Integration of Multiple Intelligence Theory in ELT: A Systematic Review

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ABSTRACT

The learning approach has altered over the last decade to one that is more focused on the characteristics and needs of children. This is one of the reasons why the Multiple Intelligence theory is emerging so swiftly. The features of children were based on eight types of intelligence in this concept. This technique may contain a range of learning components such as students, teachers, environmental things such as media, learning activities, and others. Several studies have shown that employing this strategy throughout learning improves linguistic ability. This article investigates the integration of Multiple Intelligence theory with English learning. This research focuses on trends in English learning that combine Multiple Intelligence Theory, education level, media, learning materials, and barriers to implementation in elementary schools. This article examines 18 publications from reputable databases and journals. There is a higher level of education, according to the data. MI Theory is used by a small number of English professors at the university level. The findings of this study may be used to offer an overview of current trends in MI theory, as well as references for future research on this topic. More publications or research on the integration of MI theory in educational settings is looked for in the future. More specifically, difficulties about the implementation of this theory pertain to other language abilities such as reading and writing.

Keywords: *Customize Multiple Intelligence; English; Learning; Teaching; Review*

1. INTRODUCTION

Multiple intelligence (MI) has become a crucial approach in educational settings including English Language Teaching. This perspective on intelligence contrasts from the traditional perspective, which often identifies just two intelligences [1]. It is now being used by an increasing number of schools or faculties in their educational operations. They believe that intelligence is no longer restricted to cognitive talents, but rather to their ability to solve issues with their thoughts and logical reasoning. Gardner [2] views Intelligence is defined as a set of psychological and biological attributes which assist solutions to handle issues. Everybody has different talents and abilities in different areas, thus each individual contains many intelligences that seem to be interwoven in diverse manners [3]. These differences are reflected by the mix of behaviors produced as a result of the variety created by variances in genetic structure, cognitive style, talents, and similar features [4] it makes students encounter difficulties in achieving better learning due to specific teaching styles adopted by teachers.

Gardner asserted that individuals' MI might be beneficial in education settings because it allows the software to create alternate activities that are personalized to a given learner. Likewise, as individuals are more inclined to study things that they are engaged in, scientific knowledge may be done immediately provided a particular learner has the necessary intellect [5]. Teachers who recognize their students' various intelligences tend to be highly likely to support them in growing their special, distinctive strengths and interests [6]. Another point of view is that it paves the ways for planning the education program in a way that students realize their potentials and move toward their desires. Besides, it makes it possible for us to reach students who are more active because learning would be more attractive in a condition that learners are trained through the use of these intelligences [7]. It also allows us to organize our educational program in order to meet the

needs of our pupils. It also allows us to reach out to more students who are interested in learning about various fields and philosophies.

Gardner proposed several intelligences which could implemented in psychological and educational settings. He states that there are eight intelligences as follows: Linguistic, Logical-Mathematical, Spatial, Bodily-Kinesthetic, Musical, Interpersonal and intrapersonal intelligence [8]–[10]. In detail, Linguistic intelligence is described as a type of language capacity to accomplish a goal and the ability to utilize language [7] and operate words [8]. Then, According to Marenus, logical-mathematical intelligence involves the capability to solve complex problems and conceptually. It works on scientific or mathematical initiatives to research questions or discover solutions to difficult problems. [11]. Later, He describes spatial-visual intelligence as the ability to conceive in terms of visuals, imagery, and abstract visualization. Learners who engage in this manner utilize both internally and externally images to consider about it and absorb things on a subconscious way [11]. Then, Amstrong states that bodily kinaesthetic intelligence emphasizes upon using entire body to communicate thoughts and feelings [12]. Musical intelligence entails awareness to harmony, harmony, rhythm, and sound, as well as proficiency in performing and composing musical arrangements [9], [13], [14]. Interpersonal intelligence is the capacity to understand the emotions of people and function efficiently with them [13], [15], [16]. Intrapersonal intelligence may be defined as the capacity to notice one's own similarities and distinctions, as well as those of others [1], [2], [9]. Then, Naturalist intelligence is the ability to recognize and classify the diverse species [2], [9], [17].

Some studies revealed that Multiple Intelligence integration gives great impacts in English teaching and learning. Integrating MI theory to English classroom activities can enrich vocabulary [17] and improve students' motivation [10], [15], [18]. Students' attitudes about vocabulary study shifted, and the classroom environment became more engaging [17]. In a student-cantered context, the use of MI and video in the students' language courses aimed to improve their verbal skills and conversational engagement. The study's multimedia was chosen with academic purposes in mind, and the tasks were prepared with pedagogical goals in mind [19]. The use of visual media gives impacts on students' achievement [20]. Then There is a considerable

correlation between spatial and musical intelligences, learning styles, and vocabulary knowledge among Iranian EFL students [21].

