A review of system thinking and wise organization

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Abstract
System thinking is a holistic approach that has been considered by many thinkers in the field of organization and management in recent decades. This thinking helps managers look at an organization as a whole and manage its components in relation to each other. In addition to this thinking, another important issue is the wisdom in organizations. Wisdom, which is a changeable dynamic, is an important factor in creating and increasing competitive advantage in organizations. Therefore, its advancement, management and strengthen are very important for organizations. However, by reviewing, evaluating and measuring the wisdom of each department in the organization at a specific time, it is not possible to properly review, manage and strengthen the wisdom of the entire organization, because it ignores the synergy and even eliminates it, so that not it only does not help to create a competitive advantage, but also may cause many problems such as data loss, and lack of proper use of people's knowledge and information at the right time for the organization. Therefore, in this article, system thinking, organizational wisdom and then the role of system thinking in the creation and management of wise organizations and why system thinking or holistic thinking is needed to strengthen wisdom in the whole organization? are examined.
Keywords: Wise organization, System thinking, Organizational wisdom, Practical wisdom, Holistic approach.

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1. **Introduction**

With regards to the increasing complexity and dramatic advances of science in today's dynamic world, especially in the field of human sciences and human societies such as organizations, we are witnessing dramatic changes in the short time, to which we must adapt.

Today, human knowledge is mainly based on rational reason and this issue has deprived him of the power to understand many issues (Ibn, 1985; Helali, 2020). Therefore, the elements and entities that make up the organization as a system cannot be considered individually and studied with partial wisdom. Because the components of a system together and in conjunction with each other form a whole whose characteristics are greater than the characteristics of each component of the system. In contrast to participatory thinking, there is a systemic thinking that is a comprehensive and holistic thinking. In systems thinking, the components of the system are not considered individually, but a system considered as a whole. In other words, in systems thinking, not only the components of a system, but also the relationships, patterns and structure of these components are examined together and in connection with each other. This attitude to the system creates synergy. As mentioned, managers of organizations need systemic thinking to have a holistic view and get rid of detail. This thinking that causes managers of organizations to consider the components of a set in relation to each other. Systemic thinking in management according to the internal and external factors of the organization provides a more complete picture of the organization and more accurate theories for the analysis of management and the organization (Mahdavi and Ataafarin, 2017).

Also, one of the changing dynamics in today's organizations is wisdom in organizations. Any framework of knowledge that does not include wisdom requires us to act blindly (Allee, 1997; Shoghi and Nejadi Pilehroud, 2016). There are reasons for the importance of understanding wisdom. First, wisdom has a significant impact on success at the individual, organizational, and social levels. Second, our understanding of knowledge and knowledge management increases with understanding the concept of wisdom, not only with respect to the more basic concepts of data and information, but also with respect to the more abstract and complex nature of wisdom. The emphasis of knowledge management has been more on maximizing knowledge, access to knowledge and its exchange, and less on the selection of knowledge, its use and its institutionalization in organizations. Putting this concern alongside the existing implications reveals the complexity of contemporary management and the enormous complexity and confusion of organizational environments, and forcing managers to stop and think, to step back, and to rely on their own experiences, and to show that organizational theorists should Seek Something Beyond Knowledge (Eisenhardt, 1989; Hambrick, 1989; Gosling and Mintzberg, 2004; Prusak & Davenport, 2003; Shoghi and Nejadi Pilehroud, 2016).

Boal and Hooijberg (2001), with noting the consequences of complexity and changing strategic management, identify managerial wisdom as an important component of strategic management, and Korac-Kakabadse et al. (2001) discuss transformational leadership in terms of wisdom. Finally, there are situations in which policymakers and managers make unwise decisions (Small, 2004; Shoghi and Nejadi Pilehroud, 2016). Most organizations want to know how to avoid these making unwise decisions (Rowley, 2006; Shoghi and Nejadi Pilehroud, 2016). However, the study of wisdom and its commercial application has not been given enough attention to date (Roos, 2017; Shoghi and Moghaddamipour, 2017). This lack of attention to wisdom may be due to the fact that organizations are not able to think and act wisely, or it is assumed that wisdom and the motivation of organizational profit and personal interests are contradictory. However, the elements of this model, such as complexity and systems thinking, teamwork, and collaboration, focus on learning and adaptation, and knowing what we know,

what we do not know, and what we should do about what we know are related with Organizational life and business (Shoghi and Moghaddamipour, 2017).

Also, wisdom and knowledge in different parts of an organization cannot be examined and evaluated separately, because the wisdom in different parts of an organization must be related to each other and together and in connection with Both be reviewed and evaluated and strengthened. Also, if the wisdom in different parts of an organization are not related to each other, the probability of losing information and not using the right knowledge and information at the right time increases, and this reduces the competitive advantage of the organization. In fact, this article tries to examine the wisdom of the organization, which is a changing dynamic and one of the important pillars in gaining and increasing competitive advantage in the light of systematic and holistic thinking to the organization. Given the importance of this issue, in this article, we have examined the system, system thinking and organizational wisdom, and finally we have examined the relationship between wise organization and system thinking.

