Skills Pathway Framework for Juvenile Studentat Henry Gurney School

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Abstract

Introduction: Education should not be exclusive. It must be inclusive, comprehensive, and holistic that includes the diversity of groups for the development of the country. However, juvenile delinquents who get the status of 'students' in juvenile schools are among the groups excluded from the national education stream. Juvenile students are a group of individuals who are juvenile offenders who are placed to attend school in prison institutions due to the problem of lack of discipline and moral decay. These people are also often associated with people who have learning problems, but not all of them can be considered as individuals who have failed or have no future. In addition to their mistakes and weaknesses, juvenile students may also have strengths and academic advantages or skills in certain areas that are usually quite overlooked in mainstream education.

Objectives: This study is expected to produce a skills pathway framework based on information on students' perceptions of their multiple intelligences and interview information among juvenile students. In addition, the significant output of this study is also expected to suggest new ideas to stakeholders on how a skills program can be designed to match the various levels of interest or excellence of each student.

Methods: This study uses a quantitative method with a survey design and is supported by qualitative data through interviews. The sampling of respondents (201 students) from Henry Gurney School (HGS) aged between 15 and 21 years. The instrument used in this study is divided into three parts, namely Part I (Demographic Information), Part II (Multiple Intelligence), and Part III (Interview Protocol).

Results: The findings of this studydetermined that the highest mean score for respondents' multiple intelligence score is Naturalist Intelligence ($\mu = 3.908$, $\sigma = 0.64$), while the lowest is Logic Math ($\mu = 3.294$, $\sigma = 0.62$). An analysis with the independent sample t-test that has been carried out, show that there is no significant difference ($p > 0.05$; $t = 0.883$; $df = 199$) for the overall score of multiple intelligence between academic and non-academic stream in HGS. The respondents' preferred courses to continue their study are more to Technical and Vocational Education Training (TVET) such as automotive. But there are also students who are interested in continuing their studies in the field of academic courses and sports.

Conclusions: This study has provided an important fact to the stakeholders where skills courses in the automotive field are courses that need to be offered whenever they want to open up opportunities for HGSleavers to continue their studies, especially with sponsorship from the Government. Moreover, students who are interested and qualified to continue their studies in academics and sports also need to be given opportunities so that they can be together in developing the country.

Keywords: juvenile students, multiple intelligence, skills pathway

Introduction

Juvenile students are defined as teenagers who have juvenile problems or are categorized as juvenile offenders who are placed in prison institutions due to lack of discipline and moral decay (Darussalam, 2014). Although the emphasis on discipline and morals is the main goal in the rehabilitation program in juvenile schools for juvenile

offenders, but as a student, they are also required to obtain excellence in learning activities especially in the Malaysian Examination Certificate (MCE) (Jabatan Penjara Malaysia, 2019). According to Chang, Sirat, & Abdul Razak (2018), education must be inclusive, comprehensive, and holistic that includes the diversity of groups for the development of the country.

Undoubtedly, the moral rehabilitation program conducted has also reawakened and motivated a number of juvenile students to pursue excellence in academics or skills to a higher level for a better life. Even in the 6th shift of the National Development Plan 2015-2025, the Ministry of Education (2015) proposed to "Enable State Education Departments, District Education Offices and schools to provide specific solutions based on needs" in transforming education.

Accordingly, a study related to skill pathways based on the perception of multiple intelligences needs to be conducted in order to build a skills pathway framework that matches the students' interest. This framework is needed to give an overview to the school and also the ministry in planning and utilizing optimal space and opportunities for students to develop positive potential in themselves while also contributing beneficial service to the community and the development of the country.

This study uses a multiple intelligence instrument consisting of nine constructs and 63 items. The data obtained will be analyzed descriptively and inferentially with SPSS software. The implications of the study will shed light on the perception of multiple intelligences that are dominant among the respondents so that better infrastructure and opportunities can be provided and given to those groups. This is one of the significant aspects of this study which is expected to benefit the stakeholders, especially the Malaysian Prisons Department and the Ministry of Education. In addition, this research is also significant to the field of measurement where the procedure for analyzing the reliability and validity of the instrument will also be shown. At the same time, this study is expected to help identify the direction or course that is more suitable for juvenile students in their studies so that they can participate to contribute to the progress of the country. Therefore, it is necessary to formulate a specific skills pathway framework for these juvenile students.

