

## FACTORS AFFECTING JUNIOR HIGH SCHOOL STUDENTS' INTEREST IN CONTINUING TO VOCATIONAL HIGH SCHOOL IN MAGELANG DISTRICT

Dian Purnama Sari

Study Program of Pendidikan Teknologi dan Kejuruan, Graduate School,  
Universitas Negeri Yogyakarta  
dianps13@gmail.com

Sudji Munadi

Faculty of Engineering, Universitas Negeri Yogyakarta  
sudji.munadi@uny.ac.id

### Abstract

*This research aimed to reveal the effect of junior high school (SMP) students' self-knowledge, academic achievement, counseling and guidance service, school (SMK) image to their interest in continuing their education to vocational high school (SMK) in Magelang District. The population of the research was all of grade IX SMP students, with 387 students as samples. The data were collected using questionnaires and documentation and were analyzed using descriptive and regression analysis. The result of this study shows that: (1) the interest of SMP students' to continue their study to SMK is very high; (2) there is a positive and significant contribution of students' self-knowledge, academic achievement, counseling and guidance service, school (SMK) image; to SMP students' interest in continuing their study to SMK. The  $r^2$  values are 0.338; 0.063, 0.226, and 0.155, respectively; and (3) the four variables collectively have a positive and significant contribution to the interest in continuing the study to SMK in Magelang District with an  $r^2$  value of 0.440.*

**Keywords:** *interest, self-knowledge, academic achievement, guidance and counseling service, SMK image*

## INTRODUCTION

Entering the 2015 ASEAN Economic Community (MEA), Indonesia has many potentials in regards to the quantity of its natural and human resources. In reality, this condition brought many domestic problems associated with the management of workforce and the unresolved high level of unemployment. The majority of Indonesian workers came from the low level of formal education, which are unable to compete in the global market, and not been able to prevent the inflow of skilled workers. One of the MEA arrangement is the free market of human resources, which provide employment opportunities for global worker in large numbers. One of the efforts that can be done to overcome the aforementioned problems is through education. Education as a means to produce quality human resources is the answer to the problems of workers competitiveness in the free market. Therefore, to improve the quality standards of education is necessary for a more competitive worker.

One of the education types, which have a strategic role in preparing qualified human resources, is vocational education. Vocational education is a form of education, which prepare the students with many types of skills to be ready for jobs or to pursue a higher degree in education. Vocational education is about how to do the job, which is an effort to improve the technical competence and to foster the social class (Clarke & Winch, 2007). Vocational education answers the industry demand of skilled workers' supply and contribute to strengthen the national economy. Modern economics and job market need workers with advanced skills and knowledge, which cannot be produced in low-quality school (Berg, 2002; Sahlberg, 2007; Ayhan, 2011; Catts, Falk, & Wallace, 2011).

Pavlova (2009, p. 5) stated that the "vocationalisation" of secondary education has been seen as an effective measure for developing human resources. In developed countries, in which vocational high school trained most of their young to manage their resources, vocational education is seen as the right initiative (Maclean, Wilson, Lauglo, & Maclean, 2005). The term pre-vocational education is another term for basic vocational skill, because pre-vocational is related to

the students' ability to use the right equipment in accordance to their competence so that they can work productively. Pre-vocational education is an effort of teaching and learning conducted in higher secondary school (SLTA), as of general high school (SMA) and Madrasah Aliyah (MA) high schools, which refers to vocational education, in which the education process prepares the students with basic skills, which resemble the SMK. It is expected that after the pre-vocational education, students will have the skills to be ready for work world.

Vocational education, which is oriented in producing skillful workers, is suitable to be introduced in high school education because the students are in the right age to receive an education that is based on psychomotor skills (Macklem, 2015). Therefore, Vocational High School (SMK) is a formal education, which is in the same degree as Senior High School (SMA), but the education in SMK is more focused on students who want to go straight to work after graduating. The existence of educational institution in the form of SMK is expected to help in economic growth in each region where this education institution is located. The development of industry and business in each region cannot be separated from the presence of SMK in the area.

