

SELECTION OF EXTRACURRICULAR ACTIVITIES IN SMK INSAN AQILAH 4 JAKARTA USING PROFILE MATCHING METHOD

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Abstract— This research is based on the observations and experiences of researchers, because the many extracurricular activities in schools make it difficult for students to determine extracurricular activities that can develop their personality, talents, and abilities outside the academic field, therefore the system is created to select extracurricular activities. The aim is to help students deal with extracurricular selection problems. The application of the Profile Matching method in the decision support system for the selection of extracurricular activities is expected to help provide recommendations for extracurricular activities to overcome the problem of selecting extracurricular activities and can facilitate students in selecting extracurricular activities.

Keywords: Extracurricular, SMK, Profile Matching

Abstrak—Penelitian ini didasarkan pada pengamatan dan pengalaman para peneliti, karena banyaknya kegiatan ekstrakurikuler di sekolah menyulitkan siswa untuk menentukan kegiatan ekstrakurikuler yang dapat mengembangkan kepribadian, bakat, dan kemampuan mereka di luar bidang akademik, oleh karena itu sistem dibuat untuk memilih kegiatan ekstrakurikuler. Tujuannya adalah untuk membantu siswa menangani masalah pemilihan ekstrakurikuler. Penerapan metode Profile Matching dalam sistem pendukung keputusan untuk pemilihan kegiatan ekstrakurikuler diharapkan dapat membantu memberikan rekomendasi kegiatan ekstrakurikuler untuk mengatasi masalah pemilihan kegiatan ekstrakurikuler dan dapat memfasilitasi siswa dalam memilih kegiatan ekstrakurikuler.

Kata kunci: ekstrakurikuler, SMK, Profile Matching
INTRODUCTION

In Indonesia, extracurricular activities are not new thing. Because it is already exists start from the basic education level to the college level, so that everyone knows it very well.

The formulation of an extracurricular definition is also contained in the DECREE of Dirjen Dikdasmen number 226/C/KEP 1992 (Saputra, 2017) states that extracurricular activities are beyond regular tuition hours and during school holidays performed both at school and outside the school, with the aim of deepening students ' knowledge, identifying relationships between lessons, channeling talents and interests, and complementing the full human development efforts (Hastuti, 2008).

At this time, every school is obliged to carry out extracurricular activities. These extracurricular activities are expected to help students to grow independently. In this case, through these activities, it is possible to direct and foster the interests, talents and potential of the students who are involved in improving their achievement in both talent and academic. (Inriyani, 2017)

This research was conducted in SMK INSAN AQILAH 4 Jakarta. There are 4 extracurricular options, namely film, Silat, OSIS and theater. These options make the students confused in choosing extracurricular activities that are appropriate to their interests and talents. So they need a system of decision makers. However, in this research the researchers focus only on the art category they are film and theater.

This decision-making process is assisted by a decision support system. Through this system is

expected that students can precisely choose the extracurricular according to their interests and expertise. This system is used to help decision-making in half-structured situations and unstructured situations, where no one knows exactly how the decision should be made (Sugiyono, 2018).

The researchers hope that every student at SMK INSAN AQILAH 4 JAKARTA find interest and talent in one of the extracurricular in SMK INSAN AQILAH 4 JAKARTA. Based on the problems that occur, it can be identified that students still confused choosing extracurricular (Hoiri & Agustina, 2014) especially, film and theater extracurricular, it can be seen from the number of students who move from one extracurricular to another (Wisnawati, 2016), This may be due to the absence of an extracurricular decision-making system in the school. (Hoiri & Agustina, 2014)

The purpose of this research is to provide solutions to the problems of film and theater extracurricular elections to students. Hopefully, there is an increasing number of students who follow extracurricular according to their interests and talents. It is also able to apply and build a decision making model using the method of profile matching (Indriyani, 2019) In the extracurricular elections based on pre-determined criteria.

MATERIALS AND METHODS

Stages of research

In this study each stages of research is described in detail as follows:

1. Preliminary study

At this stage, the researchers conducted a field studies and literature studies. The study of literature in this case is used to determine the theory and method used in the method of problem solving of the Profile Matching method. While field studies are conducted to learn how the method that is running related to the research object in SMK INSAN AQILAH 4 Jakarta.

