

DETERMINING THE RELATIONSHIP BETWEEN MULTIPLE INTELLIGENCES AND CAREER CHOICES AMONG SENIOR HIGH SCHOOL

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Abstract

The study employed a descriptive-correlational research methodology in order to investigate the connection between multiple intelligences and the different career paths that students in grade 12 choose to pursue. The study was conducted in the Pinoma National High School, Senior High School Department located in Barangay Pinoma, Cauayan City, Isabela and Cauayan City Stand –Alone Senior High School, located in Barangay Turayong, Cauayan City, Isabela. It was to determine whether the connection between Multiple Intelligences, which could be of assistance to them when it comes to selecting their degree program. Intrapersonal intelligence is the most prevalent form of multiple intelligence among students in grade 12, followed by existential intelligence, and then verbal-linguistic intelligence is the least prevalent form of multiple intelligence. Study ventilated on the identification of the multiple intelligences of the students. Majority of respondents had self-aware and capable of discovering their own areas of interest through self-study and observation is indicated by this circumstance. In view of the findings and conclusions of this research, the school may provide aid to the student in selecting a college degree that is most suitable to their interests. For the purpose of assisting students in exploring career options that are a good fit for their aptitudes and interests, education professionals and career counselors can make use of the Multiple Intelligence profiles that students have created, teachers may also adapt instructional methods in order to better engage students and to support them in the development of the skills and information that are necessary for them to be successful in their chosen careers.

Keywords: multiple intelligences, career choices, intrapersonal intelligence, degree program

Introduction

Everyone has an innate intellect that we need to develop and learning is the process by which we gain knowledge, new understanding, values, and abilities. Believing that education serves as the primary catalyst for a child's professional development and aids in his ability to successfully integrate into society, it is essential to help and direct them to the path where they could be useful.

Modernization of society and the economy is greatly aided by education. Since the quality of human resources directly depends on the degree of education, the shift to an innovative economy is impossible without competitive education (Pronina and Piatykov, 2021). As stipulated in RA 10533, also known as the Basic Education Act of 2013, every basic education graduate shall be an empowered individual who has learned, through a program that is grounded in sound educational principles and geared toward excellence, the foundations for learning throughout life, the competence to engage in work and be productive, the capacity to coexist in fruitful harmony with local and international communities, and the capacity to engage in autonomous, creative, and critical thinking.

Nowadays, one of the common problems of graduating students is choosing the field they will pursue and it is very crucial for them. Some of the students are not yet decided and some of them are not yet sure on what career they will pursue especially among the senior high school students of Pinoma National High School. This may be due to the diverse educational services where every year new professions and fields of study emerge.

There is a possibility that previous research has mostly concentrated on the conventional academic intelligence rather than investigating numerous intelligences altogether. By studying the ways in which different types of intelligence, such as interpersonal, intrapersonal, kinesthetic, and others, influence job choices among senior high school students, this study may have the potential to fill a vacuum in the existing literature. It's possible that there hasn't been much research done on how gender contributes to differences in multiple intelligences and profession choices. It is possible that there is a gap in study that may be filled by investigating the possibility of gender disparities in the relationship between intelligences and career preferences.

In line with this, this study was conducted to determine the relationship between Multiple Intelligences and Career Choices among Senior High School students which could be of assistance to them when it comes to selecting their degree program. Thus, this study would benefit not only the students but also the teachers in planning their career guidance program with the help of multiple intelligences.

Statement of the Problem

Generally, this study aimed to determine the relationship between multiple intelligence and career choices among Senior High School .

