# New Horizons of Knowledge Management, based on Inner Knowledge

By Irina de la Flor\*, María Sarabia<sup>±</sup>, Fernando Crecente<sup>°</sup> & María Teresa del Val•

Using a historical analysis of intelligence theories, the study aims firstly to identify whether the abilities related to the Inner Knowledge Management (IKM) model are connected to one or more types of intelligence. Secondly, this study seeks to investigate if there are IKM abilities that are not connected to any intelligence theories. Lastly, the study aims to show that certain IKM abilities that have never been described in any previous intelligence theory could be the base for a new type of intelligence named Conscious Intelligence. To conclude, the study proposes that this new type of intelligence could be positioned between the Emotional and Spiritual intelligence theories. The study is limited to theories developed in the last two centuries.

**Keywords:** *Intelligence theories, Inner Knowledge, Inner Knowledge Management, Decision- making process.* 

### Introduction

As a human creation, *knowledge* is a wide, universal, and evolving idea that is somehow connected to an unreachable and infinite truth. A wide variety of definitions of what knowledge is have been proposed. For example, old philosophy schools divide knowledge into propositional knowledge, know-how knowledge, and knowledge by acquaintance (Hetherington, 2022). To understand what knowledge is, analytical philosophers studied, divided, and identified the essential and definitive components of knowledge. With some divergences, even nowadays, the disagreements revolving around what knowledge is, have to do with two aspects. Firstly, the possibility that a part of what is true can be fully reached by our limited thought processes. Secondly, the degree of certainty that is required to prove that something has been fully comprehended and integrated by someone. Scientific literature related to the theory of knowledge analyzes knowledge by its components. The justified true belief theory (JTB) proposes that knowledge is a justified true belief, which is seen by many philosophers as the standard definition (Zagzebski, 2017). Other scholars argue that knowledge could be defined by common elements that are shared among diverse forms of knowledge. This, for example, could be that, for knowledge to happen, there must be some kind of awareness (Silva, 2019). Despite all disagreements, most scholars agree that knowledge can be obtained by different paths. Although

<sup>\*</sup>Researcher, Department of Economics and Business Management, University of Alcalá, Madrid, Spain.

<sup>&</sup>lt;sup>±</sup>Researcher, Department of Economics and Business Management, University of Alcalá, Madrid, Spain.

Researcher, Department of Economics and Business Management, University of Alcalá, Madrid, Spain.

Researcher, Department of Economics and Business Management, University of Alcalá, Madrid, Spain.

perception through the senses has been determined as one of the main sources for the gaining of knowledge, many theorists also include introspection, intuition, deduction, induction and abduction, memory, and testimony.

Within the business realm, knowledge, and especially *Knowledge Management* (KM) has been crucial to organizational success. Organizational performance pressure, fierce competition and lack of ethical leadership since COVID (Ngcobo & Reddy, 2024) push companies to explore new types of knowledge. Although in this domain knowledge has been mainly objective, in 2022 Flor *et al.* suggested that a new type of knowledge, called *Inner Knowledge* (IK), whose components were mainly unconscious and subjective, should also be considered for individual and organizational success.

In 2023, the same authors proposed a new model called *Inner Knowledge Management* (IKM) that allowed people within organizations to manage IK to improve the workers' efficiency, motivation, and satisfaction (De la Flor, *et al.*, 2023). The findings of this research highlighted that by coaching and training workers on the acquisition and management of *Inner Knowledge* through IKM, individuals could increase their efficiency, motivation, and satisfaction. The study proved that the IKM model would help individuals transform negative emotions into balanced ones and limiting beliefs into objective knowledge. On top of that, the findings suggested that IKM helps individuals develop several abilities related to a few types of intelligence. These included the ability to have a global vision, the ability to communicate positively with others and be a good listener, the ability to be empathetic towards others, the ability to feel serene when making decisions, and the ability to feel self-assured.

Furthermore, human intelligence is a term largely related to knowledge, as human intelligence has been connected to the human capacity for introspection, intuition, deduction, induction, abduction, and memory, amongst others. Intelligence, defined as, "the intellectual capability of humans to acquire and manage knowledge marked by complex cognitive abilities and a certain level of motivation and awareness" (Tirri and Nokelainen, 2012) has been studied by several intelligence theories that have measured different human capacities to acquire and manage knowledge.

One of the first methods to measure how efficiently individuals acquire and manage knowledge was the *Intelligence Quotient* test (IQ) (Brody, 1999). This test would measure some variables or factors including understanding and remembering concepts, learning new concepts, applying logic and reason, recognizing patterns, planning, innovating, solving problems, and making decisions, amongst others. Although IQ tests were very popular, they only measured abilities that were related to objective data, and therefore they were also limited. With time, different authors developed new intelligence theories that included abilities that allowed individuals to acquire and manage subjective knowledge. This is the case of *Emotional Intelligence theories* which study human abilities that allow individuals to acquire and manage knowledge with emotional components, *Social Intelligence theories* which study human abilities that allow individuals to acquire and manage knowledge with social components, or *Spiritual Intelligence theories* which study human abilities to acquire and manage different types of knowledge with spiritual components.

### **Purpose & Innovation of Research**

Since all the objective and subjective components described in the various types of intelligence are mostly conscious and objective, and many of the abilities developed through the IKM model allow the acquisition and management of unconscious and subjective components, the purpose of this article is first to carry out a conceptual analysis of the different theories of intelligence from the traditional *Cognitive Intelligence, Emotional Intelligence,* and *Multiple Intelligences* theories to the most modern theories of intelligence such as *Spiritual Intelligence*. Secondly, its purpose is to analyze and compare the abilities and competencies developed by each of these theories to those capabilities described by the IKM model to see if the IKM capabilities are related to a particular type of intelligence or, on the contrary, if those capabilities can be considered a new type of intelligence.

The innovation of this research is based on the study of the everlasting subjective components that are contained within human knowledge that affect scientific disciplines such as Knowledge Management. Innovation lies firstly in the object of study: the nature of the components contained in the abilities described by the various types of intelligence; and, secondly, in the questions of the research. Developing this latter point further, as if certain IKM abilities allow individuals to manage subjective and unconscious components that could not be managed otherwise, how could IKM be used to eliminate subjective elements from decision-making processes increasing the level of efficiency in a wide variety of fields, including at economic, social, educational and political level.

