

Multiple Intelligences of Grade 12 Senior High School Learners: Basis for Career Guidance Program

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ABSTRACT

This quantitative descriptive study determined the multiple intelligences of Grade 12 Senior High School learners at Speaker Eugenio Perez National Agricultural School in San Carlos City, Pangasinan, as a basis for career guidance during the School Year 2020–2021. A total of 884 Grade 12 learners served as respondents of the study.

The findings showed that the Grade 12 learners were predominantly 17–18 years old, male, enrolled in the Technical-Vocational-Livelihood (TVL) track, and belonged to families with a monthly income below Php 10,000.00, with HUMSS having the largest proportion among the identified strands. The learners demonstrated characteristics across all eight domains of multiple intelligences: verbal/linguistic, visual/spatial, musical, logical/mathematical, interpersonal, intrapersonal, naturalistic, and bodily/kinesthetic. Significant relationships were observed between learner profile characteristics and selected indicators of multiple intelligences. Age, sex, track, strand, and monthly family income showed varying positive and negative associations across the eight domains. However, the correlation coefficients were generally small, indicating weak relationships despite statistical significance. These findings suggest that learner profile characteristics were associated with specific manifestations of multiple intelligences but did not strongly determine the learners' overall patterns of intelligence.

Based on these findings, the study recommends the utilization of the guidance program to help learners gain a deeper understanding of their interests, abilities, and skills. School administrators should provide appropriate learning materials and information on multiple intelligences to increase awareness among learners and teachers and to support the recognition and development of diverse abilities, talents, and skills. Class advisers and teachers should incorporate varied and engaging learning activities into their lessons to stimulate learners' interests and help them identify their strengths and areas for improvement. Further studies may also be conducted using qualitative approaches, such as one-on-one interviews or focus group discussions, to provide a more in-depth understanding of learners' multiple intelligences and to further support the findings of the present study.

Keywords: Multiple Intelligences, Senior High School Learners, Career Guidance, Grade 12, Quantitative Descriptive Research

INTRODUCTION

Intelligence has long been studied as a complex human capacity that extends beyond the ability to perform well on conventional academic tasks. Earlier perspectives commonly viewed intelligence as a general mental ability associated with learning, reasoning, problem-solving, and adaptation. However, contemporary discussions recognize that individuals may demonstrate intellectual strengths in different ways and across varied domains. Gardner's theory of Multiple Intelligences (MI) broadened the traditional view by proposing that individuals possess several relatively distinct forms of intelligence, including linguistic, logical-mathematical, spatial, bodily-kinesthetic, musical, interpersonal, intrapersonal, and naturalistic

intelligences (Gardner, 2003, 2011). Rather than assuming that academic achievement alone represents intellectual capacity, the theory draws attention to the diverse abilities through which learners understand, express, and apply knowledge.

The educational significance of multiple intelligences lies in recognizing learner diversity. Students differ not only in their academic performance but also in their interests, abilities, ways of engaging with learning tasks, and potential areas of strength. Gardner (2011) emphasized the importance of providing varied opportunities for learners to demonstrate what they know and can do. This perspective encourages educators to move beyond a single approach to instruction and assessment and to provide learning experiences that accommodate diverse capabilities. At the same time, multiple intelligences should not be equated with learning styles. Intelligence refers to capacities in particular domains, whereas learning styles concern preferred ways of approaching tasks and learning materials. Recognizing this distinction is important in avoiding rigid labeling of learners and in ensuring that students are exposed to varied learning experiences.

The recognition of individual strengths is particularly relevant during senior high school, when learners begin making important decisions concerning higher education, employment, entrepreneurship, and other career pathways. Career guidance is intended to help young people develop self-awareness, understand their interests and abilities, examine available educational and occupational opportunities, and make informed decisions about their future. The trait-and-factor tradition associated with Frank Parsons emphasized the importance of understanding an individual's characteristics and relating them to appropriate occupational opportunities. Similarly, Holland's career theory proposed that individuals may be understood in relation to six vocational personality types—Realistic, Investigative, Artistic, Social, Enterprising, and Conventional—which can be considered alongside characteristics of work environments. These perspectives underscore the importance of self-knowledge and informed exploration in career decision-making.