There are numerous studies related to the implementation of MI Theory in ELT classrooms. [22] characterizes the many types of learning media available in English online learning depending on the students' multiple intelligences. However, reviews related to the issue is still limited. Therefore, this present paper aims to review articles from 2018-2021 related to Multiple Intelligence integration in ELT. The review in this paper focuses on the effectiveness of using MI to learn English, trends, language skills, and levels of education.

2. METHOD

This study used a semi-systematic review to reach its purpose. It was subjected to less examination than the critical one. It began by searching the appropriate papers in the ERIC database. Then, to retrieve them, keywords such as multiple intelligence, English, and ELT were assigned. The search was restricted to research articles published between 2016 and 2021 in this effort. It eventually generated 156 articles.

Second, the title and abstract were reviewed in light of the study's aim. After excluding the literature reviews, 42 articles remained. The examination then focused on the country, trends, language skills, level of education, and challenges in incorporating MI theory in classroom settings. All empirical investigations were included, and only 18 papers remained.

The pertinent information from those 18 publications was then entered into a spreadsheet and examined. The articles in the list were organized into categories depending on their relevant topics. They were then synthesized and described in detail.

3. RESULT AND DISCUSSION

This study was attempted to cover five major findings, namely country, trends, skills, level of education, and challenge in integrating MI theory in the classroom settings. Table 1 presents a distribution of reviewed articles regarding the country, trends of publication years and research methods, skills, and levels of education.

Table 1 Extract data

Title	Name of Journal	Country	Trends	Skills (Objectives)	Level of education
Multiple Intelligence Assessment in Teaching English for Young Learners	REiD (Research and Evaluation in Education)	Indonesia	2019 Qualitative	Not Specific	Primary Level
Adopting Multiple Intelligence-Based Activities (MIBAs) to Enhance Male and Female EFL Learners' Oral Performance	Journal of Language and Translation	Iran	2021 Quantitative	Speaking skills	Secondary Level
Multiple Intelligence and EFL Learners' Reading Comprehension	Journal of English Language Teaching and Learning	Iran	2016 Quantitative	Reading skills	Higher education level
Effects of Multiple Intelligences Activities on Writing Skill Development in an EFL Context	Universal Journal of Education Research	Turkey	2016 Quantitative	Writing skills	Primary level
Identifying College Students' Multiple Intelligences to Enhance Motivation and Language Proficiency	Canadian Center of Science and Education	Saudi Arabia	2016 Quantitative	Motivation	Higher education level
The Relationship between Multiple Intelligences and Listening Self-Efficacy among Iranian EFL Learners	Canadian Center of Science and Education	Iran	2016 Quantitative	Listening skills	Secondary level
A Study of Multiple Intelligence in Relating to Learning Style among Higher Secondary Students	International Journal of Research - GRANTHAALAYAH	India	2017 Quantitative	Not Specific	Secondary level
The Effectiveness of Multiple Intelligences Based Teaching Strategy	Journal of Technology and Science Education	Indonesia	2018 Quantitative	Not Specific	Secondary level
Application of Multiple Intelligences Theory to English Vocabulary Teaching in College	Frontiers in Educational Research	China	2020 Quantitative	Vocabulary	Higher education level
Psychometric Properties of Mymica Multiple Intelligence Instruments Among Delinquent Student in Primary School	International Journal of Innovation, Creativity and Change	Malaysia	2019 Quantitative	Not Specific	Primary level
Relationship between Intrapersonal Intelligence of Iranian EFL University Male and Female Learners and Their Grammar Ability	International Journal of Foreign Language Teaching & Research	Iran	2021 Quantitative	Grammar	Higher education level
Analysis on the Construction of English Classroom in Colleges based on Interactive Teaching and Multiple Intelligence Theory	International Conference on Social Science and Technology Education	China	2017 Qualitative	Not Specific	Higher education level
EFL Teachers' Multiple Intelligences and Their Classroom Practice	Journal sagepub	Iran	2017 qualitative & quantitative	Not Specific	Secondary Level