Jawa Tengah is heading towards the province of vocation, in the effort to resolve the unemployment and poverty problems and to improve the quality of education. SMK is directed to become a center of education and training, and a center of manufacturing education and marketing, which will yield to quality graduates. SMK, which is a school that is oriented in achieving job-competency, prepares the students with job-ready skills with the purposes of: (1) preparing the students to be ready for the job market and to develop professionalism, (2) preparing the students to choose and pursue their career, and (3) preparing intermediate level workers to fill the needs of the industry. Students in SMK are more equipped with skills to be job-ready compared to Secondary Education through Sekolah Menengah Atas (SMA).

Students who are studying in SMK are the graduates of the first level of high school such as Junior High School (SLTP) and madrasa (MTs). Therefore, insight and understanding into what to be done after graduating

SMP or MTs should be possessed by those students.

Compared to Secondary Education, SMP/MTs students need to be trained for job skills by enhancing the knowledge of further education and career opportunities. Basically, SMP students especially those in grade IX are not only have the choice of continuing education to SMA/SMK/MA after graduating SMP, but also have the choice of entering vocational training in non-formal institution or go straight to finding jobs. Students with the interest in continuing to SMK have the tendency to choose the study program suitable for their career path. There are also students who have no interest in continuing their education to SMA/SMK/MA, stopping at just the SMP level. To consider their so many choices after graduating SMP can be a psychological burden for SMP students. In these conditions, there is a need for preparedness related to one's self-knowledge, potentials, academic ability, and the orientation of one's future. These factors are related to the factors within the students themselves (internal).

The potential of a person can be identified from physical and psychological ability. Physical ability is related to the physical capability and strength to perform and learn vocational practical skills. The support of body members in practicing skills, such as hand, feet, eyes and ears, is needed in learning vocational practical skill. Psychological ability is related to the mental capability and readiness to vocational learning, such as self-knowledge, and academic achievement. In addition to the physical and psychological ability, there are other external factors having significance in the development of insight and understanding on the twist and turn of life after graduating junior high education.

One of the psychological factor, which are significant to a person in a process of obtaining an object or committing in a particular activity, according to many education experts, is interest. Interest is the underlying psychological factor of one's tendency to a certain object. Someone who has an interest for an object will always seek to follow the information of the said object. Interest can build affection to certain topics or activities, and in addition, it can develop one's motivation and self-identity (Pintrich, 2003; Mangal, 2007). Interest is closely related to

the driving factor of one's inner self, which helps in finding the appropriate activities. Interest is closely related to one's wishes, motivation, and basic needs. Interest is essentially the acceptance of a relationship between oneself and the world outside around it. According to Macklem (2015) and Trilling & Fadel (2009), interest is actually a result of the embodiment of positive emotions because of the interaction with the surrounding environment. This shows that the stronger and closer the interaction is, the higher the interest and therefore it can build the desire within oneself to react in an activity towards the realization of that interest.

Regarding to the choice of vocational schools as a place to continue study for SMP graduates, Igbiniedion, (2011) stated that interest is an important factor within a person, in this case SMP students of class IX, to choose for vocational school. The main reason why a person chooses a career or a particular skill program is because of personal interests behind it. Measurement of a person's interest is basically an activity to determine the response of the person in regards to liking or disliking an object. (Thorndike, 2006).

Based on the description above, it can be stated that interest is a mental process within a person that shows a tendency in choosing an object. The choice of the object is based on the experience and interpretation of what has been seen, heard and felt, as embodied in a positive emotional feeling in the form of expressed actions which is tend to be performed continuously, either consciously or unconsciously. The interest of class IX SMP students to continue to SMK is a sense of fondness or interest followed by the decision-making process to continue to SMK in order to plan the desired future.

Other important factor that is crucial in choosing for a certain object is self-knowledge. Self-knowledge is a psychological factor of a person that has important role whenever that person determines choices towards a particular object. Self-knowledge is described as the ability to assess realistically and objectively one's own strength and weaknesses. These strength and weakness are related to physical and cognitive ability (Munadi, 2012, p. 33). One with a good self-knowledge will have more ability to find self-identity, and

therefore capable of making the right decision when faced with different choices.

On a related note, Catts et al. (2011) stated that self-knowledge is related to the way one regards and respects oneself, other beings in the surroundings and events that take place in neighboring area. It also related to the way ones believe that the regards and respect are mutual. Ultimately, self-knowledge is a psychological aspect of a person, which is the main determinant in the goal achievement and ambition of that person.