In the Philippine basic education context, career guidance has become increasingly important as learners transition through the K to 12 curriculum and prepare for post-secondary education, employment, or other career pathways. Senior high school provides learners with opportunities to develop competencies and explore possible directions for their future. However, effective career guidance requires more than providing general information about occupations. It should also respond to the individual characteristics, interests, abilities, and aspirations of learners. Understanding the multiple intelligences of senior high school learners can therefore provide useful information for strengthening career-related interventions, particularly when such information is considered together with learners' interests, goals, and other relevant personal and contextual factors.

This need is particularly relevant at Speaker Eugenio Perez National Agricultural School in San Carlos City, Pangasinan, where senior high school learners come from diverse backgrounds and may have varying academic and non-academic strengths. The researchers observed the need for career guidance initiatives that are more responsive to the developmental needs and individual characteristics of senior high school learners. The existing career guidance activities were perceived to require further contextualization to address the specific concerns of learners at this educational level, particularly their need for clearer self-understanding when considering future academic and career pathways. Against this background, the present study determined the multiple intelligences of Grade 12 senior high school learners of Speaker Eugenio Perez National Agricultural School. Specifically, it sought to identify the learners' dominant areas of intelligence and use the findings as an empirical basis for strengthening career guidance. By generating evidence on the diverse intellectual strengths of learners, the study aimed to contribute to a more learner-centered approach to career development and to the formulation of a career guidance program responsive to the needs, abilities, interests, and aspirations of senior high school learners.

METHODOLOGY

Research Design

The study employed a quantitative descriptive-correlational research design to determine the multiple-

intelligence profiles of Grade 12 senior high school learners at Speaker Eugenio Perez National Agricultural School (SEPNAS), San Carlos City, Pangasinan, during School Year 2020–2021. The descriptive component was used to describe the respondents' demographic and educational characteristics and to determine the extent of manifestation of eight domains of multiple intelligences: bodily-kinesthetic, interpersonal, intrapersonal, linguistic, logical-mathematical, musical, visual-spatial, and naturalistic intelligence.

The correlational component was used to examine the relationships between selected respondent characteristics and their multiple-intelligence scores. No variables were manipulated during the study. Instead, the research examined the naturally occurring characteristics and responses of the learners. The design was appropriate because the study sought to describe the learners' multiple-intelligence profiles and determine whether these profiles were associated with selected demographic and educational characteristics.

The findings provided empirical information that served as a basis for strengthening career guidance activities for senior high school learners. The study treated multiple-intelligence information as one source of self-awareness for career exploration rather than as a basis for assigning learners to particular occupations.

Research Locale

The study was conducted at Speaker Eugenio Perez National Agricultural School (SEPNAS) in San Carlos City, Pangasinan, Philippines. The school had a long history of providing academic, agricultural, and technical-vocational education to learners in the area. It occupied approximately 38 hectares, which included instructional facilities and areas used for agricultural and technical-vocational activities.

During the period covered by the study, SEPNAS offered Junior High School and Senior High School programs. Its Senior High School program included the Academic and Technical-Vocational-Livelihood (TVL) tracks. The Academic Track consisted of Accountancy, Business and Management (ABM), Humanities and Social Sciences (HUMSS), and Science, Technology, Engineering, and Mathematics (STEM). The TVL Track included Agricultural Crop Production, Animal Production, Cookery/Food and Beverage Services, Dressmaking, Gas Tungsten Arc Welding (GTAW), Information and Communications Technology–Computer Systems Servicing (ICT-CSS), and Shielded Metal Arc Welding (SMAW).

The school was selected as the research locale because its Senior High School program provided learners with diverse academic and technical-vocational pathways. This setting provided an appropriate context for examining variations in learners' multiple-intelligence profiles and considering how such information could contribute to career guidance.

The study was also situated within the Philippine policy context on career guidance. Republic Act No. 11206, or the Secondary School Career Guidance and Counseling Act, institutionalized career guidance and counseling programs in public and private secondary schools to support learners in making informed decisions concerning subsequent education and career pathways. The policy context provided additional relevance to the identification of learners' individual strengths and characteristics as sources of information for career guidance.

Population and Sampling

The respondents consisted of all Grade 12 senior high school learners enrolled at SEPNAS during School Year 2020–2021. The total population comprised 884 learners, consisting of 433 learners from the Academic Track and 451 learners from the TVL Track.

Total enumeration was employed because the study intended to describe the multiple-intelligence profiles of the entire Grade 12 population of the school. All eligible Grade 12 learners were therefore included in the study rather than selecting a sample from the population.

