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FACTORS INFLUENCING THE SELECTION OF MULTIMEDIA ENGINEERING EXPERTISE COMPETENCIES

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ABSTRACT

Each Expertise Competency has its own enthusiasts, they have certain considerations before selecting a skill competency. Likewise with students who choose the Multimedia Engineering Skills Competency. They also have special considerations. For students who wish to choose the Multimedia Engineering Skills Competency, they will consider their talents, interests, personality, motivation, aspirations, perceptions or views, and the job opportunities they will get after graduating later by looking at the needs of the world of work and the number competitors, as well as encouragement from parents and peers for a job or for the Competency of Multimedia Engineering Skills itself. The considerations of each student are different from each other. This is because they have different talents, interests, personalities, motivations, aspirations and perceptions or views in assessing a Skills Competency, especially the Multimedia Engineering Skills Competency. Based on observations and field facts when carrying out activities at the Yogyakarta Vocational School, namely, the number of students who do not have basic talents and skills choose the Multimedia Engineering Skills Competency. In addition, some students complained in following the lesson. This is because they are forced to follow the wishes of their parents without considering the talents, interests, and basic skills possessed by students. In addition, there are some students who enter the wrong Skills Competency because of a lack of information about the Skills Competencies in SMKN 3 Yogyakarta. Of course this will make it difficult for students to follow the lesson and affect the motivation and achievement of student learning. The large number of student considerations in choosing a Skills Competency, made the writer interested in researching the effect of the interest of class X students

choosing the Multimedia Engineering Skills Competency by taking the title The Influence of Interests of Class X Students in terms of Intrinsic and Extrinsic Factors on the Selection of Multimedia Engineering Skills Competency at SMKN 3 Yogyakarta . This study aims to determine the influence of class X students' interest in choosing the Multimedia Engineering Skills Competency, how much student interest is viewed from intrinsic factors and how much student interest is viewed from extrinsic factors. This research is an ex-post facto research with a quantitative approach. The population used is class X Multimedia Engineering Skills Competency at SMKN 3 Yogyakarta. Data collection uses questionnaires and documentation. Data analysis techniques using descriptive analysis techniques and multiple linear regression. The results of the study show that there is a positive and significant influence of the Intrinsic Factors and the Extrinsic Factors on the Selection of Multimedia Engineering Skills Competency. This is indicated by the correlation coefficient of 0.735, the determinant coefficient of 0.540, the effective contribution of intrinsic factors and extrinsic factors of 54%. The effective contribution of intrinsic factor is 4.8%. The interest of Class X students in terms of intrinsic factor is very high category as many as 8 students (22.9%), high category 19 students (54.3%), medium category 7 students (20%) and low category 1 student (2.9%). The data shows that the interest of class X students in Multimedia Engineering Skills Competency in terms of intrinsic factors is greatest in the high category. Then it can be explained from the intrinsic factors which include factors of willingness, pleasure, talent and motivation. Of these factors that give the biggest contribution is the factor of will. The interest of class X students in terms of extrinsic factors included 2 students (5.7%) in the very high category, 9 students (25.7%) in the high category, 19 students (54.3%) in the medium category, 4 students in the low category (11.4%) and very low category 1 student (2.9%). The data shows that the interest of class X students in Multimedia Engineering Skills Competency in terms of extrinsic factors is the largest in the medium category. Then it can be explained from extrinsic factors which include family and community environmental factors. Of these factors that give the biggest contribution is the family environment factor.

