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The Trinity Paradigm of Intelligence: An Integrated Framework Emerging from Historical Review and Contemporary Research

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Abstract

The Trinity Paradigm of Intelligence (TPI) provides a comprehensive theoretical framework that views human intelligence as a dynamic, three-part system operating across three interconnected levels: Intrapersonal, Interpersonal, and Transpersonal. Based on transpersonal-phenomenological research with 48 diverse participants, this framework was developed through a systematic investigation into the core of intelligence. The study used in-depth interviews and phenomenological analysis to identify over 250 attributes of intelligence, grouped into three related categories. Results indicate that the core of intelligence is interdependence—the ability to actively connect across self, relationships, and transcendental aspects. The TPI draws from autopoietic theory, dissipative structure theory, and general systems theory, offering testable hypotheses and practical applications in education, clinical practice, and organizational growth. This article outlines the theoretical foundation, methodology, main findings, and implications of the Trinity Paradigm, presenting a unified approach that overcomes limitations of reductionist methods in intelligence research.

Keywords: intelligence, intrapersonal intelligence, interpersonal intelligence, transpersonal intelligence, interdependence, autopoiesis, phenomenology

Introduction

Since Plato's time, the existence of a phenomenon called “intelligence” has been acknowledged, and many efforts have been made to define it. However, aside from a few meaningful and comprehensive definitions from ancient Eastern and Western civilizations, most modern explanations only partially reveal its true nature (Gregory, 1994). In many cases, these descriptions have been heavily influenced and complicated by politics, economy, gender, and socially constructed attributes like race and class (Gould, 1981). The vocationalism movement in education has further added to the confusion, shifting the purpose of schooling from becoming educated to simply learning a skill or trade (Oakley, 1992). While the number of graduates from higher education institutions has increased and scientific papers have grown exponentially, our understanding of the world actually diminishes. As IQ scores have risen and technology has advanced significantly, overall human conditions have worsened (Herrnstein & Murray, 1994).

The field of psychology, especially educational psychology, has concentrated on defining and measuring intelligence since the rise of psychometric thinking. This effort, ongoing for over a century, has remained inconclusive and often unproductive. A key issue is the distinction between knowledge and intelligence: intelligence is the ability to apply knowledge to achieve goals (Newell, 1990).

While this concept aligns with many definitions of intelligence, it doesn't offer a simple way to measure it quantitatively because knowledge itself is not easily quantifiable. The goal of exploring the "essence" of intelligence was not to add to existing uncertainties but to create a unified framework that captures the purpose of intelligence. By integrating various theoretical perspectives, the aim was to develop a better understanding that could reveal more about human intelligence.

Historical Context and Theoretical Background

At the turn of the century, Alfred Binet in Paris was tasked with developing measures to identify schoolchildren who needed help. Binet created a series of short tasks related to everyday problems, yet he firmly believed that intelligence is not a single entity, not a simple measure like height, and too complex to be captured by a single number (Miller, 1993). Unfortunately, those who exploited Binet's work were quick to use the concept for their own purposes, mainly to argue that some people have an innate potential for intelligence that others lack (Gould, 1981). In 1921, 14 psychologists presented 14 different perspectives on the nature of intelligence in a symposium reported in the Journal of Educational Psychology. Since then, the effort to reach a consensus has not been repeated. Sternberg and Detterman (1986) asked about two dozen experts to answer the same questions posed in 1921. Although responses varied, Sternberg's overall conclusion was that "the molar level of theorizing seems to emphasize two principal aspects of mental functioning: the cognitive and the motivational" (p. 5).

Wechsler (1958) defined intelligence as "the aggregate or global capacity of the individual to act purposefully, to think rationally, and to deal effectively with his environment" (p. 7). Gardner (1993) developed a theory of multiple intelligences, proposing independent intelligences based on end states that individuals can achieve both across and within cultures. Goleman (1995) introduced the concept of emotional intelligence, emphasizing abilities such as self-awareness, self-regulation, motivation, empathy, and social skills. Although each of these theories offers valuable insights, they generally operate separately without being integrated into a single framework.

