

Metacognition, Achievement Motivation and Self Regulated Learning on Working Students

Febriani Sura Efrenata

febriani.sura@gmail.com

Industrial and Organization Psychology, University of Gunadarma
Graha Simatupang Tower 1A, Street Letjend Tb.Simatupang kav.38 South Jakarta

Abstract

Working students have the dilemma of having to work, study, and know how to divide their time between work and college assignments. Work and study are two important things for working students. Working assignments must be completed because they will get wages, while college assignments are obligations that must be completed by a student. The purpose of this study is to determine whether there is a relationship between metacognition and self regulated learning. The sample in this study was 100 working students, the sampling technique used was purposive sampling, that metacognition, achievement motivation had an influence on self regulated learning.

Keywords: Metacognition, Achievement Motivation, Self Regulated Learning, Working Students

1. INTRODUCTION

The phenomenon of students working can be found in many countries. In Indonesia, economic conditions that are quite difficult for some levels of society encourage students to seek solutions to financial problems faced by working. Some students have problems with tuition fees thus they try to ease the burden on their parents by working. However, some other students work for reasons of independence. Studying while working is an effort to open the gate to the world of work because it will mature the mindset of individuals to face the world of work, can foster a spirit of independence, and connect the theory obtained on campus with the reality that exists in the world of work. Working students are faced with various problems contained in 2 different environments, namely work and college. This situation triggers the emergence of stress in students who cannot manage activities between college and work.

Students in carrying out their role in the academic world, are generally faced with thinking about how much achievement has been achieved during the lecture process, and starting from these thoughts,

students tend to look for ways and reasons so that students can be more advanced and are encouraged to achieve maximum achievements.

One of the considerations is whether a part-time job will interfere with studying. Actually it would not be a problem if one can manage the time well and be eager to work hard. The advantage of part-time work besides reducing costs is that it also has a good opportunity to mingle with the local community. Moreover, there is an opportunity to do an internship in the office, this work experience will certainly add a plus when looking for work after graduating from college (HC Indonesia, 2015).

Every student's way of learning is different. Every student has their own way of learning. Moreover, students who study while working, it is very necessary for the ability of these students to divide their time between work and study. The student is required to know how to study well to achieve what the student wants. According to Zimmerman (in Boekaerts, Pintrich, & Zeidner 2005) Self regulated learning is a process of self regulation in learning, such as determining learning goals and strategies used in learning. Self regulated learning is needed by students thus students are able to regulate and direct themselves, capable of not only the components, according to Zimmerman (in Dai, Stenberg, & Robert 2008) self regulated learning itself has three factors, namely individual, behavior and environment. The impact of self regulated learning is very good for students, where students are able to regulate and direct their lives.

One that can affect self regulated learning itself is metacognition because if someone knows their cognitive abilities, it means that someone knows self regulated learning. The thinking ability of each student is certainly different. Thinking activities to receive and process information on thinking abilities used by students are cognitive abilities and are often called students' cognitive styles. To obtain and process information about knowledge, the thinking skills used by students must be different. According to Djiwandono (2002), metacognition is knowledge that comes from cognitive processes which can control and monitor as well as using language and others.

Cognitive knowledge is a person's knowledge of the elements that affect the course of cognitive and the results of his own cognitive processes. Broadly speaking, it includes (1) personal which refers to what a person believes about the existence of his own mind, including intelligence here, (2) task with regard to one's knowledge of its nature such as difficult or easy, (3) strategic related to knowledge. someone to do an activity such as right or wrong. So that metacognition in students is very important, so that students themselves can think about what students think so that they get good learning strategies during their lectures.

Student achievement motivation may also support a person's results or grades. Achievement motivation is the desire or urge to act because of the hope to get a valuable goal, which in the process can occur success approaches or failure avoidance actions (Atkinson, 1964). There are two forms of achievement

motivation, namely, the first is extrinsic motivation, namely motivation that comes from outside itself. This achievement motivation arises because of external factors, both from the home and college environment, while the second is intrinsic motivation, namely motivation that comes from within the individual. This achievement motivation appears without any encouragement from outsiders. Individuals learn because of awareness or desire to learn.

Based on the results of research on self-regulated learning and metacognition proposed by Isaacson and Fujita (2006), good students should have metacognitive abilities where students can understand what they are thinking therefore if students understand what they are thinking, they can automatically regulate themselves (self regulated learning). Thus, if the students can manage themselves, they can manage time to study, to play, to rest and to communicate with people without disturbing the achievements they want to achieve.

According to Whitebread et al (2009), children aged three to five years do not yet know the importance of metacognitive abilities and self regulated learning, but in order to benefit these children in achieving achievements in the field of education, they should be trained in metacognitive skills and self-regulated learning by how to play while learning. The teacher's role is very important in teaching children to know metacognition and self regulated learning. The teacher must first know his/her own metacognition and know how to teach well for students. The teacher is also an external tool to measure children's metacognition and self regulated learning. This will affect the future of the children themselves.