Keywords: : Interest; Intrinsic Factor; Extrinsic Factor; Expertise Competence

INTRODUCTION

The rapid development of Science and Technology (IPTEK) has caused many changes in various fields of life, one of which is changes in the world of work. The demands for professional services from the world of work entering the era of globalization are getting heavier (Amelia et al., 2022). The quality of human resources (HR) both in terms of intellectual, moral, and skills that meet the world of work is increasingly needed and has not been fulfilled. Therefore, a high level of education alone cannot guarantee a person is accepted in the world of work (Tanjung, 2020). They are also required to have high morale, creativity, and skills in their fields. Studying hard and high work ethic are the main assets that must be owned by someone to win the competition in the world of work. The learning and learning system that refers to the formation of intelligent, creative and moral humans is very urgent to be implemented immediately. Vocational High School (SMK) is one of the vocational education institutions that has the task of preparing students to be able to work in certain fields. SMK is a continuation of junior secondary education that has the main purpose of preparing the workforce according to the demands of the world of work, both self-development in physical, and intellectual dimensions, as well as emotional and spiritual. In its development, SMK is required to be able to produce quality Human Resources, which accelerate with advances in science and technology (Baitullah & Wagiran, 2019). Vocational students are required to be more proactive in following technological developments, especially information technology which is currently needed by every aspect of human life. SMKN 3 Yogyakarta is one of the schools that has great potential in the formation of students who are competent and have competitiveness in the industrial world. This is shown by the existence of various Expertise Competencies available in the school so that students can easily choose one of the Expertise Competencies that can develop their skills. SMKN 3 Yogyakarta has eight Fields of Expertise which are divided into several Expertise Competencies, namely Building Drawing Engineering Expertise Competencies, Wood Construction Techniques, Electric Power Installation Techniques, Audio and Video Engineering, Mechanical Engineering, Light Vehicle Engineering, Multimedia Engineering, and Computer and Network Engineering. To meet the needs of technological developments in the industrial world, SMKN 3 Yogyakarta added a new Field of Expertise, namely Information and Communication Technology which was formed in 2004, consisting of two Expertise Competencies, namely Multimedia Engineering and Computer and Network Engineering. In accordance with the field of science, the Multimedia Engineering Expertise Competency offers a variety of knowledge and skills related to computers, especially in the field of Multimedia.(Handayani et al., 2022) Through this expertise competence, SMK students are prepared to become experts in the field of Multimedia. Each Skill Competency has its own enthusiasts, they have certain considerations before choosing a skill competency. Similarly, students who choose the Multimedia Engineering Expertise Competency. They also have special considerations. For students who want to choose the Multimedia Engineering Expertise Competency,

they will consider their talents, interests, personality, motivations, goals, perceptions or views, and job opportunities that they will get after graduation by looking at the needs of the world of work and the number of competitors, as well as encouragement from parents and peers towards a job and the Multimedia Engineering Expertise Competency itself (Renzulli & Reis, 2021). Each student's consideration is different from each other. This is because they have different talents, interests, personalities, motivations, ideals and perceptions or views in assessing a Competence of Expertise, especially the Competence of Multimedia Engineering Expertise. Based on observations and facts in the field when carrying out KKN-PPL UNY 2011 activities at SMKN 3 Yogyakarta, namely, the number of students who do not have the talent and basic skills who choose the Multimedia Engineering Expertise Competency. In addition, there are some students who complain about following the lesson. This is because they are forced to follow the wishes of their parents without considering the talents, interests, and basic computer skills of students. In addition, there are some students who came in incorrectly.

Given the wide scope of existing problems, the research is limited only to factors that influence the interest of Class X Students in the selection of Multimedia Engineering Expertise Competencies at SMKN 3 Yogyakarta in terms of intrinsic factors (willpower, pleasure, talent and motivation) and extrinsic factors (family and community environment).

Based on the identification of the problems that have been raised, the problems in this study are as follows: (1) How high is the interest of grade X students in Multimedia Engineering Expertise Competence at SMKN 3 Yogyakarta in terms of intrinsic factors?; (2) How high is the interest of grade X students in Multimedia Engineering Expertise Competence at SMKN 3 Yogyakarta in terms of extrinsic factors?; (3) Is there any influence on the interest of grade X students in terms of Intrinsic and Extrinsic Factors on the Selection of Multimedia Engineering Expertise Competency at SMKN 3 Yogyakarta?

Based on the formulation of the problem above, this study has the following objectives: (1) To find out how high the interest of grade X students in Multimedia Engineering Expertise Competence at SMKN 3 Yogyakarta in terms of intrinsic factors; (2) Knowing how high the interest of grade X students in Multimedia Engineering Expertise Competence at SMKN 3 Yogyakarta in terms of extrinsic factors; (3) Knowing the influence of interest of grade X students in terms of Intrinsic and Extrinsic Factors on the Selection of Multimedia Engineering Expertise Competency at SMKN 3 Yogyakarta.

Through this research, it is expected to provide many benefits for various parties, including:

1. Theoretical Benefits

   In particular, the results of this research are expected to contribute to the Competence of Multimedia Engineering Expertise in the Field of Information and Communication Technology Expertise at SMKN 3 Yogyakarta (Sanusi & Wasliman, 2021).