The Academic Track included learners enrolled in ABM, HUMSS, and STEM, while the TVL Track included learners enrolled in Agricultural Crop Production, Animal Production, Cookery/Food and Beverage Services, Dressmaking, GTAW, ICT-CSS, and SMAW. The population figures were obtained from the official school registry of Senior High School learners.

Research Instrument

The study used a structured questionnaire consisting of two parts. The first part gathered information about the respondents' profile, including age, sex, track and strand, and family monthly income. Age was categorized as 15–16, 17–18, 19–20, and 21 years and above. Sex was classified as male or female. Track and strand were identified according to the respondents' actual Senior High School enrollment. Family monthly income was classified according to the income categories specified in the research instrument.

The second part measured the respondents' multiple-intelligence profiles using the Multiple Intelligences Quiz identified in the original study as an ITC-published instrument. The instrument covered eight domains consistent with Gardner's multiple-intelligences framework: bodily-kinesthetic, interpersonal, intrapersonal, linguistic, logical-mathematical, musical, visual-spatial, and naturalistic intelligence.

The instrument used a five-point response scale ranging from 1 (Never) to 5 (Always). The responses were scored and summarized according to the eight intelligence domains. Higher mean scores indicated a greater self-reported manifestation of characteristics associated with the corresponding intelligence domain.

For the study, the instrument was used as a measure of learners' self-reported multiple-intelligence characteristics and was not treated as a diagnostic test of general cognitive ability. The final instrument information was documented in accordance with the available source of the questionnaire and its intended use.

Validity and Reliability

The study considered validity and reliability as separate properties of the research instrument. The questionnaire was based on an established multiple-intelligences instrument and was reviewed for its appropriateness to the respondents and the objectives of the study. Any contextual modifications made to the instrument were examined to ensure that the items remained consistent with the intended constructs and the characteristics of the target learners.

Reliability was considered in terms of the consistency of the responses generated by the instrument. Where reliability testing was conducted, the appropriate reliability coefficient was used to establish the internal consistency of the questionnaire. The instrument was administered only after it had been determined to be sufficiently appropriate for use with the target respondents.

Data Collection Procedure

Before the data were collected, permission to conduct the study was secured from the appropriate school authorities. The researcher coordinated with the school administration and concerned personnel regarding the purpose of the study, the identification of respondents, and the schedule and procedures for questionnaire administration.

The respondents were informed about the purpose of the study and were provided with clear instructions on how to accomplish the questionnaire. Participation was voluntary, and the respondents were informed that their responses would be treated confidentially and used exclusively for research purposes.

The questionnaires were administered to the Grade 12 learners during the designated data-collection period. After completion, the questionnaires were retrieved and examined for completeness. The responses were subsequently coded, organized, and tabulated for statistical analysis.

Appropriate ethical safeguards were observed throughout the data-collection process. Since the respondents were senior high school learners, the applicable requirements concerning informed consent, learner assent, confidentiality, and voluntary participation were observed.

Statistical Treatment of Data

The collected data were analyzed using descriptive and inferential statistical procedures consistent with the research questions and the level of measurement of the variables.

Frequency and percentage were used to describe the respondents according to age, sex, track and strand, and family monthly income. These descriptive measures provided a summary of the distribution of the respondents across the identified profile categories.

Weighted mean was used to determine the extent of manifestation of each of the eight multiple-intelligence domains. The resulting mean scores were interpreted using the five-point scale established in the research instrument, ranging from Never to Always. The corresponding descriptive interpretations ranged from very low to very high extent.

For the examination of relationships, Spearman's rank-order correlation coefficient was used for profile variables that were appropriately treated as ordinal or ranked measures. The test determined the direction and strength of the association between the relevant profile variables and the respondents' multiple-intelligence scores.

For categorical variables in which the research questions concerned differences between groups rather than relationships, appropriate nonparametric procedures were used. The Mann–Whitney U test was appropriate for comparisons involving two independent groups, while the Kruskal–Wallis H test was appropriate when comparisons involved more than two independent groups. The specific test used was determined according to the nature and measurement level of each variable included in the research questions.

All inferential tests were evaluated at the 0.05 level of significance. A probability value below 0.05 was interpreted as statistically significant, while a probability value of 0.05 or higher was interpreted as not statistically significant.

The statistical findings were used to describe the multiple-intelligence profiles of the Grade 12 learners and to determine relevant associations or differences that could inform the development of a contextualized career guidance program. The findings were interpreted as evidence concerning patterns in the respondents' self-reported characteristics and were not used to prescribe specific occupations or career choices for individual learners.

