

Research Article

Teachers' Application of Multiple Intelligences Approach in Teaching Economics

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The use of Gardner's multiple intelligences (MI) theory is touted as one of the ideal ways of teaching students with diverse intelligences. However, there appears to be paucity of research in this area of knowledge. This study, therefore, explored the application of multiple intelligences approach in the teaching of Economics. The study was a quantitative research that adopted the descriptive cross-sectional survey design. In total, 100 senior high school teachers were selected for the study. Data were collected by the use of a 5-point Likert scale questionnaire, ranging from "never" to "very frequently." Descriptive (mean and standard deviation) and inferential statistics (MANOVA) were used to analyse the data. The study revealed that Economics teachers frequently used interpersonal intelligences in teaching Economics. Additionally, it was found out that there was a statistically significant difference in the application of bodily-kinesthetic intelligence approach in the teaching of Economics based on Economics teachers' teaching experience. However, the findings of the study showed no statistically significant difference in the Economics teachers' application of MI approach in the teaching of Economics based on their gender. It was, thus, recommended that Ghana Education Service, Ministry of Education, and Non-Governmental Organisations should organise seminars and conferences for teachers to deepen their understanding of the application of the MI approach in the teaching of Economics. In addition, heads of senior high schools should organise professional development programmes and conferences to enable teachers acquire information on the following domains of MI: logical-mathematical, spatial, bodily-kinesthetic, musical, and naturalistic intelligences.

1. Introduction

Intelligence is an individual's ability to acquire and apply knowledge and skills. It is plural rather than singular. Multiple intelligences (MI) theory views humans' intelligence to be multidimensional rather than seeing intelligence as dominated by a single ability [1]). Proponents of this theory believe that single measure of intelligence, such as the Intelligent Quotient (IQ), is too narrow to account for the variety of ways people learn [2]. MI offer innovative ways individuals can exhibit the intellectual capabilities they possess [3]. Chesebro [4] asserts that MI theory suggests that students learn in different ways based on their distinct blend of intelligences. MI theory introduces the best way to teach students in different teaching and learning environments.

MI theory deserves to be applied in teaching Economics because it has important implications for teaching and learning. The uniqueness of students will, therefore, require such intelligence on the part of teachers. Students do not learn in the same way and because teachers have their multiple intelligence mix, they use a distinct teaching strategy or style [4]. The modern classroom environment presents students with different ages and a wide diversity of intelligences; hence, teachers should learn how to use a variety of intelligences to engage students in the teaching and learning process [4].

Gardner [5] proposes seven intelligences that mirror the diverse ways individuals can be intelligent. Gardner posits that every person appears to possess these intelligences to a greater or lesser degree. The intelligences are linguistic,

logical-mathematical, spatial, bodily-kinesthetic, musical, interpersonal, and intrapersonal. In 1999, Gardner included two additional intelligences: naturalistic and existential [6, 7]. Some researchers argue that apart from the nine intelligences, spiritual intelligence can also be added as a tenth intelligence [8, 9]. Gardner's MI theory broadens the scope of intelligence as more than just linguistic and logical-mathematical capabilities [10]. In this study, the researchers focused on these eight intelligences: linguistic, logical-mathematical, spatial, bodily-kinesthetic, musical, interpersonal, intrapersonal, and naturalistic intelligences. The other two intelligences were ignored because the instrument adapted for this study did not include these two intelligences: existential and spiritual intelligences. Al-Wadi [11] recommended that in the study of multiple intelligences in the classroom setting, researchers should not focus on existential and spiritual intelligences since it appears there is no empirical evidence to validate the application of these intelligences in the classroom.

The ability to create, using spoken or written language, is referred to as linguistic intelligence. People who have a high level of verbal-linguistic intelligence are good at reading, writing, and telling stories [12]). Storytelling, brainstorming, tape recording, journal writing, and publishing are examples of linguistic intelligence teaching strategies [13].

The ability to deal with a set of reasons and to recognise patterns and rules is referred to as logical-mathematical intelligence. This intelligence is defined as the ability to investigate patterns, categories, and relationships by manipulating objects or symbols in a controlled and orderly manner [9].

Musical intelligence is defined as the ability and sensitivity to deal with sounds, rhythms, tones, and music, as well as the ability to appreciate, distinguish, compose, and perform different musical forms [14]. It is the ability to think in terms of music, to recognise and possibly manipulate patterns [15, 16]).

Bodily-kinesthetic intelligence is the ability to use the entire body to express ideas and feelings, and to use the hands to create or transform things. Coordination, balance, agility, strength, flexibility, and density are examples of specific skills included in this intelligence [17].

Spatial intelligence, also known as image intelligence, is defined as the ability to visualise the visual-spatial world accurately and to transform visual-spatial perceptions into various forms [18]. The ability to think about visualisation and to draw three-dimensional shapes is known as visual-spatial thinking.

Interpersonal intelligence is defined as the ability to perceive and distinguish the moods, intentions, motivations, and desires of others, as well as the ability to respond appropriately to people's moods, temperaments, motivations, and desires [19].

Intrapersonal intelligence is the ability to recognise and act on one's feelings. Strength and self-limitation are core components of intrapersonal intelligence. The other elements are accurate self-understanding: mood, purpose, motivation, and temperament; desire intelligence: self-discipline, understanding, and self-respect [20]. Naturalistic

intelligence is considered the ability to recognise and categorise species in the environment, both flora and fauna, as well as the ability to cultivate, utilise, and preserve nature [21].

Over the years, studies [13, 22–24] have been conducted about the use of multiple intelligences at the elementary, senior high school, and university levels of education. For instance, Shore [24] examined the use of multiple intelligences in the university classroom. The findings of the study showed that the majority of the teachers in the study used logical-mathematical, linguistic, and interpersonal intelligences more than other intelligences. Luo and Huang [3] studied the linkage between English teachers' multiple intelligences and teaching strategies. The study revealed that teachers use linguistic, interpersonal, and intrapersonal teaching strategies frequently in teaching English language. In California, Al-Wadi [11] investigated teachers' perceptions about the use of multiple intelligences in teaching. The findings showed that teachers use linguistic intelligence frequently but musical and naturalistic were the least used intelligence.

Davis [25] posits that teachers usually use spatial, logical-mathematical, and linguistic intelligences to teach students how to draw, think, and write. In Turkey, Saban and Bal [26] studied teaching strategies used in teaching mathematics by focusing on multiple intelligence theory. In their study, it was found that teachers regularly use linguistic, logical-mathematical, interpersonal, and naturalistic intelligences. Moreover, Sulaiman et al. [27] examined teaching styles in primary and secondary school teachers based on the theory of multiple intelligences. The findings of their study revealed that teachers use spatial, naturalistic, logical-mathematical, interpersonal, and musical intelligence in teaching.