### Research Paradigm, Method, Questions and Assumptions

**Research paradigm:** Different intelligence theories have measured numerous abilities, factors, or variables to define various types of intelligence to manage knowledge. Traditional theories of intelligence focus on cognitive abilities that measure objective knowledge such as mathematical or verbal skills, memory, or problem-solving abilities. More modern theories of intelligence also consider abilities that manage subjective knowledge such as the ability to understand or communicate emotions, the ability to care about others, or the ability to see the spiritual realm in day-to-day life. This is the case of *Emotional Intelligence* (Killian, 2012), *Social Intelligence* (Gilbert, 2019), or *Spiritual Intelligence* (Currie, 2023). Nevertheless, no intelligence theories have considered the management of knowledge with unconscious components such as the one contained in Inner Knowledge.

**Research method:** Based on qualitative research, the study measures 21 intelligence theories developed in the last 100 years. The methodology uses empirical research, analyzing human capabilities described in these theories as well as their components. This methodology, widely applied among classical researchers, has been rated as the most interesting research method by several authors and has been used in the most cited articles of the Academy of Management Journal (Eisenhardt, 1989). Although the data is qualitative, the statistical research methodology is quantitative.

In order to create a relatively homogeneous group in the study, the inclusion

criteria were intelligence theories developed in the last century, that describe human capabilities that are related to knowledge management. The exclusion criteria were theories that do not relate to knowledge management or that do not describe human capabilities such as the *Animal Intelligence theories*.

Theories were categorized by their scopes and type of knowledge processed: cognitive theories relate to cognitive mental processes; emotional theories relate to emotional mental processes; and so on. The study measured the number of theories, the number of capabilities described by each theory, and the number of components described in each capability.

The study was carried out in three phases.

- The initial phase of the study included research of all intelligence theories that relate to Knowledge Management.
- The second phase of the study included the investigation of the different capabilities described in each intelligence theory.
- The third phase of the study included the description of the components implied in each capability described by each intelligence theory.

### Research Questions

- 1. Are the IKM capabilities related to a particular type of intelligence?
  - 2. If not, can those IKM capabilities be considered a new type of intelligence?

The research hypotheses (H) were as follows:

- H1 "Intelligence theories describe human abilities that relate to objective knowledge, and some are related to IKM".
- H2 "Intelligence theories describe human abilities that relate to objective & subjective knowledge, and some are related to IKM"."
- H3 "Intelligence theories describe human abilities that relate to objective & subjective conscious knowledge, and some are related to IKM"."
- H4 "Intelligence theories describe human abilities that relate to objective & subjective conscious and unconscious knowledge, and some are related to IKM".

# **Research assumptions:** The research assumptions are as follows:

- 1. Some intelligence theories describe capabilities that contain subjective elements
- 2. Some IKM capabilities are described in intelligence theories
- 3. Some IKM capabilities are not described in intelligence theories

### **Literature Review**

In 1904, Charles Spearman, a British psychologist interested in intelligence and human aptitudes introduced the term *General Intelligence* or *G-Factor* which described a "bifactor theory of intelligence". In his theory, Spearman claimed that

any measure of intelligence could be divided into two components, a common or generic one called "G" and a specific one called "S".

The "G" factor would have a generic action (G) that extends to all individual cognitive abilities and is genetically loaded (Marsman & Rhemtulla, 2022). The "S" factor would be related to a specific component (S) such as a skill. Intelligence quotient (IQ) tests were then designed to measure both factors and had a psychometric approach. They traditionally measured mathematical skills, verbal skills, spatial visualization, and memory amongst other things.

Although a few authors stated that IQ tests did not measure non-intellectual abilities and that these needed to be included if they wanted to be efficient (Wechsler, 1943), since 1950 the psychometrics subfield has grown exponentially and nowadays IQ tests are based on psychological constructs that include a wide concept of what "intelligence" is, what a "mental disorder" is, or a "personality trait". A system has now developed where a wide number of behavioural, cognitive, environmental, and biological factors are complexly interconnected and measured (Heeren et al., 2023). The Cognitive development theory, first defined in 1919 by Jean Piaget, studied the nature and development of human intelligence focusing on the nature of knowledge itself. Piaget studied how humans gradually acquire, construct, and use knowledge demonstrating that children process information in a different way than adults do (Sanghvi, 2020). Piaget proposed four different stages of cognitive development stating that children construct and understand the world in a different way than adults do. According to Piaget, children experience discrepancies between what they already know and what they discover in their environment, and then adjust their ideas accordingly (McLeod, 2007).

In 1920 the term Social Intelligence was used for the first time by Edward L. Thorndike. This intelligence was related mainly to two capabilities: understanding and to motivate others (Thorndike & Stein 1937). From 1950, authors such as Masllow (1950), Beldoch (1964) and Leuner (1966) started mentioning a new type of intelligence called *Emotional Intelligence* which related to various personal abilities with an emotional component. These included the ability of individuals to recognize their own and others' emotions, to discern between different feelings, labelling them appropriately, and the ability to use this emotional information to guide thinking and behavior. In 1963, Raymond Cattell designed a new theory to describe intelligence. According to Cattell, intelligence was formed by a *fluid factor* of intelligence (Gf) and a crystallized factor of intelligence (Gc). Gf was related to data comprehension, problem solving, and learning abilities and Gc was related to the capacity to deduce abstract relational problems (Brown, 2016). In 1966, Das, Kirby and Jarman created a new theory called the PASS Theory of Intelligence, arguing that there are four basic dimensions of intelligence which included *Planning*, Attention, Simultaneous cognitive processing, and Successive cognitive processing (Das & Kirby 2022).

Gardner, in 1983, proposed that there were multiple intelligences and that some abilities that had been studied in clusters needed to be pinpointed as a single type of intelligence. This was the case of what he called the *Logical Mathematical/Spatial intelligence* (that included mathematical and spatial skills), Linguistic intelligence (that included verbal and communication skills), Intrapersonal-Interpersonal intelligence

(that included abilities to connect with oneself and others), Musical intelligence (that included musical skills) or Kinaesthetic intelligence (that included kinaesthetic skills). A few years later, in 1995, Gardner added a new type of intelligence called the Naturalistic intelligence that related to the ability to connect to and respect nature, and lastly, in 1999, he added the Existential intelligence which related to the ability to resolve existential human issues (Shearer, 2019). In 1984, Stenberg created the Triarchic Theory of Intelligence. This theory differentiated abilities into three groups: analytical, creative, and practical, using three types of components: performance components (by perceiving problems and being aware of relationships between different data), meta-components (by solving problems) and knowledgeacquisition components (by acquiring new knowledge) (Zajda, 2019). In 1990, a new type of intelligence was defined by Zohar as Spiritual Intelligence. Zohar related this type of intelligence to several human abilities that included: selfawareness, spontaneity, whether being vision and value-led, holism, compassion, celebration of diversity, field independence, humility, the tendency to ask fundamental "why?" questions, the ability to reframe, the positive use of adversity, and having a sense of vocation (Vasconcelos, 2020).