RESULTS AND DISCUSSION

Profile of the Grade 12 Learners

Most of the Grade 12 learners were 17–18 years old, comprising 566 (78.2%) of the respondents, while only 29 (4.0%) were aged 21 years old and above. In terms of sex, more than half of the learners were male, with 392 (54.1%), while 332 (45.9%) were female. With regard to track, the majority of the learners were enrolled in the Technical-Vocational-Livelihood (TVL) track, with 390 (53.9%), while 334 (46.1%) were enrolled in the Academic track. In terms of strand, the largest proportion of learners was enrolled in HUMSS, with 157 (21.7%), while the smallest group was enrolled in Dressmaking, with 19 (2.6%). Regarding monthly family income, most of the learners came from families earning below Php 10,000.00 per month, comprising 423 (58.4%) of the respondents, whereas only 55 (7.6%) reported a monthly family income of Php 20,001.00 and above.

Level of Multiple Intelligences of Grade 12 Learners

The findings showed that most of the Grade 12 learners sometimes enjoyed keeping a written journal and/or writing stories and articles (WM = 3.0) and liked to read a lot (WM = 3.0). In contrast, they seldom enjoyed participating in debates and/or discussions (WM = 2.6). Overall, the learners somewhat demonstrated the characteristics associated with verbal/linguistic intelligence, as indicated by an average weighted mean of 2.9.

For visual/spatial intelligence, most of the Grade 12 learners sometimes demonstrated observant behavior (WM = 3.3), often noticed things that others missed (WM = 3.3), and anticipated the moves and consequences in a game plan (WM = 3.3). However, they seldom enjoyed solving jigsaw puzzles, mazes, and other visual puzzles (WM = 2.6). Overall, the learners sometimes demonstrated characteristics associated with visual/spatial intelligence, with an average weighted mean of 3.0.

In terms of musical intelligence, most of the learners sometimes demonstrated the ability to hear an off-key note (WM = 3.2). They also sometimes played music in their minds and experienced changes in mood when listening to music, picked out different instruments when listening to a piece of music, and found it easy to engage in musical activities, with each of these indicators obtaining a weighted mean of 3.1. Overall, the Grade 12 learners sometimes demonstrated musical intelligence, with an average weighted mean of 3.2.

With regard to logical/mathematical intelligence, most of the Grade 12 learners sometimes worked best in an organized work area (WM = 3.4), enjoyed mathematics and using numbers (WM = 3.0), kept a “things to do” list (WM = 3.0), and did things one step at a time (WM = 3.0). Overall, the learners somewhat demonstrated logical/mathematical intelligence, with an average weighted mean of 3.1.

For interpersonal intelligence, the majority of the Grade 12 learners often enjoyed sharing their ideas and feelings with others (WM = 3.6). They sometimes preferred group activities rather than activities they performed alone (WM = 2.7) and enjoyed team sports rather than individual sports. Overall, the learners sometimes demonstrated characteristics associated with interpersonal intelligence, with an average weighted mean of 3.1.

In terms of intrapersonal intelligence, most of the learners often reported having strong opinions about controversial issues (WM = 3.6), while they sometimes reported that they were not easily influenced by other people (WM = 2.9). Overall, the Grade 12 learners sometimes demonstrated the attributes associated with intrapersonal intelligence.

Regarding naturalistic intelligence, most of the learners often expressed an interest in leaving school and working with plants and animals. They sometimes noticed similarities and differences among trees, flowers, and other elements of nature (WM = 3.0) and felt strongly about protecting the environment (WM = 3.0). Overall, the learners sometimes demonstrated naturalistic intelligence, with an average weighted mean of 3.2.

For bodily/kinesthetic intelligence, most of the Grade 12 learners often preferred being physically involved rather than sitting and watching (WM = 3.7) and understood concepts best through doing, such as touching, moving, and interacting (WM = 3.6). They sometimes enjoyed participating in active sports (WM = 2.8). Overall, the learners sometimes demonstrated bodily/kinesthetic intelligence, with an average weighted mean of 3.2.

Relationship Between Profile and Level of Multiple Intelligences

The analysis examined the relationships between the learners' profile characteristics and the eight domains of multiple intelligences: verbal/linguistic, visual/spatial, musical, logical/mathematical, interpersonal, intrapersonal, naturalistic, and bodily/kinesthetic intelligence. The profile variables considered were age, sex, track, strand, and monthly family income. The findings showed that several profile characteristics were significantly associated with selected indicators of multiple intelligences. However, the magnitude of the

observed relationships was generally small, indicating that statistical significance did not necessarily correspond to a strong association.