Self-knowledge is essentially a mental process to acknowledge objectively the strengths and weaknesses of oneself. One with no ability to understand oneself will encounter many obstacles in the society, feeling confused in building life philosophy, having difficulties in adapting to carrier life, and even facing various problems in marriage life.

This matter with self-knowledge applies to SMP students as well. Student who has a good self-knowledge will improve their confidence in managing cognitive skills and gather the information needed in order to choose their further education, which has been their chosen target. The process of choosing further education is at least affected by two things. Firstly, further education aims solely to continue to a higher degree of education (general education). Secondly, further education aimed to focus at entering the work world (vocational education). Especially in continuing to vocational education, SMP students surely have certain considerations. Apart from academic ability, they must also have vocational ability to support the aim. Based on vocational development theory, SMP students are actually begin to consider and think about a certain vocation. They also realize that in order to land their dream job, they have to possess certain knowledge and skills set which are achievable through education. Psychological condition like this will lead the students to determine their choice on which education or training they will attend to (Munadi, 2012).

Perry & Van Zandt (2006, p. 25) stated "...*Self-Knowledge is a life-long process of discovery, reflection, and integration,*" self-knowledge is a long process in life to discover, reflect, and integrate a learning process, especially in oneself, or in the process of career building. Furthermore, Perry and

VanZandt also wrote, in the same book, the theory of Donald Super about the developmental self-concept known as Donald Super's Developmental Self-Concept Theory, which is distinguished in five stages as presented in Table 1.

Table 1. Donald Super's Developmental Self-Concept Theory

Super's Five Developmental Stages		
Stages	Age	Characteristics
Growth	(-14)	Thinks about interests and abilities; develops general understanding of the work world.
Exploration	(15–24)	Narrows down career choices; ultimately finds a job or gets final training.
Establishment	(25–44)	Becomes committed to an occupation; moves up in the field.
Maintenance	(45–64)	Continues adjustment to improve position; might shift attention to family.
Decline	(65–)	Plans for retirement; retires.

Source: Perry & Van Zandt (2006, p. 8)  
Exploring Future Options: A Career Development Curriculum for Middle School Students.

Table 1 shows the five developmental stages of self-concept, in which SMP students in the 12-14 age range are in the Growth Stage with the characteristic of thinking about interest and abilities to develop general understanding of the work world. The next stage is Exploration at the age of SMA/SMK education, until graduate from university. In this stage, one will have narrowed down the career choice and eventually choose the right career or undergo a training for advanced level skills.

To be able to continue to a higher level of education, whether it is general education or vocational education, one needs normative requirement that must be met namely academic achievement. Academic achievement is the result of learning activities, which serve as one of the main indicators to determine the extent to which learners have mastered the

learning material and to express the achievement of learners. Students with a good academic achievement will have confidence in choosing a study program suitable to their interest. Whilst the ones with low academic achievement need guidance and counseling service, which is part of the learning process at schools.

Academic achievement can be determined from three aspects, namely cognitive, affective, and psychomotor aspects. Cognitive aspects includes the development of the ability to think and the development of skills during learning process. Affective aspects includes the development in attitude, interest and values which are related to the feelings of the students. While psychomotor aspect includes physical skills acquired by the students during the learning process.

Tu'u (2004, p. 76) explained that academic achievement could be defined as follows: (1) Academic achievement of students is achieved as students follow learning activities and working on their assignments in school; (2) the academic achievement is assessed especially on the cognitive aspects; and (3) academic achievement is proven and shown through marks or scores from the evaluation result of the teachers on their students' assignments and exams that have been taken.

Shupe (2007, p. 49) stated "student learning outcomes are properly defined in terms of the particular levels of knowledge, skills, and abilities that a student has attained at the end (or as a result) of his or her engagement in a particular set of collegiate experiences." Shupe suggest that students' academic achievement is all the thing that are related to the knowledge, skills and ability which will be possessed by the students in the end (or in part) of their involvement in a learning activity. This applies to all learners.

Academic achievement shows a mastery of learning which comprises of cognitive, affective and psychomotor factors, which is measured using tests or other relevant instruments (Prøitz, 2010). The majority of students believe that cognitive factor or intelligence is the dominant and determinant factor to the reach of the maximum academic achievement.