On their part, Sener and Cokcaliskan [28] found that naturalistic, visual, and kinesthetic intelligences of students received the highest score. Also, the study discovered that there was a significant difference in linguistic intelligence based on gender. In a quantitative study, Lopez and Patron [29] investigated the various intelligences students employ in their Business Statistics courses. The findings showed that students were higher in interpersonal intelligence and lower in linguistic and spatial intelligences. There was no significant difference in the multiple intelligences between male and female students. Similarly, Menevis and Ozad [30] explored the difference in multiple intelligences based on age and gender. This study revealed that there were statistically significant differences in the use of linguistic, bodily-kinesthetic, existential, musical, interpersonal, intrapersonal, and naturalistic intelligences based on gender. Additionally, Lawrence [31] investigated prospective teachers' multiple intelligences and found that male and female prospective teachers demonstrated significantly different verbal-linguistic intelligence. Furthermore, it was discovered that first-year and second-year prospective teachers exhibited significantly different musical intelligences.

In Malaysia, Sulaiman et al. [32] examined multiple intelligence-based teaching strategies among Science and Mathematics secondary school teachers. Their study discovered that intrapersonal and logical-mathematical intelligences

were the most commonly used teaching strategies employed by teachers. Their study focused on Science and Mathematics teachers but did not look at the differences in the multiple intelligences teaching strategies between male and female teachers. In a different study, Hajhashemi et al. [33] investigated multiple intelligences in relation to online video experiences, age, gender, and mode of learning from a rural Australian university. The study showed that there were statistically significant differences in logical-mathematical and intrapersonal intelligences based on gender. These findings suggest that gender of teachers can influence the use of multiple intelligences in teaching; hence, this study sought to find out whether there is statistically significant difference in the Economics teachers' use of multiple intelligences approach in teaching Economics based on gender.

In a different context, Massey [34] examined the impact of training teachers in multiple intelligences instructional strategies in Central Florida. The study showed that the teaching experience of the teachers was a major determinant in teachers' use of multiple intelligences. Additionally, it was found that neither the ages of the teachers nor the ages of the students proved to be a major factor. Furthermore, Dolati et al. [35] discovered that there was a statistically significant difference among teachers with different years of teaching experience concerning their implementation of logical-mathematical activities. However, there was no significant difference among teachers' linguistic, visual, musical, interpersonal, naturalistic, intrapersonal, and bodily-kinesthetic intelligences and teaching experience. Also, Jouzdani et al. [36] found that multiple intelligences of teachers do not significantly change with years of teaching experience. Furthermore, Afshar and Farahani [37] discovered that there was a difference in teachers' teaching methods based on their teaching experience. Similarly, Unal and Unal [38] observed that teachers employed different teaching methods based on their teaching experience. Saban and Bal [26] discovered that there was a statistically significant difference in teachers' use of multiple intelligences in teaching based on their teaching experience.

The studies reviewed have revealed that the findings on differences in multiple intelligences of teachers are inconclusive. Also, these studies were not directly linked to the application of multiple intelligences approach in the teaching of Economics. Therefore, there is the need to ascertain whether there is any statistically significant difference in the Economics teachers' application of multiple intelligences approach in teaching Economics based on teaching experience. Additionally, Kaewkiriya et al. [39] suggest that as technology progresses, the application of multiple intelligences approach in teaching students in the classroom should keep pace. Hence, there is the need for teachers to apply multiple intelligences approach in their lesson.

1.1. Application of Multiple Intelligences in Economics Classroom. Economics was once thought to be a business subject because it involves a lot of work with numerical data [10]. Economics is primarily concerned with decisions made by individuals, businesses, and governments, as well as the effects of those decisions on the market. It is a subject that

affects everyone, regardless of their mathematical ability. Additionally, Economics is regarded as a social science because it uses scientific methods to build theories that can help explain the behaviour of individuals, groups, and organisations. Therefore, strategies deployed by Economics teachers in the classroom should be able to help students imbibe the key concepts, principles, generalisations, and theories as well as mathematical derivations in Economics. The multidimensional nature of Economics requires that teachers apply different teaching strategies to help students understand the various thematic areas (e.g., choice, scarcity, scale of preference, demand schedule and curve) of the subject. The application of multiple intelligences approach in teaching is important because it helps to meet the diverse needs and interests of students and it also encompasses the various teaching methods (e.g., role play, discussion, simulation). Also, several authors [40–43] have indicated that the use of multiple intelligences approach in teaching positively influences the academic achievement of students. In addition, this approach to teaching is different from other methods because it allows teachers to merge their creativity in their instructional planning where student-centred activities could be conducted in eight different forms based on the eight dimensions of multiple intelligences.

Multiple intelligences theory, according to Armstrong [10], can be applied in the Economics classroom through the use of multiple intelligences teaching strategies. Armstrong further asserts that Economics teachers can deliver lessons in a variety of ways to meet the diverse needs of their students in the classroom. Logical-mathematical intelligence can be used to teach Economics students by involving them in the quantitative analysis aspects of the various topics in Economics. For example, an Economics teacher can assist students to understand the equilibrium market by guiding them to calculate the market-clearing price and quantity.

Furthermore, the Economics teacher can use linguistic intelligence in teaching by guiding students to explain how and why the curves (e.g., shifts in demand and supply) move to the left or right, the difference between a change in demand and a change in quantity demanded, the meaning of economic growth, and so on. As a result, the teacher will be able to involve students whose linguistic intelligence is dominant among the intelligences. Musical intelligence involves creating a jingle to sell a product or commodity in the classroom, or demonstrate ideas, find songs on iTunes that are relevant to employment policy, change the lyrics to a song to outline the main points of supply and demand, create a musical performance that analyses monetary policy.

According to Armstrong [10], in the Economics classroom, spatial intelligence entails graphing information on supply and demand, shifts or changes in market demand, market structures, consumer behaviour, and so on. For example, the Economics teacher could design a poster that shows changes in demand and supply. In terms of bodily-kinesthetic, Armstrong suggested that teachers should use role-playing. For instance, role-playing buying and selling scenarios, and class auction address the issue of bodily-kinesthetic. Additionally, this intelligence involves some hands-on activities that could include students doing a role

play, such as having a class auction, to demonstrate the principle of demand. This activity will arouse the interest of bodily-kinesthetic learners. Likewise, Gardner [5] argues that Economics teachers can employ a variety of multiple intelligences teaching strategies, including music, cooperative learning, art activities, role play, multimedia, field trips, and inner reflection.