Specifically, it answered the following questions:

1. What are the respondents' Multiple Intelligences in the different dimensions?
 - a. Verbal Linguistics
 - b. Visual - Spatial
 - c. Mathematical Logic
 - d. Music
 - e. Naturalist
 - f. Kinesthetic - Physical
 - g. Interpersonal
 - h. Intrapersonal
 - i. Existential

Methodology

Research Design

The researcher used a descriptive-correlational research design to determine the relationship between multiple intelligence and career choices among Grade 12 its implication for teaching Social Studies. The researcher used quantitative design for it focuses on <https://ijase.org>

quantifying and analyzing factors in order to acquire results and it can be great help for correlational research (Apuke, 2017). This approach aid researcher in their capacity to accurately generalize their findings to the population and efficient.

Locale of the Study

The study was conducted in the Pinoma National High School, Senior High School Department located in Barangay Pinoma, Cauayan City, Isabela and Cauayan City Stand – Alone Senior High School, located in Barangay Turayong, Cauayan City, Isabela. By conducting the study in these two institutions, the researcher was able to gather insights and data from a diverse range of students, representing different backgrounds, interests, and academic tracks. The inclusion of both schools adds depth and breadth to the study's findings, offering a more comprehensive understanding of the relationship between multiple intelligences and career choices among Grade 12 students in the area.

Respondents of the Study

The PNHS provides Academic Track programs for SHS such as General Academic Strand (GAS), Technical-Vocational-Livelihood Strand (TVL) in Home Economics and Industrial Arts.

While the Stand-Alone provides Humanities and Social Sciences (HUMSS), Science, Technology, Engineering and Mathematics (STEM), Accountancy, Business and Management (ABM), Technical-Vocational-Livelihood Strand (TVL) in Information and Communication Technology. The respondents of the researcher are the Grade 12 students who are enrolled in the said institutions School Year 2022-2023.

Research Instrument

A questionnaire was used to gather the data. There are three components to this, Part I covers the respondents' profiles. This part elicited the data on sex, age, and SHS strand. On the

one hand, Part II of the instrument includes items on students' multiple intelligences, which were adopted on Multiple Intelligences Survey © 1999 by Walter McKenzie. This instrument was used by the researcher because it was proven to be reliable as previous researchers claimed that the overall internal consistency ranged from 0.85 to 0.90 (Al-Balhan, 2006; Razmjoo, 2008; Razmjoo et al., 2009). Also, it comprises 90 statements that are comprehensive and constructively aligned with the nine intelligences proposed by Gardner. This instrument has nine sections with 10 items each, namely, Section 1 – Naturalist strength, Section 2 – Musical strength, Section 3 – Logical strength, Section 4 – Existential strength, Section 5 – Interpersonal strength, Section 6 – Kinesthetic strength, Section 7 – Verbal strength, Section 8 – Intrapersonal strength, and Section 9 – Visual strength. The sections are completed by placing a “1” next to each statement the respondents felt accurately describe them. If they do not identify with a statement, the respondents just leave the space provided blank. Then a total column in each section is done.

Data Gathering Procedure

For the purpose of data collection, the researcher initiated the process by drafting a formal permission letter addressed to the principal of the school. This letter outlined the aims, objectives, and nature of the study, seeking approval to gather the necessary data from the student body. Subsequently, arrangements were made with the school administration regarding the logistics of distributing and collecting the questionnaires.

Statistical Treatment of the Study

To determine the required values, the data was processed and analyzed using the SPSS software. The values produced by the data were then applied to address the study's objectives and form conclusion. In interpreting the multiple intelligences (MI) scores, a threshold of 60 was established as the criterion for identifying predominant intelligence among the

respondents. MI scores of 60 and above were categorized as indicative of a predominant intelligence in a particular intelligence domain. Conversely, MI scores below 60 were interpreted as suggesting that the corresponding intelligence was not predominant among the respondents.