It is unknown to many students that non-cognitive factors also influences academic achievement. Non-cognitive factors can

grow learning interest, which affects academic attitude and learning behavior. Students who choose a learning subject with a low interest will achieve low results when compared to the ones who choose the subject with high interest. An academic achievement will in turn, influence career achievement. In general, students with high academic achievement would choose to continue their education to general high school after graduating SMP. Whereas, most students with medium or low academic achievement tend to choose vocational education as their further education.

Students' interest in continuing to a higher education, whether it is a general education or vocational education, is not only influenced by internal factors, but also from the external factors. In addition to the school management and the teacher factors, other external factor that has great influence in choosing a higher level of education is the management of guidance and counseling services. Guidance and counseling is a systematic, objective, logical, and sustainable effort done by a counselor or a dedicated teacher to facilitate the development of students to achieve their autonomy in life (Kementerian Pendidikan dan Kebudayaan, 2014, p. 2). One function of the guidance and counseling services at SMP level is the guidance of education, work, and career choices. Career development material gives an understanding that in choosing something, whether it is an occupation or education, the students must go through a directed, programmed and measured preparation and planning. Career development is not merely choosing a career or a job once at a given time, but it involves preparation from the early on and is a long-term action. This will generate a long-term career with long-term implication (Brown, 2002).

The image is experience, understanding of something, and one's impression of a certain object so that it can build perception, which can be taken into consideration in decision-making. The image is subjective because the experience is not the same for each person. This is why an organization needs to promote continuously, giving the right information to the public. Once the information differs from the reality, there will be a disappointment, and people will have a bad perception of the organization's image, and vice versa. The image of a school can be influenced

by many factors, including academic reputation, school appearance, cost of study, personal attention, location, career placement social activities and the available study programs. The school as a public organization has legal and formal obligations to inform the public about its objectives, programs, necessity and conditions. On the other hand, the school has to understand clearly the need, hope, and demand of the public.

The program for developing a positive image for SMK is there to improve the positive image in front of the public, parents and the stakeholders. This program can increase the pride in entering SMK for SMP graduates. This program also builds confidence for SMK graduates in entering the work world or becoming an entrepreneur. This is important because the image of SMK a few years ago is quite negative; with many people assume that SMK graduates are oriented only in getting a job, difficult to enter university, having poor academic knowledge, frequently involved in a brawl, and so on.

## METHODS

This research uses the ex-post facto methods. There are four independent variables and one dependent variable in this research. The independent variables are self-knowledge (X1), academic achievement (X2), counseling and guidance service (X3), and school (SMK) image (X4), whereas the dependent variable is junior high school students' interest in continuing to vocational high school (Y). The research was conducted in several state and private SMPs in Magelang district. The selection of research area was done using the area-stratified sampling methods, and the sampling in each region was using the proportionate stratified sampling.

The total population (SMP students of grade IX in Magelang district) is 11.496 students. The number of wanted samples was calculated based on Slovin formula with 5% margin of error, resulted in 387 respondents as samples. Research data were collected by using questionnaire and documentation. The data were analyzed statistically using descriptive analysis, simple linear regression and multiple linear regression techniques.

## RESULT AND DISCUSSION

Data were described using frequency distribution and percentages. The analysis comprises of mean, median, mode and standard deviation. The analysis were proceeded with the determination of the research variables position in accordance with the tendency category of each variables. Descriptive analysis of the interest in continuing to SMK were expressed in terms of frequency and percentage.

Table 2. Distribution of Grade IX SMP Students' Interest in continuing to SMK

Category	Frequency	Percentages
Very high	171	44%
High	149	39%
Low	62	16%
Very Low	5	1%

According to Table 2, about 83% of SMP students shown their interest in continuing their study to SMK. Subsequent data analysis to determine the effect of the independent variables to the dependent variables were done using simple linear regression analysis and multiple linear analysis. Based on the analysis result, it can be seen the magnitude of direct effect of research variables (see Table 2 and Table 3).