Through the highlights of past studies, there are several theories related to this study.

a. Multiple Intelligences

The Jabatan Kebudayaan dan Kesenian Negara (2019)reports that HGS are not only focused on academics, but instead focus on various fields including skills, arts, and sports in an effort to restore and develop their oneself. Therefore, aspects of multiple intelligences need to be considered in designing a student's academic path. Gardner (1983) states that humans have intelligence that includes various abilities, capabilities, talents or skills that exist naturally. At the beginning, Gardner (2011) stated that human intelligence can be categorized into only eight discrete criteria. However, during the intervention process in a study that Gardner has conducted, he has discovered another intelligence making nine multiple intelligences. The intelligencesareLinguistic Intelligence, Logical-Mathematical Intelligence, Visual-Spatial Intelligence, Kinaesthetic-Body Intelligence, Music Intelligence, Interpersonal Intelligence, Intrapersonal Intelligence, Naturalist Intelligence, and Existential Intelligence.

Gardner (2011) explain that each intelligence is separated and not interdependent. For example, a person may be weak in one skill area but excel in another intelligence domain. According to him, every individual has all the intelligence but at different rates or degrees in terms of strength and skills. That intelligence can be developed through education, experience, and environment.

b. Skills

According to Merriam-Webster (2023), skill is a person's ability to use knowledge effectively and easily in performance or implementation. The skills in this study refer to and are related to multiple intelligences. For example, for students who have dominant intelligence in the visual-spatial aspect, it can be assumed that they also have skills in the visual-spatial aspect. According to González Campos, Sánchez-Navarro, and Arnedo-Moreno (2019), for students who are dominant in visual-spatial aspects, the field of computer graphics studies is very suitable while Šafranj and Zivlak (2018) found that the field of drawing is also suitable. The two fields,

namely graphics and painting are actually related. There are many skill-based courses offered in Malaysia such as GIATMARA Skills Certificate, Malaysian Skills Certificate, Malaysian Skills Certificate Level I (SKM I), and many other certificates (GIATMARA, 2021). In fact, the Jabatan Pembangunan Kemahiran (2021) also offers Malaysian Skills Certification at certificate, diploma, and advanced diploma levels in addition to private colleges. The fields of study offered are also very many such as cooking, mechanics, carpentry, bakery, graphics, and others. Although juvenile students are students who study in a prison environment, the skills courses offered must match their needs and interests and at the same time the relevant institutions must be ready to accept juvenile students if they are eligible. According to the Kementerian Belia dan Sukan Malaysia (2015), one of the concepts contained in the Malaysian Youth Policy is holistic development and guided by federal constitutions and national pillars. The policy defines the youth group as individuals aged 15 to before 30 years and includes minority youth and marginalized groups. Although there are juvenile students who are included in the age range and are a somewhat marginalized group, this group of juvenile students is not clearly stated in the National Youth Policy. At the same time, the policy also suggests that collaboration with various parties can be carried out to achieve the planned goals. Therefore, it is very necessary to carry out such a study so that juvenile students can be given attention and opportunities to continue learning the skills they have to a higher level so that they can participate in the current to develop the country.

c. Juvenile Students

Not all juvenile offenders have the status of 'students' because there are also among them who have been expelled from school. However, the juvenile students who were selected as respondents for this study refer to juvenile offenders who have the status of 'students' and attend school in HGS. BH Online (2017) reported that a total of 1,254 drug cases recorded in the two years to April 2017 were committed by juvenile or child offenders. Of that number, 47 percent involved syabu abuse. In addition to drugs, the group was also involved in 1,085 cases of violent crime and another 48 cases involving secret societies. Statistics from the Department of Statistics Malaysia (2016) show that the number of juvenile offenders decreased by 10.3 percent from 5,096 cases (2014) to 4,569 cases (2015). First offenses also recorded a decrease of 12.1 percent. On the other hand, repeated offenses recorded a 12.4 percent increase from 371 cases (2014) to 417 cases (2015). The same data also shows that the highest percentage of children involved in crime are those convicted of property, which is 36.0 percent (2015) compared to 42.9 percent (2014). This is followed by drug offenses (29.7%) and convictions with people (13.4%). According to Iskandar (2019), juvenile offenders should be given career opportunities in the public sector to enable them to build a new life. If there is no special help to cause them to be marginalized when they return to society, surely these people will not get a job. Eventually, they will re-offend which will land them back in jail. However, in order to get a job opportunity in the public sector, an individual usually needs to have the minimum qualifications required in the job field applied for. Therefore, appropriate academic or skill paths need to be provided for this group. The Ministry of Youth and Sports, for example, is ready to give space and opportunities to students of Henry Gurney School in Telok Mas to compete for a place in the national team and the title of national athlete is also a very good initiative (BH Online, 2019).