Lastly, naturalistic intelligence involves the social aspect of Economics and market decisions. Under this intelligence, the Economics teacher can create a cardboard or poster, using natural items to illustrate an environmental issue, draw a picture that examines the economic issues associated with the goal of ecologically sustainable development, and film an advertisement about the labour unions to explain the benefits of their labour market policies.

Many researchers in education believe that intelligence is solely based on linguistic and logical-mathematical intelligence. On the other hand, Gardner (as cited in [44]) developed a theory in which he conceptualised eight intelligences that should be incorporated into the classroom. Multiple intelligences in contemporary educational contexts and experiences unearth talents and identify individual characteristics [45]. That is to say that multiple intelligences have a philosophical description in which knowledge becomes a diverse and specialised industry of skills, attitudes, and talents. Also, the theory of MI posits that every student has varying levels of intelligence; hence, there is the need for every teacher in the classroom to employ teaching strategies that address these intelligences.

Kwao and Ankomah [46] studied multiple intelligences in primary school classrooms in Ghana. Their study revealed that both teachers and students were able to identify some areas of multiple intelligences in the classroom. Although the assessment procedures of students showed some levels of multiple intelligences in certain subject areas, it was discovered that teachers were unaware of the multiple intelligences technique. Generally, the focus of MI studies has been on teachers' MI rather than the use of MI approach in teaching. It appears there is a dearth of literature on the use of MI in teaching Economics in the senior high schools; hence, there is the need for further studies to augment the literature in this field.

1.2. Purpose of the Study. The main thrust of this study was to explore teachers' application of multiple intelligences approach in teaching senior high school (SHS) Economics in the Kumasi Metropolis. Specifically, the study sought to:

- (1) examine Economics teachers' application of multiple intelligences approach in teaching Economics
- (2) determine whether there is any statistically significant difference in the Economics teachers' application of multiple intelligences approach in teaching Economics based on teaching experience
- (3) ascertain whether there is any statistically significant difference in the Economics teachers' application of multiple intelligences approach in teaching Economics based on gender

1.3. Research Hypotheses. The study was informed by the following hypotheses:

- (1) H_0 : There is no statistically significant difference in the Economics teachers' application of multiple intelligences approach in teaching Economics based on their teaching experience
- (2) H_0 : There is no statistically significant difference in the Economics teachers' use of multiple intelligences approach in teaching Economics based on their gender

2. Research Methods

2.1. Research Design, Population, and Sampling. The descriptive cross-sectional survey design was used for the study. It was employed to explore Economics teachers' application of MI approach in teaching Economics. The choice of this design was influenced by the opinions of Dilman et al. [47] that it is suitable for gathering information and data on respondents' attitudes and perceptions of specific phenomena. Further to this, the design was chosen based on the recommendations of Leedy and Ormrod [48] that it helps the researcher to elicit information about the opinions and attitudes of respondents by surveying a sample of that population. Also, the cross-sectional survey design was used for the study because the study did not manipulate the variables involved in the study but rather examined the situation as it existed on the ground.

The population of the study consisted of all senior high school (SHS) Economics teachers in the Kumasi Metropolis. In total, there are 67 senior high schools in the Kumasi Metropolis (GES, 2019). The Metropolis has a total of 335 Economics teachers [49]. The sample for this study was, therefore, drawn from 20 of the 67 senior high schools in the Metropolis, using the simple random sampling technique. The 20 selected schools have 115 Economics teachers.

The census method was used by the researchers to include 115 teachers from the 20 schools. This technique was used because each school had a relatively small number of Economics teachers, so there was no need to sample. The choice of the census method was thus informed by the suggestion of Farooq [50] that when the elements in a given population are relatively small, the entire elements could be used rather than sampling them. A large sample provides better judgment than a small sample, provided such large samples are available and accessible [51].

2.2. Data Collection Instrument. The multiple intelligences questionnaire developed by Al-Wadi [11] was adapted and used for the data collection. The original MI instrument had 40 items; however, the researchers added 18 items to it based on the reviewed literature. Linguistic, logical-mathematical, spatial, bodily-kinesthetic, musical, interpersonal, intrapersonal, and naturalistic intelligences were the eight sections of the MI questionnaire and in all, the questionnaire had 58 items. Participants were asked to rate how frequently they practice the said items on a 5-point Likert scale as follows: Never=1, Rarely=2, Sometimes=3, Frequently=4, and Very Frequently=5. The composite reliability as shown

TABLE 1: Reliability for the domains of multiple intelligences.

S/N	Domains of MI	No. of items	Cronbach's α	MacDonald's ω
1	Linguistic intelligence (LI)	7	.763	.766
2	Logical-mathematical intelligence (LMI)	8	.842	.835
3	Spatial intelligence (SI)	11	.858	.849
4	Bodily-kinesthetic intelligence (BKI)	7	.827	.834
5	Musical intelligence (MI)	5	.842	.845
6	Interpersonal intelligence (INI)	9	.901	.901
7	Intrapersonal intelligence (ITI)	8	.836	.839
8	Naturalistic intelligence (NI)	3	.804	.810
	MI questionnaire	58	.951	.951

Source: Fieldwork (2021).

by the Cronbach alpha value for the instrument was .951 (number of items=58); thus, the instrument was deemed reliable and acceptable for gathering useful data for the study [52, 53]. The Cronbach alpha (α) and McDonald omega (ω) for the domains of MI are presented in Table 1.

In Table 1, all the Cronbach alpha and McDonald omega of the domains of MI are greater than .7, which makes the instrument reliable for gathering data for the study [54]. Also, the overall reliability of the instrument was .951 which was above the threshold of .70 suggested that the instrument gathered credible data. Moreover, the content and construct of the questionnaire were well validated by Al-Wadi [11]. However, some of the items were added to the original questionnaire and its content was further validated by a team of experts and professors in the field of Economics education.

2.3. Procedure for Data Collection. The researchers engaged the services of four research assistants for the entire study. They were thoroughly briefed on all aspects of the instrument, as well as the research ethics. Each of these research assistants was assigned to five different schools. The research assistants visited all the schools that were sampled, and administered the multiple intelligences questionnaire. Economics teachers were given 30 to 40 minutes to respond to the items on the MI questionnaire. In all, the research assistants collected 100 completed questionnaires out of the entire 115 questionnaires that were administered to all the teachers within the twenty selected senior high schools. Therefore, the return rate for the questionnaire was 86.96%. After the filled questionnaires were collected, each completed instrument was quickly reviewed for absolute completeness.