2. Practical Manthat
   a. For Yogyakarta State University and Informatics Engineering Education Students, this research is expected to be used as reference material for further research development.
   b. For SMKN 3 Yogyakarta, this research is expected to be an input in selecting students who choose the Multimedia Engineering Expertise Competence.
   c. For students, this research is expected to be an input for prospective SMK students who want to choose the Multimedia Engineering Expertise Competency.
   d. For researchers, the results of the research are expected to be useful as a means to increase knowledge and experience, especially on problems related to the interest in choosing a Expertise Competency in Vocational High Schools (SMK).
   e. For the Government, it can be useful as a consideration and formulate policies in the field of education and to improve the quality of education.

RESEARCH METHODS

This research is an Ex-post Facto research with a quantitative approach. It is called ex post facto research because this research was conducted to examine events that have occurred and trace back to find out the factors that caused the event. Ex-post facto research is a systematic empirical investigation, where researchers do not have direct control over independent variables because the manifestation of phenomena has occurred or because phenomena are difficult to manipulate ((Nazir, 2019). This study uses a quantitative approach, because in analyzing data using numerical data or numbers processed by statistical methods, after obtaining the results, then describedn by describing conclusions based on numbers processed withstatistical methods.

Variables are research objectsor what is the point of attention of a study (Rachmawati, 2017) In this study there are three variables which are two independent variables and one dependent variable, namely:

1. Free variables
   These variables are often referred to as stimulus, predictor, antecedent variables. In Indonesian it is often referred to as an independent variable. Independent variables are variables that affect or cause changes or arise dependent variables (Hayati et al., 2019). In this study, the independent variables consisted of Intrinsic Factor (X1) and Extrinsic Factor (X2)
2. Bound variables
   Bound variables are often referred to as output, criterion, consequent variables. In Indonesian it is often referred to as a dependent variable. Dependent variables are variables that are influenced or that become a result, because of the existence of independent variables (Hayati et al., 2019).
3. Bound variables
   In this study, the dependent variable is Choosing Multimedia Engineering Expertise Competencies (Y).

The research paradigm is a mindset that shows the relationship between the variables to be studied which are also the type and number of problem formulations that need to be answered through research, the theory used to formulate hypotheses, the type and number of hypotheses, and statistical analysis techniques to be used (Sugiyono & Lestari, 2021)

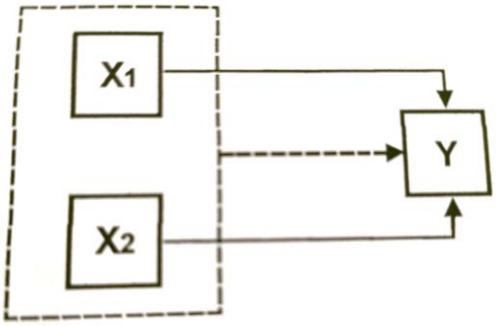

Figure 1. Research Paradigm

Ket:
X_1 = Intrinsic Factor
X_2 = Extrinsic factor
Y = Choosing Multimedia Engineering Expertise Competency
⟶ = Regression Line X to Y
⇢ = Double Regression Line X_1 and X_2 to Y

Population is a generalization area consisting of: objects or subjects that have certain qualities and characteristics that are determined by researchers to be studied and then drawn conclusions (Hayati et al., 2019) The population in this study is all Class X Students of Multimedia Engineering Expertise Competence at SMK Negeri 3 Yogyakarta totaling 35 students. states that "if one wishes to examine all the elements present in the research area, the research is population research". Since the research subjects are out of 100, population research can be applied. Based on these considerations, all were used as research subjects. Therefore this study is called population research.

Data collection technique is a method used by researchers to obtain the data investigated. Data quality is determined by the quality of the data capture tool or its measurement measuring instrument. The data collection techniques used in this study are:

1. Questionnaire Method
   Questionnaire or questionnaire is a data collection technique carried out by giving a set of questions or written statements to respondents to answer. The questionnaire methods used in this study were direct and closed questionnaires. A closed questionnaire is a questionnaire that contains questions accompanied by answer choices for those questions.
2. Documentation Methods
   In carrying out documentation methods, researchers investigate written objects such as books, magazines, documents, meeting minutes, daily records, and so on

(Rachmawati, 2017) This technique is used to obtain data about students and a picture of the Multimedia Engineering Expertise Competence.