In 1993, John Carroll developed the *Three-stratum Theory of Intelligence*. According to him, intelligence abilities needed to be classified in three stratums. These were the narrow abilities, the broad abilities and a general cognitive factor. Later, Carroll, together with Cattell and Horn, developed the Cattell-Horn-Carroll (CHC) theory of intelligence that represented a combination of the theory of Fluid and Crystallized intelligence from Catell and Horn, and John Carroll's Threestratum theory of cognitive abilities. In this theory more components were added: A fluid component of intelligence (Gf), a crystallized component of intelligence (Gc), a general memory and learning component (Gy), a broad visual perception component (Gv), a broad auditory perception component (Gu), a broad retrieval ability component (Gr), a broad cognitive speediness component (Gs), and a processing speed component (Gt) (Schneider & McGrew 2022). In 1997, O'Donnell described a new concept of Spiritual Intelligence with a holistic approach. The abilities related to this new definition included the ability to be efficient in getting results with the least possible time, money, and energy, to respect others, to be honest, to have dignity and serenity at work, to possess common sense when making decisions, to respond in a balanced way in difficult situations, and to focus on the positive aspects of others rather than criticize them (Sharifnia et al. 2022).

Emmons (2000) and Wigglesworth (2007) related *Spiritual Intelligence* (SI) to several slightly different abilities. Emmons connected SI to several abilities that allow individuals to transcend the physical and material: the ability to experience higher states of consciousness, the ability to see the spiritual in everyday life, the ability to use spiritual resources to solve problems, and the ability to be virtuous. (Rai, 2023). For Wigglesworth, SI was connected to the ability to connect to a higher Self, to be aware of the individual's ego, to be aware of a universal consciousness, to master self and ego, to possess a spiritual presence, and to master the social realm (Ma & Wang 2022). Using neuroscientific technology, some recent scientific studies have related intelligence to several neural connections between the frontal and parietal parts of the brain which allow communication and exchange of

information. This is the case of the *Frontal Integration Theory of Intelligence* from Jung and Haier (Jung & Haier 2007).

### **Theoretical Gap Analysis**

In the realm of intelligence theories, one area that remains underexplored is the relationship between individual abilities to be conscious of their own feelings and limiting beliefs. While traditional models of intelligence—such as Spearman's g factor, Howard Gardner's theory of multiple intelligences, and Robert Sternberg's triarchic theory—have significantly advanced our understanding of cognitive abilities, there is a notable theoretical gap when it comes to the interplay between emotional awareness, self-reflection, and belief systems. Theories on intelligence typically emphasize cognitive, analytical, or creative abilities, yet they often overlook the crucial aspects of emotional intelligence (EQ) and the role of limiting beliefs in shaping personal and professional outcomes.

One of the most prominent gaps lies in the relationship between cognitive intelligence (IQ) and emotional intelligence (EQ). While some models of intelligence, such as Daniel Goleman's emotional intelligence framework, highlight the importance of being aware of and managing one's emotions, this focus tends to center more on social interaction and less on the individual's internal awareness of their own feelings and beliefs. The development of emotional awareness, particularly in terms of recognizing and challenging limiting beliefs, is not adequately integrated into mainstream intelligence models. This is critical oversight, given that individuals' emotions and beliefs can significantly influence their cognitive processes, decision-making, and overall ability to function effectively in both personal and professional environments.

Limiting beliefs—those ingrained assumptions that prevent individuals from realizing their potential—play a key role in how people approach problems, interact with others, and manage stress. Yet, there is little in traditional intelligence theories that specifically address how these beliefs develop, how they limit cognitive flexibility, or how they might be overcome. For instance, cognitive-behavioral therapy (CBT) research has long shown that self-limiting beliefs affect one's emotional state and ability to solve problems. However, intelligence theories typically focus more on processing information or solving problems in isolation, rather than how the individual's internal dialogue and belief systems can impact their problem-solving capacities.

The integration of emotional awareness and limiting beliefs into a cohesive model of intelligence could enrich our understanding of individual differences in cognitive performance. Individuals who are highly conscious of their own emotions and aware of how limiting beliefs shape their thoughts and behaviors may possess a unique form of intelligence that is not captured by traditional IQ tests. This "meta-intelligence" would involve the ability to reflect on one's emotional responses, identify underlying beliefs that may be constraining personal growth, and actively work to shift those beliefs toward more empowering perspectives. Additionally, this theoretical gap can also be viewed in terms of cultural and social factors. Many

intelligence theories fail to account for the ways in which cultural beliefs and social context shape an individual's emotional awareness and belief systems. For example, in collectivist cultures, the ability to tune into one's own emotions and beliefs might differ from individualist cultures, where personal autonomy and self-awareness are more highly valued. A comprehensive intelligence theory should therefore consider the broader social and cultural factors that influence emotional consciousness and the development of beliefs.

One potential direction for bridging this gap could be to expand emotional intelligence frameworks to incorporate the awareness and transformation of limiting beliefs as a key component of personal growth and cognitive development. This would align more closely with the growing body of research in areas like neuroplasticity, where individuals are shown to have the capacity to change their thought patterns, emotional responses, and beliefs through intentional practices such as mindfulness, cognitive reframing, and therapeutic interventions. In conclusion, the theoretical gap in intelligence theories related to an individual's ability to be conscious of their own feelings and limiting beliefs represents a significant opportunity for further research and integration. By incorporating emotional awareness and the transformative power of self-reflection into the broader concept of intelligence, we could develop more holistic models that account for the complex, dynamic nature of human cognition and personal development.

# Problem Statement: Inner Knowledge and the Challenges of Knowledge Management (KM)

In 2000, Cope suggested that on top of *Organization knowledge*, workers, in corporations, could potentially expand their own *Personal Knowledge*, that is, the knowledge that they possess and use within the organization, by developing different cognitive processes, using their intuition, and acting. (Young 2012). In 2009, Jones proposed that *Personal Knowledge Management* (PKM) could be an area of *Knowledge Management* that encourages workers to be responsible for developing their own knowledge to increase productivity.