Table 3. Multiple Linier Regression Analysis Results

Var.	Adjusted R <sup>2</sup>	Const.	Coeff.	Sig.
X1,			X1 = 0,668	
X2,			X2 = 0,338	
X3,	0,440	-48.703	X3 = 0,423	0,000
X4			X4 = 0,289	
→ Y				

It means that there is an effect of self-knowledge, academic achievement, guidance and counseling service, and SMK's image, collectively, to SMP students' interest in continuing to SMK. The magnitude of the effect can be deduced from the Adjusted R<sup>2</sup> determinant coefficient value of 0.440 or

44.0%. The magnitude for each independent variables in descending order are: (1) self-knowledge with a value of 0.668; (2) guidance and counseling service of 0.423; (3) academic achievement of 0.338; and (4) SMK's image of 0.289. These results proved that self-knowledge, academic achievement, guidance and counseling service, and SMK's image possessed by SMP students collectively play an important role and have a very good effect on SMP students' interest in continuing their study to SMK.

The effect of each independent variables to constrained variable can be discern from the Table 4.

Table 4. Simple Linier Regression Analysis Results

Var	R <sup>2</sup>	Const	Coeff.	Sig.
X1 → Y	0.338	1.250	0.959	0.000
X2 → Y	0.063	9.046	0.556	0.000
X3 → Y	0.226	6.123	0.922	0.000
X4 → Y	0.155	19.108	0.648	0.000

Table 4 informs the following information: (1) There is a positive and significant effect of self-knowledge to the SMP students' interest in continuing to SMK with an R<sup>2</sup> (coefficient of determination) of 0.338 or 33.8%; (2) There is a positive and significant effect of academic achievement to the SMP students' interest in continuing to SMK with an R<sup>2</sup> of 0.063 or 6.3%; (3) There is a positive and significant effect of guidance and counseling service to the SMP students' interest in continuing to SMK with an R<sup>2</sup> of 0.226 or 22.6%; and (4) There is a positive and significant effect of SMK's image with an R<sup>2</sup> of 0.155 or 15.5%.

According to the descriptive analysis and simple linear regression, the students' self-knowledge data shows positive and significant effects of 33.8% to the SMP students' interest in continuing to SMK. The average score of self-knowledge is 55.97 (on the 72-18 scale) and the high category dominates by 59%. For each increment of one score of self-knowledge, the SMP students' interest increased by 0.959. This result supports the findings of Farid (2009), Nurmala (2012), and Dharmayanti & Munadi (2014). Farid (2009) stated that there is a positive effect of self-

knowledge to the interest in continuing to SMK with a correlation coefficient of 0.332 and effective contribution of 11%. Nurmala (2012) found that there is a positive effect of self-knowledge to grade IX SMP students' interest to continue their study to SMK in the healthcare expertise with estimation β value of 0.360. Research done by Dharmayanti & Munadi (2014) found that there is a positive and significant effect of self-knowledge to the interest of SMP students to continue to SMK in Pontianak city with an r-value of 0.743 and p-value of 0.000.

Self-knowledge of SMP students is found to have a role and positive effect in the development of the interest in continuing study to SMK. Self-knowledge is the key internal factor of students' purpose and ambition in deciding their next direction after finishing SMP. Donald Super theory of self-knowledge development stated that SMP students in the age range of 12 to 14 years are in the "Growth Stage", having the characteristics of thinking about interest and ability to develop their general knowledge of the work world.

To increase the effect of SMP students' self-knowledge on their interest in continuing to SMK in Magelang District, can be done by involvement of adults who are close to the students, including parents and teachers. The presence of parents and teachers helps in the formation of students' self-concept, which leads to a new self-knowledge. The presence of parents and teachers is not always quantitative, more importantly, the quality of the presence is more effective in the formation of self-concept. A positive self-concept formation can be seen from the students' conditions. The students feel being accepted, capable of self-assessment, maintain good appearance, well-behave, overcoming social situation, respectful and feel being respected. These conditions were developed as the parents and teachers with their authority of the students, treat them just and with dignity, truly listening, making compassionate eye contacts, sincerely enjoying their togetherness, and supporting the students to become whatever they wanted to. The students will feel being respected and will give their respects to these feelings in the form of a positive self-knowledge.