Ancient perspectives provide a broader foundation. Confucius stated that the goals of cognition and emotion are balance and harmony: "While there are no stirrings of pleasure, anger, sorrow, or joy, the mind may be said to be in the state of equilibrium. When those feelings have been stirred, and they act in their due degree, there ensues what may be called the state of harmony" (cited in Legge, 1971, p. 384). Plato, in *The Republic*, emphasizes using intelligence to serve the purpose of bringing one's whole soul to its highest nature—"the man who has intelligence strain all of his powers to that end" (cited in Bloom, 1991, p. 591). Aristotle's *De Anima* aims to explain how the human intellect transitions from its initial state, where it does not think, to a subsequent state, where it does (Davidson, 1992). These philosophical foundations suggest an integrated view of intelligence that includes cognitive, emotional, social, and spiritual aspects.

Purpose of the Study

This study aimed to explore "other" attributes of intelligence and develop an integrated concept using a transpersonal-phenomenological approach. The main research question was: What is intelligence? The goal was to address the existing theoretical gap and move us toward a unified understanding of intelligence. Since intelligence is fundamental across many fields, its long and varied history has produced numerous ideas that often hinder the development of a clear, singular understanding. A new approach, combining holistic (naturalistic-qualitative) methods supported by empirical research, offers a strong foundation to help educators, practitioners, and researchers better understand intelligence for their own growth and the benefit of others.

Method

Philosophical and Theoretical Framework

The exploration focused on philosophical ideas: phenomenology in general and transpersonal phenomenology specifically. Husserl (Hanna, 1993) developed transcendental phenomenology—a philosophy rooted in experience—in the early twentieth century. His goal was to understand the essence of all phenomena through experience and to reveal the mysteries of consciousness and existence. The core principle of phenomenology is "to the things themselves." Husserl believed his method could be used to conduct inquiry free from assumptions, enabling philosophers to reach a universal experiential foundation (Hanna, 1993).

Heidegger, who studied under Husserl, explained that he ultimately had to choose between focusing on consciousness and focusing on Being as the core principle of phenomenology. He chose Being. For Heidegger, the goal of phenomenology was to reveal what is hidden within phenomena—aletheia, or "the unconcealedness of what-is present" (cited in Hanna, 1993, p. 192). The transpersonal method was used because it could better explore rich, meaningful, and complex human experiences. As Braud and Anderson (1998) note: "In transpersonal method, both emic and etic, both subjective/experiential and objective/observational modes of knowing, are recognized and honored" (p. 241).

Participants

A diverse group of 48 participants was chosen for this study. The sample included 31 males and 17 females, with an average age of 48 years. Participants came from various academic, vocational, experiential, and personal backgrounds to reduce potential bias in the selection process. This approach was deemed most suitable and relevant for the chosen method and research focus, based on insights from a pilot study. The diversity among participants enabled an exploration of intelligence across different life contexts, careers, and perspectives.

Data Collection

The primary method of data collection was in-depth interviews, aligned with phenomenological research. This approach enables a comprehensive exploration of participants' experiences, understandings, and perceptions of intelligence. Interviews were conducted with careful attention to bracketing the researcher's assumptions and allowing the phenomenon to emerge through participants' stories. The transpersonal-phenomenological approach facilitated broader and deeper inquiry, focusing on the depth of experience and the wide range of outcomes that standard methods might miss.

Data Analysis

Data analysis used phenomenological methods, including identifying themes, clustering meaning units, and synthesizing core structures. The process involved eidetic reduction—the identification of essential features of the phenomenon across individual accounts. This process resulted in over 250 attributes of intelligence, which were then organized into three main categories that represent the core structure of intelligence.