Although the concept of *Inner Knowledge creation* was first mentioned in 2012 by Young with the concept of "*Personal Knowledge Capital*" within the field of Knowledge Management, in 2022 Flor *et al.* suggested that *Inner Knowledge* (IK) was different to *Personal Knowledge* (PK) in the sense that IK allows workers to manage subjective and unconscious components -that PK does not contain- that affect the productivity, motivation, and wellbeing of workers.

In 2023 Inner Knowledge Management (IKM) was proposed as a model to observe, analyze, record, manage, and enhance Inner Knowledge (De la Flor et al., 2023). The model proved that by helping individuals create, manage, store, and modify their Inner Knowledge, workers could increase their productivity, motivation, and well-being. The model suggested that in the first phase – the Introspective Evaluation phase – workers could observe, pinpoint, and classify inner assets (emotions and beliefs) by their internal or external approach. In the Externalization phase, workers were able to be aware of unconscious inner assets (emotions and beliefs) that were limiting

their potential. In the third phase – the *Start-up* phase – workers were able to manage those limiting inner assets (such as limiting beliefs and negative emotions), eliminating them and acquiring new objective data that would contribute to creating balanced emotions and positive habits. In the last phase – called the *Internalisation* phase – most workers were able to internalize new positive inner assets that were favorable to their productivity, motivation, and well-being.

The challenges of current KM models are that they do not deal with subjective components contained within knowledge and therefore they do not eliminate the interferences that these components bring to decision-making processes. On the contrary, the IKM model transforms conscious and unconscious subjective components into objective components preventing workers from seeing subjectively. Therefore, studying which IKM capabilities can manage negative emotions, limiting beliefs, and ideas about oneself, others, or the environment, transforming patterns, decisions, and actions, and understanding which types of intelligence can contribute to this aim, can help workers and organizations to use human and physical resources more efficiently.

Although the challenges of IKM are the quantitative measurement of subjective components, the absolute level of knowledge can be measured across all sub-skills within the discipline. The complete knowledge level of the assessment can fall within the weak, proficient or strong category. Percentile tests could be used to analyze workers from their scores to the absolute scores of the other test-taking population considering a relative standing. Each sub-skill could be assessed independently so that one sub-skill does not impact on the results of another. Using powerful algorithms and multiple correct response methodologies, different levels of knowledge regarding conscious and unconscious material can be assessed within each sub-skill. This score identifies an individual who can put their knowledge into practice. A low score indicates little ability to apply the knowledge. Subject coverage tests could provide the overall number that indicates the extent to which the test-taker has the ability 'covered'. It is calculated by adding up the sub-skills that the candidate is Proficient or Strong as a percentage of the overall sub-skills. The higher the number, the more well-rounded the individual is.

# **Findings**

To understand if the abilities described in the IKM model are related to one or more intelligence theories, the different intelligence theories, abilities, factors measured, and components need to be organized according to the various types of intelligence, number of factors measured, and nature of factors. Results can be seen in Table 1.

**Table 1.** Analysis of the most Important Intelligence Theories by Author(s), measured Factors, and their Nature

Year	rs, and their Natu  Author/s	Theory	Type of Intelligence	N° Measured Factors	Nature of factors	
1904	Charles Spearman	General Intelligence theory	Cognitive Intelligence (Int.)	4	Mental (4)	
1919	Jean Piaget	Cognitive Development theory	Cognitive Int.	3	Mental (3)	
1920	Edward L. Thorndike	Social Intelligence theory	Social Int.	2	Emotional (2) Mental (1) Conscious (1)	
1950 1964 1966	Masllow Beldoch Leuner	Emotional Intelligence theories	Emotional Int.	5	Mental (3) Emotional (3) Conscious (1)	
1963	Raymond Cattell & Horn	Fluid and Crystallized factors of intelligence theory	Cognitive Int.	4	Mental (4)	
1966	Das, Kirby, and Jarman	PASS theory of Intelligence	Cognitive Int.	4	Mental (4)	
1983 1995 1999	Gardner	Multiple intelligences theory	Logical & Mathematical Int. Spatial Int. Linguistic Int. Intrapersonal- Interpersonal Int. Musical Int. Kinaesthetic Int. Naturalistic Int. Existential Int.	8	Mental (4) Emotional (2) Natural (2) Spiritual (1) Conscious (1)	
1984	Stenberg	Triarchic theory of intelligence	Cognitive Int.	3	Mental (3) Mental Mental	
1990	Zohar	Spiritual intelligence theory	Spiritual Int.	11	Conscious (2) Natural (1) Mental (4) Spiritual (2) Emotional (3)	
1993	John Carroll  Carroll, Cattell, and  Horn	Three-stratum Theory of Intelligence Cattell-Horn- Carroll theory of intelligence (HCH)	Cognitive Int.	7	Mental (7)	
1997	O'Donnell	Spiritual intelligence theory	Spiritual Int.	8	Mental (5) Emotional (4)	
2000	Emmons Wigglesworth	Spiritual intelligence theory	Spiritual Int.	10	Conscious (4) Spiritual (5) Mental (1) Emotional (1)	
				TOTAL: 69	TOTAL: 78	

Following on from this, IKM abilities were classified and compared to the various abilities described by the different intelligence theories. As some IKM abilities are composed of several more specific abilities, two groups were created: a first group of abilities called the *broad inner abilities* and a second group formed by more specific abilities, called the *narrow inner abilities*.

The *broad inner abilities* would include: the ability to be objective, the ability to have a global vision, the ability to communicate positively and be an active listener, the ability to be empathetic to others, and the ability to feel serene. When comparing the six broader IKM abilities, results show that they all relate to at least one intelligence theory. The ability to be objective is related to all the factors measured by the Cognitive Development theory as IKM enhances the abilities to acquire, construct, and use (inner) knowledge. It is also related to understanding others' feelings (outer knowledge) – a factor measured in Social Intelligence – to recognizing and labelling one's own and other's feelings and emotions (inner), discerning and managing emotions (inner), and using them to conduct thinking and behaviour, typical of *Emotional intelligence*. It is also related to data comprehension (inner and outer knowledge) and learning abilities (learning how to distinguish inner from outer knowledge), which is typical of Fluid and Crystallized intelligence theories. In addition to this, it is connected to possessing attention abilities, simultaneous cognitive abilities, and successive cognitive abilities (to learn how to distinguish inner from outer) – typical of PASS theory of Intelligence – and to use analytical abilities to perceive problems (from being simultaneously aware of subjective and objective data). It is also linked to several practical abilities such as to acquire (objective) knowledge (pinpointed in the *Triarchic theory of intelligence*). Lastly it is related to possessing a self-awareness ability (to distinguish inner from outer) and the ability to ask fundamental "why?" questions - pinpointed in the Spiritual intelligence theories (Zohar) – and to the ability to be aware of the individual's own ego (Wigglesworth).