d. Henry Gurney School

According to Jabatan Penjara Malaysia (2021), the Henry Gurney School (HGS) got its new name on 15 May 1950. The school was first operational in 1949. This institution, originally established for boys, has undergone three name changes. Its original name was Sekolah Akhlak Tertinggi in 1949 and changed to Sekolah Latihan Pemuda in 1950. Later, it changed for the third time to Henry Gurney School which was in conjunction with its official opening by the late Sir Henry Gurney. There are two forms of training / streams offered at this school, namely the academic stream and the vocational stream. Sarirah Che Rose (2011)found that HGS is a school for child offenders who are guilty of any offense punishable by imprisonment. In addition, she also stated that when the child's family can no longer control their child's behavior or the child is associating with bad people, and finally in the court's view the offense committed is of a serious nature, then the arrest of the child offender at HGS is appropriate to restore his character and fight crime in accordance with Section 75 of the Children's Act. According to Ashotha, Zaharah, dan Vishalache (2019), Juvenile students who are serving sentences in prison feel that life experiences that give them an awareness of moral values are not the subject of Moral Education

that they follow in class during elementary school or even high school. So, the experience of juvenile students in schools in prisons like HGS will hopefully be able to provide awareness with reflection on their previous lives to a more positive life path.

e. Skills Pathway Framework

A skills pathway framework usually refers to a framework that contains information on achievements and prospects ahead. OECD (2021) for example, has included domain elements and education levels to build an education framework. Dr. Comer, on the other hand, in his research has identified six of the many domains of adolescent development that are key in the framework of the academic learning path, namely physical, cognitive, linguistic, social, ethical, and psychological (Yale School of Medicine, 2021). Although this study builds skills pathway, all those elements are also measured in the instrument used in this study. The skills pathway framework is important as a guide to students, teachers, parents, and stakeholders. Groinig and Sting (2019) found that the academic or skills framework affects the aspirations of the post-graduate studies they follow.

1.   Objectives

The purpose of this study is to identify multiple intelligences among juvenile students in HGS and further build a skills pathway framework. In summary, the objectives of this study are as follows;

i. Identifying multiple intelligences among juvenile students.

i. Identifying differences in multiple intelligence scores among the academic stream and vocational stream.

iii. Building a skills pathway framework for juvenile students in HGS.

2.   Methods

a. Research Design

This study is quantitative with a survey design and is supported by interview data.

b. Population and Sampling

According to the Malaysian Ministry of Education (2019), there are 12 juvenile schools across the country. Of the 12 schools, eight of them are Integrity Schools (IS) and four are Henry Gurney School (HGS). Although the schools are under the control of the Malaysian Prisons Department (Jabatan Penjara Malaysia, 2019), all of the schools were registered as Government schools in January 2011 (Utusan Online, 2012). This study will only focus on HGSs as shown in Table 1 which have a population size of 301 juvenile students (Peninsula and Borneo, Malaysia).

Tablel 1 Henry Gurney School (HGS) di Malaysia

Bil	School	Code
1.	HGS Telok Mas, Melaka	MIA 2003
2.	HGS Keningau, Sabah	XIA 1007
3.	HGS (Women) Kota Kinabalu, Sabah	XIA 4011
4.	HGS Puncak Borneo, Sarawak	YIA 1209

Source: (Ministry of Education Malaysia, 2019)

The respondents of this study include HGS students aged between 15 and 21 years. Based on a population size of 301 people, Krejcie and Morgan (1970) suggested a minimum sample size of 170 people to meet a confidence level of at least 95 percent. The study samplesare randomly selected in theHGS Telok Mas, Melaka located in Peninsular Malaysia and a total of 201 samples were obtained. Sampling was tried to be collected as much as possible to reduce the measurement error.

c. Instrumentation

This research instrument is divided into three parts, namely I (Demographic Information), II (Multiple Intelligence), and III (Interview Protocol).