Results

The Trinity Paradigm: Three Pillars of Intelligence

Analysis of interview data revealed that intelligence comprises three interconnected core elements, forming the Trinity Paradigm of Intelligence (Ghaffari, 2001). These three pillars—Intrapersonal, Interpersonal, and Transpersonal Intelligence—represent the fundamental structure of human intelligence as shown through phenomenological analysis.

Intrapersonal Intelligence

Intrapersonal Intelligence refers to the ability for self-organization, self-regulation, and self-transcendence at the individual level. This element is fundamental, encompassing qualities related to a person's relationship with themselves. Key traits include analytical skills and problem-solving ability, memory and knowledge integration, mathematical and musical talents, autonomy and self-determination, self-awareness and metacognition, emotional regulation and integration, cognitive flexibility and adaptability, self-efficacy and motivation, physical health and vitality, creativity and aesthetic sensitivity, and the ability to learn from experiences.

The theoretical basis for this component is grounded in autopoietic principles, which highlight the individual as a self-producing, self-organizing system that maintains coherence while interacting with the environment (Maturana & Varela, 1980). Participants consistently described self-knowledge, self-regulation, and the capacity for autonomous functioning as key aspects of intelligence.

Interpersonal Intelligence

Interpersonal Intelligence is the ability to create, maintain, and expand meaningful relationships with other conscious beings and social groups. This aspect views intelligence as inherently relational and developed through social interaction.

Key traits include communication and language skills, empathy and compassion, cooperation and teamwork, social understanding and theory of mind, cultural awareness and adaptability, leadership and followership abilities, conflict resolution, and community development skills.

This component aligns with social cognitive theory, attachment theory, and systems thinking. Participants emphasized the crucial role of relationships, communication, and social skills in their understanding of intelligence. The ability to empathize was especially highlighted, as it allows individuals to understand and respond effectively to others' emotional states and perspectives.

Transpersonal Intelligence

Transpersonal Intelligence is the ability to perceive and connect with aspects of reality beyond the individual self, such as spiritual awareness, ecological consciousness, and universal connectedness. This component acknowledges dimensions of intelligence that extend beyond personal and social boundaries. Key traits include spiritual awareness and practice, a sense of purpose and meaning, ecological consciousness, transcendent experiences, ethical reasoning and moral growth, wisdom and insight, connection to universal principles, and self-actualization and transcendence.

Drawing from transpersonal psychology, philosophy, and spiritual traditions, this element became essential for a full understanding of intelligence. Participants shared experiences of connection to something greater than themselves, whether seen as spiritual, ecological, or universal. Wisdom—the ability for deep insight and good judgment—stood out as a key trait of transpersonal intelligence.

The Essence of Intelligence: Interdependence

The most significant discovery from this research is that the core of intelligence is interdependence or interconnectedness. The three components do not operate independently but work together as a dynamic, integrated system. This finding supports Salingaros's (1998) mathematical theory of the urban web, which illustrates how connectivity promotes coherence and function in complex systems. Intelligence only exists and functions through the continuous interdependence among the three components. Intrapersonal intelligence requires a social context for development. Interpersonal intelligence relies on self-aware individuals. Transpersonal intelligence combines and exceeds both.

The trinity schema that developed from the research describes knowledge at its core (the integrating center), intelligence as the application (practical expression), and purpose as the surrounding sphere (Evolution/Transcendence). This schema provides guidance: intelligence moves from the core through application toward the ultimate goals of evolution and transcendence. It addresses a key gap in intelligence research—the lack of a unifying purpose or teleological focus. Previous theories have examined what intelligence is and how it functions but not its purpose. The Trinity Paradigm suggests that intelligence is rooted in evolution and transcendence—the ongoing development of humanity toward higher levels of integration and consciousness.

Autopoietic Foundations and Systems Theory

Each component acts as an autopoietic (self-producing) system that maintains its organization through interaction with other components and the environment. According to Maturana and Varela's (1980) autopoiesis theory, individuals, relationships, and transcendent awareness are all self-organizing systems that support coherence while continually evolving. The concept of autopoiesis—literally "self-making"—offers a compelling framework for understanding how intelligence maintains its organization while remaining open to change and growth.