2.4. Data Processing and Analysis. The data were screened to identify and eliminate incomplete and void questionnaires. Afterwards, the data were coded and entered into the Statistical Product for Service Solution (SPSS) version 22 for processing. The mean and standard deviation were used to determine Economics teachers' use of MI approach in teaching Economics. The following is the interpretation of the scale mean score:

- (1) 1.00-1.49 = Never
- (2) 1.50-2.49 = Rarely

TABLE 2: Domains of multiple intelligences.

S/N	Multiple intelligences	M	SD
1	Linguistic intelligence (LI)	3.42	1.05
2	Logical-mathematical intelligence (LMI)	3.35	1.02
3	Spatial intelligence (SI)	3.14	1.06
4	Bodily-kinesthetic intelligence (BKI)	2.89	1.11
5	Musical intelligence (MI)	2.31	1.10
6	Interpersonal intelligence (INI)	3.60	.93
7	Intrapersonal intelligence (ITI)	3.46	.95
8	Naturalistic intelligence (NI)	3.08	.96

Scale M: 1.00-1.49 (*Never*); 1.50-2.49 (*Rarely*); 2.50-3.49 (*Sometimes*); 3.50-4.49 (*Frequently*); 4.50-5.00 (*Very Frequently*).Source: Fieldwork (2021).

- (3) 2.50-3.49 = Sometimes
- (4) 3.50-4.49 = Frequently
- (5) 4.50-5.00 = Very Frequently

In terms of the research hypotheses, multivariate analysis of variance (MANOVA) was used to determine whether there was a statistically significant difference in the application of MI approach in teaching Economics based on gender and teaching experience.

3. Results

This section presents the results of the study concerning the research question and hypotheses that were posed to guide the study.

3.1. Research Question One. The research question was meant to investigate Economics teachers' use of MI approach in teaching Economics. Table 2 shows the means and standard deviations for each of the MI domains used in teaching Economics.

In Table 2, the results show that the highest mean value ($M = 3.60$, $SD = .93$) recorded was on interpersonal intelligence and this result means that Economics teachers frequently employ interpersonal intelligence teaching strategies in teaching Economics. Also, Economics teachers confirmed that they use intrapersonal intelligence in teaching Economics ($M = 3.46$, $SD = .95$). In addition, Economics teachers claimed

TABLE 3: Correlation matrix for domains of multiple intelligences.

Domains of MI	LI	LMI	SI	BKI	MI	INI	ITI	NI
LI	1							
LMI	.617**	1						
SI	.651**	.776**	1					
BKI	.364**	.438**	.601**	1				
MI	.294**	.224**	.454**	.651**	1			
INI	.645**	.497**	.450*	.308**	.145**	1		
ITI	.597**	.441**	.469**	.295**	.141**	.809**	1	
NI	.131**	.227**	.350**	.562**	.505**	.320**	.329**	1

Note: LI = linguistic intelligence; LMI = logical-mathematical intelligence; SI = spatial intelligence; BKI = bodily-kinesthetic intelligence; MI = musical intelligence; INI = interpersonal intelligence; ITI = intrapersonal intelligence; NI = naturalistic intelligence. Source: Fieldwork (2021) ** Correlation is significant at .01 level (2-tailed).

TABLE 4: MANOVA results of differences in multiple intelligences based on teaching experience.

Effect		Value	<i>F</i>	Hypothesis df	Error df	Sig.	Partial eta squared (η_p^2)
Teaching experience	Pillai's trace	.698	1.846	40.000	455.000	.002	.140
	Wilks' lambda	.457	1.877	40.000	382.019	.001	.145
	Hotelling's trace	.884	1.886	40.000	427.000	.001	.150
	Roy's largest root	.411	4.672	8.000	91.000	.000	.291

Source: Fieldwork (2021) Significant at .05 level.

that they use linguistic intelligence teaching strategies in teaching Economics ($M = 3.42$, $SD = 1.05$). Furthermore, Economics teachers confirmed that they sometimes use logical-mathematical ($M = 3.35$, $SD = 1.02$), spatial ($M = 3.14$, $SD = 1.06$), naturalistic ($M = 3.08$, $SD = .96$), and bodily-kinesthetic ($M = 2.89$, $SD = 1.11$) intelligence teaching strategies in teaching Economics. However, the lowest mean value ($M = 2.31$, $SD = 1.10$) was recorded on musical intelligence. This result means that Economics teachers rarely use musical intelligence in teaching Economics.

3.2. Research Hypothesis One. The first research hypothesis sought to determine whether there was any statistically significant difference in Economics teachers' application of MI approach in teaching Economics based on their teaching experience. The MANOVA test was carried out after the establishment of the correlation among the domains of MI. MANOVA is wasteful when dependent variables are uncorrelated, which is why correlation was established [55]. Maxwell [56] also stated that the dependent variables should have a correlation of .3 to .7. The correlation results among the dependent variables (linguistic, logical-mathematical, spatial, bodily-kinesthetic, musical, interpersonal, intrapersonal, and naturalistic intelligences) are indicated in Table 3.

Table 3 shows that the correlations among the dependent variables are significant. As a result, MANOVA was used to determine the differences in SHS Economics teachers' application of MI approach based on teaching experience and gender. The MANOVA results are shown in Tables 4, 5, and 6.

The test of homogeneity of variance-covariance matrices based on Box's M test was conducted. The results of the

Box's M test are $M = 82.110$, $F(36, 4130.64) = 1.873$, $p = .001$. This result is statistically significant, which means that the assumption of variance-covariance matrices has not been met. Therefore, Wilk's lambda (Λ_W) test was used to test for statistical significance. Table 4 shows that there is a statistically significant difference in Economics teachers' use of MI approach in teaching Economics based on their teaching experience, $F(40, 382.019) = 1.877$, $p = .001$; $\Lambda_W = .457$, $\eta_p^2 = .145$. This result implies that the application of MI approach in teaching Economics is significantly dependent on Economics teachers' teaching experience. A post hoc analysis was performed to find out where the differences in the Economics teachers' use of MI approach exist. Table 5 presents a summary of the post hoc analysis.

