

Descriptive Analysis of Multiple Intelligence and Career Interest

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ABSTRACT

Intelligence is the ability to learn, understand, reason and solve problems effectively and the ability to contribute positively to the societies. This study was conducted to identify the multiple intelligence stage and career interest patterns among 77 secondary school students. This study is a quantitative that represents descriptive data analysis. The Inventory of Multiple Intelligence and Inventory of Career Interest were analyze using Statistical Package for Social Science (SPSS). The result of the study shows that the level of intelligence of form 3 students is moderate. A total of nine intelligence domains, verbal/visual linguistic is at moderate level of 54.2%, Naturalistic 51.8%, Visual Spatial domain is at 49.4%, Kinesthetic and Intrapersonal both at 47%, followed by Mathematic at 41%, Music and Interpersonal each at 34.9%. Existential domain is the lowest percentage in the study at 27.7%. This study suggests to examine the correlation of multiple intelligence and career interest toward academic achievement among students.

Keywords: *Multiple intelligence, career interest*

1. INTRODUCTION

According to Rogers in Corey and Corey (2002), an individual's potential can be tapped when in the right environment. Multiple Intelligences theory was put forward by Howard Gardner (1993, 1999). He raised that there are eight (8) human intelligence that can be developed throughout life. According to Gardner, humans have all eight intelligences. Smith and Smith (2002) has added yet another existential intelligence and making the nine (9). Theory of Multiple Intelligences Gardner outlining human intelligence to eight different domains, namely Verbal-linguistic (VL) - ability in spoken and written language as well as learn many languages, Logical-mathematical (LM) - the ability to analyze problems logically, solve math problems and investigate a scientific, visual-spatial (VR) - the ability to create a sense visually whether on paper or in your mind, kinesthetic (KB) - adept at using the body movement to solve a problem, Music (MZ) - skilled in performing arts, and professional soundtrack creation appreciate musical works, Interpersonal (IE) - the ability to understand the feelings, motivations and habits of others, intrapersonal (IA) - the ability to understand ourselves and so naturalist (NA) -ability to know has been identified and wildlife species that exist in the environment.

The difference intelligences have been made by the Gardener criteria and evidence sufficient to enable it to be separated. Gardner has made a study of various walks

of life including normal children and special population groups also have special criteria (special population). Gardner also said that intelligence is not merely inherited but can develop reignite.

Selection of Holland's Career Typology theory as a basis for the development of the theory test instrument easy to understand and can be tested empirically to suit the individual and the environment (Holland and Raymond, 1986). This theory has three main components namely individual needs, environment and harmony between the individual and the environment. Selection is based on the career of an individual personality and a few other variables on the background of the work (Holland, 1973).

Previous Study

Study Factors Multiple Intelligences in Formation Profile of Youth by Siti Rahayah Ariffin, Roseni Ariffin, Arbaiyah Md Zin, Nik Noralhuda Nik Mohamed (2011) This study aims to identify the contribution of the factors of multiple intelligences (KP) to eight multiple intelligences pioneered by Gardner. This study aims to explore the different factors of multiple intelligences based on gender, race, schools, streams and SES (Social Economic Status).

The study was conducted through a survey and analysed quantitatively over 511 students using the instrument MyMICA 2006 (Malaysian Multiple

Intelligence Adult Check list for 2006). Linear regression analysis showed Visual Spatial intelligence contributed the highest percentage of 97.8% to the intelligence of Mathematical Logic and intelligence Verbal Linguistics contribute a low percentage of 22.2% to the intelligence of Music. Through ANOVA analysis, the results obtained have significant differences based on multiple intelligence school in two of Verbal Linguistics ($F = 25.11$, $p < 0.01$) and intrapersonal ($F = 14.85$, $p < 0.01$). There is also a significant difference between Malays and non-Malay students in two multiple intelligences of Music ($F = 12.82$, $p < 0.01$) and kinaesthetic ($F = 9.58$, $p < 0.01$). The study showed that teachers and school administrators should be sensitive to different multiple intelligences of each individual student. Teachers should make full use of the school infrastructure to tap this intelligence to maximize student performance.

According Iskandar Rohati Mohd Majzud, Zuria Mahmud (2009) conducted a study of Emotional Intelligence and Job Commitment in Circles Lecturer at the University of Indonesia. This study aims to identify the profiles of emotional quotient and work commitment among 265 university lecturers in Indonesia. This study used by Inventori Kepintaran Emosi Malaysia (IKEM) an instrument build for researchers of the inventory work commitment. Descriptive statistics shows that the lecturers obtained a mean score of high emotional intelligence and spiritual dimension of maturity, and the mean score for the modest dimensions of self-motivation, self-regulation and empathy, and the lowest mean scores for the dimensions of self-awareness and social skills. The study also found that there are significant differences in emotional quotient among the lecturers based on age group and work experience, and there are significant differences in work commitment by age group, level of education, and teaching experience. The findings also show that there is a significant relationship between emotional intelligence and work commitments. Regression testing found the dimensions of social skills in emotional intelligence contributes significantly to job commitments.