Intelligence functions as a dissipative structure, maintaining order and complexity through continuous exchange of energy, information, and matter with the environment (Prigogine, 1997). This thermodynamic concept has important implications for understanding intelligence. Unlike closed systems that tend toward entropy (disorder), living systems preserve and increase their organization via ongoing interaction with their surroundings. Isolation leads to entropy (disorder); active interaction promotes syntropy (growing order). This explains why isolated individuals tend to have lower intellectual functioning, while those involved in social and intellectual engagement continue to develop.

The three components operate together at different levels of organization, from micro (cellular) to macro (planetary), with each level showing properties that cannot be reduced to lower levels.

Complex systems theory states that higher-level properties emerge from lower-level interactions but are not reducible to them. This idea of hierarchy and integration suggests that understanding intelligence requires analysis at multiple levels—biological, psychological, social, and spiritual.

Participant Narratives and Experiential Evidence

The phenomenological approach provided detailed descriptions of intelligence grounded in participants' lived experiences. Participants consistently portrayed intelligence not as a fixed trait but as an active, developing process of making connections. One participant explained: "Intelligence is about seeing connections—between ideas, between people, between yourself and something larger. When you can't see connections, you're not functioning intelligently."

Another participant emphasized the developmental aspect: "I wasn't really intelligent until I understood myself, then others, and then something beyond both. It wasn't learning facts—that was just information. Intelligence was the ability to use that information for growth, connection, and meaning."

The diversity of the participant sample (48 individuals from different backgrounds, professions, and perspectives) enhances confidence in the universality of the three-component structure. Although there are superficial differences in how participants conceptualized and described intelligence, the core structure remained consistent across all interviews.

Structural Coupling and Co-Evolution

Each component naturally interacts with others and the environment, leading to co-evolution through mutual influence. This principle, rooted in autopoietic theory, explains how a change in one component inevitably impacts the others. When an individual develops greater self-awareness (Intrapersonal), their capacity for empathy (Interpersonal) usually increases. Similarly, when someone deepens their spiritual practice (Transpersonal), both self-regulation and relationship quality tend to improve.

This co-evolution works both ways. Neglect or harm to one part impacts the others. A person experiencing social isolation (Interpersonal deficit) may show decreased self-awareness and self-regulation (Intrapersonal) along with a diminished sense of meaning (Transpersonal). Conversely, therapeutic intervention targeting one component often results in improvements across all three.

The principle of mutual causality states that causality works in both directions among components; each part serves as both a cause and an effect of the others. This challenges reductionist models that try to find a single cause for intelligent (or unintelligent) behavior. The Trinity Paradigm instead promotes a systemic view where multiple factors interact dynamically over time.

Discussion

Theoretical Integration

The Trinity Paradigm of Intelligence combines different theoretical views into a single comprehensive model. Traditional IQ tests only measure the cognitive parts of Intrapersonal intelligence, overlooking Interpersonal and Transpersonal aspects—explaining their limited success in predicting life achievement. Emotionally intelligent people demonstrate both Intrapersonal (self-awareness) and Interpersonal (empathy) skills. Spiritual practices improve well-being by developing Transpersonal intelligence, which connects and enhances Intrapersonal and Interpersonal functions.

The framework also explains why isolation damages intelligence: it disrupts the essential interdependence among components, causing entropy across all three dimensions. Genius often requires both solitude and collaboration because solitude builds intrapersonal intelligence, collaboration enhances interpersonal intelligence, and their integration produces transpersonal insights.

Implications for Education

The Trinity Paradigm has significant implications for educational practice and policy. Curriculum design should incorporate the development of all three components across various educational levels. Current educational systems, which primarily focus on cognitive development and vocational training, fail to address the entire spectrum of human intelligence. The emphasis on standardized tests and academic achievement only reflects a small portion of Intrapersonal intelligence, largely neglecting Interpersonal and Transpersonal dimensions.