From Table 5, Turkey's HSD post hoc test indicates that there is a statistically significant difference in Economics teachers' application of bodily-kinesthetic intelligence approach between teachers who have taught for 16-20 years, and 26 years and above. Specifically, Economics teachers who have taught for 16-20 years usually apply bodily-kinesthetic intelligence approach as compared to those who have taught for 26 years and above who rarely apply it. Also, it can be observed from Table 5 that there is a statistically significant difference in Economics teachers' use of bodily-kinesthetic intelligence approach between teachers who have taught for 21-25 years and those who have taught for 26 years and above. Precisely, Economics teachers who have taught for 21-25 years sometimes apply bodily-kinesthetic intelligence approach as compared to those who have taught for 26 years and above who rarely apply it. However, the differences in Economics teachers' application of linguistic, logical-mathematical, spatial, musical,

TABLE 5: Multiple comparison.

Dependent variable	(I) Teaching experience	(J) Teaching experience	Mean difference (I-J)	Std. error	Sig.
Linguistic intelligence	0-5 yrs	6-10 yrs	-.0846	.17831	.997
		11-15 yrs	.1663	.25228	.986
		16-20 yrs	.0532	.21285	1.000
		21-25 yrs	-.1849	.28633	.987
		26 yrs and above	.5770	.34447	.552
	6-10 yrs	0-5 yrs	.0846	.17831	.997
		11-15 yrs	.2509	.27961	.946
		16-20 yrs	.1378	.24463	.993
		21-25 yrs	-.1003	.31067	1.000
	11-15 yrs	26 yrs and above	.6617	.36496	.463
		0-5 yrs	-.1663	.25228	.986
		6-10 yrs	-.2509	.27961	.946
		16-20 yrs	-.1131	.30281	.999
		21-25 yrs	-.3512	.35829	.923
	16-20 yrs	26 yrs and above	.4107	.40626	.913
		0-5 yrs	-.0532	.21285	1.000
		6-10 yrs	-.1378	.24463	.993
		11-15 yrs	.1131	.30281	.999
		21-25 yrs	-.2381	.33171	.979
	21-25 yrs	26 yrs and above	.5238	.38303	.746
		0-5 yrs	.1849	.28633	.987
		6-10 yrs	.1003	.31067	1.000
		11-15 yrs	.3512	.35829	.923
		16-20 yrs	.2381	.33171	.979
26 yrs and above	26 yrs and above	.7619	.42824	.484	
	0-5 yrs	-.5770	.34447	.552	
	6-10 yrs	-.6617	.36496	.463	
	11-15 yrs	-.4107	.40626	.913	
	16-20 yrs	-.5238	.38303	.746	
Logical-mathematical intelligence	0-5 yrs	21-25 yrs	-.7619	.42824	.484
		6-10 yrs	-.0654	.18849	.999
		11-15 yrs	.2224	.26669	.960
		16-20 yrs	.1078	.22501	.997
		21-25 yrs	-.8088	.30268	.091
	6-10 yrs	26 yrs and above	.0037	.36414	1.000
		0-5 yrs	.0654	.18849	.999
		11-15 yrs	.2878	.29557	.925
		16-20 yrs	.1732	.25859	.985
	11-15 yrs	21-25 yrs	-.7434	.32841	.219
		26 yrs and above	.0691	.38580	1.000
		0-5 yrs	-.2224	.26669	.960
		6-10 yrs	-.2878	.29557	.925
		16-20 yrs	-.1146	.32010	.999
	16-20 yrs	21-25 yrs	-1.0313	.37875	.080
		26 yrs and above	-.2188	.42946	.996
		0-5 yrs	-.1078	.22501	.997
		6-10 yrs	-.1732	.25859	.985
		11-15 yrs	.1146	.32010	.999

TABLE 5: Continued.

Dependent variable	(I) Teaching experience	(J) Teaching experience	Mean difference (I-J)	Std. error	Sig.
		21-25 yrs	-.9167	.35065	.104
		26 yrs and above	-.1042	.40490	1.000
	21-25 yrs	0-5 yrs	.8088	.30268	.091
		6-10 yrs	.7434	.32841	.219
		11-15 yrs	1.0313	.37875	.080
		16-20 yrs	.9167	.35065	.104
		26 yrs and above	.8125	.45269	.474
	26 yrs and above	0-5 yrs	-.0037	.36414	1.000
		6-10 yrs	-.0691	.38580	1.000
		11-15 yrs	.2188	.42946	.996
		16-20 yrs	.1042	.40490	1.000
		21-25 yrs	-.8125	.45269	.474
		6-10 yrs	.0160	.18513	1.000
	0-5 yrs	11-15 yrs	.2660	.26194	.912
		16-20 yrs	.2206	.22100	.917
		21-25 yrs	-.2870	.29729	.928
		26 yrs and above	.6524	.35766	.456
		0-5 yrs	-.0160	.18513	1.000
	6-10 yrs	11-15 yrs	.2500	.29031	.955
		16-20 yrs	.2045	.25399	.966
		21-25 yrs	-.3030	.32256	.935
		26 yrs and above	.6364	.37893	.549
	11-15 yrs	0-5 yrs	-.2660	.26194	.912
		6-10 yrs	-.2500	.29031	.955
		16-20 yrs	-.0455	.31440	1.000
		21-25 yrs	-.5530	.37200	.674
		26 yrs and above	.3864	.42181	.942
Spatial intelligence	16-20 yrs	0-5 yrs	-.2206	.22100	.917
		6-10 yrs	-.2045	.25399	.966
		11-15 yrs	.0455	.31440	1.000
		21-25 yrs	-.5076	.34440	.682
		26 yrs and above	.4318	.39768	.886
	21-25 yrs	0-5 yrs	.2870	.29729	.928
		6-10 yrs	.3030	.32256	.935
		11-15 yrs	.5530	.37200	.674
		16-20 yrs	.5076	.34440	.682
		26 yrs and above	.9394	.44462	.290
	26 yrs and above	0-5 yrs	-.6524	.35766	.456
		6-10 yrs	-.6364	.37893	.549
		11-15 yrs	-.3864	.42181	.942
		16-20 yrs	-.4318	.39768	.886
		21-25 yrs	-.9394	.44462	.290
		6-10 yrs	-.0425	.19988	1.000
	0-5 yrs	11-15 yrs	.0252	.28280	1.000
Bodily-kinesthetic intelligence		16-20 yrs	-.5581	.23861	.189
		21-25 yrs	-.4510	.32097	.724
		26 yrs and above	.9538	.38615	.144
			26 yrs and above	.9538	.38615

TABLE 5: Continued.