Instrument is a tool used to measure observed natural and social phenomena (Hayati et al., 2019). The measuring instrument used in this study was in the form of a questionnaire. In quantitative research, the data in this study must be converted into numbers i.e. by scoring. The measurement scale used is the Likert scale. This questionnaire contains questions that are given responses by research subjects which are arranged based on theoretical constructions that have been prepared previously, then developed in indicators and then translated into question items (Sung & Wu, 2018). The answer to each instrument item that uses the Likert scale has a gradation from very positive to very negative can be in the form of words including: Strongly Agree (Ss), Agree (S), Disagree (Ts), and Strongly Disagree (STS). The type of answer used is in the form of a check list (V). The scores of each alternative answer given by respondents on positive statements (+) and negative statements (-) are as follows:

Table 1. Instrument Grille

Research Variables	Indicators	Sub Indicators
Interest	**Intrinsic Factor**	
	Desire	1. Underlying intentions of behavior 2. Willingness to choose 3. Willingness to acquire skills 4. Willingness to achieve
	Pleasure	1. Happy at something 2. Love multimedia lessons
	Talent	1. Skills possessed 2. Easy absorption of information
	Motivation	1. Behavior drivers 2. Direction-setters 3. Completion of actions
	Extrinsic Factors	
	Family Environment	1. Attention and direction from parents 2. Learning facilities 3. A supportive family environment 4. Parents' educational background 5. Socioeconomic status of the family
	Community Environment	1. Social friends 2. Mass media 3. Community life forms
Multimedia Engineering Expertise Competency	Developing digital imagery and animation	1. Graphic arts design 2. 2D and 3D Images 3. Animation 4. Digital photography
	Develop interactive (web) pages	1. Web design 2. Web database

	Record and edit audio-video Develop interactive multimedia applications	1. Movie 2. Audio Interactive multimedia applications

RESULTS AND DISCUSSION

In this study, three variables were discussed consisting of two independent variables and one dependent variable. As an independent variable is an intrinsic factor and an extrinsic factor, while the dependent variable is to choose the Multimedia Engineering Expertise Competence (Goh & Jamaluddin, 2021). The population of this study is all students of class X Multimedia Engineering Expertise Competency. The following will describe the description of research data which includes the average price (mean), median (Me), mode (Mo), histogram, pie chart (pie chart) and table of the tendency categories of each variable. testing of its analytical requirements which include normality test, linearity test. Then hypothesis testing is carried out.

Based on the results of descriptive analysis processed using the SPSS computer program version 17.0, for intrinsic factor variables can be known the average value (M) 69.80 mode (Mo) = 71, median (Me) = 72 and standard deviation (SD) 9.228. In addition to these data, the maximum value = 86 and the minimum value = 43 can also be known. Here is the calculation so that the frequency distribution table and histogram below can be made:

1. Number of Interval Classes
   K= 1 +3.3 log 35
   = 1+ 3.3 log n
   = 1+3.3 * 1.544
   = 6.0952
   = 6
2. Data Range (Range)
   = Largest data - smallest data
   =86-43
   = 43
3. Class Length
   = Data range: number of interval classes
   =43:6 7.16 rounded to 7

Data on factors that influence interest in terms of intrinsic factors are obtained through questionnaires to reveal the actual conditions of factors that affect the interest of grade X students Multimedia Engineering Expertise Competence. The questionnaire consisted of 23 statements consisting of 4 alternative answers with a total of 35 students. For the lowest score is 1 and the highest score is 4, then based on this valid score obtained the lowest score is 1 x 23-23 and the highest score is 4 x 23=92.

Here is a calculation to find the value of the intrinsic factor category and Distribution table:

1) Calculation of Ideal Average Value (Mi) and Ideal Standard Deviation (SDI)

a) Ideal Average Value (Mi) =1/2 (92+23)=575

b) Ideal standard deviation (SDI) =1/6 (92-23) = 11.5

2) Tendency Category Limitations

a) Very High = X2 Mi+1.5 SDi

= X≥ 57.5+ (1.5 * 11.5)

= X≥ 74.75

b) High

-Mi+0.5 SDi≤ X<Mi+ 1.5 SDi

-57.5+(0.5 11.5) X <57.5+ (1.5*11.5)