2. Systems thinking
2.1. What is system?
The word "system" in the vocabulary means apparatus, order, method, rule, government and etc. (Ekran et al., 2017). A system is a set of components and relationships between them that are interconnected or related by certain characteristics and these components form a whole with their environment, such as a factory or human body (Rezaian, 2009; Ekran et al., 2017). These components move towards the realization of a goal and complement each other towards the realization of this goal (Zoragh, 2007; Ekran, et al., 2017). The word system is also derived from the Greek word systema composed of "sys" meaning together and histanai meaning "cause for". Just as plurality is associated with unity and singularity with the plural, so the system appears not merely as a set, but as a continuous set of elements that have a particular generality, so the system can be illustrated on a non-figurative level with the following characteristics:

- A system is a general set of interdependent elements.
- Forms a special unity with the environment.
- The system under consideration is usually an element of a higher-order system.
- The elements of each studied system in turn appear as lower-order systems (Sadowski, 1982; Ekran et al., 2017).

Bolding introduces the hierarchy of systems as levels of theoretical discourse in the form of nine levels, so that each level has the characteristics of the previous levels:

✓ The first level: a static structure that can be called the level of frameworks. This level includes the geography and skeleton of the universe and creatures.

✓ The second level: Cheek clock level or Mechanical level in which a systematic analysis of simple dynamic systems is performed and the required movements are pre-adjusted and determined. The solar system is a large clock in the universe. Natural sciences such as physics, astronomy and the like are at this level.

✓ Third level: Temperature regulating device (thermostat) which is a control mechanism with a cybernetic system (command).

✓ Level 4: The level of the open system or self-supporting structure, also this level called the cellular level.

✓ Level 5: The genetic-social level that the plant symbolizes. This level is characterized by the division of labor between cells, as well as the precise distinction between genotype (including the total genetic composition of a person) and phenotype (observable characteristics or traits of an organism).

- ✓ Level 6: An animal level that has the characteristics of variability, purposeful behavior and self-awareness. At this level, the system has specialized sensory receptors (eyes, ears, etc.) and the nervous and brain systems organize the information that is fed into the structure of knowledge or body.
- ✓ Level 7: The human level in which the existence of human beings is considered as a system. In addition to the features of the previous level, the human system has conscious self-awareness (which is different from animal self-awareness), consciousness and insight. Human self-awareness is more complex than animal self-awareness and in addition has the quality of thinking. That is, not only does he know, but he knows that he knows.
- ✓ Level 8: The level of social organization, which is a set of roles that are interconnected through communication channels.
- ✓ Level 9: The transcendent or supernatural level which is absolute and unknown and it is called the level of unanswered questions (Boulding, 1956; Moghimi, 2016).

Most of the theoretical preparations in the social sciences are still at the second level, and some theoretical issues have recently been raised at the third level; this is while the topics and issues in the field of social sciences are related to the eighth level. Theoretical issues raised regarding the theory of organization, communication systems, organizational structure, balance and growth, decision-making processes in conditions of uncertainty and Advances made in management science, have not yet exceeded the third and fourth levels; While we are dealing with the personalities of people and organizations that are in the eighth level. Therefore, management science does not have enough ability to meet the needs of the eighth level and there is a long way to go to reach this level of ability (Boulding, 1956; Moghimi, 2016).

Sub and main systems
Systems are divided into two main and sub-categories (Mahdavi and Ataafarin, 2017):

- Subsystems: A system consists of a number of subsystems. Special activities that ensure the survival of the system are performed by departments that act as a subsystem. The organization's subsystems have five main functions: border guarding, production, maintenance, environmental compatibility, and management.
- There are two main types of systems: open system and closed system.
    - ○ Open system: exchanges energy or information with its environment. That is, it interacts and reacts with its environment. The school is an example of an open system.
    - ○ Closed system: It is inherent, independent and needless, or it has a relatively impenetrable boundary with its own environment and can absorb only very limited elements from the environment. The clock is a relatively closed system that can only do its job by tuning in, or installing a battery. It is important to note that in reality the systems are more or less closed-open. That is, in the realm of eight living systems, for example, our brains are open to some information and closed to others. (Mahdavi and Ataafarin, 2017)

In general, it can be said that a system is a set of interdependent components that act as a complete unit and interconnected key to achieve a common goal. A system acquires inputs or data from the external environment and, using production technology, makes changes to them and returns products or services to the environment in the form of output. In total, systems theory emphasizes the need for conceptual skills to understand the relationship between subsystems and the organization as a whole (Lussier, 2000; Moghimi, 2016).