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

Multiple Intelligence Scores	Naturalist		Musical		Logical		Existential		Interpersonal		Kinesthetic		Verbal		Intrapersonal		Visual	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
10	6	2.44	2	0.81	9	3.66	5	2.03	9	3.66	6	2.44	7	2.85	8	3.25	7	2.85
20	20	8.13	5	2.03	20	8.13	7	2.85	17	6.91	14	5.69	27	10.98	11	4.47	13	5.28
30	28	11.38	30	12.20	25	10.16	11	4.47	19	7.72	20	8.13	52	21.14	16	6.50	33	13.41
40	34	13.82	39	15.85	46	18.70	30	12.20	48	19.51	32	13.01	32	13.01	21	8.54	30	12.20
50	46	18.70	32	13.01	53	21.54	36	14.63	55	22.36	39	15.85	37	15.04	22	8.94	35	14.23
60	39	15.85	53	21.54	35	14.23	34	13.82	41	16.67	39	15.85	34	13.82	25	10.16	37	15.04
70	28	11.38	40	16.26	21	8.54	38	15.45	30	12.20	33	13.41	23	9.35	29	11.79	29	11.79
80	20	8.13	27	10.98	21	8.54	29	11.79	9	3.66	27	10.98	17	6.91	47	19.11	28	11.38
90	13	5.28	12	4.88	5	2.03	30	12.20	10	4.07	21	8.54	6	2.44	41	16.67	14	5.69
100	12	4.88	6	2.44	11	4.47	26	10.57	8	3.25	15	6.10	11	4.47	26	10.57	20	8.13
Mean	53.78		56.91		50.93		64.39		51.42		58.41		48.58		66.26		56.99	

Table 1. Students' Multiple Intelligences in the Different Dimensions.

According to the data presented in the table, the multiple intelligence that is most prevalent among the students is Intrapersonal Intelligence, which has a mean score of 66.26. Existential Intelligence, which has a mean score of 64.39, is the second most prevalent, while Verbal-Linguistic Intelligence, which has a mean score of 48.5, is the least prominent.

In other words, this indicates that the majority of the respondents are self-aware or that they are aware of their own interests. They take pleasure in engaging in activities that involve self-reflection and analysis, such as imagining things, evaluating relationships with other people, and analyzing their own personal strengths (Subia et al. 2012). These activities can be learned through self-study and observation. According to Villanueva and Santos (2019), they are the pupils who are the best capable of taking care of themselves. On the other hand, the respondents had a rather low level of word intelligence, which means that they are not able to communicate well in both written and oral form. On the other hand, it is entirely possible that the majority of the respondents' intelligence was developed as a result of the environment that was available to it. On the other hand, the least and other intelligences remained underdeveloped or moderately developed due to a lack of an encouraging environment (Yaghoob & Hossein2016). This may be due to a variety of factors that influence the respondents.

Table 2. Differences in Students' Multiple Intelligence when Grouped according to K-to-12 Strand

The preceding table presents the average scores on the Multiple Intelligences test for students who were enrolled in a variety of K-to-12 courses. The many intelligences, such as Naturalist, Musical, Logical, Existential, Interpersonal, Kinesthetic, Verbal, Intrapersonal, and Visual, were investigated. The strands that were investigated included Arts and Design, GAS, HUMSS, Sports, STEM, TVL HE, TVL ICT, and TVL IA.

Multi- Intelligence	K-12 STRAND									<i>F</i>	<i>Sig.</i>
	ABM	Arts and Design	GAS	HUMSS	Sports	STEM	TVL HE	TVL ICT	TVL IA		
Naturalist	55.13	20.00	39.17	55.60	50.00	54.13	46.67	50.00	61.25	1.52 ^{ns}	0.15
Musical	58.46	30.00	45.83	57.47	30.00	58.00	50.00	57.00	61.25	1.41 ^{ns}	0.19
Logical	56.15	15.00	37.50	50.11	50.00	53.00	40.00	49.00	50.00	1.84 ^{ns}	0.07
Existential	71.03	30.00	56.67	63.74	40.00	65.25	63.33	61.00	58.75	1.42 ^{ns}	0.19
Interpersonal	52.31	30.00	45.00	55.82	50.00	48.75	26.67	46.00	55.00	1.86 ^{ns}	0.07
Kinesthetic	61.79	35.00	44.17	59.12	90.00	57.75	50.00	63.00	61.25	1.34 ^{ns}	0.23
Verbal	54.62	40.00	35.83	50.66	40.00	48.50	46.67	33.00	38.75	1.83 ^{ns}	0.07
Intrapersonal	71.28	25.00	64.17	64.51	40.00	69.00	60.00	70.00	48.75	1.79 ^{ns}	0.08
Visual	62.31	85.00	34.17	54.95	70.00	58.50	56.67	65.00	55.00	2.36 ^{ns}	0.02

