DOI 10.18372/2786-823.1.20646

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HOWARD GARDNER'S THEORY OF MULTIPLE INTELLIGENCES: A COMPREHENSIVE PERSPECTIVE

Annotation. *In this study examines Howard Gardner's the theory of multiple intelligences. The theory of multiple intelligences (MI) posits that human intelligence is not a single general ability but comprises various distinct modalities, such as linguistic, logical-mathematical, musical, and spatial intelligences. Introduced in Howard Garner's book Frames of Mind: The Theory of Multiple Intelligences (1983), this framework has gained popularity among educators who accordingly develop varied teaching strategies purported to cater to different student strengths. In this study is explained conceptually Gardner's theory of multiple intelligences. In this context has been conducted a literature review.*

Key words: *H. Gardner, multiple intelligence, abilities.*

Research Type: *Review.*

Анотація. *У цьому дослідженні розглядається теорія множинного інтелекту Говарда Гарднера. Теорія множинного інтелекту (MI) постулює, що людський інтелект не є єдиною загальною здатністю, а включає різні окремі модальності, такі як лінгвістичний, логіко-математичний, музичний та просторовий інтелекти. Представлена в книзі Говарда Гарнера «Форми мислення: Теорія множинного інтелекту» (1983), ця структура здобула*

популярність серед педагогів, які відповідно розробляють різноманітні стратегії навчання, спрямовані на задоволення різних сильних сторін учнів. У цьому дослідженні концептуально пояснюється теорія множинного інтелекту Гарднера. У цьому контексті було проведено огляд літератури.

Ключові слова: *Г. Гарднер, множинний інтелект, здібності.*

Тип дослідження*: Огляд.*

Introduction. Howard Gardner's *Theory of Multiple Intelligences* (MI Theory) revolutionized the understanding of intelligence by challenging the traditional notion of a single, measurable IQ. Gardner proposed that intelligence is not a unitary concept but a pluralistic phenomenon encompassing a variety of distinct modalities. For decades, intelligence was viewed as a singular, quantifiable construct, primarily measured by psychometric tests such as IQ scores. However, Howard Gardner's groundbreaking work *Frames of Mind* (1983) [4] introduced a paradigm shift. He proposed that human intelligence is multifaceted, consisting of several distinct but interrelated intelligences. Gardner's model fundamentally redefined the meaning of intelligence, highlighting diverse cognitive capabilities beyond linguistic and logical reasoning (Gardner, 2011). [5]. Beginning in the late 1970s, using a pragmatic definition, Howard Gardner surveyed several disciplines and cultures around the world to determine skills and abilities essential to human development and culture building. He subjected candidate abilities to evaluation using eight criteria that must be substantively met to warrant their identification as an intelligence. Furthermore, the intelligences need to be relatively autonomous from each other, and composed of subsets of skills that are highly correlated and coherently organized. Howard Gardner is a developmental psychologist who suggested that people can be intelligent in more than one way. When you hear the word intelligence, the concept of IQ Testing may immediately come to mind. Intelligence is often defined as our intellectual potential; something we are born with, something that can be measured, and a capacity that is difficult to change (Youk, 2018) [14].

MI Theory has profoundly influenced educational practice by promoting student-centered learning and differentiated instruction. Traditional education systems often privilege linguistic and logical skills, neglecting other forms of intelligence. MI-based pedagogy encourages teachers to design learning experiences that engage multiple intelligences — for instance, using music to teach language patterns or bodily-kinesthetic activities to explore scientific concepts (Armstrong, 2017) [1]. Moreover, the MI framework supports inclusive education by recognizing diverse learner strengths and promoting equity. Teachers employing MI strategies can foster motivation, creativity, and deeper understanding among students with varying learning profiles (Campbell et al., 2004) [2].

Theoretical Foundations. Professor Howard Gardner is the author of the theory of multiple intelligences. He has been researching the human brain for several years. Gardner suggested that intelligence is concentrated in different areas of the brain that interact with each other, or work independently of each other and can be developed in the presence of suitable conditions.

The eight intelligences H. Gardner identified are: This theory suggests that traditional psychometric views of intelligence are too limited. Gardner first outlined his theory in his 1983 book Frames of Mind: The Theory of Multiple Intelligences, where he suggested that all people have different kinds of "intelligences." In recent years, however, other views of intelligence have emerged, including Gardner's suggestion that *many* different types of intelligence may exist. Gardner proposed that there are eight intelligences, and has suggested the possible addition of a ninth known as "existentialist intelligence (Maslo, 2023) [7].