Part I:

The items in this section are related to demographic information that includes the year of School Name (current), Gender, and Age.

PartII:

The items in this section are built based on Multiple Intelligence Theory (Gardner, 1983; Gardner, 2011). This instrument contains nine constructs (Table 2) and consists of 63 items in total. Item response is using a 5-point Likert scale from '1' (strongly disagree) to '5' (strongly agree) or in more detail as follows; Strongly Disagree, Disagree, Not Sure, Agree, and Strongly Agree. Cohen and Swerdlik (2002) suggested that instrument construction involves three phases, namely planning, construction, and testing and validation. To enact the items in this section, the three phases will be followed. The items will also be drafted in a simple and easy form. This means that the drafted items need to use language that is easy to understand, simple, and clear so that respondents can complete it in a short period of time. In carrying out research in the field of education, Lay and Khoo (2014) also suggested that the questionnaire formulated should short and simple.

Table 2 Items Measuring Multiple Intelligences

No.	Multiple Intelligence	Number of Items	Item Code
1.	Linguistic	7	B1 to B7
2.	Logic Math	7	B8 to B14
3.	Visual Spatial	7	B15 to B21
4.	Kinesthetics	7	B22 to B28
5.	Music	7	B29 to B35
6.	Interpersonal	7	B36 to B42
7.	Intrapersonal	7	B43 to B49
8.	Naturalistic	7	B50 to B56
9.	Existential	7	B57 to B63
	Total	63	

PartIII:

The items in the interview protocol section were formulated to obtain more in-depth information from the respondents' opinions about the fields of study / advanced courses / vocational courses that are suitable for students in the future. In order to conduct the interviews, several juvenile students are selected on the basis of the students' voluntariness to be interview respondents. This information can support and further strengthen the quantitative data that has been obtained to build a framework of skills pathways.

d. Data Collection Procedures

After obtaining permission from Malaysian Prisons Department, and the schools involved, the study was conducted in HGSTelok Mas, Melaka. The collected data areentered into the software. In addition to quantitative data, interviews with selected students from theHGSare also be conducted to support the results of

the study. To ensure that every detail of the interview is recorded efficiently, the researchers recorded the voice (with the permission of the school and the respondent) during the interview session with a digital voice recorder.

e. Data Analysis Procedures

Once entered into the computer, the data were analyzed with SPSS software. The analysis output with SPSS software helped researchers to answer the research questions through descriptive analysis and inference test of the research data.

3.   Results

As in Table 3, demographically, most respondents were male (85.5%), while the female was 14.4 percent. Certain assumptions abroad stated that female is better behaved than male. The results of this finding have shown evidence that female is better behaved than male.The majority of respondents (62 people) are 20 years old, and only two are 16 years old. Other respondents are 17 years old (16), 18 years old (34), 19 years old (60), and 21 years old (27). This shows that individuals (mostly male) who are 19 and 20 years old have a great potential to commit crimes.

Table 3 Repondents' Profile

Profile	Characteristics	Frequency	Percentage (%)
Gender	Male	172	85.6
	Female	29	14.4
Age (Years Old)	16	2	1.0
	17	16	8.0
	18	34	16.9
	19	60	29.9
	20	62	30.8
	21	27	13.4
Total		201	100.0

4.1. Dominant Multiple Intelligences among Respondents

From item analysis with statistical software, the multiple intelligence perception instrument's reliability value was 0.925, with a construct validity value of 0.70. It showed that this instrument is good in internal consistency and validity and could provide an acceptable output. In an attempt to interpret the descriptive score, the mean score was categorised into three levels, particularly low, average, and high. The interpretation of the mean score used for the descriptive data analysis results is as in Table 4.