HUMSS, Sports, STEM, TVL HE, TVL ICT, and TVL IA.

In accordance with what was said, the students who were enrolled in the TVL IA strand achieved the highest mean score on the Naturalist intelligence test, which was 61.25. On the Naturalist intelligence test, the students who were enrolled in the Arts and Design strand received the lowest scores, with a mean score of 20.00. On the GAS strand, the students received the highest score, with a mean score of 39.17. Taking this into consideration, it appears that these students may not be as interested in the activities that involve Naturalist intelligence or are not nature smart as compared to students who are enrolled in TVL IA. Furthermore, it is

proven in the table that there is no substantial difference between the students' Multiple Intelligences and the strand that they are enrolled in, respectively.

In addition, the students who were enrolled in the TVL IA strand achieved the maximum possible score on the Musical intelligence test, which was 61.25 on average. On the Musical intelligence test, the students who were enrolled in the Arts and Design strand received the lowest scores, with a mean score of 30.00. The students who were enrolled in the Sports strand also received a mean score of 30.00. Based on this, it appears that these students may not have the same level of musical intelligence as TVL IA students or may not have the same level of interest in activities that take place with instruments. It was also proven in the table that there is no substantial difference between the Multiple Intelligences of the students and the strand that they are in.

Following closely behind are the students from the ABM strand who achieved the highest mean score on the Logical intelligence test, which was 56.15. The students who obtained the lowest scores on the Logical intelligence test were those enrolled in the GAS and Arts and Design strands. In light of this, it appears that these children might not be as engaged in the activities that involve logical intelligence, reasoning, or number smartness when compared to students who were enrolled in GAS and Arts and Design. It was also proven in the table that there is no substantial difference between the Multiple Intelligences of the students and the strand that they are in.

A further point to consider is that the students who were enrolled in the ABM strand achieved the greatest scores on the Existential intelligence test, with a mean score of 71.03, and the Intrapersonal Intelligence test, with a mean score of 71.28. With a mean score of 30.00 on the Existential Intelligence test and a mean score of 25.00 on the Intrapersonal Intelligence test, the students who were enrolled in the Arts and Design streams received the lowest scores.

This shows that students in the Arts and Design program have the ability to manage profound topics and are self-aware. However, students in the Arts and Design program may not be as engaged in activities that involve existential intelligence and understanding regarding the intrinsic aspects of a person. On the table, it was also proven that there is no substantial difference between the intelligences of the kids and the strands that they have.

In addition, the TVL ICT strand covering interpersonal intelligence had a mean score of 55.82 out of a possible 100 points. In terms of the Interpersonal Intelligence test, the students who were enrolled in the Arts and Design strand received the lowest mean score of 15.00, while the students who were enrolled in the GAS strand received the highest mean score of 37.50. When compared to students who are enrolled in the TVL Information and Communication Technology program, this indicates that these students may not be as engaged in activities that need interpersonal intelligence or who do not prefer working in a group. It was also proven in the table that there is no substantial difference between the Multiple Intelligences of the students and the strand that they are in.