The ability to have a global vision is related to the following factors described in various intelligence theories: to possessing mathematical and spatial visualization and memory from the General Intelligence theories (Spearman), to be able to acquire, construct, and use (inner) knowledge from the Cognitive Development theories (Piaget), to be able to understand others' feelings (Social intelligence), to recognize and label one's own and other's feelings and emotions (Emotional intelligence), to possessing data comprehension skills, learning abilities (Triarchic theory of intelligence), attention abilities, simultaneous cognitive abilities and successive cognitive abilities (PASS theory of intelligence), emotional skills, skills to connect to and respect nature (Naturalistic intelligence), skills to resolve existential human issues (Existential intelligence), analytical abilities to perceive problems, practical abilities to acquire knowledge (Triarchic theory of intelligence), to have self-awareness ability, compassion, humility, the ability to ask fundamental "why?" questions (Zohar's Spiritual Intelligence theory);, in addition to several broad and narrow abilities including fluid intelligence (Gf), crystallized intelligence (Gc), general memory and learning (Gy), broad visual perception (Gv), broad auditory perception (Gu), broad retrieval abilities (Gr), broad cognitive speediness (Gs), processing speed (Gt) (from the Cattell-Horn-Carroll theory of intelligence), to be honest (from O'Donnell's Spiritual intelligence theory), to see the spiritual in life (Emmons' Spiritual theory), to connect to a higher Self, to be aware of the individual's ego and to be aware of a universal consciousness (Wigglesworth's Spiritual theory).

The ability to communicate positively and be an active listener is linked to the following factors: to acquire, construct and use (inner and outer) knowledge (Cognitive Development theories), to understand others' feelings (Social intelligence), to recognize and label one's own and other's feelings and emotions, to discern and to manage emotions and use them to conduct thinking and behavior (Emotional intelligence), to verbal and writing skills (Linguistic intelligence), to analytical abilities to perceive problems (inner and outer knowledge), to the creative abilities necessary to solve problems and practical abilities to acquire knowledge (inner and outer), to the ability to be spontaneous, to the ability to be vision- and value-led, to the ability to think holistically and to be compassionate, the ability to celebrate diversity and having a feeling of independence, the ability to be humble and to ask fundamental "why?" questions, the ability to reframe, to the positive use of adversity and to having a sense of vocation (typical from Zohar's Spiritual intelligence theory), to possess the general cognitive abilities, the broad and narrow abilities (from the Cattell-Horn-Carroll theory of intelligence), to the ability to be efficient getting results with the least possible time, money, and energy, to the ability to respect others & to be honest, to the ability to have dignity and serenity at work, to the ability to have common sense in the making of decisions and to respond in a serene way in difficult situations, to the ability to focus on the positive aspects of others rather than criticize them (typical of O'Donnell's Spiritual theory of intelligence), and to the ability to be virtuous, to be aware of the individual's ego, to master the self and the ego and to master the social realm (typical of *Emmons* and Wigglesworth Spiritual theory of intelligence relatively).

The ability to **be empathetic to others** is linked to the following factors: to acquire, construct and use (inner and outer) knowledge (*Cognitive Development theory*), to understand others' feelings (*Social intelligence*), to recognize and label other's feelings and emotions and to use them to conduct thinking and behavior (*Emotional intelligence*), to possess analytical abilities, to perceive problems (inner and outer), to possess practical abilities to acquire knowledge (inner and outer), to be compassionate, to celebrate diversity, to ask fundamental "why?" questions, to the ability to reframe and to the positive use of adversity and having a sense of vocation (typical of *Zohar's Spiritual intelligence theory*), to possessing general cognitive abilities, broad and narrow abilities (from the *Cattell-Horn-Carroll theory of intelligence*), the ability to respect others and to be honest, the ability to respond in a serene way to difficult situations, the ability to focus on the positive aspects of others rather than criticize them (*O'Donnell's Spiritual theory of intelligence*) and the ability of being aware of the individual's ego (Emmons Spiritual theory of intelligence).

The ability **to feel serene** is also linked to several abilities: the ability to respect others and to be honest, the ability to have dignity and serenity at work, the ability to possess common sense in decision-making and to respond serenely to difficult situations, (*O'Donnell's* Spiritual theory of intelligence), the ability to be aware of the individual's ego, the ability to be aware of universal consciousness, the ability to master self and ego and the ability to manifest a spiritual presence (*Wigglesworth* 

*Spiritual theory of intelligence*). The ability to **feel self-assured** is linked to a self-awareness ability (*Zohar's Spiritual intelligence theory*).

The *narrow inner abilities* related to the different IKM phases were compared to the factors pinpointed in the various intelligence theories, some of them not yet described by any intelligence theory. Results can be seen in Table 2.

**Table 2.** Analysis of IKM Narrow Abilities related to different Types of Intelligence

IKM Phase		Action required	Narrow abilities needed	Theory that is linked to
	1	To be aware of own needs and level of satisfaction	Self-awareness ability	Spiritual intelligence (Zohar)
	2	To create SMART goals and strategies	Planning cognitive abilities, attention abilities, simultaneous cognitive abilities, and successive cognitive abilities	PASS theory of intelligence
	3		Analytical abilities to perceive problems, creative abilities to solve problems and practical abilities to acquire knowledge	Triarchy theory of intelligence
	4		Broad and narrow abilities	HCH theory of intelligence
Introspective Evaluation	5		Ability to be efficient, getting results with the least possible time, money, and energy and the ability to possess common sense decision making	Spiritual intelligence (O'Donnell)
	6	To observe conscious inner assets (IA)	Recognize own and other's feelings and emotions	Social theory of intelligence
	7		Recognize own conscious limiting beliefs	Spiritual intelligence (Wigglesworth)
	8	To pinpoint conscious IA	Discern between conscious emotions	Emotional theory of intelligence
	9		Discern between conscious limiting beliefs	NOT FOUND
	1 0	To classify conscious IA	Classify own conscious emotions between balanced and unbalanced	Social intelligence
	1 1		Classify own conscious beliefs as limiting or powerful	NOT FOUND
Externalization phase	1	Observe, pinpoint, and classify	Observe, pinpoint, and classify own unconscious emotions	Emotional intelligence
		unconscious limiting IA		
	2		Observe, pinpoint, and classify own unconscious beliefs as limiting or powerful	NOT FOUND
Start Up phase	1	Manage Unconscious IA	Manage conscious and unconscious unbalanced emotions	Emotional intelligence
	2		Manage conscious and unconscious limiting beliefs (manage ego)	Spiritual intelligence (Wigglesworth)
	3	To transform inefficient IA into efficient IA	Acquire or construct new efficient inner knowledge	Cognitive- development theory
	4		Experience balanced emotions	Emotional intelligence theory
	5		Ability to not judge self and others, to accept own limitations, circumstances, and other people and to disidentify from their own inner assets	NOT FOUND
Internalization phase	1	To internalize new powerful data	Ability to recognize self-worth and self-power and not to feel above or below others in value, worth or power	NOT FOUND
	_			