Verbal/Linguistic Intelligence

The findings showed several significant relationships between learner profile characteristics and verbal/linguistic intelligence. Age was positively associated with the ability to use different words to express oneself ($\rho = .12, p < .001$), enjoyment of crossword and other word games such as Scrabble ($\rho = .11, p < .001$), remembering things exactly as they were said ($\rho = .10, p < .001$), participation in debates and discussions ($\rho = .09, p < .001$), ease in explaining things to others ($\rho = .11, p < .001$), enjoyment of keeping a written journal or writing stories and articles ($\rho = .10, p < .001$), and liking to read ($\rho = .12, p < .001$). These findings suggest that older learners tended to report slightly stronger verbal and language-related characteristics across several indicators. Nevertheless, the relatively small coefficients indicate that age accounted for only a modest proportion of the variation in these characteristics.

Sex was positively associated with the ability to use different words to express oneself ($\rho = .08, p = .018$), ease in explaining things to others ($\rho = .14, p < .001$), enjoyment of keeping a written journal or writing stories and articles ($\rho = .11, p = .001$), and liking to read ($\rho = .15, p < .001$). Conversely, sex was negatively associated with feeling comfortable working with language and words ($\rho = -.07, p = .042$) and participation in debates and discussions ($\rho = -.09, p = .005$). The coefficients indicate weak relationships, suggesting that although differences associated with sex were statistically detectable, they were not large.

Track was positively associated with using different words to express oneself ($\rho = .08, p = .014$), enjoying crossword and other word games ($\rho = .13, p < .001$), explaining things to others ($\rho = .14, p < .001$), keeping a written journal or writing stories and articles ($\rho = .11, p = .001$), and liking to read ($\rho = .13, p < .001$). A negative relationship was observed between track and participation in debates and discussions ($\rho = -.10, p < .001$). Strand likewise showed positive relationships with using different words to express oneself ($\rho = .10, p = .001$), explaining things to others ($\rho = .13, p < .001$), keeping a written journal or writing stories and articles ($\rho = .12, p < .001$), and liking to read ($\rho = .14, p < .001$). Negative relationships were observed for feeling comfortable working with language and words ($\rho = -.07, p = .032$) and participation in debates and discussions ($\rho = -.08, p < .001$).

Monthly family income was positively associated with using different words to express oneself, enjoying crossword and other word games, explaining things to others, keeping a written journal or writing stories and articles, and liking to read, with coefficients ranging approximately from $\rho = .09$ to $.14$ and all corresponding p -values below $.001$. A negative association was observed between family income and participation in debates and discussions ($\rho = -.09, p < .001$). Taken together, the results indicate that several learner characteristics were related to specific manifestations of verbal/linguistic intelligence, although the relationships were generally weak.

Visual/Spatial Intelligence

Several significant relationships were also observed for visual/spatial intelligence. Age was positively associated with understanding color combinations ($\rho = .11, p < .001$), enjoying jigsaw puzzles and mazes ($\rho = .10, p < .001$), reading charts and maps ($\rho = .12, p < .001$), being observant ($\rho = .11, p < .001$), noticing things that others missed ($\rho = .10, p < .001$), anticipating moves and consequences in a game plan ($\rho = .09, p < .001$), and picturing scenes mentally when remembering things ($\rho = .11, p < .001$).

Sex was positively associated with understanding color combinations ($\rho = .10, p < .001$) and noticing things that others missed ($\rho = .12, p < .001$). Negative relationships were observed with solving jigsaw puzzles and mazes ($\rho = -.08, p < .001$), anticipating moves and consequences in a game plan ($\rho = -.07, p = .002$), and picturing scenes mentally when remembering things ($\rho = -.07, p = .032$). These findings indicate that the direction of the relationship differed according to the particular visual/spatial characteristic being considered.

Track showed positive relationships with understanding color combinations and noticing things that others missed, while negative relationships were observed for solving visual puzzles, watching scenes and activities in movies, anticipating moves and consequences in a game plan, and picturing scenes mentally when remembering things. Strand was positively associated with understanding color combinations, solving jigsaw puzzles and mazes, and noticing things that others missed, while a negative relationship was observed with watching scenes and activities in movies.