Mean Score	Interpretation
3.67 hingga 5.00	High
2.34 hingga 3.66	Average
1.00 hingga 2.33	Low

Table 4. Multiple Intelligence Score Interpretation

The findings of this study (Figure 1) determined that the highest mean score for respondents' multiple intelligence score isNaturalistic Intelligence ($\mu = 3.908$, $\sigma = 0.64$), while the lowest is Logic Math ($\mu = 3.294$, $\sigma = 0.62$). According to Gardner (2006),evidence for the existence of a naturalistic intelligence is surprisingly persuasive. Biologists like Charles Darwin excel at identifying and distinguishing one species from another. Persons with a high degree of naturalistic intelligence are keenly aware of how to distinguish the diverse animals, plants, mountains, or cloud configurations in their ecological niche. These capacities are not exclusively visual; the recognition of whale calls or bird song entails auditory perception. For example, the Dutch naturalist Geermat Vermij, who is blind, depends on his sense of touch. According to LearningBP (2022),

courses related to zoology, botany, and environmental education are suitable for the student who dominant in naturalistic intelligence.

Naturalistic intelligence is defined as the ability to categorize, appreciate, classify, explain, and connect the things of everyday life with nature. It is the ability to distinguish between living things, whether plants or animals(LearningBP, 2022). This type of intelligence is present in people who know how to observe nature, classify elements of the environment, and use this knowledge productively. Characteristics of people with developed naturalistic intelligence are they love outdoor settings, visit farms, and fields. Exploring, camping and hiking are part of their routine activities or entertainment. In addition, naturalistic intelligence can be interpreted as deal with the classification abilities or flora and fauna of one's environments (Choirunnisa Nurul Latifah & Lis Prasetyo, 2022).

According to LearningBP (2022), musical intelligence is the ability to perceive, distinguish, transform, and express sounds and musical forms. It allows people to create, communicate and understand meaning through sound. This intelligence includes sensitivity to the rhythms, melodies, and tones of a piece of music. Children may show musical precocity due to being exposed to musical instruction or if they are born into a musical family. The more exposure children have, the more it will develop. Person with musical intelligence manifested itself even before he had touched a musical instrument or received any musical training (Gardner, 2006).
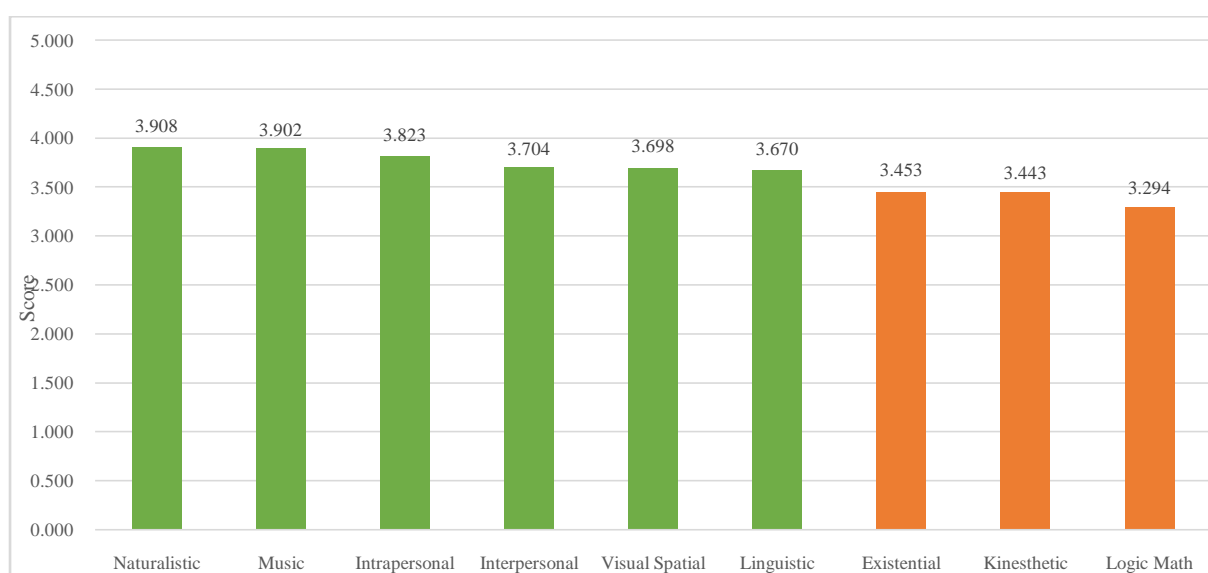

Figure 1. Respondents' Multiple Intelligence

Ideally, education should be matched to individual abilities and interests so that he/she can be appropriately challenged and maximally motivated to learn. According to Šafranj and Zivlak (2018), in multiple intelligence theory, intelligence can be associated with an individual's aptitude or potentials - the fact that an individual score either high or low in one specific area does not make him any more or less intelligent in the traditional sense.