Next, study Multiple Intelligences Among Students in Malaysian Public Universities by Mohd Kashfi b. Mohd Jailani, Siti Rahayah Ariffin, Rosseni Din, Bishanani Omar & Sarimah Mokhtar (2011) aims to establish a profile of multiple intelligences of students of public universities in terms of gender and faculty. Next identify the differences and similarities between them. The study was conducted quantitatively over 1154 undergraduate students of a public university in Malaysia by using a questionnaire 'Ujian Kecerdasan Pelbagai Remaja Malaysia (UKPRM) - Malaysia Adolescent Multiple Intelligences Test (MIT)' on-line. In this study, the descriptive statistics in the form of mean and mean percent have been used. For gender profile shows girls predominant in the domain of spirituality and music

while boys are high in seven domains. Domain intelligence between faculty showed a group of students from the Faculty of Economics, Faculty of Islamic Studies, Faculty of Law, Faculty of Medicine and Faculty of Science and Technology is better in most domains compared to other faculties.

Mohd Kashfi Mohd Jailani, Rosseni Din Siti Rahayah Ariffin Muhammad Amirul Abdullah, Norliza Ghazali, Ida Kamalawati Abu Bakar, Shah Nazim Shahar (2013) conducted a study of Multiple Intelligences (MI) and Learning Style (Les) among public high education students. This study used a survey method with a questionnaire developed a group of researchers known as the Electronic System of Multiple Intelligences and Learning Styles (e-Miles). The questionnaire contains 81 item likert scale of five point that represent nine construct of multiple intelligence that logical mathematical, verbal linguistic, visual-spatial, musically, bodily-kinaesthetic, interpersonal, intrapersonal, natural and spiritual. The results showed the highest mean score for clusters of multiple intelligences listed in Social Sciences for the spiritual domain, while the lowest score was recorded on a cluster of Health Sciences for the visual domain space. For learning style, the clusters of Social Sciences showed the highest mean score in collaborative learning style, while the lowest mean score is to avoid learning styles

2. METHOD

The research design involves a quantitative approach that involves collecting data using existing multiple intelligence instruments.

2.1 Sample

The selection of schools and sample surveys was done to align with the design and purpose of the study. This study requires monitoring by researchers to safeguard the internal validity of observers and observers' observations for data collection purposes. The population in this study only involved 424 students of SMK Dato. Syed Ali Al Jufri, Jelebu Negeri Sembilan, a total of 198 male students and 226 female students. The students involved are within the age of 15 - 18 years old. The sampling of the study was not random by taking all three form three students of 77. The results show that all form three students have multiple intelligences at a moderate level.

2.2 Research Instruments

2.2.1 Multiple Intelligence Instruments

The instrument used to obtain or gather information about the student's Multiple Intelligences Instrument (DCI). This instrument was developed based on the theory of Multiple Intelligences (MI) by Howard Gardner (1985) and Smith and Smith (2002).

The instrument consists of Paper 1 and Paper 2. Paper 1 consists of two parts, A and B. Part A contains 20 test items Verbal Linguistics Malay, 20 items Verbal Linguistics English test and two test items allocated 30 minutes each 20 items. Whereas, Part B contains 20 items tested Logic-Mathematics (30 minutes) and 10 test items Visual-space (20 minutes). Students are required to answer in the form of striping the answers given by the choice of the correct answers.

Paper 2 consists of 130 items representing constructs perception Visual-Spatial, Music, naturalist, intrapersonal, interpersonal, kinesthetic and Existential where students have to answer YES or NO to the statement about themselves. The duration is 45 minutes. Item Instruments Multiple Intelligences has been practise to Form three students in secondary schools in Malaysia and been using the stratified sampling method. Schools samples consisting of secondary urban and rural schools area that have high, medium and low performance. The selection of students as respondents also taking into account gender, race and performance. Data were analyzed to obtain the index KR-20 reliability and validity of the items that fit mean square (MNSQ).

2.2.2 Instrument Career Interest

Instruments Career Interest Inventory (IMK) to Form 3 has been developed by the Institute of Examination by Career Interest Inventory (Moe, 2012b). Some improvements have been made with the use of the graphics and instruments to enhance the students' understanding of the information that want to deliver. The new component that was added to this inventory is efficiency in Part C. HCI Form 3 has three parts, Part A: passions, Part B: Work, and Section C: Skills. Instruments HCI Form 3 contains 6 construct the Realistic (R), Investigative (I), Artistic (A), Social (S), Enterprising (E) and Conventional (K). Each construct has 30 items and the number of items is 180

2.3 Data Analysis

Data for this study were analysed using descriptive statistical analysis used to obtain the frequency, percentage and mean score. The data required for this study are various types of intelligence among children in grades three and also the level of multiple intelligences among students. To analyse the data, SPSS will be used to get the frequency and percentage of each item of the questionnaire, an also to get the mean score for each construct a questionnaire.