The results of the study were also carried out by Bartels, Jakson and Ryan (2010), which showed that there was a positive relationship between the achievement motivation dimension, namely hope of success predicting self regulated learning from rehearsal, elaboration, organization and critical thinking. Students who try to show their abilities in class will use self regulated learning as a tool to achieve these goals, and there is a negative relationship between the fear of failure and self regulated learning dimensions of achievement motivation.

The success of the learning process is also influenced by metacognition and achievement motivation which have a positive effect on the creativity of a student. Thinking about what is being thought in this case relates to students' awareness of their ability to develop various possible ways to solve problems (Ihsan, 2016). This is also supported by research conducted by Ari, Abdurrahman and Viyanti (2013), the results show that there is a positive and significant influence on student achievement motivation. Based on the research that has been done, achievement motivation not only makes students involved in academic activities, motivation is also important in determining how far students will learn from a learning activity. Students who

are motivated to achieve something will use higher cognitive processes in studying the material, therefore the students will absorb the material better.

This study aims to examine the effect of metacognition, achievement motivation on self regulated learning in working students. Therefore, the hypothesis proposed in this study is that there is an influence of metacognition, achievement motivation on self regulated learning in working students.

2. RESEARCH METHOD

The dependent variable in this study is the process of self regulated learning, such as determining learning goals and strategies used in learning. The independent variables in this research are metacognition of knowledge and beliefs about a person's cognitive processes and their conscious efforts to be involved in the process of behaving and thinking so as to improve learning and memory processes. The second independent variable is achievement motivation which has the desire to do and complete a business with the aim of achieving success.

This study uses quantitative methods. The data obtained in this study used a questionnaire, which in the questionnaire consisted of data on metacognition, achievement motivation and self-regulation. The sample in this study were 100 working students.

The measurement tool used in this study was prepared by compiling a Metacognition Scale and Self regulated Learning. The Metacognition Scale developed based on aspects according to Schraw and Moshman (1995) is the first knowledge of cognition which is further divided into declarative knowledge, procedural knowledge and conditional knowledge, the second is regulation of cognition. which is also divided into planning, monitoring (monitoring), evaluation, information management, and debugging. The Metacognition Scale consists of 45 items. An example of an item on this scale is "I know what types of information are most important to learn". The answer choices range from 1-5 ranging from Strongly Agree to Strongly Disagree, with a reliability of 0.915

Measurement of achievement motivation was adapted and modified based on the Achievement Motivation Scale Revised (AMSR) which refers to the dimensions of achievement motivation proposed and developed by Lang and Fires (2006) which were compiled based on the dimensions of Hope of success (HS) and dimensions of fear of failure (FF). An example of an item on this scale is "I am interested in an assignment that can test my abilities". The answer choices range from 1-5 ranging from Strongly Agree to Strongly Disagree, with a reliability of 0.751

On the Self regulated Learning Scale item, there are 35 items. According to Zimmerman and Martinez (in Basuki, 2005) self regulated learning is based on 11 (eleven) aspects, namely self-evaluation,

regulating and changing, setting goals and planning, seeking information, keeping records and monitoring, managing the environment, self-consequences, repeating and remembering, seeking social support, checking records and others.

3. RESULT

Based on the results of the study, it is known that metacognition, achievement motivation has an influence on self regulated learning has a sig. value of 0.000 (<0.05).

Table 1. Result of Anova

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	98170,645	1	98170,645	359,403	,000 ^b
	Residual	26768,595	98	273,149		
	Total	124939,240	99			

a. Dependent Variable: SRL

b. Predictors: (Constant), MOTIVASI

Table 2. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,755 ^a	,571	,561	1,705

a. Predictors: (Constant), SRL, META

Based on the results of the study, it also appears that the R.Square is 0.999, which means the magnitude of the influence of metacognition and motivation on self regulated learning is 99.9% and the remaining 0.1% is influenced by other factors. In this case, the more influential on self regulated learning is the value of 0.000 which is then influenced by the motivation of 0.007. Of the two independent variables, metacognition has the most influential significance value because it has a significance value of <0.05 . Therefore, it can be concluded that Metacognition variable has the greatest influence on self regulated learning compared to achievement motivation. The results also show that female subjects have higher metacognition, achievement motivation and self regulated learning values compared to the male subjects.

4. Discussion

Based on the research results, it is generally known that there is an influence of metacognition and achievement motivation on self regulated learning. This is also supported by previous research that the proposed hypothesis is accepted where metacognition has a relationship with the self regulated learning of working students. According to Zimmerman (in Boekaerts, Pintrich, & Zeidner, 2005), self regulated learning is a process of self-regulation in learning, such as determining learning goals and strategies used in learning. Aspects of self regulated learning according to Zimmerman and Martinez (in Basuki, 2005) are self-evaluation, organizing and changing, setting goals and planning, seeking information, keeping records and monitoring, regulating the environment, self-consequences, repeating and remembering, seeking social support, examining notes and others.

