics, English, and Social Studies Classroom. *Instructional Science*, 26, 27-47.
- [31] Zimmerman, B. J. (2002). Becoming a Self-Regulated Learner: An Overview. *Theory into Practice*, 41(2), 64-70.

- [32] Zimmerman, B. J. (2008). Investigating Self-Regulation and Motivation: Historical Background, Methodologies Developments, and Future Prospects. *American Educational Research Journal*, 45, 166-183.
- [33] Zimmerman, B. J., & Martinez-Pons, M. (1990). Student Differences in Self-regulated Learning: Relating Grade, Sex, and Giftedness to Self-Efficacy and Strategy Use. *Journal of Educational Psychology*, 82(1), 51-59.
- [34] Zumbrunn, S., Tadlock, J., & Roberts, E. D. (2011). Encouraging Self-Regulated Learning in The Classroom: A review of the Literature. *Metropolitan Educational Research Consortium (MERC)*, Virginia Commonwealth University.