Assessment practices need a fundamental rethink. Instead of only measuring cognitive skills with standardized tests, a complete assessment should include all three components. These include self-awareness and self-regulation (Intrapersonal), empathy and social skills (Interpersonal), and meaning-making and ethical reasoning (Transpersonal). Teacher training programs should prepare educators to recognize and improve all three areas in students, shifting the focus from just transmitting information to developing integrated intelligence.

The developmental trajectory hypothesis suggests that educational interventions should progress gradually. A strong foundation in Intrapersonal intelligence (self-awareness, self-regulation) supports Interpersonal growth (empathy, communication), which then enables Transpersonal development (meaning, transcendence). Early childhood education might emphasize self-awareness and emotional regulation, elementary education on developing social skills and communication, and secondary or higher education on fostering meaning-making and ethical reasoning.

Implications for Clinical Practice

In clinical settings, the Trinity Paradigm provides a new framework for understanding mental health and dysfunction. Mental health disorders can be viewed as imbalances among different components. Depression might represent an intrapersonal deficit, such as negative self-concept or poor self-regulation. Antisocial personality could indicate an interpersonal deficit, like a lack of empathy or impaired social cognition. Existential crises may signify a transpersonal deficit, including loss of meaning or disconnection from purpose.

Treatment should target specific component deficits while encouraging integration across all three dimensions. Cognitive-behavioral therapies may focus on intrapersonal functioning. Interpersonal therapy could address relationship patterns. Logotherapy or spiritually integrated methods might support transpersonal development. The most effective treatments would encompass all three components, recognizing their essential interdependence.

Prevention programs should encourage balanced development in all three areas from an early age. Social-emotional learning programs emphasize intrapersonal and interpersonal skills. Character education and service learning can foster transpersonal abilities. The Trinity Paradigm demonstrates that effective mental health promotion must address all three components.

Implications for Organizational and Leadership Development

In organizational settings, the Trinity Paradigm guides leadership development, team building, and shaping organizational culture. Effective leaders demonstrate strong integration of all three components. Self-awareness (Intrapersonal) promotes authentic leadership and proper self-regulation. Empathy and communication (Interpersonal) aid in effective relationship management and team leadership. Vision and purpose (Transpersonal) inspire and motivate others toward meaningful goals.

Leadership development programs should nurture all three dimensions. Self-awareness training, 360-degree feedback, and coaching enhance intrapersonal intelligence. Communication skills training, empathy building, and team exercises strengthen interpersonal intelligence. Vision development, ethical reasoning, and service orientation improve transpersonal intelligence. Programs focusing on only one dimension will result in incomplete leaders.

Team building should focus on developing groups with complementary strengths in various areas. Some members may offer analytical insight (Intrapersonal), others excel in relationship skills (Interpersonal), and some provide vision and purpose (Transpersonal). Teams balanced across these three domains tend to perform better and be more resilient. Organizational culture should promote well-rounded growth by fostering environments that value self-awareness, relationship quality, and meaningful purpose.

Performance assessment should evaluate all three dimensions. Traditional metrics mainly focus on task performance, often ignoring interpersonal contributions (teamwork, mentoring) and transpersonal contributions (innovation, ethical leadership). A comprehensive assessment offers a fuller understanding of individual and team contributions to organizational success.

Testable Hypotheses

The Trinity Paradigm proposes several testable hypotheses to guide future research. First, the Component Interdependence Hypothesis indicates that individuals with high intelligence will show strong positive correlations among Intrapersonal, Interpersonal, and Transpersonal intelligence measures. Scores on validated assessments of self-awareness, empathy, and spiritual depth should significantly correlate in intelligent individuals.

Second, the Developmental Trajectory Hypothesis predicts that intelligence develops in a consistent sequence: Intrapersonal intelligence develops first, followed by Interpersonal, with Transpersonal intelligence emerging last. Longitudinal studies should show that measures of Intrapersonal stabilize earlier than those of Interpersonal, which in turn stabilize before Transpersonal measures.