2. Formulation of problems

The formulation of the problem resulted from the analysis of researchers at the time of field studies and data taken from the interview with the administration and section extracurricular sections of SMK INSAN AQILAH 4 Jakarta. The result of the formulation of this problem is also used as purpose in the research.

3. Data Collection and Data processing

In the third stage, the unification of data is required as a material used to provide alternative solutions that have been formulated in the second stage. Once data is made one, the processing of

data will be used in the analysis stage. In the process of analysis will be examined the data.

4. Analysis

At this stage there is analysis process and ranking of the results of the problem discussion using the Profile Matching method. In general the discussion of the issue contains the calculation stage of existing data, using a valid formula of Profile Matching method. Each stage will be discussed thoroughly according to the steps already in the Profile Matching method. The result of this problem is expected to provide an alternative calculation of better in determining the extracurricular activities of students at SMK INSAN AQILAH 4 Jakarta.

5. Conclusion

At this stage, researchers concluded the results of research that has been implemented on the basis of data processing results using the Profile Matching method. This conclusion is a statement taken from the calculations produced by the research method.

6. Suggestion

As the next step of the conclusion, the researcher formulated the advice related to the ongoing process of the research object in order to provide beneficial results in the future.

Research Instruments

Research instrument is a mechanism used in data collection or information that is useful to produce solutions to the research problem. Instruments as a tool at the time of research using a method of research instruments consists of the following:

1. Kuantitatif Data

The Data gathered from the questionnaire results using mathematical calculation techniques through Microsoft Excel.

2. Questionnaire

This questionnaire was given to students of grade X pharmaceuticals at SMK INSAN AQILAH 4 Jakarta, with a total of 16 respondents. Questionnaires and questionnaire questions were determined by the questions.

Data Collection Methods

In the preparation of this research need a certain method that will be used in the collection of data obtained in the following manner:

a. Interview

The data collection method is to conduct a direct question-and-answer with an extracurricular contractor.

b. Library Studies

The Library study method is to find the appropriate data by reading the books of scientific

works that correspond to the subject of both text book and internet articles.

c. Questionnaire

In this technique the respondents were given the opportunity to fill a poll with the answers already available. Thus, the answer is closed.

Population and Research samples

a) Population

The population of this research is the student/I grade 10 pharmacy SMK INSAN AQILAH 4 Jakarta. Based on data in May 2019, the number of students in Grade 10 pharmacy in SMK INSAN AQILAH 4 Jakarta amounted to 20 students.

b) Research Sample

In determining the sample, researchers use purposive sampling techniques and Slovin formulas, purposive sampling is the determination of the sample on the basis of specific aspects and criteria in this study.

Data Analysis Methods

In this profile matching process is needed input from the art aspect and the aspect of the attitude obtained from the questionnaire that has been filled by the respondent.

1. Firstly, Explaining the criteria that will be made as a problem resolution standard.

Table 1 Criteria Description Value

| No | Aspect | Criteria | Question number |
|----|--------|--------------|-----------------|
| 1 | Seni | Film | 1-5 |
| | | Teater | 6-10 |
| 2 | Sikap | Percaya Diri | 11 |
| | | Adaptasi | 12 |
| | | Inisiatif | 13 |
| | | Kedisiplinan | 14 |
| | | Pengetahuan | 15 |

Source: (Wahyudin, Saryoko, & Aziz, 2019)

Table 2 Valuation Scale

| | |
|--------------------|-----------------|
| Sub Criteria Value | Very agree=5 |
| | Agree=4 |
| | Hesitant=3 |
| | Disagree=2 |
| | Very disagree=1 |

Source: (Wahyudin et al., 2019)