2	To experience balanced emotions, to communicate and behave in an efficient way	Ability to experience vitality, wellbeing, curiosity, compassion for self and for others, serenity, confidence in self and in the environment	Emotional intelligence theory
3	To feel inner peace and develop intuition	Ability to feel inner peace and develop intuition	NOT FOUND

The results of analyzing the intelligence theories designed over the last two centuries, the several factors or abilities described in them as well as the method in which knowledge is acquired or managed, include the following conclusions:

- 1. All factors described in the intelligence theories possess one or more components of different nature: natural, mental, emotional, conscious, and spiritual.
- 2. The 12 intelligence theories describe 69 factors composed of 79 components. From the point of view of their natures, the factors that have been studied the most are factors that possess a mental component (as 55% of all components are mental), followed by factors that possess an emotional component (18%), then factors that possess a conscious component (11%), then factors that possess a spiritual component (10%), and lastly, factors that possess a natural component (3%), as seen in Table 3.

**Table 3.** Percentage of Factors analyzed by Intelligence Theories according to their Nature

Nature of factors described in Intelligence theories	Example of factors that share this component	Number of components in the various factors described	%
Mental	Analytical skills, mathematical skills, verbal skills spatial visualization and memory	44	55%
Emotional	Ability to feel own emotions and communicate them	15	18%
Conscious	Ability to be conscious of own emotions	9	11%
Spiritual	Ability to see the spiritual in life, the ability to be aware of a universal consciousness, ability to possess a spiritual presence	8	10%
Natural	The ability to gather information, be spontaneous, or possess musical skills	3	3%
TOTAL		79	

3. Some factors are related to a single component and some of them are related to two or more components. The more components the ability or the factor possesses, the more layers of complexity it entails. For example, to resolve

a mathematical exercise entails 2 components, one natural (the ability to have access to data through the senses) and one mental component (the capacity that allows the individual to do math). The ability to stop working due to a shocking piece of news such as being informed of a car accident of a family member, entails 3 components, one natural (the ability to have access to data through the senses), one mental component (to process mentally the information, etc.), and one emotional component (to be able to feel own emotions). The ability to communicate effectively and give support to a child who is crying because their dog is lost, entails 4 components, one natural (the ability to have access to data through the senses), one mental component (to analyze the situation, gather information, talk, etc.), one emotional component (to be able to feel own emotions), and one conscious component (to be able to be conscious of the child's emotions). The ability to use spiritual resources to help a drug addict to effectively stay away from the drugs has 5 components: one natural (the ability to have access to data through the senses), one mental (to analyze the situation, gather information, talk etc.), one emotional (to be able to feel own emotions), one conscious component (to be able to be conscious of the person's emotions), and one spiritual (to have access to and use spiritual resources).

- 4. Factors with natural components are simpler to measure than factors with mental, emotional, conscious or spiritual components, probably because natural factors imply simpler actions and can be measured in a more simplistic way than, for example, mental components and so on. In turn, mental components seem simpler to observe and measure than emotional, conscious or spiritual components.
- 5. With regards to the six broad IKM abilities described in Table 1 (the ability to be objective, the ability to have a global vision, the ability to be empathetic to others, the ability to communicate positively and be an active listener, the ability to feel serene and to feel self-assured when making decisions), they all have a correspondent ability with at least one intelligence theory. Nevertheless, when analyzing the 20 narrow IKM abilities necessary to achieve the different actions required in each IKM phase, it was observed that only 14 out of the 20 abilities described correspond with an ability described in an intelligence theory.

The IKM abilities that are not related to any intelligence theory are:

- a) the ability to observe, pinpoint and classify conscious beliefs from the *Introspective* phase
- b) the ability to observe, pinpoint and classify unconscious beliefs from the *Externalization* phase
- c) the ability to manage conscious and unconscious beliefs from the *Start-up* phase
- d) the ability to create or acquire objective information through the ability not to judge oneself or others, to accept oneself, others & circumstances, the ability to disidentify from ego, the ability to feel self-value, self-worth and

the using of one's own power (without feeling above or below others in value, merit, or power), the ability to feel balanced emotions including inner peace plus the ability to develop intuition in order to create efficient behavior from the *Internalization* phase

This means that there are six abilities that have never been included in any of the intelligence theoretical models. These are:

- 1) The ability to discern between conscious limiting beliefs and objective data and to classify them as neutral or limiting.
- 2) The ability to discern between unconscious limiting beliefs and objective data and to classify them as neutral or limiting.
- 3) The ability to manage conscious and unconscious beliefs, substituting them by objective data; 4, the ability not to judge oneself and others, to accept one's own limitations, circumstances, and people and to disidentify from their own inner assets (beliefs and emotions).
- 4) The ability to feel self-value, self-worth and the ability to use one's own power (without feeling above or below others in value, merit or power); and
- 5) The ability to find inner peace and develop intuition to create efficient behavior.
- 6. From the study it was also observed that there are several factors that possess a conscious component that have been included in other intelligence theories. These are: the ability to be aware of one's own and others' emotions (*Emotional intelligence*), the ability to be aware of a higher self (*Spiritual intelligence*), the ability of be aware of nature needs (*Naturalistic intelligence*), the ability to be compassionate towards others, the ability to have a sense of vocation (both from *Zohar's Spiritual intelligence*), and the ability to be aware of a universal consciousness (*Wigglesworth's Spiritual intelligence*).