Gardner (1983) [4] **identified seven original intelligences:**

1. Visual-spatial intelligence
2. Linguistic-verbal intelligence
3. Logical-mathematical intelligence
4. Bodily-kinesthetic intelligence
5. Rhythmic-Musical intelligence

6. Interpersonal intelligence
7. Intrapersonal intelligence
8. Naturalistic intelligence (Fig. 1.).

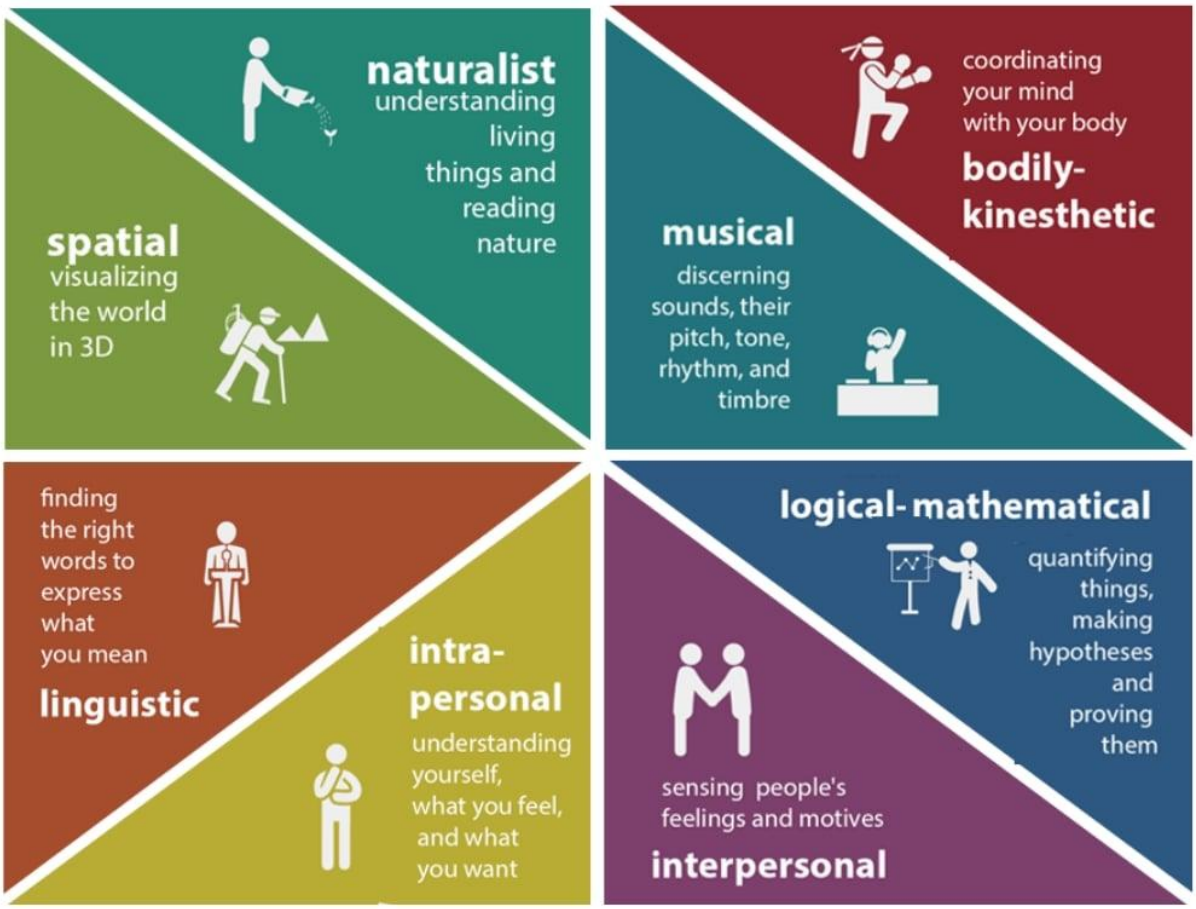

Fig. 1. Gardner's (1983) seven original intelligences

1. Visual-Spatial Intelligence: People who are strong in visual-spatial intelligence are good at visualizing things. These individuals are often good with directions as well as maps, charts, videos, and pictures. Research suggests that visual-spatial abilities play an important role in reading and arithmetic skills, as well as in overall academic achievement.

Strengths: Visual and spatial judgment.

Characteristics: Read and write for enjoyment, are good at putting puzzles together, interpret pictures, graphs and charts well, enjoy drawing, painting, and the visual arts, recognize patterns easily.

Potential career choices: Architect, artist, engineer, etc...