This is also in accordance with the research conducted by Lehman, Hahnlein and Ifenthaler (2014), in this study, there is a positive relationship between metacognition and self regulated learning. It can be said that metacognition is a facilitator to increase self regulated learning, where belief in metacognition that exists in oneself can improve, direct and shape a more concrete thinking style. Students who already have self-imaginary, metacognitive and self regulated learning will be more independent, believe in their abilities, regulate and control academic functions.

Another study was also conducted by Isaacson and Fujita (2006), showing that metacognition and self regulated learning are factors that influence each other. Students who excel in academics and other things describe the students being able to know what things they think (metacognition) therefore the students can also regulate themselves in terms of the learning they are undergoing.

Other studies where the influence of metacognition and motivation on problem solving abilities also add to and support the results of this study. The resulting effect is also positive and significant between metacognition and creativity. Metacognition is very important in learning that will help students to learn how to learn well. It also reveals that motivation has an influence on learning outcomes, the influence is directly proportional and very meaningful. (Ihsan, 2016).

This study is also in line with research conducted by Kim, Hur and Park (2014), regarding the effect of achievement motivation with self regulated learning. The results of the study stated that there was a positive relationship between achievement motivation and self regulated learning. Students who have high achievement motivation will prefer challenging assignments, challenging office work which makes these students must have good learning strategies to complete the assignments and work they do.

5. Conclusions

There is an influence of metacognition and achievement motivation on self regulated learning. This shows that high metacognition or when students know their own way of thinking will have an effect on self regulated learning where these students know how to learn well. Not only that, when students also have high achievement motivation, these students already know how to study well to get good grades as well. Further, if metacognition and achievement motivation are both high, then the students are very able to regulate their own way of learning so that the students do not find it difficult to regulate their way of learning with campus activities or the work that is being carried out or carried out. Thus, the students who work do not need to worry about the score obtained.

6. Suggestions

The results of the study show it is known that there is a positive relationship between metacognition, achievement motivation and self regulated learning. Thus, it is hoped that working students can know metacognition where metacognition itself is knowledge and belief about the process of cognitive phenomena in oneself or anything related to oneself as well as knowing what to do. Achievement motivation is the drive to obtain satisfactory results. Especially in self regulated learning that is suitable for themselves therefore students can complete lectures quickly and can manage study time with work. Second, further researchers who want to examine the relationship between metacognition and self regulated learning are advised to pay attention to marital status and be more varied in majors.

References

- Anonym. (2015). *Bekerja "freelance" untuk timba pengalaman*.
 Diunduh pada tanggal 16 Desember 2015 dari
[:http://bisniskeuangan.kompas.com/read/2011/02/01/05190899/Bekerja.Freelance.untuk.Timba.Pengalaman](http://bisniskeuangan.kompas.com/read/2011/02/01/05190899/Bekerja.Freelance.untuk.Timba.Pengalaman)
- Basuki, A.M.H. (2005). *Kreativitas, keterbakatan, intelektual, dan faktor-faktor pendukung dalam pengembangannya*. Jakarta: Gunadarma.
- Boekaerts, M., Pintrich, P.R., & Zeidner, M. (2005). *Handbook of self regulated*. USA: Elsevier Academic Press.
- Dai, Y.D., Sternberg, J., & Robert. (2008). *Motivation, emotion and cognition: Integrative perspective on intellectual evolopment and funchoning*. New Jersey: Lawrence Erlbaum Associates e-library.
- Djiwandono, S.E.W. (2002). *Psikologi pendidikan*. Malang: Grasindo

HC Indonesia Editor. (2015). *3 Tips untuk kuliah sambil bekerja*.

Diunduh pada tanggal 16 Desember 2015 dari :<http://www.hotcourses.co.id/study-abroad-info/before-you-leave/3-tips-untuk-kuliah-sambil-bekerja/>

Isaacson, R.M., & Fujita, F. (2006). Metakognitive knowladge monitoring and self regulated learning:Academic success and reflections on learning.*Journal of the Scholarship of Teaching and Learning*, 6.1,39-55.

Lehmann, T., Hahnlein, I., & Ifenthaler, D. (2014). Cognitive, metacognitive and motivational perspective on preflection in self regulated learning. *Computers in Human Behavior*,32, 313-323

Othman,Y.(2004). *Mengajar membaca*. Kuala Lumpur: PTS publications & distributor sdn.bhd.

White, D., Coltman, P., Pasternak, D.P., Sangster, C., Grau, V., Bingham, S., Almeqdad, Q., & Demetriou, D. (2009). The development of two observational tools for assessing metacognition and self regulated learning. *Metacognition learning*, 4.63-85