2. Calculating GAP values between the subject profile and the required profile.

Table 3 GAP calculation

| No | Difference | Value | Description |
|----|------------|-------|-----------------------|
| 1 | 0 | 5 | No Gap |
| 2 | 1 | 4.5 | Individual competency |

| | | | |
|----|----|-----|---------------------------------------|
| | | | Excess 1 level |
| 3 | -1 | 4 | Individual competence less 1 level |
| 4 | 2 | 3.5 | Individual competency Excess 2 levels |
| 5 | -2 | 3 | Individual competence less 2 levels |
| 6 | 3 | 2.5 | Individual competence Excess 3 levels |
| 7 | -3 | 2 | Individual competence less 3 levels |
| 8 | 4 | 1.5 | Individual competence Excess 3 levels |
| 9 | -4 | 1 | Individual competence less 4 levels |
| 10 | 5 | 0 | Individual Competencies Pros 5 levels |

Source: (Adhar, 2014)

3. Compute GAP Mapping value sourced from GAP analysis.

The formula of calculating the average value *Core Factor dan Secondary Factor* sebagai berikut:

$$NCF = \frac{\sum NCFIC}{N} \dots\dots\dots (1)$$

$$NSF = \frac{\sum NSFIS}{N} \dots\dots\dots (2)$$

Description:

NCF: Average Factor Value

NSF: Average Secondary Factor Score

NC: Total Number of Core Factor Values

IC: Total Number of Core Factor Item Values

NS: Total Number of Secondary Factor Values

IS: Total Number of Secondary Factor Item Values

4. Calculate the final value

After finishing the core factor and secondary factor calculation, the next step is to perform the calculation of the final or total value based on the percentage of core factor and secondary factor that is thought to be influential. The formula for the extracurricular determination is as follows:

$$(X)\% \times NCF + (X)\% \times NSF = N \dots\dots\dots (3)$$

Description:

NCF: The average value of the core factor

NSF: The average value of secondary factor

N: The total value of aspects of the study

(X)%: Percent Value inputed

5. Conducting a step

After the process of calculating the final value of all aspects of art and attitudes, the next stage is determining the ranking stage. Where this stage is the final stage of *profile matching*.

RESULTS AND DISCUSSION

From the calculation results of each of the above specifications then recalculated the total value based on the presentation of the core and

secondary that is expected to affect the performance of each profile. To be more accurate in the process of calculating the data, then for each calculation of the total value of the first specified percentage value that will be in input is core factor 60% and secondary factor 40%. Then the core factor and secondary factor values will be calculated according to the formula and the result can be seen in the calculation example of art aspect and attitude aspect as the example below:

Table 4. Calculating the total value of art aspects

| No | Name | NCF | NSF | Total Score | | N1 N1=NCF+NSF |
|----|------------------------------|-----|-----|------------------|-----------------|------------------|
| | | | | 60% *NCF F | 40% * NSF | |
| 1 | Adelia Putri Oktaviani | 4.5 | 3.5 | 2.7 | 1.4 | 4.1 |
| 2 | Aulia Dwi Cahyani | 4.5 | 2.5 | 2.7 | 1 | 3.7 |
| 3 | Dhea Muthia Putri | 4.5 | 3.5 | 2.7 | 1.4 | 4.1 |
| 4 | Diana Fitria | 3 | 4.5 | 1.8 | 1.8 | 3.6 |
| 5 | Farinda Anggrainie | 5 | 4.5 | 3 | 1.8 | 4.8 |
| 6 | Fatahillah Olyvan | 3 | 2.5 | 1.8 | 1 | 2.8 |
| 7 | Geger Ramadhan | 4.5 | 4 | 2.7 | 1.6 | 4.3 |
| 8 | Hasbie Abdillah | 4.5 | 5 | 2.7 | 2 | 4.7 |
| 9 | Indriyani Novita Sari | 4 | 4.5 | 2.4 | 1.8 | 4.2 |
| 10 | Mutia Lamatenggo | 4.5 | 4.5 | 2.7 | 1.8 | 4.8 |
| 11 | Mutiara Maheswari | 5 | 3.5 | 3 | 1.4 | 4.4 |
| 12 | Nina Susana | 5 | 4.5 | 3 | 1.8 | 4.8 |
| 13 | Putri Puspitasari | 4 | 3.5 | 2.4 | 1.4 | 3.8 |
| 14 | Retno Pertiwi | 5 | 4.5 | 3 | 1.8 | 4.8 |
| 15 | Sahrul Afriyan Nurzaqi | 4.5 | 4.5 | 2.7 | 1.8 | 4.5 |
| 16 | Sagita Wulan Ayu Puspitasari | 4 | 4.5 | 2.4 | 1.8 | 4.2 |