2. Linguistic-Verbal Intelligence: People who are strong in linguistic-verbal intelligence are able to use words well, both when writing and speaking. These individuals are typically very good at writing stories, memorizing information, and reading.

Strengths: Words, language, and writing.

Characteristics: Remember written and spoken information, enjoy reading and writing, debate or give persuasive speeches, are able to explain things well, use humor when telling stories.

Potential career choices: Writer/journalist, lawyer, teacher, etc...

3. Logical-Mathematical Intelligence: People who are strong in logical-mathematical intelligence are good at reasoning, recognizing patterns, and logically analyzing problems. These individuals tend to think conceptually about numbers, relationships, and patterns.

Strengths: Analyzing problems and mathematical operations

Characteristics: Have excellent problem-solving skills, enjoy thinking about abstract ideas, like conducting scientific experiments, can solve complex computations.

Potential career choices: Scientist, mathematician, computer programmer, engineer, accountant, etc…

4. Bodily-Kinesthetic Intelligence: Those who have high bodily-kinesthetic intelligence are said to be good at body movement, performing actions, and physical control. People who are strong in this area tend to have excellent hand-eye coordination and dexterity.

Strengths: Physical movement, motor control**.**

Characteristics: Are skilled at dancing and sports, Enjoy creating things with his or her hands, Have excellent physical coordination, Remember by doing, rather than hearing or seeing.

Potential career choices: Craftsperson, dancer, builder, surgeon, sculptor, actor, etc...

5. Musical Intelligence: People who have strong musical intelligence are good at thinking in patterns, rhythms, and sounds. They have a strong appreciation for music and are often good at musical composition and performance.

Strengths: Rhythm and music.

Characteristics: Enjoy singing and playing musical instruments, recognize musical patterns and tones easily, remember songs and melodies, have a rich understanding of musical structure, rhythm, and notes.

Potential career choices: Musician, composer, singer, music teacher, conductor, etc...

6. Interpersonal Intelligence: Strong interpersonal intelligence is a skill that involves being good at understanding and interacting with other people. These individuals are skilled at assessing the emotions, motivations, desires, and intentions of those around them.

Strengths: Understanding and relating to other people**.**

Characteristics: Communicate well verbally, are skilled at nonverbal communication, see situations from different perspectives, create positive relationships with others, resolve conflicts in group settings.

Potential career choices: Psychologist, philosopher, counselor, salesperson, politician.

7. Intrapersonal Intelligence: Individuals who are strong in intrapersonal intelligence are good at being aware of their own emotional states, feelings, and motivations. They tend to enjoy self-reflection and analysis, including daydreaming, exploring relationships with others, and assessing their personal strengths.

Strengths: Introspection and self-reflection.

Characteristics: Analyze their strengths and weaknesses well, enjoy analyzing theories and ideas, have excellent self-awareness, understand the basis for his or her own motivations and feelings

Potential career choices: Philosopher, writer, theorist, scientist, etc...

8. Naturalistic Intelligence: Naturalistic intelligence is the most recent addition to Gardner's theory and has been met with more resistance than his original seven intelligences. According to Gardner, individuals who are high in this type of intelligence are more in tune with nature and are often interested in nurturing, exploring the environment, and learning about other species. These individuals are said to be highly aware of even subtle changes to their environments.

Strengths: Finding patterns and relationships to nature**.**

Characteristics: Are interested in subjects such as botany, biology, and zoology, categorize and catalog information easily, enjoy camping, gardening, hiking, and exploring the outdoors, dislikes learning unfamiliar topics that have no connection to nature.

Potential career choices: Biologist, conservationist, gardener, farmer, etc...

Later, he added Naturalistic intelligence and considered Existential intelligence as a possible ninth type (Gardner, 1999) [5]. Each intelligence operates semi-independently and reflects different ways of processing information and solving problems. Gardner's model draws upon findings from neuroscience, anthropology, and developmental psychology, emphasizing that intelligence should be understood within cultural and biological contexts (Gardner, 2011) [6].

Educational Implications: MI Theory has profoundly influenced educational practice by promoting student-centered learning and differentiated instruction. Traditional education systems often privilege linguistic and logical skills, neglecting other forms of intelligence. MI-based pedagogy encourages

teachers to design learning experiences that engage multiple intelligences — for instance, using music to teach language patterns or bodily-kinesthetic activities to explore scientific concepts (Armstrong, 2017) [1]. Moreover, the MI framework supports inclusive education by recognizing diverse learner strengths and promoting equity. Teachers employing MI strategies can foster motivation, creativity, and deeper understanding among students with varying learning profiles (Campbell et al., 2004) [2]. Gardner is emphasized that the main principle of the learning process should be built to enable children to gain experience that would require the involvement of different types of intelligence. The main thing is to give children the opportunity to get to know and learn anything in the way that is most convenient for them. «*Multiple intelligences should not be an educational goal»*. The use of the theory of multiple intelligences helps to organize an educational process that will take into account different learning styles, which requires the involvement of different types of intelligence, to get to know and learn something in the way and way that is closest to him and convenient. This will help to motivate the child to learn and gain the necessary experience (Maslo, 2023) [7].