= 63.25 < X<74.75

c) Medium

-Mi-0.5 SDi <X<Mi+0.5 SDi

=57.5-(0.5 11.5) X<57.5+(0.5*11.5)

=51.75≤ X<63.25

Based on the results of the research conducted, the interest of grade X students in Multimedia Engineering Expertise Competence in terms of intrinsic factors that fall into the very high category is achieved by 8 students (22.9%), for high categoryI is achieved by 19 students (54.3%), while for the medium category 7 students (20%) and the low category is 1 student (2.9%), The data shows that the level of interest of grade X students Multimedia Engineering Expertise Competence Judging from the largest intrinsic factor found in the high category. Interest is viewed from intrinsic factors, which consist of willpower, pleasure, talent and motivation. A more complete explanation can be described as follows:

a. Desire
   Willpower is an internal impulse that the individual is aware of and considering. The willingness in this research is addressed to grade X students of Multimedia Engineering Expertise Competence at SMKN 3 Yogyakarta, which encourages

the interest of grade X students in Multimedia Engineering Expertise Competence. Based on the results of the analysis which can be seen in table 8. The table shows how high the willingness factor affects the interest of grade X students in Multimedia Engineering Expertise Competence, which is 68.57% (Very High). Thus, the interest of class X students in Multimedia Engineering Expertise Competence in terms of intrinsic factors is strongly influenced by the will of the students themselves. The stronger the student's will, the stronger the student's interest in choosing the Multimedia Engineering Expertise Competency at SMKN 3 Yogyakarta.

b. Pleasure

Pleasure is part of the emotional (affective) component that arises from a person that will result in an interest or interest in something (Ching & Chan, 2020). Based on the results of the analysis which can be seen in table 8. The table shows how high the pleasure factor affects the interest of grade X students in Multimedia Engineering Expertise Competence, which is 57.14% (Low). Thus, the interest of class X students in Multimedia Engineering Expertise Competence in terms of intrinsic factors is less influential on the interest of grade X students in Multimedia Engineering Expertise Competence. This means that the pleasure a student has affects interest less.

c. Talent

Talent is the seed of a trait that will only be apparent if it gets the opportunity or possibility of development. Talented students are those who have prominences in certain areas (Jablonski, 2021). Of course, in this study, the intended field is the basic talent regarding multimedia owned by students. In this study, it will be revealed how high the aptitude factor affects the interest of grade X students in Multimedia Engineering Expertise Competence. Based on the results of the analysis which can be seen in table 8. The table shows how high the aptitude factor affects the interest of grade X students in Multimedia Engineering Expertise Competence, which is 54.28% (High). Thus, the interest of class X students in Multimedia Engineering Expertise Competence in terms of intrinsic factors is influenced by the talents of the students themselves. A gifted student will influence interest in choosing the Keshlian Multimedia Engineering Competency. Students who are talented in the field of multimedia will be much easier to absorb information, knowledge, and skills related to the field than other students.

d. Motivation

A person's interest will be higher when accompanied by motivation. Motivation is a change found in a person to do something to achieve goals. In this study, it will be revealed how high the motivation factor affects the interest of grade X students in Multimedia Engineering Expertise Competence (Ng, 2022). Based on the results of the analysis that can be seen in table 8, the table shows how high the motivation factor affects the interest of grade X students in Multimedia Engineering Expertise Competence, which is 57.14% (High). Thus, the interest of class X students in Multimedia Engineering Expertise Competence in terms of intrinsic factors is influenced by the motivation of the students themselves. The stronger the student's motivation, the stronger the interest in the student.

Thus it affects the desire, encouragement that arises in students to choose the Multimedia Engineering Expertise Competence.