3. FINDINGS

The findings showed that nine percent of multiple intelligences domain according to the level of low, medium and high. Domain visual language or linguistics

have a percentage of 32.5% in the low, 54.2% moderate and 6.0% in the high level. It shows most form three students of SMK Dato Syed Ali Al Jufri Act have the skills to record their conversation then listen back what they record. They are also proficient in teaching and friends or family members read even like doing storytelling together. Can be identified that those with the highest scores in this domain has the ambition to become a lawyer, teacher, journalist and newsreader. Domain mathematics has a share of 14.5% in the low, 41.0% moderate and the high level of 40.3%. students who were identified with the highest percentage in the medium have an interest in playing with the numbers to analyse things and are very fond of working in a situation that requires a solution that's right.

Occupations chosen by them among mathematicians are like accountants, programmers, physicists and engineers. There is a visual domain that has the lowest percentage in the high level of only 18.1%, 25.3% in the low and medium level of 49.4%. The study identified that there are still many students who enjoy the visual world and those who are in this domain are those who like to draw, scribble or create a 3D picture. Students in the group's domain is also very sensitive to the relationship between objects in space and most of them are within the domain choose a career as an architect, graphic and cartoonist. Naturalistic domain has a high percentage of scores at a moderate level of 51.8%, followed oleh 33.7% in low level and 7.2% at the high level. Students who are in this domain tend to be environmental, like observing and sensitive to changes occurring in the environment. The percentage of intrapersonal domain also has the highest mean scores in the moderate level of 47.0%, followed by 37.3% in the high level and have the lowest scores in the low level of only 8.4% only. Students who are in this domain have skills have been identify their strengths and weaknesses of themselves and be able to use the power to make decisions themselves.

Those who are in this domain to identified as a person who likes to listen and know their life goals. Career choice of students who are in this domain as psychology experts, researchers, entrepreneurs, writers, novelist or a philosopher. Next is the interpersonal domain has the highest percentage of 54.2% at a high level, at a moderate level of 34.9% and a low level of 3.6% only. It can be seen that the student is in this domain still has sensitive behaviour to the feelings and moods of others, helpful, like to make friends, it is easy to work in a group and stay in a leadership role at home or at school. They are also easy to feel empathy for others. Career as counsellors or volunteers become their main career options that are in this domain. Domain is preferred kinaesthetic learners who enjoy physical activities such as sports, playing with objects, or perform any activity that movement. Kinaesthetic have a high

percentage of the average level of 47.0%, 39.9% at the low level and only 6.0% in the high level. Domain of multiple intelligences in the last test is existential domain. Existential has its fans when in a high level and also have a high percentage of 62.7%, followed by 27.7% moderate and 2.4% in the low level. Students who are in this domain group are those who have the ability to see things holistically understand the values of life and to internalize things easily. Those in this group also likes to attach great importance to literary culture and civilization, and respect the societal values.

Table 1 According to the degree of multiple intelligences

Variables	Low (%)	Medium (%)	High (%)	TOTAL (%)
Language	32.5	54.2	6.0	92.8
Mathematic	14.5	41.0	40.3	92.8
Visual Space	25.3	49.4	18.1	92.8
Music	44.6	34.9	13.3	92.8
Naturalistic	33.7	51.8	7.2	92.8
Intrapersonal	8.4	47.0	37.3	92.8
Interpersonal	3.6	34.9	54.2	92.8
Kinaesthetic	39.9	47.0	6.0	92.8
Existential	2.4	27.7	62.7	92.8

4. DISCUSSION AND RECOMMENDATION

This study identifies the various intelligence that contains nine domains among three Form Three students of Dato Undang Syed Ali Al-Jufri. Language intelligence domains, interpersonal intelligence domains, existential intelligence domains and naturalistic domains are well-informed intelligence. However, multiple intelligence domains need to be strengthened further by taking into consideration the environmental factors. These environmental factors include teacher teaching techniques, teaching aids, motivation by teachers and family encouragement. These environmental factors need to be emphasized to ensure that students improve their intelligence and thus enable them to excel in their achievement either from academic or daily life.

The role of teachers in observing and motivating students also plays an important role in raising the intelligence of various students. This is a starting point where teachers need to identify the pupils' strengths in the various intelligences and the strength of the students. This helps the teacher choose appropriate strategies and match the intelligence of students. This intervention can be done by the teacher by observing the strength of the student in various intelligence through the behaviour of the student during the study, the activities enjoyed by the leisure students, performance reports and student

intelligence profiles. With this, teachers can also develop potential students in other unexplained intelligence. A student with high potential but if not glazed he will stunt the student's intelligence.

Based on the results of this study, form three students need to be focused on enhancing the mastery of multiple intelligences through appropriate and effective activities with them.

5. CONCLUSION

Through the findings of this study, the researcher found that three Form Three students of SMK Dato Undang Syed Ali Al Jufri have various intelligence and career interest patterns that are not much different. The assessment system needs to be expanded and diversified so that not only assess mental intelligence alone but rather the range of potential and individual abilities. The school should also provide career information to students so that they are more susceptible to career choices that are appropriate to the students and not wrong in choosing a career in accordance with the strengths and weaknesses of the student.

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