Source: (Wahyudin et al., 2019)

Table 5. Total Attitude Value Calculation

| No | Name | NCF | NSF | Total Score | | N2 N2=NCF+NSF |
|----|------------------------|-----------|-----|-----------------|-------------------|------------------|
| | | | | 60% *NC F | 40% % * NSF | |
| 1 | Adelia Putri Oktaviani | 4.5 | 3 | 2.7 | 1.2 | 3.9 |
| 2 | Aulia Dwi Cahyani | 3.83 3 | 3.5 | 2.2 | 1.4 | 3.6 |
| 3 | Dhea Muthia Putri | 4.5 | 3 | 2.7 | 1.2 | 3.9 |
| 4 | Diana Fitria | 4.5 | 4 | 2.7 | 1.6 | 4.3 |
| 5 | Farinda Anggrainie | 4.5 | 3.5 | 2.7 | 1.4 | 4.1 |
| 6 | Fatahillah Olyvan | 4.5 | 4 | 2.7 | 1.6 | 4.3 |

| No | Name | NCF | NSF | Total Score | | N2 N2=NCF+NSF |
|----|------------------------------|-----------|----------|-----------------|-------------------|------------------|
| | | | | 60% *NC F | 40% % * NSF | |
| 7 | Geger Ramadhan | 4.5 | 4.7 5 | 2.7 | 1.9 | 4.6 |
| 8 | Hasbie Abdillah | 5 | 4.5 | 3 | 1.8 | 4.8 |
| 9 | Indriyani Novita Sari | 4.5 | 4 | 2.7 | 1.6 | 4.3 |
| 10 | Mutia Lamatenggo | 4.66 7 | 4.5 | 2.8 | 1.8 | 4.6 |
| 11 | Mutiara Maheswari | 4.5 | 3.5 | 2.7 | 1.4 | 4.1 |
| 12 | Nina Susana | 3.5 | 2.5 | 2.1 | 1 | 3.1 |
| 13 | Putri Puspitasari | 4.5 | 4 | 2.7 | 1.6 | 4.3 |
| 14 | Retno Pertiwi | 4.66 7 | 3.5 | 2.8 | 1.4 | 4.2 |
| 15 | Sahrul Afriyan Nurzaqi | 4.5 | 4 | 2.7 | 1.6 | 4.3 |
| 16 | Sagita Wulan Ayu Puspitasari | 4.83 3 | 3.5 | 2.9 | 1.4 | 4.3 |

Source: (Wahyudin et al., 2019)

Calculation of rank determination

The final outcome of this process is the rank of the Extrakurukuler elections. Ranking of rankings refers to specific calculation results. Here is the final result table and the determination of the extracurricular selection ranking based on the profile matching method: Here is the final result table and the determination of the selection of extracurricular activities:

Table 6. Calculation of rank determination

| No | Name | NCF | NSF | Total Score | | N1 N1=NCF+NSF |
|----|------------------------|-----|-----|------------------|-----------------|------------------|
| | | | | 60% *NCF F | 40% * NSF | |
| 1 | Adelia Putri Oktaviani | 4.1 | 3.9 | 2.46 | 1.56 | 4.02 |
| 2 | Aulia Dwi Cahyani | 3.7 | 3.6 | 2.22 | 1.44 | 3.66 |
| 3 | Dhea Muthia Putri | 4.1 | 3.9 | 2.46 | 1.56 | 4.02 |
| 4 | Diana Fitria | 3.6 | 4.3 | 2.16 | 1.72 | 3.88 |
| 5 | Farinda Anggrainie | 4.8 | 4.1 | 2.88 | 1.64 | 4.52 |
| 6 | Fatahillah Olyvan | 2.8 | 4.3 | 1.58 | 1.72 | 3.4 |
| 7 | Geger Ramadhan | 4.3 | 4.6 | 2.58 | 1.84 | 4.42 |
| 8 | Hasbie Abdillah | 4.7 | 4.8 | 2.82 | 1.92 | 4.74 |
| 9 | Indriyani Novita Sari | 4.2 | 4.3 | 2.52 | 1.72 | 4.24 |
| 10 | Mutia Lamatenggo | 4.8 | 4.6 | 2.88 | 1.84 | 4.72 |
| 11 | Mutiara Maheswari | 4.4 | 4.1 | 2.64 | 1.64 | 4.28 |
| 12 | Nina Susana | 4.8 | 3.1 | 2.88 | 1.24 | 4.12 |
| 13 | Putri Puspitasari | 3.8 | 4.3 | 2.28 | 1.72 | 4 |
| 14 | Retno | 4.8 | 4.2 | 2.88 | 1.68 | 4.56 |