Monthly family income was positively associated with understanding color combinations ($\rho = .10, p < .001$), solving jigsaw puzzles and mazes ($\rho = .11, p < .001$), reading charts and maps ($\rho = .07, p = .035$), noticing things that others missed ($\rho = .12, p < .001$), and anticipating moves and consequences in a game plan ($\rho = .07, p = .037$). A negative relationship was observed between income and watching scenes and activities in movies. Overall, the findings suggest that profile characteristics were associated with selected visual/spatial behaviors, but the relatively small coefficients indicate limited strength of association.

Musical Intelligence

The analysis also revealed relationships between learner profile characteristics and musical intelligence. Age was positively associated with the ability to hear an off-key note ($\rho = .10, p < .001$). Conversely, age was negatively associated with following the beat of music ($\rho = -.09, p < .001$), picking out different instruments when listening to a piece of music ($\rho = -.08, p = .012$), and keeping time when music was playing ($\rho = -.09, p < .001$).

Sex was positively associated with hearing an off-key note ($\rho = .10, p < .001$), while negative relationships were observed with playing music in the mind, experiencing changes in mood when listening to music, following the beat, identifying different instruments, and keeping time. Track and strand displayed similar patterns, with several negative relationships involving musical engagement and performance-related indicators. Monthly family income was positively associated with hearing an off-key note but negatively associated with several other musical characteristics, including playing music in the mind, following the beat, identifying instruments, keeping time, engaging in musical activities, and remembering pieces of music.

The pattern indicates that the relationships involving musical intelligence were not uniformly positive. This is important because the findings do not support a simple interpretation that a particular profile characteristic is generally associated with higher or lower musical intelligence. Rather, associations differed according to the specific musical behavior measured.

Logical/Mathematical Intelligence

For logical/mathematical intelligence, age was positively associated with enjoying mathematics and using numbers ($\rho = .10, p < .001$), working best with a day planner or timetable ($\rho = .12, p < .001$), and quickly grasping cause-and-effect relationships ($\rho = .07, p = .020$). Negative relationships were observed with working best in an organized work area ($\rho = -.07, p = .005$), enjoying brainteasers and logic puzzles ($\rho = -.07, p = .047$), and doing things one step at a time ($\rho = -.09, p < .001$).

Sex was positively associated with working best with a day planner or timetable ($\rho = .11, p < .001$), while negative relationships were observed with working in an organized work area, enjoying mathematics and using numbers, keeping a "things to do" list, grasping cause-and-effect relationships, and doing things one step at a time. Track and strand were positively associated with working best with a day planner or timetable but negatively associated with several organizational and sequential-work indicators. Monthly family income was positively associated with working best with a day planner or timetable and negatively associated with working in an organized work area, keeping a "things to do" list, enjoying brainteasers and logic puzzles, asking "why" questions, and doing things one step at a time.

Although several relationships reached statistical significance, the coefficients were generally small. Thus,

the findings should be interpreted as evidence of association rather than evidence that learner profile characteristics strongly determine logical/mathematical intelligence.

Interpersonal Intelligence

For interpersonal intelligence, age was positively associated with sensing the moods and feelings of others ($\rho = .07, p = .036$), sorting out arguments between friends ($\rho = .12, p < .001$), and preferring group activities rather than individual activities ($\rho = .07, p = .036$). Negative relationships were observed with working best when interacting with people ($\rho = -.09, p < .001$), enjoying team sports rather than individual sports ($\rho = -.09, p = .007$), and enjoying social events such as parties ($\rho = -.10, p < .001$).

Sex was positively associated with enjoying team sports rather than individual sports, whereas negative relationships were observed with working best when interacting with people and enjoying social events. Track was positively associated with enjoying team sports, learning about different cultures, and sharing ideas and feelings with others, but negatively associated with working best when interacting with people, sorting out arguments between friends, and preferring group activities. Strand showed a positive relationship with sensing the moods and feelings of others and negative relationships with working best when interacting with people and enjoying social events. Monthly family income was positively associated with sensing the moods and feelings of others and sorting out arguments between friends, while negative relationships were observed with working best when interacting with people and enjoying social events.

The mixed directions of the associations suggest that interpersonal intelligence is multidimensional. A learner may report strength in recognizing emotions or resolving disagreements without necessarily preferring group activities or social events. Therefore, individual indicators should not be treated as interchangeable measures of interpersonal intelligence.

Intrapersonal Intelligence

For intrapersonal intelligence, age was positively associated with having strong opinions about controversial issues ($\rho = .12, p < .001$) and not being easily influenced by other people ($\rho = .11, p < .001$). Negative relationships were observed with knowing oneself well, having a few close friends, raising questions concerning values and beliefs, and enjoying working independently.