2.2. History of systems thinking

The concept of system has been considered by thinkers and philosophers since ancient times; Aristotle, Ibn, Rumi, Leipnitz, Hegel and Hermann Hesse are among the scientists who have paid attention to the concept of system. In the present century, Henry Kendall is one of the first people to have references to the concept of the system and the way it works (Nowruzi, 2016). An explicit discussion of systems thinking emerged in the early twentieth century (Luoma, 2009; Helali, 2020). Researchers in this field confirm that the concept of systemic thinking occurred several thousand years ago and see it as the main thinking style of Eastern cultures (Helali, 2020). The ancient idea of systems thinking emerged thousands of years ago with the beginning of various philosophical traditions. Systemic thinking was embedded in the early cultural traditions of the East and the West and remained a major form of thought in the East (Wang, 2003; Helali, 2020). Of course, the exact date of the beginning of the domination of systemic thought over organizational thinking is not well known. A review of research and organizational writings shows that this dominance is more than half a century old. The Austrian biologist and thinker Ludwig von Bertalanffy was one of the founders of the general theory of systems in the early twentieth century, who first established the concept of systems thinking. During the years 1932-1930, he presented the organic theory and took great steps in its expansion and bedrock in other fields. According to him, an organism is not just a set of separate elements, but a system with an order and totality (Mahdavi and Ataafarin, 2017).

2.3. Theory of General Systems (Moghimi, 2016)

Kenneth Bolding was one of the great thinkers of systems who, in the first fifty years of its formation, introduced and developed the public systems movement. Thinkers such as Ludwig von Bertalanffy, Talcott Parsons, West Churchman, Alfred Emerson, and Anatole Rapoport are among the most prominent theorists of General Systems Theory (GST) (Hopp, 2004; Moghimi, 2016).

Ludwig von Bertalanffy in 1951 and Kenneth Bolding in 1956 wrote papers that provided new foundations for public systems theory. Johnson, Cast, and Rosenzweig also established the practical foundations of public systems theory in management in 1964 (Johnson et al., 1964; Moghimi, 2016). Ludwig von Bertalanffy emphasizes a part of the theory of public systems called game systems. The basis of this concept is a living creature that is not a mixture of separate elements, but it is a system with definite boundaries that has an integrated organization and whole. A living thing is an open system that maintains its permanence, while the energy and matter that enters it, causes transformation; this is called dynamic balance. The living thing is affected by its environment and affects its environment and achieves a state of dynamic balance in its environment. Such a description of a system fits well with the characteristics of the organization. The organization is a man-made system that interacts dynamically with its environment (customers, competitors, unions, suppliers, government and other organizations Ludwig von Bertalanffy summarizes the main features of public systems theory in the following cases: 1. Interaction and interdependence of elements and their properties. 2. Holism: Holism creates synergy and Synergy means that the whole is greater than the algebraic sum of the components. 3. Targeting. 4. The process of metamorphosis or deformation. 5. Inputs and outputs .6. Entropy. 7. Regulation. 8. Hierarchy. 9. Differentiation. 10. Equifinality or multifinality (Moghimi, 2016).

2.4. Applications of systems thinking:

The application of systems thinking can be divided into two areas:

1. Methodology, tools and methods created related to systems thinking, such as soft systems methodology, systems dynamics, cybernetics, were used to solve problems in various fields.
2. As a conceptual understanding of problem solving in various fields (Helali, 2020).

The required proficiency to implement systems thinking led to the recognition of systems thinking as a skill (Sterman, 2000; Hung, 2008; Arnold and Wade, 2015; Helali, 2020).

2.5. The concept of Holism

Systemic thinking as opposed to reductionist is a general and comprehensive approach to the system in which not only the components and details of a system are considered but also the interaction between components as well as the interaction of components and the environment. In other words, to understand the properties of a set, it is not possible to achieve the properties of the whole set by analyzing the components of a set and examining the properties of each component separately. In other words, the properties of a set are not derived from the algebraic sum of the properties of each component. The concept of "synergy" is introduced in the form of this feature. Synergy means that the whole is greater than the algebraic sum of the components. When different parts of the organization work together; they will have more production compared to when they operate independently (Dubrin, 2012; Moghimi, 2016). Synergy is an increasing and complex energy that results from combined actions or collaborations and increases effectiveness (2+2=5). In other words, the multiplicative partnership results in the production of more than the algebraic sum of the individual partners (Plunkett, 2008; Moghimi, 2016). Components in synergistic state have synergistic properties and produce added value (Mahdavi and Ataafarin, 2017). Jacob Levy Moreno, one of the founders of group science, believes that the reality of human life is the result of social interactions and relationships between individuals, in other words, the "synergy". Achieving synergy requires some conditions and equipment; these include: common goal; Free interaction, cooperation and collaboration; common value and cultural identity; emotional group construction and group cohesion (Mahdavi and Ataafarin, 2017).

