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MULTIPLE INTELLIGENCES OF BACHELOR OF ELEMENTARY EDUCATION STUDENTS

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Abstract

Multiple intelligences play important role in higher education learning. They classify individual preferences and strengths in learning and can be used for developing new ways of learning. Knowledge of teachers in multiple intelligence of students can help them better understand their students. And students knowing their dominant intelligence will find it easier to learn. This research is focused on the relationship between multiple intelligences among NEUST BEED students.

The population of 41 third-year Bachelor of Elementary Education students was selected as a sample. This is a quantitative approach and research data were collected using a questionnaire. The gathered data were analyzed using frequencies, percentages, and diagrams.

The result showed that the majority of the students tend to possess divergent learning styles with an emphasis on Intrapersonal Intelligence for the excellent level and Verbal-Linguistic for the low level.

1. INTRODUCTION

Students have multiple intelligences. These multiple intelligences of every student are used especially in school because they use them for their learning. Thus, by understanding and adapting these various abilities the teachers can now use the appropriate strategies and approaches that will suit their students who are different from one another because they are gifted to have unique intelligence.

Gardner's multiple intelligences theories are two different areas of research, they do not opposite each other and can be used together to improve the learning of the students. Multiple intelligences celebrate the uniqueness and diversity of all students. Gardner suggests the need for a broader view of the human mind of human learning than what currently exists. Multiple intelligences hold that every student is smart not just in one or two ways but in many. Gardner believes instructors must attempt to reach all students and develop their diverse intelligence. Moreover, instructors need to teach in a variety of ways that provide varied learning experiences for students (McClellan & Conti, 2008).

Yenice & Aktamis (2010) have identified the dominant multiple intelligence domains of pre-service teachers in department primary, science, and social science teacher education. According to Abdollah (2008), Learning styles and strategies as a learner-centered approach which is closely related to Multiple

Intelligences theory were also tackled. Also, to be successful in educating all students, teachers should be aware of students' differences; individual learning styles, and multiple intelligence profiles.

This calls for a study on the correlation between multiple intelligences of Bachelor of Elementary Education students that have an impact on their learning. The researchers are concerned about the relationship between these two kinds of theories. Therefore, this study intended to measure how strong the relationship between multiple intelligences.

2. METHODOLOGY

A sample consisting of 41 third-year Bachelor of Elementary Education students of Nueva Ecija University of Science and Technology, San Isidro Campus , Year 2017.
Data collection sources
Primary data
A questionnaire is administered to the 41 respondents and primary data is extracted by this method.
Secondary data
Secondary data is collected through articles, websites, etc.
Limitations of the study:
- Sample size is limited
- Locale of the study is limited
- Time is a major constraint

3. RESULTS AND DISCUSSION

Table: 1
Age of the respondents

21-23	24-26	27 & above
23	12	6

From the above table, it is evident that there were 23 respondents with age 21-23; 12 were in the age range of 24-26 and 6 were in the age group of 27 and above. The majority of the respondents were in early adulthood.

Table: 2
Gender of the respondents

Male	Female
11	30

From the above table, it is found that out of the 41 respondents, there were 30 females and 11 male respondents.

Table: 3
Civil Status of the respondents

Single	Married
38	3

From a total of 41 respondents, it is shown that 38 respondents were single and 3 were married.

Table: 4
Weighted Mean of Multiple Intelligences

Multiple Intelligences	Weighted Mean
Verbal/Linguistic Intelligence	3.20
Logical/Mathematical Intelligence	3.59
Musical Intelligence	3.59
Visual/Spatial Intelligence	3.59
Bodily-kinaesthetic Intelligence	3.11
Interpersonal Intelligence	4.73
Intrapersonal Intelligence	4.48
Naturalist Intelligence	4.46
Existential Intelligence	4.76

It is shown in the table that respondents somewhat agreed that they have Verbal/Linguistic Intelligence with a weighted mean of 3.20. According to (Kowald, 2013) in learning a new lesson a students' way of accommodating new knowledge is listening attentively in the class discussion. This proves that most of the students were understanding new lessons by listening to the class discussion given by their teacher using verbal/ linguistic communication using reading, writing, memorializing words learning languages, and speaking and telling stories.

As shown in the table, respondents described their Logical/Mathematical Intelligence pretty well with a weighted mean of 3.59. This explains the study (Safranj, 2016) stated that the person/ people exposed to teaching based on deductive, reasoning detecting patterns logical things and problem-solving tasks were more suited to learn things with strong logical/mathematical intelligence

It can be gleaned from the table that respondents described their Musical Intelligence pretty well with a weighted mean of 3.59. This multiple intelligence types is an integral part of our lives and it is the most interesting type. Also, in many cases, this intelligence is referred to as rhythmic intelligence. But it doesn't necessarily mean that people's musical intelligence will get involved in music it's just that most of the people correlate their lives to music or the melody of their experiences. (Michigan, 2015).

When it comes to Visual/Spatial Intelligence, respondents described it as pretty well with a weighted mean of 3.59. This strengthens the study of Silverman, N. D. who coined the term "visual-spatial learner" in her study stated that a person with high visual/spatial has in common such as thinking primary pictures, good at reading maps, using intuition to solve the problem, and often a late bloomer.

The table also suggested that the respondents somewhat agreed that they possess bodily-kinesthetic intelligence. This has a weighted mean is 3.11. Most of the students can learn their lesson without hands-on manipulation but based on the survey it shows that the student could best if the lesson is discussed orally but at the same time with hands-on experience so that the student can absorb the lesson effectively. This was supported by the study (Meetu, 2015) states that active participation of students in the classroom can help relates to academic performance, by touching and exploring things can help students learn best.