Title	Name of Journal	Country	Trends	Skills (Objectives)	Level of education
Spatial-Visual Intelligence in Teaching Students of Engineering	Research in Pedagogy	Serbia	2018 quantitative	speaking	Higher education level
The Effect of Spatial Intelligence-based Metalinguistic Written Corrective Feedback on EFL Learners' Development in Writing	Journal of Curriculum and Teaching	Turkey	2019 quantitative	writing skills	Secondary level
Using Multiple Intelligence Activities and Film to Stimulate the Communicative EFL Learner	IAFOR Journal of Language Learning	Cyprus	2018 quantitative	Speaking skills	Higher education level
Incorporating Multiple Intelligences in the English Classroom	Excellence in Education Journal	Saudi Arabia	2018 qualitative	Not Specific	Primary level
Analysis of the activities used in English textbooks regarding the multiple intelligences theory in Jordan	Educational Research an Reviews	Jordan	2021 quantitative	Not Specific	Higher education level

Table 1 summarizes the papers that have been examined. This study evaluates the patterns noticed in the previous 5 years in the discussion that follows. The year of publication and the study method are the trends in question. There are 18 related studies from various years of publication. This study examines publications published between 2016 and 2021 on the integration of MI theory in English instruction. In all, four out of eighteen research were published in 2016. This figure corresponds to the number of papers published in 2018. The year with the fewest articles was 2020, with only one. As a result, each year, three or four publications are published that investigate the applicability of MI-based English learning. Furthermore, when compared to study subjects in English learning [23] with 57 papers, [24] with 200 articles, and [25] with 221 articles. This number indicates that interest in researching on this issue is minimal. In detail, it is presented in Figure 1.
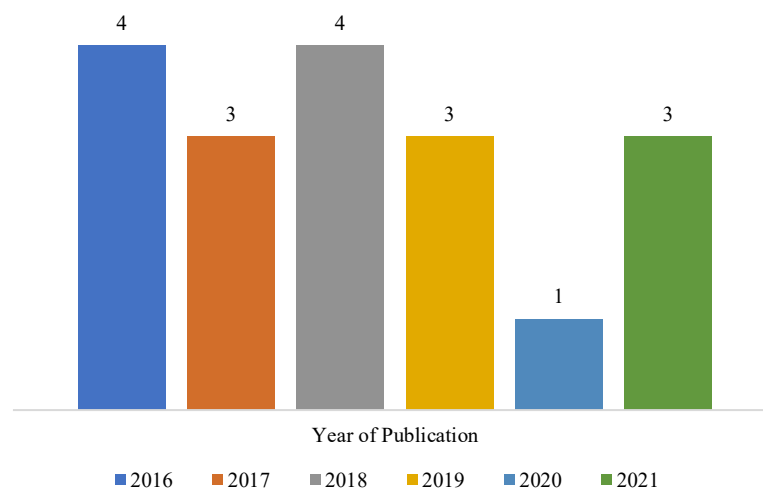

Figure 1 Year of Publication

Following that is a discussion of the number of publications dependent on the research approach chosen. It is presented in Figure 2. The quantitative technique is used in 12 of the 18 publications. There are four articles that employ the qualitative technique. Meanwhile, there is just one publication that employs a mixed method study design.

Figure 3 depicts the number of publications per country. These studies were conducted in several countries, including Indonesia, Jordan, Iran, Turkey, Saudi Arabia, Cyprus, Malaysia, India, Serbia, and China. Iran has the most publications among these countries (28%). Meanwhile, Cyprus and Jordan have the fewest article publications (5%). The research in issue is

concerned with the incorporation of MI theory in English learning. When compared to other countries, this indicates that MI theory is widely implemented and developed in that country.
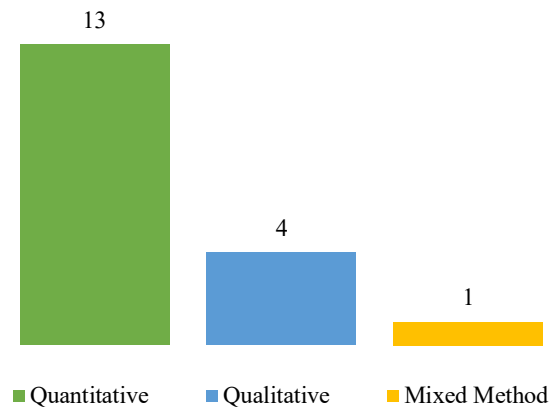