Holistic approaches to the organization include: Systems Hard Thinking, System Dynamics, Organizational Cybernetics, Complexity Theory, Assumption Detection, Interactive Planning, Systematic Soft Thinking Methodology, Critical Understanding of Systems, Team Integration, and Postmodern systemic thinking (Nowruzi, 2016).

2.6. Principles of systems thinking

Each system includes input, output, processing and feedback (Collins, 2007; Helali, 2020). Important features of a system arise from the interaction between its components, not from their separate activities. In view of the above, a method other than analysis is necessary to understand the behavior and characteristics of the system (IKAF, 2009; Helali, 2020). In fact, analysis and composition are complementary (Mokhtari, 2008; Helali, 2020).

According to Helali, the steps of systems thinking are:
- When you want to check a topic, first, identify the general system that covers the above topic. (Ikaf, 2001; Helali, 2020).
- Examine the behavior and characteristics of the general system (Helali, 2020).
- Explain the behavior or characteristics of the subject matter according to its roles or functions in the general system. (Singh, 1996; Helali, 2020).

In system thinking it is recommended that the composition be done before analysis. In analytical thinking, what we want to examine is decomposed as a whole, but in the composition of what we want to examine, it is examined as a part of the whole that encompasses it. The first reduces the field of interest of the researcher and the second expands it (Helali, 2020).

Analysis creates knowledge (Porter, 2005; Helali, 2020) and combines, increases understanding (Perception flows from whole to part and knowledge flows from part to whole) (Singh, 1996; Helali, 2020), Analysis looks inside things, but composition looks at them from the outside (Helali, 2020).

Churchman (Gharajedaghi, 2011; Helali, 2020), explains the above concept as follows. In the analytical approach, the system is usually identified and defined according to its components (Helali, 2020).

Organizational way of thinking emphasizes new concepts such as totality, system, hierarchy, and biological dynamics and this view is a living organism, a general organism whose many attributes arise not from the set of properties of its components but from its totality. The living creature is a transcendent system and can preserve its system in spite of entropy-enhancing factors, and Prevent leading to disorder and destruction by exchanging matter, energy and information with the outside environment. The living creature in the organic school is a dynamic phenomenon and does not lose this continuity as long as it is alive. In a living organism, there is no static balance, On the contrary, every living organism is always evolving, and its evolution is governed by principles. The living creature evolves under the influence of two opposing forces, and with constant interaction these two forces remain in dynamic equilibrium states (Farshad, 1983; Ekran et al., 2017).

2.7. Methodologies related to systems thinking

The systems thinking literature also discusses methods tailored to different theoretical areas with a focus on improving some real-world situations. And is used as a systemic thinking (Jackson, 2000; Flood 2010; Helali, 2020). Each application of the methods must show an argument for how it adapts to the situation (Jackson, 2001; Helali, 2020), systems thinking methods can be divided into functionalist, interpretive and free methods (Helali, 2020):

Functionalist methods: Functional methods use mechanical or organizational models that adopt hard views of systems thinking and early theories of systems thinking. Assume that the world is a system. The goal of functionalist methodologies is to acquire the logic of the situation and use it to produce a representation of the system that can be used to understand relationships within the system and predict system behavior under certain conditions (Jackson, 2001; Helali, 2020). Examples of functionalist methods that use the mechanical model are "systems analysis." These approaches use analytical models to obtain the most important variables and interactions in the system and determine the most efficient way to reach the goal (Helali, 2020).

Interpretive methods: Unlike Functionalist methods, interpretive methods do not assume that the world is a system. Interpretive methods create models to help interrogate world perceptions and to Create a discussion about rational and desirable interventions. The intervention process is considered as a systematic process, continuous and with the aim of reducing concerns about the problematic situation instead of providing a solution. Interventions that may reduce discomfort are evaluated in terms of effectiveness, elegance, and ethical principles (Jackson, 2001; Helali, 2020).

Free methods: Problems using interpretive methods arise when stakeholders do not have a common denominator and reach an agreement is difficult. In such cases, decisions are dominated by power, which leads to potentially unfair outcomes (Jackson, 2009; Helali, 2020). Experimental methods assume that systems created in the world can mislead individuals or groups. The purpose of analyzing a situation is to show who is deprived in the current situation. Models that show alienation and weakness are used to clarify their situation and suggest possible improvements (Jackson, 2001; Helali, 2020). Such proposed changes are evaluated morally and freely. Ulrich (1983) "Methods of Exploration of Vital Systems" propounds

questions to determine who benefits from particular systemic positions and seeks to empower those who have been excluded from positions of power (Ulrich, 1983; Helali, 2020).