Table 5 Overall Multiple Intelligences Score

No.	Multiple Intelligence	Mean Score	Std. Deviation
1.	Naturalistic	3.9083	0.64049
2.	Music	3.9019	0.74883
3.	Intrapersonal	3.8230	0.68277
4.	Interpersonal	3.7036	0.59315

5.	Visual Spatial	3.6979	0.65562
6.	Linguistic	3.6695	0.61787
7.	Existential	3.4527	0.96765
8.	Kinesthetic	3.4428	0.64823
9.	Logic Math	3.2942	0.80833

4.2. Differences in Multiple Intelligence Scores Between Academic and Vocational Stream

The results of the analysis with the independent sample t-test that has been carried out as in Table 6, show that there is no significant difference ($p > 0.05$; $t = 0.883$; $df = 199$) for the overall score of multiple intelligence between academic (57 respondents) and vocational stream (144 respondents) in HGS.

Table 6 Multiple Intelligences Score t-test for Academic vs Non-Academic stream

Stream	n	Mean	Standard Deviation	t	df	*Sig. (2-tailed)*
Academic	57	3.70	0.42	0.883	199	0.378
Vocational	144	3.64	0.49			

Based on Table 7, this study found that the mean score for the multiple intelligence of students who came from the academic stream was slightly better ($\mu = 3.70$; $\sigma = 0.42$; $n = 57$) compared to students who came from the vocational stream ($\mu = 3.64$; $\sigma = 0.49$; $n = 144$). However, the difference is not significant.

Table 7 Multiple Intelligences Score for Academic vs Vocational Stream

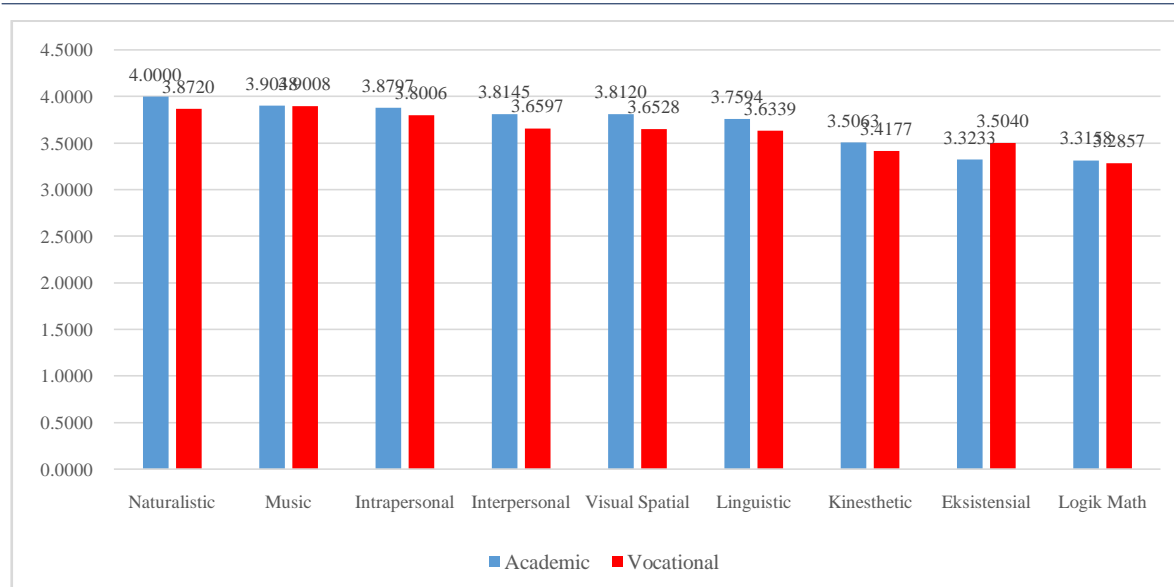| No.	Multiple Intelligences	Academic Stream Students (Mean Score)	Vocational Stream Students (Mean Score)
1.	Naturalistic	4.0000	3.8720
2.	Music	3.9048	3.9008
3.	Intrapersonal	3.8797	3.8006
4.	Interpersonal	3.8145	3.6597
5.	Visual Spatial	3.8120	3.6528
6.	Linguistic	3.7594	3.6339
7.	Kinesthetics	3.5063	3.4177
8.	Existential	3.3233	3.5040
9.	Logic Math	3.3158	3.2857