Sex was positively associated with knowing oneself well, having strong opinions about controversial issues, and enjoying working independently. Conversely, negative relationships were observed with not being easily influenced by others and having a good understanding of one's feelings and reactions to situations. Track was positively associated with knowing oneself well and having strong opinions about controversial issues, while a negative relationship was observed with understanding one's feelings and reactions to situations.

Strand was positively associated with having strong opinions about controversial issues and working best when activities were self-paced. Negative relationships were observed with having a few close friends, understanding one's feelings and reactions, and raising questions concerning values and beliefs. Monthly family income was positively associated with having strong opinions about controversial issues, working best when activities were self-paced, and not being easily influenced by others, while negative relationships were observed with knowing oneself well, having a few close friends, understanding one's feelings and reactions, and raising questions concerning values and beliefs.

The findings again demonstrate that statistical relationships varied considerably among individual indicators. Consequently, intrapersonal intelligence should not be interpreted as a single uniform characteristic based on any one indicator.

Naturalistic Intelligence

For naturalistic intelligence, age was positively associated with feeling strongly about protecting the

environment ($\rho = .10, p < .001$) and enjoying nature programs on television ($\rho = .09, p = .001$). Negative relationships were observed with planting and caring for a garden, enjoying fishing, bushwalking, bird-watching, and hoping to work with plants and animals after leaving school.

Sex was positively associated with being affected by pollution ($\rho = .08, p = .020$), noticing similarities and differences in trees and flowers ($\rho = .12, p < .001$), feeling strongly about protecting the environment ($\rho = .09, p = .005$), and participating in clean-up activities ($\rho = .12, p < .001$). Negative relationships were observed with fishing, bushwalking, bird-watching, and hoping to work with plants and animals.

Track and strand demonstrated similar patterns. Both were positively associated with selected environmental-awareness indicators and negatively associated with several outdoor activities. Monthly family income was positively associated with being affected by pollution, protecting the environment, watching nature programs, and participating in clean-up activities, while negative relationships were observed with fishing, bushwalking, bird-watching, and hoping to work with plants and animals.

These findings suggest that awareness and concern for environmental issues may not necessarily correspond to participation in outdoor or nature-based activities. The distinction is important because naturalistic intelligence encompasses more than one type of learner behavior.

Bodily/Kinesthetic Intelligence

Age was positively associated with moving, tapping, or fidgeting while sitting ($\rho = .07, p < .001$), enjoying active sports ($\rho = .07, p = .032$), being curious about how things feel and examining the texture of objects ($\rho = .08, p = .009$), and thinking through problems while walking or running ($\rho = .10, p < .001$). Negative relationships were observed with preferring physical involvement rather than sitting and watching ($\rho = -.08, p = .008$) and understanding best through doing, such as touching, moving, and interacting ($\rho = -.09, p < .001$).

Sex was positively associated with moving, tapping, or fidgeting while sitting, enjoying active sports, being curious about how things feel and examining textures, and being well coordinated. Negative relationships were observed with liking to work with one's hands and preferring physical involvement rather than sitting and watching.

Track was positively associated with moving, tapping, or fidgeting while sitting, enjoying active sports, and being well coordinated, while a negative relationship was observed with preferring physical involvement rather than sitting and watching. Strand was positively associated with moving, tapping, or fidgeting while sitting, enjoying active sports, and thinking through problems while walking or running, while a negative relationship was observed with preferring physical involvement rather than sitting and watching.

Monthly family income was positively associated with moving, tapping, or fidgeting while sitting and thinking through problems while walking or running. Negative relationships were observed with working with one's hands, preferring physical involvement, understanding best through doing, and thinking through problems while walking or running. As in the other domains, the coefficients indicate relatively weak relationships despite several statistically significant findings.

Taken together, the findings indicate that learner profile characteristics were associated with selected indicators across all eight domains of multiple intelligences. However, the pattern was neither uniform nor consistently strong. Some characteristics showed positive relationships with particular indicators, while the same profile variable could demonstrate a negative relationship with another indicator within the same intelligence domain.

One of the most important findings was the difference between statistical significance and the magnitude of association. Several relationships achieved statistical significance, including relationships with p-values below .05 and others below .001. However, the corresponding coefficients were generally small. This means that the statistically significant findings should not be interpreted as evidence that age, sex, track, strand, or

family income strongly determines a learner's level of multiple intelligence. Rather, the findings indicate that these characteristics were related to particular learner behaviors or preferences within the measured domains.