2.8. Obstacles to systemic thinking

Obstacles to systemic thinking are multiple. Although the benefits of systems thinking are not hidden from anyone, there are obstacles to applying system thinking in practice. The root of these obstacles and factors must be sought in the attitude and behavior of human beings. Among the obstacles (Helali, 2020):

1. Partiality: Partiality is opposed to holism. Systemic thinking is based on holism. Partisanship is the product of immersion in the experimental sciences, so partisanship is not in itself disgusting and may be necessary in some areas of the sciences. The point is that relying solely on partisanship eliminates the possibility of understanding the patterns that govern the phenomenon and the system. Great people like "Michael Hammer" believe that the Duty-oriented structure is not accountable for modern organizations and the process of acting is an inevitable necessity (Singh, 1996; Helali, 2020).

The art of systems thinking is to see both forests and trees together, that is, to receive general and comprehensive information while taking into account the details. Only by seeing the details and generalities of the problem at the same time that strong response to complex changes and challenges can be answered strongly.

According to Michael Porter, a forest from above looks just likes a green tablecloth and one can understand the forest that has walked in it. Seeing from above must be supported by seeing from below (Ikaf, 2001; Helali, 2020).

2. Focus on events: Focusing on events is one of the obstacles to paying attention to systemic thinking and its development. According to Dr. David Hawkins, making choices leads to something that depends on the situation. In other words, this kind of view artificially breaks down true unity into seemingly separate parts. These parts are seen only in appearance and are not really separated from each other (Helali, 2020).

A serious consequence of this mental process is the misunderstanding of cause-and-effect relationships. This misunderstanding causes endless human problems and catastrophes (Helali, 2020).

3. Exaggeration: One of the obstacles to systemic thinking is a kind of negativity and blaming environmental conditions. System thinking teaches us that there is nothing outside the system that causes problems (Helali, 2020).

4. The trap of dual thinking: Seeing phenomena in black or white is an obstacle to systemic thinking. The zero and one attitude and thinking "either this or that" lead to stagnation of thinking. This kind of analysis is a kind of simplistic thinking and does not correspond to the complexities of today's world. These dual templates must be broken. Should be thinking beyond the duality and consider "both this and that" (Mokhtari, 2008; Helali, 2020).

5. Formal thinking: Adults are accustomed to formal education systems, or linear and formal thinking, and it is difficult for them to get rid of this way of thinking. In other words, we do not correctly determine the boundaries of the system in solving problems (Harris, 2010; Helali, 2020).

6. Paying attention to the symptoms instead of the causes: A systemic approach tells us that in order to understand the underlying problems; we need to address issues beyond individual mistakes or bad luck. You have to go above the events and characters. It is necessary to understand the depth of the structure that shapes the actions of individuals and conditions in such a way that an event occurs (Helali, 2020).

7. Analytical thinking: In systemic thinking, the combined method is used. In other words, system thinking is a cycle of decomposition and synthesis. The mere use and reliance on analytical methods and thinking is a major obstacle to synthetic and systemic thinking. The downside of analytical thinking is that when we break down a system, it loses its important features. The system is a whole that cannot be understood by analysis. It is best to do the combination before analysis. In analytical thinking, what we want to study is decomposed as a whole, but in combination, what we want to study is examined as a part of the whole that includes it (Ibn, 1985; Helali, 2020).

8. Attention to quantity: Paying attention only to numbers and figures is one of the obstacles of systemic thinking; systemic thinking is a developmental thinking. Growth is an increase in number or size, but development is an increase in competence (Singh, 1996; Helali, 2020).

3. Organizational wisdom
3.1. What is an organization?
Over time, several definitions have been provided for the organization, including the following (Moghimi, 2016):

1. Two or more people working together in a structured framework to achieve a specific goal or set of goals (Stoner et al, 1995).

2. An organization is a group of people who work together and coordinate their actions to achieve specific goals (Jones et al, 2000).

3. Organization is the rational coordination of the activities of a number of individuals to achieve a clear common goal or destination through the division of labor or task using the hierarchy of authority and responsibility (McAulley, 2007)

In general, it can be said that organizations 1. Have a social nature, 2. Are goal oriented, 3. Their structure is wisely designed and their activities are coordinated in a systematic way, 4. Are connected and interact with the external environment (Daft, 2010; Moghimi, 2016).

Organizational factors that are presented today in the 7M format (man, materials, money, machinery, methods, markets and management) must be organized efficiently, effectively and profitably to achieve the goals of the organization, In the meantime management Is at the top of the priorities (Moghimi, 2016).

According to what has been said about systems before and the points raised by various thinkers, the most important characteristics of the systems school about the organization that is a system, can be summarized as follows:

- Organization is a social system, a system of cultural relations;
- Relationships exist in both the internal and external environment of the organization;
- Cooperation among group members is essential to achieve the goals of the organization;
- For effective management, there must be coordination and compatibility between the goals of the organization and different stakeholder groups (Moghimi, 2016).