Figure 2. Respondents' Multiple Intelligence for Academic vs Vocational

4.3. Appropriate Skill Courses forJuvenile Students

In overall, the respondents' preferred courses are more to vocational / skills / courses such as automotive and sports. Most of the choice of courses declared by the respondents during the interview session was appropriate and realistic with the respondents who aspired to be a mechanic and athlete. However, some respondents aspired to continue their study to the higher level.

According to Mohd Razimi Husin, Hishamuddin Ahmad, Ismail Yusuf Panessai, Norliza Abdul Majid, and Agus Lokman Sulam (2020), mean in career goals learning method is higher than the learning with another method. That means the teacher can relate a career aspiration while teaching the juvana students to give them a picture of course or field of study and its suitable career. Accordingly, it is also the accountability of teachers in schools to explain the proper employment field for each student at the school level to develop future careers.

This study found that the majority (18/57 = 31.6%) of students who are in the academic stream are interested in advanced courses in the academic and automotive fields. The academic courses meant by the respondents refer to the subjects they study in class while at HGS to obtain good results in the MCE exam, and at the same time are also interested in continuing their studies to a higher level (Diploma and Degree). In addition, a total of 14/57 (24.6%) juvenile students who follow the academic stream at HGS are interested in courses in the automotive field, while another 9/57 (15.8%) are interested in sports-related courses. When juvenile students are in the academic stream and are interested in automotive courses, this will of course greatly help the student in his learning, especially about the contents in the automotive field.

However, there is also a majority of juvenile students who are in the vocational stream who are interested in the automotive field (38/144 = 26.4%). This is a positive thing because as a rapidly developing country, human capital with skills in the automotive field is very much needed. This group has the opportunity to participate in Technical and Vocational Education Training (TVET), where it is an educational and training process that has a job orientation with a major emphasis on industry practice. TVET aims to produce a competent workforce in certain fields. In addition, juvenile students in non-academic fields are also interested in courses related to sports (33/144 = 22.9%) and the military (11/144 = 7.6%).But, to enter the military training offered by the Government agency, candidates need to have MCE with certain results and never have any criminal record. Therefore, entering the military field is quite impossible for HGS leavers.

Table 8 Respondents' Most Prefered Course

Stream	Prefered Course
Academic	Academic courses, Automotive, Sports
Vocational	Automotive, Sports, Military

As shown in **Figure 3**and based on students' interest, the framework can explain the advanced/TVET courses that are optional and found following the ability based on the dominant aspect in multiple intelligence that is naturalistic intelligence. In today's era, self-driving vehicles (autonomous vehicle) will depend on the environment to move. Understanding the environment will be able to help in the development of the automotive technology. According toShuo Feng, Xintao Yan, Haowei Sun, Yiheng Feng, and Henry X. Liu (2021), by training the background vehicles to learn when to execute what adversarial maneuver, the certain environment becomes an intelligent environment for driving intelligence testing.

In Malaysia, without an MCE certificate, an individual can still follow a skill or vocational course that will help the individual improve their skills. With certain skills, the individual may be able to obtain a better job. Even without an MCE certificate, with the right education, training and work experience, an individual still have a chance to get a good job. Many companies today value skills and knowledge more than certificates alone.
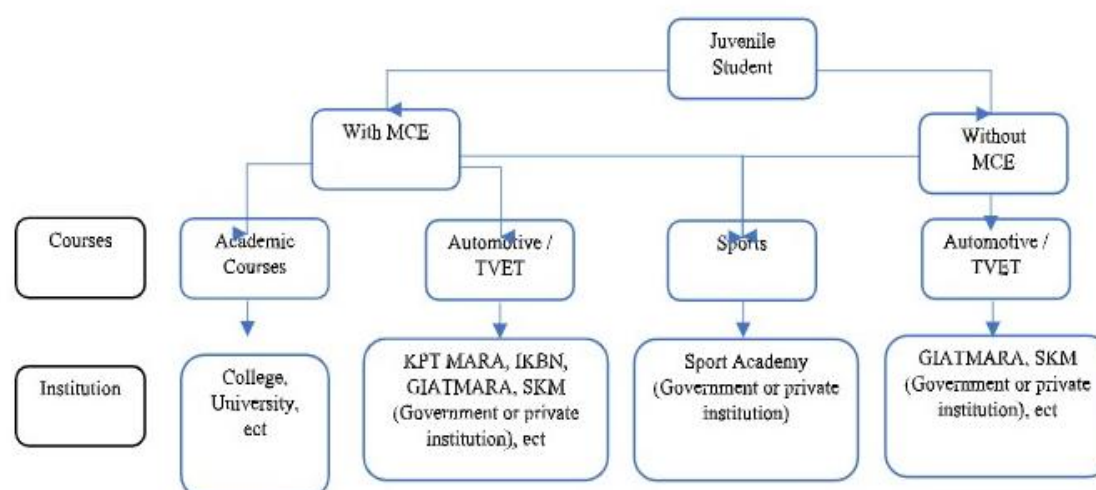