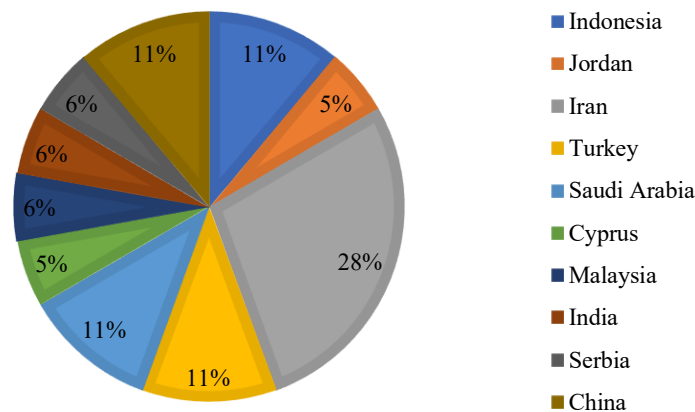**Figure 2** Number of Publication by Research Method

Figure 3 Number of Publication by Country

Figure 4 depicts the distribution of competencies or language abilities in these studies that are the target language. There were 33 % publications with the theme of utilizing Multiple Intelligence but not particular to specific language skills among the 18 articles evaluated. The description is detailed in studies on MI content in classroom assessments [26], integration of MI theory in classroom instruction [3], [19], [26] and content analysis of student textbooks [27]. Then, speaking is the most studied language skill, followed by reading and writing (17%). This indicates that speaking has a rather strong connection with the implementation of MI theory in English learning. Several treatments connected to studies on speaking skills were applied in the classroom, such as [28] linking it to Spatial-Visual Intelligence, exploring the implementation of MI-based activities [29], and [19] in combination with films.
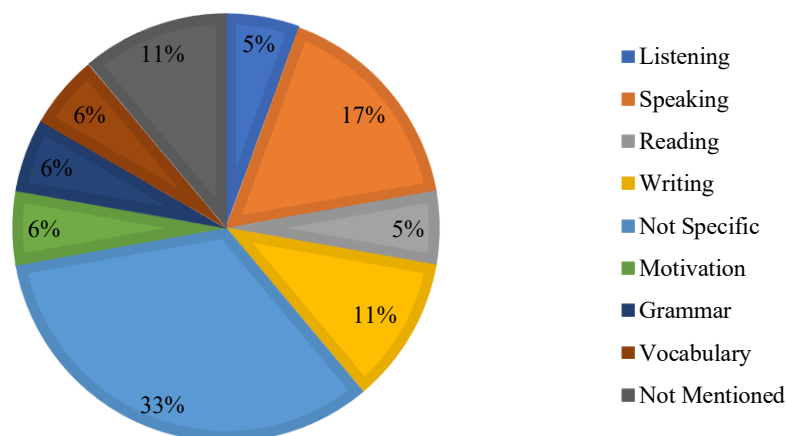
Figure 4 Distribution based on Learning Objectives

Lastly, according to Figure 5, research at the higher education level is extremely dominating (44%), followed by research at the secondary level (28%), and research at the elementary level (22%). Meanwhile, the percentage of study involving teachers in MI integration is the lowest, at 6%. A factor in the significant number of studies at this level is the method of communication and discussion in learning [27], [30], and diversified media widely used [19].
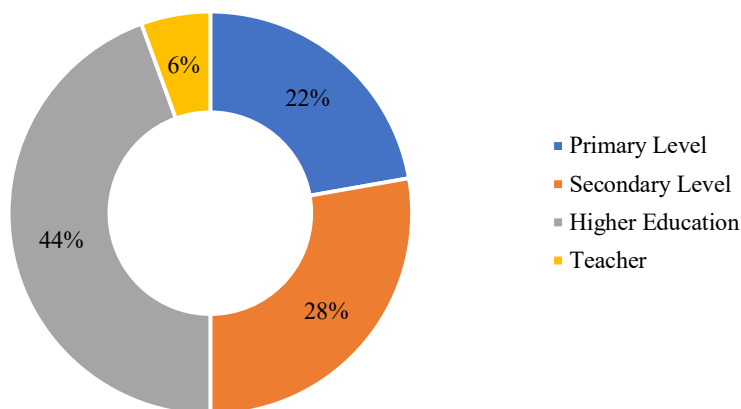
Figure 5 Number of Publication by Level of Education

4. CONCLUSION

This study reveals a trend in the use of MI theory at the elementary, secondary, and higher education levels. This area of study has shown a minor decrease in recent years. Although not statistically significant, just three papers show that this issue has begun to be superseded by more current challenges such as distance learning or language acquisition difficulty during a pandemic. Despite the fact that this approach must still be applied to all language learners. The findings of this study may be used to offer an overview of current trends in MI theory, as well as references for future research on this topic. More publications or research on the integration of MI theory in educational settings is looked for in the future. More specifically, difficulties about the implementation of this theory pertain to other language abilities such as reading and writing. This is also an opportunity for further researchers to explore these topics more deeply.

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