3.2. What is wisdom, practice and practical wisdom?
There are several definitions of wisdom, practice and practical wisdom, some of which are mentioned here:

1. Historically, wisdom has been most widely reflected in religious and philosophical writings (Birren and Svensson, 2005; Osbeck and Robinson, 2005; Küpers, 2016). Classically, practical wisdom has been seen as one among other virtues, respectively encompassing the principal ones; as once you have practical wisdom you have all the virtues (Aristotle, 1985). Moreover, exercising or striving to exercise moral virtues, to make them part of the habituated personal character (ethos), requires a certain form of

practical wisdom (Küpers, 2016). Cooper states that there are two kinds of practices: poiêsis, which is guided by tékhnê; and the more comprehensive prâxis, which is guided by phrónêsis. This prâxis is present not only in the execution of certain actions, but is always already given with existence itself, insofar as it constitutes its nature and precedes every particular action. As phrónêsis is used in and for prâxis as acting for the common good, it manifests a situated practical reasoning, knowledge and habit, which directs action for acting well (euprâxía) and living well (éu zén). Whilst calculating tékhnê is the knowledge that steers the activity of making (poiêsis), in which means and ends are distinguishable from one another, deliberating phrónêsis guides prâxis in a way by which the 'doing' that is practiced constitutes an end in itself: 'Poiêsis Makes Things, Prâxis Makes Perfect' (Eikeland, 2008; Küpers, 2016). While tékhnê can be conceptualized in terms of its 'possession' (being) and its 'application' (use or production), phrónêsis cannot be instrumentalized (Dunne, 1993; Küpers, 2016) because the good that is embodied in phrónêtic action is a combination of the motives of the agent and the action being done (Küpers, 2016).

2. Wisdom in Dehkhoda dictionary means intellect, perception, tact, insight, intelligence, knowledge and shrewdness.

3. Persian Wikipedia states that wisdom is having knowledge, intelligence, understanding, experience and acquired insight, as well as innate understanding along with their ability to work. In many religions and cultures, the importance of wisdom has been emphasized and is considered a virtue. It should also be noted that some writers have emphasized the difference between wisdom and intelligence and have believed that Wisdom is acquired and intelligence is innate and cannot be equated.

4. Schwartz and Sharp in their book "Practical Wisdom, the Right Ways to Do the Right Thing" say: Practical wisdom is a right measure of the goal and the path to achieve it, and requires something more than skill. Wisdom can be used to analyze motivations, accept failures, estimate progress, categorize remaining tasks, and understand why they are needed. Practical wisdom is a skill that deals with human and human affairs, and not only leads you to know the world outside of you, but also helps you to know yourself. Practical wisdom is a spiritual and moral skill that enables you to interact properly with people in your daily affairs and social interactions. As a result, practical wisdom is a combination of will and skill. Skill without will means achieving the desired goal without interest, which can lead to the cruel exploitation of others and Serve your personal interests and desires and not others. Unskilled will can also lead to futile and fruitless effort. This is exactly what we see in some people, people who have good intentions but spoil the situation. To acquire wisdom, what is important is skill, and skill is accumulated during experience. Wisdom and experience are the two wings of the falcon of success. Thinking requires emotion, and the two must go hand in hand. This is how argument becomes possible. Practical wisdom does not mean knowing what is right and doing it. It means being motivated and persuaded to do a right thing. It is often emotions that trigger action and make us act (Schwartz and Sharpe, 2011).

5. The definition of the word wisdom that one finds in a dictionary may run something like "the correct, highest knowledge based on insight and experience of life (and action consistent with it)" (see van Dale, Groot Woordenboek der Nederlandse Taal). Striking in this definition is the direct connection of wisdom with practical action. Wisdom implies (1) correct insight into the situation, (2) correct insight into what needs to be done, and finally, (3) appropriate action (Strijbos, 1995).

6. Csikszentmihalyi and Rathunde (1990) say that wisdom's role is to replace narrow,

fragmented and intellectually aloof accounts of reality with holistic or 'metasystemic awareness'. This stance or orientation suggests that an integral systemic view of the world is important for wisdom (Küpers, 2016).

3.3. The relationship between wisdom and science

Sternberg is adamant that IQ is not the most critical component of wisdom. Indeed, he argues that knowledge, intelligence and creativity can all be put to unwise, even evil purposes (Sternberg, 2003; Küpers, 2016). For Aristotle, practical wisdom occupies a higher place than contemplative wisdom (sophía) because it is anchored in prâxis, which is where well-being is created and experienced (Küpers, 2016).

A physician, for instance, who has a correct insight into the precarious position of a patient but who lacks the courage to intervene effectively and is satisfied with half-measures, can hardly be considered a wise doctor. Wisdom is more than correct insight. Wise people with their keen insight will very often stand out as figures who say little but act at just the right moment with just the right means, such that it is by this precisely that they are seen to be wise (Strijbos, 1995).