Dependent variable	(I) Teaching experience	(J) Teaching experience	Mean difference (I-J)	Std. error	Sig.
		0-5 yrs	.0425	.19988	1.000
		11-15 yrs	.0677	.31343	1.000
	6-10 yrs	16-20 yrs	-.5157	.27422	.421
		21-25 yrs	-.4085	.34826	.849
		26 yrs and above	.9962	.40911	.155
		0-5 yrs	-.0252	.28280	1.000
		6-10 yrs	-.0677	.31343	1.000
	11-15 yrs	16-20 yrs	-.5833	.33944	.523
		21-25 yrs	-.4762	.40163	.843
		26 yrs and above	.9286	.45541	.329
		0-5 yrs	.5581	.23861	.189
		6-10 yrs	.5157	.27422	.421
	16-20 yrs	11-15 yrs	.5833	.33944	.523
		21-25 yrs	.1071	.37184	1.000
		26 yrs and above	1.5119*	.42936	.008*
		0-5 yrs	.4510	.32097	.724
		6-10 yrs	.4085	.34826	.849
	21-25 yrs	11-15 yrs	.4762	.40163	.843
		16-20 yrs	-.1071	.37184	1.000
		26 yrs and above	1.4048*	.48004	.048*
		0-5 yrs	-.9538	.38615	.144
		6-10 yrs	-.9962	.40911	.155
	26 yrs and above	11-15 yrs	-.9286	.45541	.329
		16-20 yrs	-1.5119*	.42936	.008*
		21-25 yrs	-1.4048*	.48004	.048*
		6-10 yrs	.2590	.22757	.864
		11-15 yrs	.6525	.32197	.335
	0-5 yrs	16-20 yrs	-.1559	.27166	.993
		21-25 yrs	-.1059	.36543	1.000
		26 yrs and above	.9275	.43964	.291
		0-5 yrs	-.2590	.22757	.864
		11-15 yrs	.3934	.35685	.879
	6-10 yrs	16-20 yrs	-.4149	.31220	.768
		21-25 yrs	-.3649	.39650	.940
		26 yrs and above	.6684	.46578	.706
Musical intelligence		0-5 yrs	-.6525	.32197	.335
		6-10 yrs	-.3934	.35685	.879
	11-15 yrs	16-20 yrs	-.8083	.38646	.301
		21-25 yrs	-.7583	.45727	.562
		26 yrs and above	.2750	.51849	.995
		0-5 yrs	.1559	.27166	.993
		6-10 yrs	.4149	.31220	.768
	16-20 yrs	11-15 yrs	.8083	.38646	.301
		21-25 yrs	.0500	.42335	1.000
		26 yrs and above	1.0833	.48884	.240

TABLE 5: Continued.

Dependent variable	(I) Teaching experience	(J) Teaching experience	Mean difference (I-J)	Std. error	Sig.
		0-5 yrs	.1059	.36543	1.000
		6-10 yrs	.3649	.39650	.940
	21-25 yrs	11-15 yrs	.7583	.45727	.562
		16-20 yrs	-.0500	.42335	1.000
		26 yrs and above	1.0333	.54654	.414
		0-5 yrs	-.9275	.43964	.291
		6-10 yrs	-.6684	.46578	.706
	26 yrs and above	11-15 yrs	-.2750	.51849	.995
		16-20 yrs	-1.0833	.48884	.240
		21-25 yrs	-1.0333	.54654	.414
		6-10 yrs	-.0893	.19165	.997
		11-15 yrs	-.0754	.27115	1.000
	0-5 yrs	16-20 yrs	-.0338	.22878	1.000
		21-25 yrs	-.2745	.30775	.948
		26 yrs and above	.4662	.37024	.806
		0-5 yrs	.0893	.19165	.997
		11-15 yrs	.0139	.30052	1.000
	6-10 yrs	16-20 yrs	.0556	.26293	1.000
		21-25 yrs	-.1852	.33392	.994
		26 yrs and above	.5556	.39226	.717
		0-5 yrs	.0754	.27115	1.000
		6-10 yrs	-.0139	.30052	1.000
	11-15 yrs	16-20 yrs	.0417	.32546	1.000
		21-25 yrs	-.1991	.38509	.995
		26 yrs and above	.5417	.43665	.816
Interpersonal intelligence		0-5 yrs	.0338	.22878	1.000
		6-10 yrs	-.0556	.26293	1.000
	16-20 yrs	11-15 yrs	-.0417	.32546	1.000
		21-25 yrs	-.2407	.35652	.984
		26 yrs and above	.5000	.41168	.829
		0-5 yrs	.2745	.30775	.948
		6-10 yrs	.1852	.33392	.994
	21-25 yrs	11-15 yrs	.1991	.38509	.995
		16-20 yrs	.2407	.35652	.984
		26 yrs and above	.7407	.46027	.595
		0-5 yrs	-.4662	.37024	.806
		6-10 yrs	-.5556	.39226	.717
	26 yrs and above	11-15 yrs	-.5417	.43665	.816
		16-20 yrs	-.5000	.41168	.829
		21-25 yrs	-.7407	.46027	.595
		6-10 yrs	.0135	.17282	1.000
		11-15 yrs	-.1369	.24451	.993
	0-5 yrs	16-20 yrs	.0870	.20630	.998
		21-25 yrs	-.5172	.27751	.431
		26 yrs and above	.2537	.33386	.973
		0-5 yrs	-.0135	.17282	1.000
	6-10 yrs	11-15 yrs	-.1505	.27100	.994
		16-20 yrs	.0735	.23709	1.000
Intrapersonal intelligence					

TABLE 5: Continued.