| No | Name | NCF | NSF | Total Score | | N1 N1=NCF+NSF |
|---------|------------------------------|-----|-----|-------------|-----------------|------------------|
| | | | | 60% *NCF | 40% * NSF | |
| Pertiwi | | | | | | |
| 15 | Sahrul Afriyan Nurzaqi | 4.5 | 4.3 | 2.70 | 1.72 | 4.42 |
| 16 | Sagita Wulan Ayu Puspitasari | 4.2 | 4.3 | 2.52 | 1.72 | 4.24 |

Source: (Wahyudin et al., 2019)

Table 7. Method-based ranking results
Profile Matching

| No | Name | The final result | Ranking |
|----|------------------------------|------------------|---------|
| 1 | Hasbie Abdillah | 4.74 | 1 |
| 2 | Mutia Lamatenggo | 4.72 | 2 |
| 3 | Retno Pertiwi | 4.56 | 3 |
| 4 | Farinda Anggrainie | 4.52 | 4 |
| 5 | Geger Ramadhan | 4.42 | 5 |
| 6 | Sahrul Afriyan Nurzaqi | 4.42 | 6 |
| 7 | Mutiara Maheswari | 4.28 | 7 |
| 8 | Indriyani Novita Sari | 4.24 | 1 |
| 9 | Sagita Wulan Ayu Puspitasari | 4.24 | 2 |
| 10 | Nina Susana | 4.12 | 3 |
| 11 | Adelia Putri Oktaviani | 4.02 | 4 |
| 12 | Dhea Muthia Putri | 4.02 | 5 |
| 13 | Putri Puspitasari | 4 | 6 |
| 14 | Diana Fitria | 3.88 | 7 |
| 15 | Aulia Dwi Cahyani | 3.66 | 8 |
| 16 | Fatahillah Olyvan | 3.4 | 9 |

Source: (Wahyudin et al., 2019)

From the table above it can be concluded that the students rank 1 to 7 admission to the co-curricular Fim with a value of > 4.25 and to rank 8 to 16 entry into the extracurricular theatre with a value of < 4.25.

CONCLUSION

Based on the results of the selection of extracurricular activities in SMK INSAN AQILAH 4 Jakarta using Profile Matching method, it can be taken some conclusions as follows. First, the profile matching method can make good decisions in the screening and calculation of the values of the criteria that students have, so that students/I can choose between film and theater extracurricular. Secondly, this decision support system can be used as a foundation to determine the extracurricular students of SMK INSAN AQILAH 4 Jakarta Objectively, so that students become more educated in achieving the highest achievement that is in accordance with the potential owned, so that the students are not move around in choosing the ectraprircular. Thirdly, with the decision support

system, the extracurricular of the students of SMK INSAN AQILAH 4 Jakarta become more objective. The advice of research that has been done to the party of SMK INSAN AQILAH 4 Jakarta, among others. The addition of extracurricular category for more complete. Develop the system by adding other methods in order to provide more accurate results for an extracurricular election decision support system. The extracurricular election decision support system can be developed into a web-based or desktop decision support system so that decision makers can save time calculations. The research is still using manual calculations, in the future this system can be developed using a calculation application. For example SPSS and so on.

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