### **Discussion and Conclusions**

Intelligence theories have been used as an attempt to understand which human abilities and capacities bring humankind closer to knowledge and to study to what extent knowledge can be reached, understood, and managed with our limited physical resources. Science has investigated different abilities with natural, emotional, mental, conscious, and spiritual components and several theories to cluster these abilities under different types of intelligence have been designed. Perceiving, managing, transmitting, memorizing, learning, relating, or processing data were some of the most basic abilities that scientists started measuring to understand the limits and capacities of the human mind. After two centuries, science has suggested that intelligence is something wider than just a sum of cognitive abilities. The ability to be aware of one's own and others' feelings has allowed scientists to understand that the power to connect and be compassionate toward others and towards themselves

can be developed. The ability to connect with nature has allowed scientists to understand that the power to connect and protect nature can be developed. The ability to be conscious of unconscious negative emotions and limiting beliefs described in the IKM has allowed scientists to understand that the power to overcome inner limits can be developed and the ability to connect with something larger than anything from this world can be developed.

Furthermore, this study allows understanding that when placing IKM abilities with the abilities described in the most important theories of intelligence over the last two centuries, it can be observed that six specific abilities with conscious components have not yet been described in any intelligence theory so far. Considering that some intelligence theories have described several abilities with conscious components, the study proposes that if all the abilities that possess a conscious component are grouped together, including those described in the IKM model and a few others described before in various intelligence theories, then a new type of intelligence can be defined. Organizing all these factors hierarchically according to the components of different nature (natural, emotional, mental, conscious and spiritual) that are contained within, would create an image of what this new type of intelligence would look like covering all the different aspects explored in the various intelligence theories so far. This includes the most basic natural components up to the spiritual components. All factors related to this new type of intelligence can be accommodated hierarchically in 5 different layers as described in Image 1.

**Image 1.** Conscious Intelligence Factors organized by Layers Hierarchically



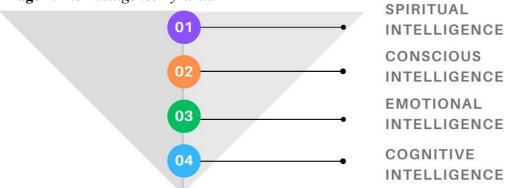
Finally, this study proposes that the ability to use spiritual resources to solve problems is dependent on the realization of several other factors. Firstly, one needs to exist (existence has an inherent natural component related to natural intelligence), then one needs to be able to be a sentient being (a being that can feel emotions), then

one needs to be able solve problems (a being that has some basic mental capacities), then one needs to be able to be aware of things (a being that can use consciousness internally and externally) and lastly one needs to be able to connect with the spiritual realm (a being that can have a spiritual experience). This way, factors or abilities can also be classified in a hierarchical structure as described in Image 2.

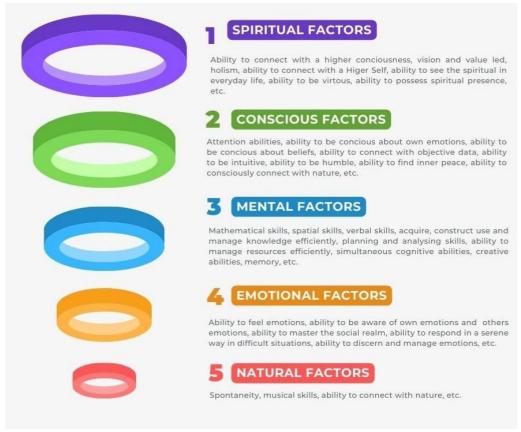
On top of its conclusions, the study proposes to use an Intelligence Pyramid, following what Rowley proposed in 2007 for knowledge as described in Image 2 which explains the hierarchical relationships between cognitive, emotional, conscious, and spiritual factors described in the various intelligence theories. As the DIKW Pyramid (Rowley, 2007) explained, there could be a hierarchy or functional relationship between data, information, knowledge, and wisdom with information being defined in terms of data, knowledge being defined in terms of information, and wisdom being defined in terms of knowledge. The Intelligence Pyramid proposes that there could be a functional relationship between cognitive, emotional, conscious, and spiritual intelligence.

This would imply that cognitive intelligence centered on knowledge of objective data would be the most basic intelligence followed by emotional intelligence which focuses on knowledge of emotional data, and this in turn would be followed by conscious intelligence which focuses on being aware of conscious and unconscious data, and lastly, this would be followed by the spiritual intelligence which focuses on the spiritual experience.

Image 2. The Intelligence Pyramid



**Image 2.** Factors of Intelligence Theories classified by their Nature and Hierarchical Structure



### **Contributions of the Article**

The Importance of Inner knowledge in the Digital Age

In the digital age, managing beliefs and difficult emotions has become more important than ever. The rapid evolution of technology and the pervasive influence of the internet have created a world where information is accessible at an unprecedented scale, and where emotional responses can be triggered instantly through social media, online forums, or news outlets. The constant bombardment of information, opinions, and world events can lead to mental exhaustion, confusion, and emotional instability if not properly managed. In this context, the ability to regulate beliefs and emotions becomes critical for personal well-being, as well as for fostering healthy interactions in society.

One of the most significant challenges in the digital age is the overwhelming amount of information people encounter daily. With just a few clicks, individuals can access a variety of perspectives on almost any topic, from political debates to health advice. While this wealth of information has its advantages, it also creates the risk of information overload. In this environment, it is easy for people to become attached to certain beliefs, often based on the most emotionally charged or

sensationalized content they encounter online. This phenomenon is amplified by algorithms that prioritize content likely to evoke strong emotions—such as anger, fear, or outrage—instead of balanced, objective information.

For instance, social media platforms often fuel confirmation bias, where users are shown content that aligns with their pre-existing beliefs, reinforcing those beliefs and making it harder to consider alternative perspectives. This narrowing of worldview can contribute to the polarization of societies, where individuals or groups become increasingly entrenched in their views, dismissing others as uninformed or even dangerous. Using *Inner Knowledge* management, and therefore *Conscious intelligence* in such an environment would allow individuals to cultivate critical thinking skills and the awareness that the information they consume might be incomplete, misleading, or designed to trigger an emotional reaction.

### **Research Limitations**

This study is limited to the IKM abilities and those that have been described in the various intelligence models over the last two centuries. Further research needs to be done to complete the list of factors that could form this potentially new type of intelligence. The study is also limited to the analysis of the connections between the IKM factors and certain types of intelligence, keeping in mind that their approaches are completely different. This is the case of the *Parieto-frontal integration theory of intelligence* because its approach is purely biological. The analysis does not consider other research models of cognitive processes beyond the different types of intelligence, such as the different models of human consciousness. The analysis does not study the lines of connection between knowledge and wisdom.