In addition, the students who were enrolled in the Sports Strand achieved the highest mean score on the Kinesthetic Intelligence test, which was calculated to be 90.00. On the Kinesthetic intelligence test, the students who were enrolled in the Arts and Design strand received the lowest mean score, which was 35.00. Students who were enrolled in the Sports strand are likely to have a high level of body intelligence, but students who are enrolled in the Arts and Design strand may not have the same level of interest in body kinesthetic activities or may not be body smart. Furthermore, it was proven in the table that there is no substantial difference between the students' Multiple Intelligences and the strand that they are enrolled in, respectively.

In addition, the students who were enrolled in the Arts and Design track achieved the highest mean score on the Visual Intelligence test, which was 85.00. With a mean score of 34.17, the students who were classified as belonging to the GAS strands had the lowest possible score on the Visual intelligence exam. The fact that this is the case shows that students who are enrolled in the Arts and Design strand are picture smart, but students who are enrolled in the GAS strand might not be as interested in the activities that include images, photographs, and paintings, or they might not be picture smart at all. Furthermore, it is shown in the table that there is no substantial difference between the students' Multiple Intelligence and the strand that they are enrolled in, respectively.

According to the results of the Verbal intelligence exam, the students who were enrolled in the ABM strand achieved the highest mean score, which was 54.62 points. During the Verbal intelligence test, the students who were enrolled in the GAS strand received the lowest scores, with a mean score of 35.83, and the students who were enrolled in the TVL ICT strand received a mean score of 33.00. Taking this into consideration, it appears that these children may not be as motivated in the activities that involve Verbal intelligence or are not word clever when compared to students enrolled in ABM. It was also proven in the table that there is no substantial difference between the Multiple Intelligence of the students and the strand that they are in.

The results also indicate that the most dominant intelligence of ABM students is Intrapersonal, while the least dominant intelligence of Arts and Design is Interpersonal. Comparatively, the most dominant intelligence of Arts and Design students is Visual-Spatial, while their least dominant intellect is Naturalist intelligence. On the other hand, in the HUMSS strand, the individuals' dominant intelligence is Intrapersonal, while their least dominant intelligence is Logical Intelligence. In the GAS strand, the individuals' major

intelligence is Intrapersonal, while their least dominant intelligence is Visual-Spatial Intelligence. Furthermore, the Kinesthetic Intelligence is the dominant intelligence in the Sports strand, while the Musical Intelligence is the least prominent. That being said, the Intrapersonal Intelligence is the dominant intelligence in STEM, while the Interpersonal Intelligence is the least dominant. Additionally, the TVL Higher Education (HE) has a dominant intelligence of Existential Intelligence, while their least dominant intelligence is Interpersonal Intelligence. In the TVL Information and Communication Technology (ICT) department, the dominant intelligence is Intrapersonal, and the least dominant intelligence is Verbal Intelligence. In the TVL Information and Arts (IA) department, the dominant intelligences are Naturalist and Musical Intelligence, and the least dominant intelligence is Verbal Intelligence. It is possible that this is due to a different set of circumstances.

CONCLUSION

Based on the findings of the study, the following conclusions are drawn:

It has been revealed that the most prevalent intelligence among students in the 12th grade is Intrapersonal Intelligence. This conclusion was reached based on the analysis of the figures that helped identify multiple intelligences among the students. Based on this, it can be deduced that the majority of the students possess a high level of self-awareness and possess the capacity to acquire knowledge and learn about their own interests through self-study and observation. There is a great sense of questioning and contemplating on the meaning of life and their place in the world, which suggests that these kids exhibit a strong sense of existential intelligence, which is the second most prominent intellect. Verbal-Linguistic Intelligence, on the other hand, is discovered to be the level of intelligence that is least dominant among the pupils. These data, taken as a whole, shed light on the various abilities and learning preferences of the students in the twelfth grade.