The findings concerning age were particularly notable. Older learners tended to demonstrate positive relationships with several verbal/linguistic characteristics and selected visual/spatial, logical/mathematical, interpersonal, intrapersonal, naturalistic, and bodily/kinesthetic indicators. At the same time, age was negatively associated with some specific behaviors. This mixed pattern suggests that developmental differences may be reflected differently across individual manifestations of intelligence rather than through a simple increase in overall intelligence with age.

The results involving sex, track, and strand likewise showed both positive and negative associations. This finding cautions against interpreting demographic or academic classifications as direct determinants of multiple intelligences. Learners within the same track or strand may still possess varied combinations of strengths, preferences, and ways of learning. The observed relationships therefore provide evidence of patterns within the present sample rather than a basis for assigning fixed intelligence profiles to particular groups.

Family income also showed several statistically significant associations, particularly in verbal/linguistic, visual/spatial, naturalistic, and bodily/kinesthetic indicators. Nevertheless, the relatively small coefficients suggest that socioeconomic circumstances represent only one of many factors potentially associated with learner characteristics. The findings should therefore not be interpreted as demonstrating that family income directly produces a particular intelligence profile.

The mixed findings across individual indicators also reinforce the importance of examining multiple intelligences as multidimensional. For example, naturalistic intelligence included environmental awareness, appreciation of nature programs, outdoor activities, and interest in working with plants and animals. These behaviors do not necessarily develop together at the same level. Similarly, interpersonal intelligence involved recognizing emotions, resolving disagreements, participating in groups, sports preferences, and social activities. A learner may demonstrate strength in one aspect while showing a different pattern in another.

From an educational perspective, the results support the use of learner profiles as a source of information for differentiated and responsive instruction rather than as a mechanism for labeling learners. Teachers may consider learners' demonstrated preferences and strengths when designing activities, but these characteristics should remain flexible and should not be treated as fixed categories. The relatively small associations observed in the present study further suggest that instructional decisions should consider multiple sources of learner information, including classroom performance, interests, learning experiences, and contextual factors.

The findings also have implications for the interpretation of multiple-intelligence assessment instruments. Because the study involved numerous item-level associations, statistically significant findings may occur by chance even when the actual relationships are weak. Consequently, the coefficients, confidence intervals, and adjusted significance levels should be considered together. The present findings therefore provide a more cautious interpretation of the relationship between learner profile and multiple intelligences than would be possible from p-values alone.

CONCLUSIONS

Based on the findings, it was concluded that the Grade 12 learners were predominantly 17–18 years old, male, enrolled in the Technical-Vocational-Livelihood (TVL) track, and belonged to families with a monthly income below Php 10,000.00, with HUMSS comprising the largest proportion among the identified strands. The learners demonstrated characteristics across all eight domains of multiple intelligences—verbal/linguistic, visual/spatial, musical, logical/mathematical, interpersonal, intrapersonal, naturalistic, and

bodily/kinesthetic—reflecting diverse patterns of abilities and preferences. The analysis further showed that age, sex, track, strand, and monthly family income were significantly associated with selected indicators of multiple intelligences, with both positive and negative relationships observed across the different domains. However, the generally small correlation coefficients indicated that these associations were weak in magnitude, suggesting that learner profile characteristics were related to particular manifestations of multiple intelligence but did not strongly determine or predict learners' overall intelligence patterns.

RECOMMENDATIONS

School administrators may provide appropriate learning materials, information, and professional development opportunities concerning multiple intelligences for both learners and teachers. These initiatives may strengthen awareness of learners' diverse abilities, skills, talents, and learning characteristics and may support the development of learning experiences that recognize individual differences. Class advisers and teachers may design and integrate varied classroom activities that address different forms of intelligence. Learning experiences may include opportunities for verbal expression, visual activities, musical activities, problem-solving tasks, collaborative work, individual reflection, nature-related activities, and hands-on or movement-based activities. Such approaches may provide learners with opportunities to discover their strengths and identify areas that may require further development. Future researchers may conduct qualitative studies using individual interviews or focus group discussions to obtain a more in-depth understanding of learners' multiple intelligences and to further explain the quantitative findings of the present study. Such qualitative investigations may provide richer descriptions of how learners perceive, develop, and apply their different forms of intelligence in academic, social, and career-related contexts.

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