Dependent variable	(I) Teaching experience	(J) Teaching experience	Mean difference (I-J)	Std. error	Sig.
		21-25 yrs	-.5307	.30111	.495
		26 yrs and above	.2401	.35372	.984
	11-15 yrs	0-5 yrs	.1369	.24451	.993
		6-10 yrs	.1505	.27100	.994
		16-20 yrs	.2240	.29348	.973
		21-25 yrs	-.3802	.34725	.882
		26 yrs and above	.3906	.39375	.919
	16-20 yrs	0-5 yrs	-.0870	.20630	.998
		6-10 yrs	-.0735	.23709	1.000
		11-15 yrs	-.2240	.29348	.973
		21-25 yrs	-.6042	.32149	.421
		26 yrs and above	.1667	.37123	.998
	21-25 yrs	0-5 yrs	.5172	.27751	.431
		6-10 yrs	.5307	.30111	.495
		11-15 yrs	.3802	.34725	.882
		16-20 yrs	.6042	.32149	.421
		26 yrs and above	.7708	.41505	.435
	26 yrs and above	0-5 yrs	-.2537	.33386	.973
		6-10 yrs	-.2401	.35372	.984
		11-15 yrs	-.3906	.39375	.919
		16-20 yrs	-.1667	.37123	.998
		21-25 yrs	-.7708	.41505	.435
		6-10 yrs	.2301	.21122	.884
	0-5 yrs	11-15 yrs	-.1471	.29885	.996
		16-20 yrs	-.3971	.25214	.617
		21-25 yrs	-.6471	.33918	.404
		26 yrs and above	-.1471	.40806	.999
		0-5 yrs	-.2301	.21122	.884
	6-10 yrs	11-15 yrs	-.3772	.33122	.864
		16-20 yrs	-.6272	.28978	.264
		21-25 yrs	-.8772	.36802	.173
		26 yrs and above	-.3772	.43233	.952
		0-5 yrs	.1471	.29885	.996
	11-15 yrs	6-10 yrs	.3772	.33122	.864
		16-20 yrs	-.2500	.35870	.982
		21-25 yrs	-.5000	.42442	.846
		26 yrs and above	.0000	.48125	1.000
		0-5 yrs	.3971	.25214	.617
	16-20 yrs	6-10 yrs	.6272	.28978	.264
		11-15 yrs	.2500	.35870	.982
		21-25 yrs	-.2500	.39294	.988
		26 yrs and above	.2500	.45373	.994
		0-5 yrs	.6471	.33918	.404
	21-25 yrs	6-10 yrs	.8772	.36802	.173
		11-15 yrs	.5000	.42442	.846
		16-20 yrs	.2500	.39294	.988
		26 yrs and above	.5000	.50728	.921
		0-5 yrs	.3971	.25214	.617

TABLE 5: Continued.

Dependent variable	(I) Teaching experience	(J) Teaching experience	Mean difference (I-J)	Std. error	Sig.
		0-5 yrs	.1471	.40806	.999
		6-10 yrs	.3772	.43233	.952
	26 yrs and above	11-15 yrs	.0000	.48125	1.000
		16-20 yrs	-.2500	.45373	.994
		21-25 yrs	-.5000	.50728	.921

Source: Fieldwork (2021) Significance at .05 level.

TABLE 6: MANOVA results of differences in the use of multiple intelligences based on gender.

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial eta squared (η_p^2)
Gender	Pillai's trace	.060	.724	8.000	91.000	.670	.060
	Wilks' lambda	.940	.724	8.000	91.000	.670	.060
	Hotelling's trace	.064	.724	8.000	91.000	.670	.060
	Roy's largest root	.064	.724	8.000	91.000	.670	.060

Source: Fieldwork (2021) Significant at .05 level.

interpersonal, intrapersonal, and naturalistic intelligences approach based on their teaching experience are not statistically significant.

3.3. *Research Hypothesis Two.* The last research hypothesis was meant to ascertain whether there was any statistically significant difference in the Economics teachers' application of MI approach in teaching Economics based on their gender. Table 6 presents the MANOVA results of differences in the use of MI based on gender.

The test of homogeneity of variance-covariance matrices based on Box's M test was conducted. The results of the Box's M test are $M = 44.760$, $F(36, 1786.62) = .945$, $p = .562$. This result was statistically insignificant which means that the assumption of the equality of homogeneity of variance-covariance matrices has not been violated. Since there was no violation of homogeneity of variance-covariance matrices, Wilk's lambda (Λ_W) test was employed in testing for statistical significance. From Table 6, it can be observed that there is no statistically significant difference in the Economics teachers' use of MI in teaching Economics based on their gender, $F(8, 91) = .724$, $p = .670$; $\Lambda_W = .940$, $\eta_p^2 = .060$. This result suggests that the use of MI in teaching Economics by teachers is not significantly dependent on their gender. Table 7 presents the univariate results.

The corrected models for linguistic intelligence, $F(1, 98) = .869$, $p = .354$; logical-mathematical intelligence, $F(1, 98) = .115$, $p = .735$; spatial intelligence, $F(1, 98) = .735$, $p = .393$; bodily-kinesthetic, $F(1, 98) = .664$, $p = .417$; musical intelligence, $F(1, 98) = 3.820$, $p = .054$; interpersonal intelligence, $F(1, 98) = .127$, $p = .723$; intrapersonal intelligence, $F(1, 98) = .001$, $p = .977$; and naturalistic intelligence, $F(1, 98) = .189$, $p = .664$ were not statistically significant. Therefore, no statistically significant differences were found in linguistic, logical-mathematical, spatial, bodily-kinesthetic, musical, interpersonal, intrapersonal, and naturalistic intelligences for the main effect (gender).

4. Discussion

The study explored Economics teachers' application of MI approach in teaching Economics in senior high schools. The study revealed that Economics teachers use interpersonal intelligence teaching strategies in teaching Economics. This finding of the study is in line with that of MacLeod [57] who asserts that teachers usually use interpersonal intelligence teaching strategies in teaching. Similarly, this finding seems to be consistent with that of Shore [24] who identified that the majority of ESL teachers tend to stress linguistic and interpersonal intelligence strategies. This finding also suggests that Economics teachers use interpersonal intelligence teaching strategies such as cooperative learning and group work in teaching Economics. In addition, it was discovered that Economics teachers sometimes use intrapersonal, linguistic, logical-mathematical, spatial, naturalistic, and bodily-kinesthetic intelligence. This finding is in harmony with that of Sulaiman et al. [32] who found that intrapersonal and logical-mathematical intelligences were the most commonly used teaching strategies by teachers. Likewise, this finding validates the assertion by Davis [25] that teachers regularly use linguistic, logical-mathematical, and spatial intelligences to teach students. Moreover, this finding confirms the opinions of Luo and Huang [3] who emphasise that teachers use linguistic, interpersonal, and intrapersonal teaching strategies frequently.

However, it was found out that Economics teachers rarely employ musical intelligence teaching strategies in teaching Economics, which confirms the assertion by Al-Wadi [11] that teachers tend to pay little attention to intelligences such as musical and naturalistic that are not measured in a standardised test. Al-Wadi observed that because musical and naturalistic intelligences are rarely used, teachers may not have the available resources to apply these intelligences in the classroom. It is, therefore, not surprising that this study shows that Economics teachers rarely apply musical and naturalistic intelligences in teaching

TABLE 7: Tests of between-subjects effects.