Third, the Intervention Efficacy Hypothesis predicts that interventions targeting one component will lead to noticeable improvements in the other two components, demonstrating systemic interdependence. Meditation training (Transpersonal) should enhance self-regulation (Intrapersonal) and empathy (Interpersonal). Social skills training (Interpersonal) should boost self-awareness and a sense of purpose.

Fourth, the Contextual Modulation Hypothesis predicts that the significance and expression of each component vary in predictable ways across different cultural and environmental contexts, while still maintaining the core three-part structure. Cross-cultural studies should reveal different baseline levels for each component but preserve the same correlation pattern among them.

Limitations and Future Research

This research has several limitations that need acknowledgment. Measurement challenges are present, particularly for Transpersonal intelligence, where existing tools are less developed than those for other areas. While tools for self-awareness (Intrapersonal) and empathy (Interpersonal) are well-established, validated measures for spiritual awareness, meaning-making, and transcendent experiences are still missing.

Cultural bias may exist, as the theory might reflect Western philosophical ideas, even with efforts to include diverse perspectives. The focus on individuality, self-growth, and transcendence could highlight specific cultural values. Cross-cultural validation is necessary to see if the tripartite structure applies worldwide or varies across cultures.

The complexity of the theory can make it difficult to implement in real-world settings. Although comprehensive frameworks offer explanatory power, they can be hard to apply in educational, clinical, and organizational environments that prefer simpler, more straightforward interventions. Developing practical tools and guidelines is a vital task.

While based on existing research and phenomenological investigation, more comprehensive empirical testing is necessary. The hypotheses derived from the theory need to be systematically examined using appropriate quantitative and qualitative methods. Combining psychometric validation with phenomenological depth through mixed-methods approaches could be especially valuable.

Future research should emphasize developing and validating instruments for all three components, mapping neurological correlates to brain networks and functions, conducting cross-cultural validation to test the theory in diverse cultures, performing longitudinal studies to track how each component develops over the lifespan, examining intervention programs targeting each component, and exploring the evolutionary origins of these components. Furthermore, computational modeling might offer valuable insights into the dynamics of this three-component system.

Societal Implications

In the post-modern era, with declining job opportunities due to automation, skilled workers and professionals are needed who can think critically, not just follow orders; who are creative, intuitive, and capable of leading rather than imitating others. Human society must have people who are emotionally intelligent—those who are not solely focused on instant gratification; who are responsible, moral, and interdependent, rather than solipsistic, narcissistic individuals; good community-oriented citizens; and those who are, or are becoming, self-realized and spiritual beings.

The unified concept of intelligence introduced here aims to improve humanity. Its importance is evident in every human effort, as thinking, feeling, and acting all originate from it. The Trinity Paradigm offers a broad framework for understanding and developing human potential across all aspects of intelligent functioning.

Conclusion

The Trinity Paradigm of Intelligence is a comprehensive framework that integrates various views on human intelligence into a single system (Ghaffari, 2001). By introducing three connected components—Intrapersonal, Interpersonal, and Transpersonal—the theory explains existing phenomena, generates testable hypotheses, and offers practical applications across multiple fields. The core idea of the theory—that intelligence is mainly defined by active interdependence across different levels of organization—challenges reductionist perspectives and provides a more complete understanding of human potential.

The research presented here demonstrates that intelligence cannot be fully understood from a single perspective. Cognitive methods only address one aspect of Intrapersonal intelligence. Emotional intelligence models focus on parts of Intrapersonal and Interpersonal functioning but ignore Transpersonal dimensions. Spiritual intelligence assessments look at Transpersonal aspects but may neglect fundamental cognitive and social elements. Only a comprehensive framework that recognizes the connection among all three aspects can truly capture the full scope of human intelligence.