Figure 3. Respondents' Skill Pathway Framework

4. Conclusion and Discussion

The study found that there are more male students than female students in HGSs. This is in line with past history which shows that more men are involved in criminal activities than women. Women have more shyness than men. Because of this, women's involvement in activities that break the rules / crime is less than men.

The findings of the study that show the dominant aspect of naturalistic intelligence among HGS students are related to the interest in exploring within the respondents. The activity of exploring all corners of nature is very good and will be able to add knowledge and experience. But, if the exploration activity cannot be well controlled in an individual, then the exploration will lead to activities that break the rules up to the level of committing a crime. For example, an individual who likes to explore the environment and various fruit trees is a good thing. But, when the individual trespasses into other people's fields and takes fruits without permission, then the matter has led to criminal activity. Individuals who have a high naturalistic nature also like to explore new things to the extent that they are willing to try to take drugs because for them life should be lived by trying

new things. Such individuals will feel happy when they can explore and try new things in their environment. So, a good step to prevent naturalistic individuals from doing bad things is by putting them in a good environment.

This study also found that there is no significant difference between HGS students who follow academic or vocational streams. The results of the study show that students from both streams are dominant in two aspects, namely naturalistic and music. This means, these students besides like to explore, they also like to have fun. Musical intelligence relates to the ability to sing, learn, and play musical instruments easily, and many more. When such individuals have a high aspect in the music component, then such individuals usually, will not like to learn in class. A good strategy for such individuals while in class is to insert a musical component so that such students do not get bored quickly. This can be done occasionally by inviting students to perform in class while relating the learning content. For example, while learning a history subject, the teacher can ask students to identify songs that have patriotic or related elements and then ask students to sing them.

The results of this study also prove that automotive and sports are two very significant fields for students in HGS as a whole to continue their studies if given the opportunity. This has provided an important fact to the stakeholders where skills courses in the automotive field are courses that need to be offered whenever they want to open up opportunities for HGSleavers to continue their studies, especially with sponsorship from the Government.

In addition, individuals who in-charged in the field of sports can also be invited to attend the HGS to identify new talents in a certain field of sports and provide additional training because there are also many students at the HGS who are interested in entering the field of sports. This is because, the field of sports can also generate income when the country organizes international games participated by talented athletes from the country.

Apart from that, this study also found that all students who follow the vocational stream will not sit for the MCE exam. However, there are also a few students who wish to continue their studies in the field of skills. The good news for them is that, in Malaysia there are training institutions that offer vocational training or skills without MCE as requirement. Among the institutions involved are such as the Pusat GIATMARA andseveral government or private institution that offering *Sijil Kemahiran Malaysia*(SKM). However, institutions such as Kolej Kemahiran Tinggi (KPT) MARA, Institut Kemahiran Bina Negara (IKBN), Akademi TVET Malaysia, and Institut Kemahiran MARA (IKM) still require a minimum entry qualification of MCE or completion of Form 5. This means, even though former juvenile students have limited opportunities, there are still some institutions or opportunities to continue their studies in the field of interest. At the same time, the stakeholders also need to provide places or opportunities for former juvenile students including who are interested in academic fields, and even increase the admission quota for courses that former juvenile students are interested in.

Acknowledgements

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