From the results of the explanation of the discussion of the interest of grade X students, the Competence of Multimedia Engineering Expertise in terms of the intrinsic factor above, the biggest factor that affects student interest is the will factor. This is supported by research by Dewi Safitri (2011), which states that the willpower factor is the biggest factor in influencing interest in terms of intrinsic factors that will affect interest in choosing Multimedia Engineering Keshlian Competencies. Students who are talented in the field of multimedia will be much easier to absorb information, knowledge, and skills related to the field than other students. A person's interest will be higher when accompanied by motivation. Motivation is a change found in a person to do something to achieve goals. In this study, it will be revealed how high the motivation factor affects the interest of grade X students in Multimedia Engineering Expertise Competence. Based on the results of the analysis that can be seen in table 8, the table shows how high the motivation factor affects the interest of grade X students in Multimedia Engineering Expertise Competence, which is 57.14% (High). Thus, the interest of class X students in Multimedia Engineering Expertise Competence in terms of intrinsic factors is influenced by the motivation of the students themselves. The stronger the student's motivation, the stronger the interest in the student. Thus it affects the desire, encouragement that arises in students to choose Multimedia Engineering Expertise Competencies.From the results of the explanation of the discussion of class X students' interests, Multimedia Engineering Expertise Competencies in terms of intrinsic factors above the biggest factor that affects student interest, namely the will factor. This is supported by research by Dewi Safitri (2011), which states that the will factor is the biggest factor in influencing interest in terms of the intrinsic family factors of the students themselves. The greater the role of the family, namely direction, guidance, guidance, encouragement, attention and provision of learning facilities to a student, the greater the interest of the student. Thus, family environment factors affect the selection of Multimedia Engineering Expertise Competencies at SMKN 3 Yogyakarta.

Community environment is an external factor that also affects a person's personal development. Based on the results of the analysis which can be seen in table 11. The table shows how high community environmental factors affect the interest of grade X students in Multimedia Engineering Expertise Competence, which is 51.42% (Medium). Thus the interest of class X students in Multimedia Engineering Expertise Competence is influenced by the community environment of the students themselves. A good community environment for one's personal development will affect both students and also their learning. Students will be affected by things done by people in their environment. This influence can encourage student enthusiasm in determining the Expertise Competency to be selected. From the results of the explanation of the discussion of the interests of grade X students, the Competence of Multimedia Engineering Expertise in terms of the extrinsic factors above, the biggest factor that affects student interest is family environment factors.

The competence of Multimedia Engineering Expertise is 54% while 46% is influenced by other factors that were not studied in this study. The figure of 46% does not come from one factor that influences the selection of Multimedia Engineering Expertise Competency but the contribution of several factors. So. The 46% figure will be divided into smaller presentation figures for each factor that influences the selection of Multimedia Engineering Expertise Competencies. This strengthens the theory presented by several authors who state that intrinsic factors and extrinsic factors influence the selection of Multimedia Engineering Expertise Competencies. This means that the stronger the intrinsic factor and extrinsic factor, the stronger the student's interest in the selection of Multimedia Engineering Expertise Competencies. Thus, it can be suspected that intrinsic factors and extrinsic factors together affect the selection of Multimedia Engineering Expertise Competencies. This can be used as input for students to always consider the desire to choose a Skill Competency. Then for the school to be more selective in screening new students who will enter SMKN 3 Yogyakarta, namely by using new methods, for example by conducting written tests, interview tests and basic skill practice tests in accordance with the field of Multimedia Engineering Expertise Competence.

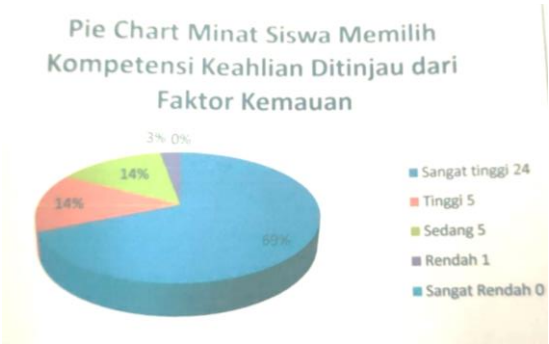

Figure 3. Pie Chart Interest Siswa Choosing Competency Expertise in terms of factor will

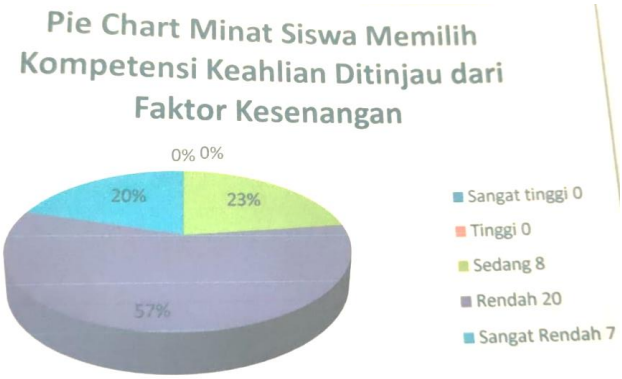

Figure 4. Pie Chart: Student Interest in Choosing Expertise Competencies in terms of Fun Factor