Rooted in transpersonal-phenomenological research and established scientific principles, the Trinity Paradigm meets the criteria for a robust theoretical framework while exploring new research and application avenues. Its methodology—phenomenological investigation with diverse participants—provides both depth and breadth of understanding that solely quantitative methods cannot achieve. The identification of over 250 attributes grouped into three key categories presents a detailed map of intelligent functioning.

The practical implications of this framework are considerable. In education, it requires a fundamental rethinking of curriculum, assessment, and teacher training. In clinical practice, it offers new models for understanding and treating mental health issues. In organizational settings, it provides guidance for leadership development and team building. In social policy, it emphasizes priorities for promoting human well-being across various areas.
As humanity faces increasingly complex challenges like climate change, social fragmentation, technological disruption, and global health crises, a comprehensive understanding of intelligence—including aspects of self, relationships, and transcendence—might be essential for individual growth, societal progress, and evolutionary development. The Trinity Paradigm provides a theoretical foundation for such understanding.

The journey to understanding intelligence, like intelligence itself, never truly ends. This framework is not a final destination but a waypoint—a collection of gathered wisdom that raises new questions and opens up fresh possibilities. The core of intelligence, this research indicates, is interdependence—the ability for active connection between self, others, and the universe. Within that interdependence lies the pathway toward a more intelligent, compassionate, and evolved humanity.

References

Bloom, A. (1991). *The Republic of Plato* (2nd ed.). Basic Books.

Braud, W., & Anderson, R. (1998). *Transpersonal research methods for the social sciences*. Sage.

Davidson, H. A. (1992). *Alfarabi, Avicenna, and Averroes, on intellect: Their cosmologies, theories of the active intellect, and theories of human intellect*. Oxford University Press.

Gardner, H. (1993). *Frames of mind: The theory of multiple intelligences* (10th ed.). BasicBooks.

Ghaffari, M. (2001). *Intelligence: E pluribus unum. An ontological and epistemological inquiry* (Publication No. 9995573) [Doctoral dissertation, Cleveland State University]. ProQuest Dissertations and Theses Global.

Goleman, D. (1995). *Emotional intelligence: Why it can matter more than IQ*. Bantam Books.

Gould, S. J. (1981). *The mismeasure of man*. W. W. Norton.

Gregory, R. (1994). Seeing intelligence. In J. Khalfa (Ed.), *What is intelligence?* (pp. 13-24).Cambridge University Press.

Hanna, F. J. (1993). Rigorous intuition: Consciousness, being, and the phenomenological method. *The Journal of Transpersonal Psychology, 25*(2), 181-197.

Herrnstein, R. J., & Murray, C. (1994). *The bell curve: Intelligence and class structure in American life*. The Free Press.

Jantsch, E. (1989). *The self-organizing universe: Scientific and human implications of emerging paradigm of evolution* (6th ed.). Pergamon Press.

Legge, J. (1971). *Confucius: Confucian Analects, The Great Learning, & The Doctrine of Mean*. Dover Publications.

Maturana, H. R., & Varela, F. J. (1980). *Autopoiesis and cognition: The realization of the living*. Kluwer Boston.

Miller, L. (1993). *What we call smart: A new narrative for intelligence and learning*. Singular Publishing Group.

Newell, A. (1990). *Unified theories of cognition*. Harvard University Press.

Oakley, F. (1992). *Community of learning*. Oxford University Press.

Prigogine, I. (1997). *The end of certainty: Time, chaos, and the new laws of nature*. The Free Press.

Salingaros, N. K. (1998). Mathematical theory of the urban web. *Journal of Urban Design, 3*(1), 53-71. https://doi.org/10.1080/13574809808724461

Sternberg, R. J., & Detterman, D. K. (1986). *What is intelligence? Contemporary viewpoints on its nature and definition*. Ablex Publishing.

Varela, F. J., Thompson, E., & Rosch, E. (1991). *The embodied mind: Cognitive science and human experience*. The MIT Press.

Wechsler, D. (1958). *The measurement and appraisal of adult intelligence* (4th ed.). Williams & Wilkins.