The data of students' academic achievement shows a positive and significant effect of 6.3% to the interest of SMP students' continuing to SMK. The average of academic achievement score is 82.47 (on the 100-70 scale) and is dominated by a low category of 63%. The dominance of low category academic achievement is in accordance with Sukardi (2008) findings, in which society still perceive SMK as a less prestigious education, low quality, and is considered as a "second class" education in which SMP students who continue their study to SMK are those with low academic performance. Having low academic achievement, SMP students are afraid that they will fail to compete with those who have high academic achievement in order to enter SMA. This has formed perceptions that continuing to SMK is not by choice.

SMP students' academic achievement have a role and effect that are still possible to be developed in the improvement of the interest in continuing study to SMK. Academic achievement is an internal factor achieved from the academic learning process that can be used as a measure of the depth of students' understanding about the learning materials. SMP students' academic achievement in regards to the interest in continuing to SMK at Magelang District have an effect of 6.30%, which is a low category dominance. It can be said that students with low academic achievement and have an interest in continuing their study to SMK will be able to develop their academic potential to improve their achievement in accordance to their field of interest in SMK. Interest can be used as a reference of the students' academic achievement. A low interest about the learning objectives will result in lower academic achievement compared to those with a high interest. Furthermore, academic achievement will affect the career advancement in the future.

Data on guidance and counseling service of SMP students show a positive and significant effect at about 22.6% to the SMP students' interest in continuing to SMK. The average of guidance and counseling score is 52.89 (on the 72-18 scale) and is dominant in the high category of about 77%. For each graduation of guidance and counseling score, the interest of SMP student to continue their study to SMK increased by 0.922 points. This result supports the research finding of Farid

(2009), stated that there is a positive effect of the quality of guidance and counseling to the interest of continuing to SMK with a correlation coefficient of 0.408 and effective contribution of 11.5%.

The guidance and counseling service for SMP students is proven to have a very good role and effect in growing the interest to continue study to SMK. The service is an external factor which contains career guidance materials where there exists continuous process to delve information about one self, self-potential management, and to develop it into a career opportunities. School is a beautiful place to start recognize and understand the steps in career development. Career guidance in schools have a role in guiding the students to be able to understand and evaluate themselves. This is especially related to their inner-potentials, capability, interest, talent, attitude and future goals; realize and understand the values within themselves and in society; understand the many types of jobs related to their potentials; understand the kinds of education and training required for a certain field; understand the effects of their current efforts towards their future; discover the obstacles which may occur from within or from the surroundings, and to find ways to overcome those obstacles; students are also guided to be able to plan their future and find harmony in career and life.

Data of SMK' image in the view of SMP students have a positive and significant effect of 15.5% to their interest in continuing their study to SMK. The average of SMK's image in the view of SMP students is 55.24 (on the 72-18 scale), and is dominated on the high category of 64%. For each increment of SMK's image value in the view of SMP students, the interest of SMP students in continuing their study to SMK increases 0.648 points. These supports the research findings by Farid (2009), and by Dharmayanti & Munadi (2014). Farid (2009) stated that there is a positive effect of SMK's image to the students' interest of continuing to SMK with a correlation coefficient of 0.631 with an effective contribution of 21.5%. Dharmayanti & Munadi (2014) found that there is a positive and significant of SMK's image to the students' interest in continuing to SMK with and r-value of 0.678 and p-value of 0.000.

SMK's image in the view of SMP students is proven to have a very good role and effect in improving students' interest in continuing to SMK. SMK's image is an external factor because it emerge from a stimulus to the perception, cognition, motivation and attitude components of the students towards SMK. The development process of SMK's image will generate opinions, responses and behaviors, which will materialize in the form of interest in continuing their study to SMK.

## CONCLUSIONS

Based on the analysis result and the discussion that follows, it can be concluded: (1) The interest of SMP students in Magelang District to continue their study to SMK is about 83% which is in the category of very high, (2) These variables are proven to affect the interest of SMP students to continue to SMK: self-knowledge, academic achievement, guidance and counseling service, and SMK's image, (3) Collectively, the SMP students' self-knowledge, academic achievement, guidance and counseling service in SMP, and the SMK's image are proven to affect the interest of SMP student in continuing their study to SMK. The combination of these four variables increases the students' interest significantly and can give the maximum outcome in the learning process of the students in SMK. Therefore, with SMK, it is hoped that the local human resources can grow better and meets the demand of the work world.

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