# **Future Lines of Research and Research Suggestions**

As much as IQ tests establish that certain abilities such as perceiving, managing, transmitting, memorizing, learning, and processing data somehow differ between individuals, future lines of research could entail:

- 1. Exploring whether Conscious intelligence (CI) abilities are nurture or nature related.
- 2. Measure CI factors more in detail in order to comprehend their relationship with various levels of intelligence.
- 3. Measure the relationship between Conscious intelligence and Spiritual intelligence as well as Cognitive intelligence and Conscious intelligence. Compare all the IKM factors with the different intelligence theories as some of them do not correspond to any of them.
- 4. Explore how new organizations might be developing conscious intelligence as groups based on the research of Jones, P. (2024) on *Business company approaches to the protection of nature and biodiversity* where the conservation and protection of nature is attracting increasing attention in the business world.

- 5. Explore how Conscious intelligence can help with the challenges in this new deglobalization (PAPANIKOS, 2024) as mentioned in the article The Future of Globalization.
- 6. Explore whether Conscious intelligence can help develop ethics and integrity in business or like Gregory Papanikos, (Papanikos, G. 2025) indicated ethics and integrity can be taught.
- 7. Explore whether Conscious intelligence can help governments to respect human rights as indicated in the research done by G.T. Papanikos (Papanikos, G. T., 2025).

### References

- Bostan Z, Majdi A A, Honari H, Karoubi M, Nikjoo A (2021) The Relationship Between Cultural Intelligence (CQ), Spiritual Intelligence (SQ), and Interpersonal Communication Skills: The Case of Cultural Tour Guides. *Tourism Culture & Communication*, 21(4), 345–353.
- Brody N (1999) What is intelligence? *International Review of Psychiatry*, 11(1), 19–25.
- Brown R E (2016) Hebb and Cattell: The genesis of the theory of fluid and crystallized intelligence. *Frontiers in Human Neuroscience*, 10, 606.
- Currie C (2023) Creating enabling spaces for adolescents through the development of spiritual intelligence. In *African Schools as Enabling Spaces: A Framework for Building Communities of Care*.
- Flor I D L, Sarabia M, Crecente F, Del Val M T (2022) Inner Knowledge: A New Approach Building Upon Innovation. *International Journal of Innovation and Technology Management*, 19(01), 2140006.
- Gallardo-Pujol D (2013) Carpeta docent/Bienni 2010-2012-David Gallardo Pujol.
- Gilbert P (2019) Explorations into the nature and function of compassion. *Current Opinion in Psychology*, 28, 108–114.
- Heeren A, Mouguiama-Daouda C, McNally R J (2023) A network approach to climate change anxiety and its key related features. *Journal of Anxiety Disorders*, 93, 102625.
- Hetherington S (2022) *Defining Knowledge: Method and Metaphysics*. Cambridge University Press.
- Jones P (2024) Business company approaches to the protection of nature and biodiversity. *Athens Journal of Business & Economics*, 10(3), 239–252.
- Jung R E, Haier R J (2007) The Parieto-Frontal Integration Theory (P-FIT) of intelligence: Converging neuroimaging evidence. *Behavioral and Brain Sciences*, 30(2), 135–154.
- Killian K D (2012) Development and validation of the emotional self-awareness questionnaire: A measure of emotional intelligence. *Journal of Marital and Family Therapy*, 38(3), 502–514.
- Klein P D (1998) Knowledge, concept of. In *Routledge Encyclopaedia of Philosophy* (pp. 266–276). London & New York: Routledge.
- Ma Q, Wang F (2022) The role of students' spiritual intelligence in enhancing their academic engagement: A theoretical review. *Frontiers in Psychology*, 13, 857842.
- Marsman M, Rhemtulla M (2022) Guest Editors' Introduction to The Special Issue "Network Psychometrics in Action": Methodological Innovations Inspired by Empirical Problems. *Psychometrika*, 87(1), 1–11.
- McLeod S (2007) Jean Piaget's theory of cognitive development.
- Ngcobo S, Reddy C D (2024) Exploring the link between organisational performance pressures

- and the factors that compromise ethical leadership. *Athens Journal of Business & Economics*, 10(2), 139–158.
- Papanikos G T (2024) The future of globalization. *Athens Journal of Business & Economics*, 10(2), 87–108.
- Papanikos G T (2025) Ethics and Academic Integrity: Lessons from Plato's *Protagoras*. *Athens Journal of Humanities and Arts*.
- Papanikos G T (2025) Are Human Rights a Luxury or a Normal Good? *Athens Journal of*, 9. Rai D K (2023) Importance of religious attitude and spiritual intelligence in socio-religious harmony.
- Sabbah S S, Abd Aldin A M (2022) Distinctive behavioral characteristics of outstanding students in the light of Triarchic theory of intelligence from the point of view of students and their teachers. *International Journal of Health Sciences*, (II), 8624–8639.
- Sanghvi P (2020) Piaget's theory of cognitive development: A review. *Indian Journal of Mental Health*, 7(2), 90–96.
- Schneider W J, McGrew K S (2022) The Cattell–Horn–Carroll abilities (CHC theory) is a comprehensive. In *Contemporary Intellectual Assessment: Theories, Tests, and Issues* (p. 73).
- Sharifnia A M, Fernandez R, Green H, Alananzeh I (2022) Spiritual intelligence and professional nursing practice: A systematic review and meta-analysis. *International Journal of Nursing Studies Advances*, 100096.
- Silva Jr P (2019) Beliefless knowing. Pacific Philosophical Quarterly, 100(3), 723–746.
- Thorndike R L, Stein S (1937) An evaluation of the attempts to measure social intelligence. *Psychological Bulletin*, 34(5), 275.
- Tirri K, Nokelainen P (2012) Measuring Multiple Intelligences and Moral Sensitivities in Education (Vol. 5). Springer Science & Business Media.
- Vasconcelos A F (2020) Spiritual intelligence: A theoretical synthesis and work-life potential linkages. *International Journal of Organizational Analysis*, 28(1), 109–134.
- Wechsler D (1943) Non-intellective factors in general intelligence. *The Journal of Abnormal and Social Psychology*, 38(1), 101.
- Zagzebski L (2017) What is knowledge? In *The Blackwell Guide to Epistemology* (pp. 92–116). Zajda J (2019) Current research of theories and models of intelligence. *Curriculum and Teaching*, 34(1), 87–108.