Criticisms and Limitations: Despite its popularity, MI Theory has faced criticism regarding its empirical validity. Psychometricians argue that Gardner's intelligences lack sufficient scientific evidence and overlap with personality traits or abilities (Visser, Ashton, & Vernon, 2006) [8]. Additionally, critics suggest that MI Theory's appeal lies more in its educational philosophy than in rigorous psychological validation (Waterhouse, 2006) [9]. Nevertheless, Gardner (2011) [6] maintained that MI Theory was intended as a framework for understanding human potential rather than as a psychometric construct. Its enduring influence in education underscores its practical value despite ongoing debates about its scientific robustness. This theory suggests that traditional psychometric views of intelligence are too limited (Youki, 2018; Cherry, 2025) [11; 3].

Conclusions. The theory of multiple intelligences is important because it allows us to think about different types of mental strengths and abilities. Learning more about which types of intelligence you lean towards may help you learn to recognize your own preferences. However, it shouldn't be used as a tool to label and should not be confused with learning styles. Instead of trying to match what you learn to your perceived type of intelligence, focus on learning new things via various modalities and formats to strengthen encoding and reinforce learning. «Multiple intelligences should not be an educational goal». The use of the theory of multiple intelligences helps to organize an educational process that will take into account different learning styles, which requires theinvolvement of different types of intelligence, to get to know and learn something in the way and way that is closest to him and convenient. This will help to motivate the child to learn and gain the necessary experience. According to the results of these studies, the scientist changed the idea of intelligence as the only once and for all determining innate abilities and problem-solving skills. Gardner suggested that intelligence is concentrated in different areas of the brain that interact with each other, or work independently of each other and can be developed in the presence of suitable conditions. Howard Gardner's Theory of Multiple Intelligences represents a transformative lens through which human potential can be viewed. By broadening the definition of intelligence, MI Theory honors the diversity of human capabilities and fosters more inclusive educational practices. While empirical challenges remain, the theory's enduring relevance in pedagogy and psychology testifies to its profound contribution to our understanding of the human mind (https://www.waterford.org/blog/multiple-intelligences-theory) [10].

References

1. Armstrong, T. (2017). Multiple intelligences in the classroom. (4th edition). ASCD.

2. Campbell, L., Campbell, B., & Dickinson, D. (2004). Teaching and learning through multiple intelligences. (3rd edition). Allyn & Bacon.

3. Cherry, K. (25 January 2025). Gardner's theory of multiple intelligences. URL: https://www.verywellmind.com/gardners-theory-of-multiple-intelligences-2795161 (last accessed: 2025/10/02).

4. Gardner, H. (1983). Frames of mind: The theory of multiple intelligences. (3th edition). Basic Books, New York.

5. Gardner, H. (1999). Intelligence reframed: Multiple intelligences for the 21st century. Basic Books.

6. Gardner, H. (2011). The theory of multiple intelligences: As psychology, as education, as social science, *New Horizons for Learning*, 9(3), 1–15.

7. Maslo, I. M. (2023). Gardner's theory of multiple intelligences in the learning process, Conference proceedings. Promising areas of theoretical and applied research. https://doi.org/10.30888/2709-2267.2023-21-01-002. URL: https://www.proconference.org/index.php/usc/article (last accessed: 2025/10/02).

8. Visser, B. A., Ashton, M. C., & Vernon, P. A. (2006). Beyond g: Putting multiple intelligences theory to the test, *Intelligence*, 34(5), 487–502.

9. Waterhouse, L. (2006). Multiple intelligences, the Mozart effect, and emotional intelligence: A critical review. *Educational Psychologist*, 41(4), 207–225.

10. Waterford.org – How teachers use gardner's multiple intelligences theory. URL: https://www.waterford.org/blog/multiple-intelligences-theory/ (last accessed: 2025/10/02).

11. Youki, T. (2018). Multiple intelligences theory: Widely used, yet misunderstood. Edutopia. George Lucas Educational Foundation. URL: https://www.edutopia.org/article/multiple-intelligences-theory-widely-used-yetmisunderstood (last accessed: 2025/10/02).