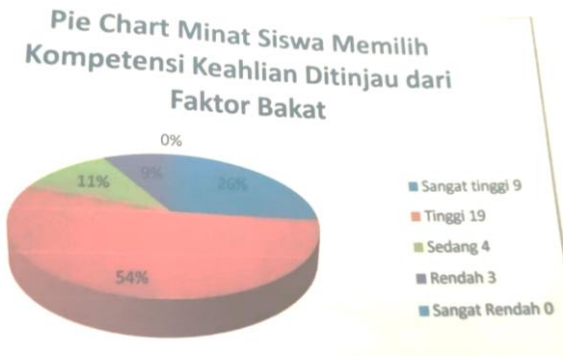

Figure 5. Pie Chart Student Interest in Choosing Expertise Competencies in terms of Talent Factors

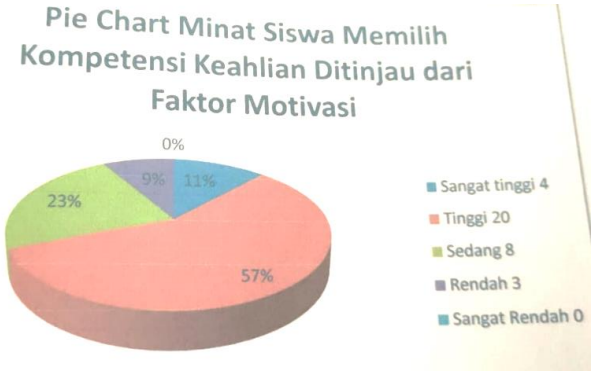

Figure 6. Pie Chart Student Interest in Choosing Expertise Competencies Reviewed from Motivation Factors

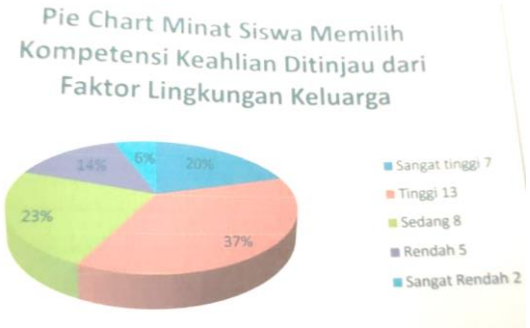

Figure 7. Pie Chart Student Interest in Choosing Expertise Competencies Reviewed from Family Environment Factors

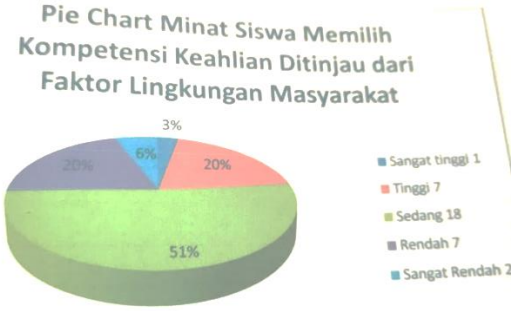

Figure 7. Pie Chart Student Interest in Choosing Expertise Competencies Reviewed from Community Environmental Factors

CONCLUSION

Based on the results and discussion of the research presented in front, the conclusions that can be put forward in this study are as follows:

The interest of grade X students in multimedia engineering expertise competence in terms of intrinsic factors that fall into the very high category is achieved by 8 students (22.9%), for the high category it is achieved by 19 students (54.3%), while for the medium category as many as 7 students (20%) and the low category there is only 1 student (2.9%). The data shows that the interest of grade X students in Multimedia Engineering Expertise Competence in terms of the largest intrinsic factor is found in the high category. Then it can be explained from intrinsic factors, which include factors of willpower, pleasure, talent and motivation. Of these factors, the biggest contribution is the will factor.

The interest of grade X students Multimedia engineering expertise competence in terms of extrinsic factors that fall into the very high category is achieved by 2 students (5.7%), for the high category it is achieved by 9 students (25.7%), for the medium category there are 19 students (54.3%), while for the low category there are 4 students (11.4%) and the very low category there are only I students (2.9%). The data shows that the interest of grade X students in Multimedia Engineering Expertise Competence in terms of the largest extrinsic factor is found in the medium category. Then it can be explained from extrinsic factors, which include environmental factors, family and society. Of these factors, the one that contributes the most is the family environment.