Source	Dependent variable	Type III sum of squares	df	Mean square	F	Sig.	η_p^2
Corrected model	LI	.380	1	.380	.869	.354	.009
	LMI	.060	1	.060	.115	.735	.001
	SI	.354	1	.354	.735	.393	.007
	BKI	.405	1	.405	.664	.417	.007
	MI	2.798	1	2.798	3.820	.054	.038
	INI	.064	1	.064	.127	.723	.001
	ITI	.000	1	.000	.001	.977	.000
	NI	.122	1	.122	.189	.664	.002
Intercept	LI	584.095	1	584.095	1334.440	.000	.932
	LMI	531.130	1	531.130	1028.196	.000	.913
	SI	493.140	1	493.140	1023.017	.000	.913
	BKI	436.428	1	436.428	714.792	.000	.879
	MI	298.007	1	298.007	406.850	.000	.806
	INI	615.874	1	615.874	1226.740	.000	.926
	ITI	575.905	1	575.905	1378.792	.000	.934
	NI	467.691	1	467.691	724.785	.000	.881
Gender	LI	.380	1	.380	.869	.354	.009
	LMI	.060	1	.060	.115	.735	.001
	SI	.354	1	.354	.735	.393	.007
	BKI	.405	1	.405	.664	.417	.007
	MI	2.798	1	2.798	3.820	.054	.038
	INI	.064	1	.064	.127	.723	.001
	ITI	.000	1	.000	.001	.977	.000
	NI	.122	1	.122	.189	.664	.002
Error	LI	42.895	98	.438			
	LMI	50.623	98	.517			
	SI	47.240	98	.482			
	BKI	59.835	98	.611			
	MI	71.783	98	.732			
	INI	49.200	98	.502			
	ITI	40.933	98	.418			
	NI	63.238	98	.645			
Total	LI	1211.939	100				
	LMI	1170.422	100				
	SI	1032.413	100				
	BKI	927.122	100				
	MI	610.040	100				
	INI	1346.864	100				
	ITI	1238.094	100				
	NI	1012.000	100				
Corrected total	LI	43.276	99				
	LMI	50.683	99				
	SI	47.595	99				
	BKI	60.241	99				
	MI	74.580	99				
	INI	49.264	99				
	ITI	40.934	99				
	NI	63.360	99				

Source: Fieldwork (2021).

Economics. The implication of the finding of the study is that in teaching Economics, Economics teachers usually employ these interpersonal intelligence teaching strategies: group brainstorming, peer tutoring, cooperative learning, and small group discussions. Also, Economics teachers seem to employ interpersonal intelligence frequently because the interaction between students is essential to the effective teaching and learning of the subject at the senior high school level.

The first research hypothesis was meant to determine whether there is a statistically significant difference in the Economics teachers' application of MI approach in teaching Economics based on their teaching experience. The study showed that there is a statistically significant difference in Economics teachers' application of bodily-kinesthetic intelligence approach between teachers who have taught for 16-20 years, and 26 years and above. Additionally, the study revealed that there is a statistically significant difference in Economics teachers' use of bodily-kinesthetic intelligence approach between teachers who have taught for 21-25 years and those who have taught for 26 years and above. The findings of this study are consistent with that of Massey [34] who found that teachers' teaching experience is a major determinant in the use of multiple intelligences. Similarly, Afshar and Farahani [37] found a difference in teachers' teaching methods based on their teaching experience. This finding also confirms that of Unal and Unal [38] who assert that teachers employ different teaching methods based on their teaching experience. However, the finding of this study is contrary to that of Dolati et al. [35] who established a statistically significant difference in the implementation of logical-mathematical intelligence based on teachers' teaching experience. Similarly, Jouzdani et al. [36] observed that multiple intelligences did not significantly change with years of teaching experience. The preceding studies did not find any statistically significant difference in teachers' use of bodily-kinesthetic intelligence approach in teaching. This finding of this study suggests that the use of bodily-kinesthetic intelligence approach in the teaching of Economics differs based on the number of years that Economics teachers have taught. This finding may be due to the fact that as teachers acquire more experiences, they begin to improve upon their teaching strategies and adopt several bodily-kinesthetic intelligence teaching strategies such as role play in engaging students in the classroom.

The last research hypothesis sought to ascertain whether there is a statistically significant difference in the Economics teachers' application of MI approach in teaching Economics based on their gender. The finding indicates that there is no statistically significant difference in the Economics teachers' application of MI approach in teaching Economics based on gender. This revelation is contrary to the assertion of Menevis and Ozad [30] who claim that there are significant differences in MI based on gender. In addition, this finding is not in line with that of Lawrence [31] who discovered that male and female teachers demonstrate significantly different linguistic intelligence. Again, this finding is not consistent with that of Hajhashemi et al. [33] who found that there were significant differences between gender and the use of multiple

intelligences. This result means that irrespective of Economics teachers' gender, they apply the same multiple intelligences approach in the teaching of Economics. Again, this seems to suggest that if the application of MI approach was influenced by gender, then it could be argued that a particular gender (either male or female) might have been highly exposed to the use of MI in teaching. Lastly, this result may be due to the fact that Economics teachers irrespective of their gender receive the same level of training at the various tertiary levels in terms of the methods used in teaching Economics.

5. Conclusions

The study explored teachers' application of MI approach in the teaching of senior high school Economics. It can be concluded that when Economics teachers use teaching strategies such as cooperative learning, group work, and discussion, they tend to emphasise interpersonal and linguistic intelligences. Also, Economics teachers' use of MI is an interplay between their varying teaching experiences and the availability of resources. Finally, Economics teachers' application of MI in the teaching of Economics is not influenced by the gender of the teacher.

6. Recommendations

It is recommended that Ghana Education Service (GES), Ministry of Education (MoE), and Non-Governmental Organisations (NGOs) organise seminars and conferences for teachers with a specific focus on the application of MI approach in the teaching of the various topics (e.g., price theory, economic systems, the theory of production, the theory of consumer behaviour, national income accounting and determination) in Economics. Also, heads of senior high schools should organise professional development programmes and conferences to enable teachers acquire information on the following domains of MI: logical-mathematical, spatial, bodily-kinesthetic, musical, and naturalistic intelligences. Moreover, it is recommended that, in the training of Economics teachers about the use of other MI teaching strategies in the teaching of Economics, no special attention should be given to them based on their gender but rather on their teaching experience. The current study focused on teachers' application of MI approach in the teaching of Economics, and further studies should focus on the impact of the application of MI approach on Economics students' academic curiosity since the use of MI approach in teaching arouses the interest of students.

Data Availability

The data on which the findings and conclusions of the study are derived will be available upon request from the corresponding author at myidana@ucc.edu.gh. This request will be considered in 24 months' time after the publication of this article.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

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