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It is possible that factors such as parental decision, peer pressure, or income played a role in the fact that students in the twelfth grade did not make profession choices that were in line with their intellect levels. There is no correlation between the intellect levels of children in the twelfth grade and the job paths they choose to pursue. One possible explanation for this disparity is that it is caused by a number of factors, such as the influence of parents, the pressure of peers, and financial considerations. It brings to light the necessity of a more all-encompassing and individualized approach to career guidance, one that takes into account not only academic capabilities but also personal preferences and aptitudes. Taking action to address these influential elements will help students make more informed judgments about their future careers, which will ultimately result in increased levels of satisfaction and success for the students in their chosen paths.

Recommendations

In the light of findings and conclusion of this research, the following recommendations are hereby offered:

1. It is possible for the school to provide the student with guidance in selecting a college degree that is most suitable to their interests. For the purpose of assisting students in exploring career options that are a good fit for their aptitudes and interests, education professionals and career counselors can make use of the MI profiles that students have created.
2. Educators and career counselors have the ability to provide guidance to students regarding a wide range of employment alternatives, regardless of the students' age or gender. Furthermore, they have the ability to take into account the distinct preferences

of males and females with regards to career options.

3. Organize seminars with the purpose of educating senior high school students about the significance of developing multiple intelligences and with a focus on career guidance.

4. Hold LAC sessions or in-service trainings for teachers in order to raise awareness about the material that can assist students in developing their ability to choose a career and their many intelligences.

5. The teachers have the ability to create and implement activities and instructional strategies that will foster and cultivate the many MI that the kids possess.

6. In the future, researchers will conduct additional study that incorporates multiple intelligences and how it may enhance student learning and career development. Additionally, they will be able to conduct additional research to find fundamental factors that influence the career decisions of students.

References

- Apuke, O. (2017). Quantitative Research Methods : A Synopsis Approach. Arabian Journal of Business and Management Review (kuwait Chapter).. 6. 40-47. 10.12816/0040336.
- Al-Balhan, E. M. (2006). Multiple intelligence styles in relation to improved academic performance in Kuwaiti middle school reading. Digest of Middle East Studies, 15(1), 18-34.
- Multiple Intelligences Survey © 1999 by Walter McKenzie, <http://surfaquarium.com/MI/inventory.htm>
- Pronina, O. and Piatyko O. (2021) The Decision Support System Education Career Choice Using Fuzzy State Higher Educational Institution «Pryazovskyi State Technical University», University str., 7, Mariupol, 87500, Ukraine. <https://ceur-ws.org/Vol-2870/paper88.pdf>
- RA 10533. (2013) An Act Enhancing The Philippine Basic Education System By Strengthening Its Curriculum And Increasing The Number Of Years For Basic Education, Appropriating Funds <https://ijase.org>

Therefor And For Other Purposes. <https://www.officialgazette.gov.ph/2013/05/15/republic-act-no-10533/>

- Razmjoo, S. A. (2008). On the relationship between multiple intelligences and language proficiency. *The Reading Matrix*, 8(2), 155-174.
- Razmjoo, S. A., Sahragard, R. and Sadri, M. (2009). On the relationship between Multiple Intelligences, vocabulary learning knowledge and vocabulary learning strategies among the Iranian EFL learners. *The Iranian EFL Journal Quarterly*, 3, 82-110.
- Subia, G., Amaranto, J., Amaranto, J., Bustamante, J., Damaso, I. (2019). Chess and Mathematics Performance of College Players: An Exploratory Analysis. *OALib*. 06. 1-7. 10.4236/oalib.1105195.
- Villanueva, Jovita and Santos, Marlon, Verbal Linguistic Intelligence and Communication Skills of College of Education Students of Bulacan State University: Inputs to Improved Academic Engagement (September 17, 2019). Available at SSRN: <https://ssrn.com/abstract=3455142> or <http://dx.doi.org/10.2139/ssrn.3455142>
- Yaghoob, R & Hossein, Z. (2016). The correlation of multiple intelligences for the achievements of secondary students. *Educational Research and Reviews*. 11. 141-145. 10.5897/ERR2015.2532.