Wisdom is greater than knowledge, intelligence, and experience, three attributes popularly held to comprise wisdom. Our organizations have these already. It is how they are linked and leveraged that makes the difference. It appears that where wisdom exists, intelligence, experience, and values are combined to consistently generate sound judgment and compassionate action (Baltes and Staudinger, 2000; Hays, 2008), even in challenging, unique, and unpredictable situations (Kitchener and Brenner, 1990; Hays, 2008). Wisdom implies a synergy amongst intelligence, knowledge, and experience. Organizations generally have these elements, but lack synergy. What organizations need are improved processes that promote the synergy amongst intelligence, knowledge, and experience and allow employees at all levels to exploit the synergy. Reflective thinking and learning is one such process, especially given full appreciation of context that includes important shared values (Hays, 2008).

3.4. Organizational wisdom components

The following scales can be used to evaluate measure, develop and strengthen wisdom in organizations (Shoghi and Moghaddamipour, 2017):

1. The Brown (2004) Wisdom Development Model is a framework that describes wisdom, how it is developed, and the conditions that facilitate wisdom development. Although the main concept of this model is in the field of education, but this model can be extended to people inside and outside the traditional education systems. The wisdom Developmental Scale is designed to measure a person's level in the areas of self-knowledge, emotion management, altruism, judgment, inspiration, life knowledge, life skills, and willingness to learn (Brown and Green, 2006; Brown, 2004; Shoghi and Moghaddamipour, 2017).

2. Schmit et al. (2012) presented a comprehensive and relevant organizational wisdom scale to assess the characteristics of individuals. By integrating the management literature and two psychological streams, they presented the concept of multidimensional wisdom that is applicable in the generalized managerial and organizational context; Therefore, they provided a comprehensive definition of wisdom, in which wisdom consists of seven dimensions: contemplation, openness, willingness to interact, action, moral sensitivity, tolerance of contradiction and experience (Schmit et al., 2012; Shoghi and Moghaddamipour, 2017).

Rezaian et al have listed the components and indicators related to organizational wisdom measurement in educational organizations in Yemen as follows: The results of the study show

that the organizational wisdom measurement model includes eleven components in five levels. At the first level, the components of strategic thinking and organizational structure are located, which shows the high impact of these two variables in the system and shows the high importance of these two indicators in this system. Also in the second level, the components of virtue and moral principles, learning and training and strategy and goals have a direct impact with the first level. At the third level, there are components of decision making, leadership and human resource management, and at the fourth level, there are components of cooperation and pragmatism, and at the lowest level, innovation and creativity, which has a direct impact with high levels (Rezaian et al., 2019).

3.5. Organizational wisdom

What is organizational wisdom and how can it be developed? In answer to this question (Bierly et al., 2000; Shoghi and Nejadi Pilehroud, 2016) have a good starting point: 1. Wisdom connects the ability to effectively select and apply the appropriate knowledge in a particular situation (p. 581) and 2. We define wisdom as a pragmatic concept that leads to the application of appropriate organizational knowledge in the stages of planning, decision-making and implementation or action (p. 201). Bierly et al. (2000) go on to state that organizational wisdom includes the collection, transfer, and integration of individual wisdom as well as the use of institutional and social processes (such as structure, culture, and day-to-day affairs) for storage. Thus, organizations can have a wide range of functions, although it is not possible to attribute wisdom to individual factors in the organization. In addition, organizational wisdom is related to decision making (judgment) about changing the behavior of the organization's operations. So wisdom is a pragmatic construct. This article also provides the following definition for organizational wisdom: The ability to implement the most appropriate behavior for the organization according to the knowledge and reasonable concerns of its various stakeholders (Shoghi and Nejadi Pilehroud, 2016).

4. Wise Organizations and systems thinking (Mattila, 2016)

In the mentioned article open systems theory is taken as a background for this study, because it introduces how influences and exchanges affect parts of a whole, and vice versa in a continuous cyclical movement. One approach for a wise organization in an open system suggests that we need to examine power, influences and exchanges as sources, enablers or disablers for wisdom or un-wisdom.

Lewin (1947) introduced action research thinking and his insights on experiential learning and force-field are helpful in understanding where it is possible to fathom the 'whole', because it is 'bounded' by real or imagined organizational boundaries and produces pressures which are not always understandable from outside.

Bauman (2005) argues that since today's societies are in a phase of "liquid modernity" (light and liquid versus earlier heavy and stationed), changes happen quickly and unannounced. Such liquidity may also be seen to increase environmental turbulence and unpredictability (e.g. reference to recent earthquakes, environmental catastrophes, airline disasters, ethical and financial problems, environmental challenges etc.), which need to be examined as sources of ethical problems. It refers to the constant flux, fleeting moments and continuous change which have replaced pictures-in-the mind of more control focused, fixed and rationality oriented structures. This makes it more difficult to approach issues with expectations of certainty.

Bateson (1972) referred to mental systems with higher complexity than what he called as elementary cybernetic thought: "In principle, if you want to explain or understand anything in human behavior, you are always dealing with total circuits, completed circuits".