The table also suggested that the respondents strongly agreed that they possess interpersonal intelligence. The weighted mean is 4.73. According to (Fahim et. al., 2010) started that people with interpersonal ability are the one who excels in group performance, group activities, and film reviewing. They all have to cooperate with other people easily, so they become a good partner. People with interpersonal intelligence are commonly teachers, politicians, and salespeople. Developing interpersonal intelligence can be made by doing some activities like participating in an organization and creating a relationship with friends.

The table above also suggested that the respondents strongly agreed that they have intrapersonal intelligence with a weighted mean of 4.48. According to (Wheeler, 2009) learners who got intrapersonal intelligence or self-smarts likes doing a pile of work in language classrooms which are completely from those activities that are liked by different learners with intrapersonal intelligence.

When it comes to Naturalist Intelligence, respondents strongly agreed that they possess or have it with a weighted mean of 4.46. Naturalist intelligence is the ability to identify and group the animals and plants and different parts of a professional who can group several types of animals. This type of intelligence is keen on grouping the likeness and unlikeness of things. (Hajhashemi, Akef Anderson, 2012; Maftoon & Sarem, 2012; Rad & Rahanama, 2015).

Lastly, respondents strongly agreed that they have existential intelligence with a weighted mean of 4.76. According to Rad & Rahanama (2015) have the idea that existential intelligence is the description of life on humans' perception. Logsdon (2016) added that an existential person reasons out deeply on reality and how the universe existed. People who usually have existential intelligence are scientists, philosophers, and theologians. They are all good at reflection and thinking critically crafty in creating abstracts theory.

Table: 5

Relationship of Respondents' Profile and their Multiple Intelligences (Verbal/ Linguistic, Logical/Mathematical, and Musical)

		Verbal/ Linguistic			Logical/ Mathematical			Musical		
		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
Age	Pearson Correlation	-.015	.000	-.121	.036	.006	.005	-.097	.064	-.043
gender	Pearson Correlation	-.123	-.056	.064	-.110	**.146***	-.110	-.032	-.126	-.093
Civil status	Pearson Correlation	.229	-.081	-.155*	-.036	-.111	-.117	.012	-.135*	-.032

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Gender is significantly correlated to the logical/ mathematical intelligence of the respondents with the result of +.146 using 0.01 significant value. This implies that intelligence in terms of logic was often developed equations to describe relationships and/or to explain the observations.

Table: 6
Relationship of Respondents' Profile and their Multiple Intelligences (Visual/Spatial, Bodily/Kinaesthetic, and Interpersonal)

		Visual/Spatial			Bodily/Kinaesthetic			Interpersonal		
		Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18
Age	Pearson Correlation	.051	**.179***	.050	-.084	.053	-.052	.040	.126	.049
Gender	Pearson Correlation	**-.183***	-.088	-.129	**-.153***	**-.210***	**-.185***	.078	-.023	-.031
Civil status	Pearson Correlation	-.006	.161	-.069	-.161	-.098	-.203	-.068	-.001	-.116

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Age and gender are significantly correlated to the visual intelligence of the respondents with the results of +.179 and -.183 using 0.01 significant value. The visual intelligence manipulated the respondent for knowing directions is easy for them.

Gender is significantly correlated to the bodily-kinesthetic of the respondents with the results of -.210 and -.185 using 0.01 significant value. This implies that respondents have a good balance and eye-hand coordination enjoy sports that use a ball, consider themselves an athlete, and feel good as physically fit

Table: 7
Relationship of Respondents' Profile and their Multiple Intelligences (Intrapersonal, Naturalist, and Existential)

		Intrapersonal			Naturalist			Existential		
		Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26	Q27
Age	Pearson Correlation	.011	-.106	-.061	-.019	.083	.102	-.030	**.132***	.02
Gender	Pearson Correlation	-.113	-.029	.016	**-.169***	**-.137***	**-.183***	**-.183***	-.043	.011
Civil status	Pearson Correlation	-.066	**-.171***	-.053	-.012	.103	.025	-.009	.115	**.176***

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

The profile of the respondents in terms of gender is significantly correlated to naturalist intelligence with the result of -.183 using 0.01 significant value. This intelligence implies that the respondents are enjoying their pets, enjoy to caring for the house plants. Also, the respondents like learning about nature.

The gender and age of the respondents are significantly correlated to existential intel. Thus, the respondents' age and gender are significantly related to existential intelligence, why they're here in this world. Also, the respondents often reflect on the reasons why innocent people suffer.

Civil status is significantly related to intrapersonal intelligence of intelligence. This implies that the respondents are always honest with themselves. The civil status is significantly correlated to the existential intelligence of the respondents with the result of +.176 using 0.01 significant value. Thus, the respondents need to know their mission in life.

This indicates that the respondent's profile is significantly related to their intelligence type, therefore the researchers rejected the null hypothesis stating that there is no significant relationship between the respondent's profile and their intelligence type.

Conclusion

The respondents are late teens to early adulthood with an age range from 21-23, most are female and single. The profile of the respondents in terms of age, gender, and civil status are significantly related to logical/mathematical intelligence, visual/spatial intelligence, bodily-kinesthetic intelligence, naturalist intelligence, and existential intelligence.

The researcher concluded that there is a supportive relationship between the profiles of the respondents and their multiple intelligences. Thus, there are significantly related to the bodily/kinesthetic with the result of -.183 using 0.01 significant value.

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