There is a significant positive influence between intrinsic factors and extrinsic factors on the selection of multimedia engineering expertise competencies at SMK Negeri 3 Yogyakarta. This is indicated by the correlation coefficient (Ry12) of 0.735, Tcalculate is greater than Table (0.735 > 0.334), determinant coefficient (R2y12) is 0.540, Fcalculate is greater than Fable (18.763 > 3.28). This determinant coefficient of (R2y12) of 0.540 means that 54% of the effective contribution of intrinsic factors and extrinsic factors. The intrinsic factor gives an effective contribution of 4.8% and is shown by the equation $Y = 3.913+0.211X_1+0.049X_2$

REFERENCES

Amelia, N. P., Sabila, I., & Asbari, M. (2022). Pancasila as a Paradigm of Science and Technology. *Journal of Information Systems and Management (JISMA)*, *1*(2), 1–6.

Baitullah, M. J. A., & Wagiran, W. (2019). Cooperation between vocational high schools and world of work: A case study at SMK Taman Karya Madya Tamansiswa. *Jurnal Pendidikan Vokasi*, *9*(3), 280–293.

Ching, C. L., & Chan, V. L. (2020). Positive emotions, positive feelings and health: A life philosophy. *Linguistics and Culture Review*, *4*(1), 1–14.

Goh, M., & Jamaluddin, H. (2021). Influencers of University Students' Career Decision. *Issues and Perspectives in Business and Social Sciences*, *1*(1), 28–44.

Handayani, N., Muizz, A., Wahidin, W., & Nur, S. (2022). Implementation of a Problem-Based Learning (PBL) Model Assisted By Zoom Cloud Meeting in Improving High School Students' Critical Thinking Skills and Learning Motivation on the Concept of Environmental Pollution. *Edunity: Kajian Ilmu Sosial Dan Pendidikan*, *1*(04), 223–237.

Hayati, D. N., Santoso, M., & Widiastuti, S. (2019). LEARNING MEDIA DEVELOPMENT DORAEMON'S TEAMS (TEAMS GIFT) FOR ELEMENTARY SCHOOL THEMATIC LEARNING. *JOSAR (Journal of Students Academic Research)*, *4*(2), 67–74.

Jablonski, N. G. (2021). Skin color and race. *American Journal of Physical Anthropology*, *175*(2), 437–447.

Nazir, A. (2019). Multidrug-resistant Acinetobacter septicemia in neonates: A study from a teaching hospital of Northern India. *Journal of Laboratory Physicians*, *11*(01), 23–28.

Ng, D. T. K. (2022). Online aviation learning experience during the COVID-19 pandemic in Hong Kong and Mainland China. *British Journal of Educational Technology*, *53*(3), 443–474.

Rachmawati, D. W. (2017). Kinerja Keuangan PT Bank Muamalat Dilihat Dari Rasio Aktivitas. *Jurnal Ekonomi, Manajemen, Bisnis, Auditing, Dan Akuntansi*, *2*(1).

Renzulli, J. S., & Reis, S. M. (2021). *The schoolwide enrichment model: A how-to guide for talent development*. Routledge.

Sanusi, A., & Wasliman, I. (2021). STRATEGIC MANAGEMENT OF PROFESSIONAL COMPETENCY TEACHERS OF PRODUCTIVE COURSES IN SMK (Descriptive Study at Dinas Pendidikan Provinsi Jawa Barat, SMKN 1 Cimahi, and SMKN 3 Bandung). *Journal of Industrial Engineering & Management Research*, *2*(6), 103–123.

Sugiyono, S., & Lestari, P. (2021). *Metode Penelitian Komunikasi (Kuantitatif, Kualitatif, dan Cara Mudah Menulis Artikel pada Jurnal Internasional)*. Alvabeta Bandung, CV.

Sung, Y.-T., & Wu, J.-S. (2018). The visual analogue scale for rating, ranking and paired-comparison (VAS-RRP): a new technique for psychological measurement. *Behavior Research Methods*, *50*, 1694–1715.

Tanjung, B. N. (2020). Human resources (HR) in education management. *Budapest International Research and Critics in Linguistics and Education (BirLE) Journal*, *3*(2), 1240–1249.