According to Pondy and Mitroff (1979) an organization responds to the variety it is exposed to in its environment. If an organization sees itself as a highly complex and evolving system, but finds its surroundings lacking (or vice versa) in complexity, such an organization often adjusts. But why are open systems relevant in wisdom research? Firstly, in today's discussions about stakeholders (e.g. Freeman, 1984), where multiple actors and actor groups are considered beyond the organization per se, or in Contractarian business ethics (highlighting the social contract view; see e.g. Wempe, 2008), we take a society-person point of view. Organizations are thus seen from the perspective of "being made" from some forms of social contracts pertaining to certain defined environments being also a nexus of internal or external contracts (Reve, 1990). These social contracts explicate authority systems, powers, rights and sometimes responsibilities, and it becomes an issue whether members can choose or change such contracts. Such "hidden" social contracts and their outcomes through organizational experiences and habits are often referred to as basic values or beliefs of the organization and experienced as its culture. We express these in our judgments of how things appear to us or have been understood by us. Whitehead and McNiff (2006) define such standards followingly: "making judgments about the quality of practice means making value judgments, in terms of what you find valuable in the practices. Value judgments then become standards of judgment. You judge things in terms of what you think is good". In a social system we need to ask who sets those standards, how are they set and why the outcomes are the ones that are experienced. Secondly, notions of wisdom may change over time. This is also important to acknowledge when we seek advice from the past. Not acknowledging context and its influence to at least some aspects of wisdom would result in anachronisms. The past experiences were always had with a different set of people in different value bubbles, with different sets of expectations and understandings of how the world was constituted. In some sense we can draw from the past but need to be careful with interpretations, since all information is filtered through our present mindsets. This comes out in art, where interpretations of symbols painted on canvas do not easily lend themselves to interpretations unless one is familiar of what these symbols mean. An example of this could be Hieronymus Bosch (15th century) whose pictures (e.g. Garden of Eartly Delights) present symbols at levels that no longer speak to people in the same way they did when he was alive. Even then, putting ourselves in the shoes of people of the past is difficult, because the past is always in some sense a 'dead past'.

Rowley and Gibbs (2008) introduce the idea of practically wise organization building on the idea of phrónêsis and arguing that wise organizations necessarily need to emphasize also ethics. They practically re-present what Pondy and Mitroff (1979) and Daft and Weick (1984) wrote: need for higher level actions that are not rule based, e.g. do not rely on certainty. What all these scholars bring out is the aspect that some decisions and judgments do not have readymade paths to trod, but represent more an event of truth (or aletheia as Heidegger puts it), an opening. Therefore, Rowley and Gibbs (2008) argue, practical wisdom is needed, because it relies on the particular, contextual and subjective – not only rational, objective and known. However, it needs to be noted that "practically wise organization" may mean many things, e.g. almost wise, practically oriented (praxis), and practical wisdom.

While it is known that persons have bodies and emotions along with cognitive, psychological and mental aspects, in competitive environments these are often subdued to limited notions of profit, value maximation or transactional values. Organizations need to examine also how to build on the notion of weak ties as well as strong ties (Granovetter, 1973). In many cases it is felt that strong ties are more important and relevant than weak ties, but organizations miss out on creative parts and new information in this process. It is perhaps being in the "stillness" (Chatterjee, 2006) of oneself, but at the same time connected with what already is being

presented from the stillness. The aspects of relationality, unity in reality and attention (Chatterjee, 2006) are experiences that need to be looked at when speaking of wisdom and wise organizations, not just wise leaders. Stillness is being there, here, everywhere at any moment. In this sense it is not following anything, it is.

What kinds of organizations are called wise? A wise organization should embrace what Antonacopoulou (2009) sees as co-creating actionable knowledge. Perhaps it should be a self-aware system that reflects on its actions and results of its actions to itself and others. Pondy and Mitroff (1979) recall that at some point direction was drawn away from "higher mental functions of human behavior that are relevant to understanding organization". One such higher mental function is wisdom.

5. Conclusion

In this article, while reviewing systemic thinking and organizational wisdom, the relationship between wise organization and open systems, which is a kind of systemic thinking, was examined. This article and the research contained in it can be the beginning of studying various topics, including the following:

Is there a relationship between learning organizations, experiential learning, knowledge management and wise organization in systems thinking and can this relationship strengthen organizational wisdom? How can leadership help build and strengthen a wise organization? Is there a relationship between wisdom and power? Is there a relationship between wisdom and hermeneutics? Can organizational wisdom be measured using tools and information systems? Are organizational idiots wise? Does organizational wisdom lose opportunity or create a competitive advantage? Can business intelligence as a competitive advantage strengthen wisdom in the organization? Is there a relationship between business intelligence, organizational wisdom and systems thinking? And finally, does organizational wisdom make the situation in the organization worse or does it always lead to improvement and progress in the organization?

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