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Organizational Development and Quantum Organizations

By

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Abstract

In terms of systems, it is important in educational organizations to achieve continuity in the processes of organizational development and formation of the structures of learning organization. And this continuity can only be possible by a good grasp of the zeitgeist. The root cause for this fact lies in the thought that, especially for educational organizations, learning, honesty, sharing, transparency, teamwork and organizational synergy unite with the spirit of organization in our day. In other saying, the zeitgeist suggests that organizational development and the structure of learning organization should transform into an organizational behavior and synergy in order for a climate of integration to rule organizations and their staff. The current study also aims to provide information on quantum organizations and their characteristics based on the concept of organizational development as discussed in the relevant literature because it offers a different perspective on the organizations of today. Applicability of the concept of quantum organization to educational organizations is also discussed. The study, therefore, is significant due to the fact that it opens into discussion an organizational model which may be necessary for the managerial processes of our time, which are indecisive, unstable, unclear, inexplicit and ever-changing. In this context, first of all, domestic and foreign publications on the subject matter were reviewed to obtain some data and, based on these data, conclusions were made regarding the educational organizations of our time.

Keywords: *educational organizations; organizational development; quantum; quantum organizations*

1. Introduction

Organizations of our time are, by their nature, surrounded by classical theories that contain a mechanical understanding. These theories, many of which involve managerial thoughts that are based on hierarchical structuring and "one-upmanship", have left 21st-century organizations into the intricate cycle of bureaucracy and unwieldy structures. The (Newtonian) organizational structure that follows classical doctrines, however, is one of the biggest obstacles to the organizational development and progress in our day.

The former superiority of Western (Newtonian) organizations was because they were efficient and reliable. They were also goal-oriented and rule-bound. In other saying, the operation of those organizations involved the assumption that procedures were complied with in the relevant units and that, as long as suitable channels were kept open, information was properly flowing to the necessary units of organizations. It can be stated, however, that this situation also involved some adversities. And it can be argued that these adversities lay more in the fact that organizations did not value their staff as individuals, that they did not sufficiently care about interpersonal relationships and that they did not possess the necessary flexibility to cope with unexpected situations. As such organizations do not have sufficient relationships among their units, they experience a kind of learning disorder because even though they take some lessons from an error or education, these lessons are not conveyed to other units (Değirmenci and Utku 2000). So those organizations which, until recently (1980 and before), took Newton's physical theory as basis adopted a segmented understanding in management. According to this understanding, hierarchy and rules of authorities influence all managerial segments. Besides, profit, efficiency, power of control and certainty were the primary elements in such organizational structures. Importance of predictable and controllable qualities was huge in an organization. Problems were solved by separately focusing on each segment of the organization (Mutlu and Sakınç 2006).

In our day, however, many of the basic and various studies in the organizational literature suggest that classical, Newtonian or mechanical organization structures of the 1980s and before should give place to

organizational structures like learning organizations, quantum organizations, etc., in which organizational development rules. According to Kara (2013), this result can be taken to mean that the new paradigm created by the theories of quantum, chaos and complexity theories challenges, with its different views, all fields of life and even the currently dominating paradigm. In this context, we need to identify the points in which old paradigms influenced our ways of thinking and see that the new paradigm offered a new perspective on ourselves and our relationships, our jobs, managerial ways, organizational theories, our global, political and economy tendencies and our educational understandings. It is obvious, moreover that this new organizational process of paradigm shift has changed/will change our approach to the concept of organization in the field of educational management, as in many other fields of science, theories on managerial structure and understanding of leadership.

It can be considered, then, that it will be beneficial to ask the questions how and according to which rules organizations of today should be formed and how intra-organizational and inter-organizational relationships should be arranged, and that, in a sense, answers to these fundamental questions can be sought in the concepts of quantum paradigm and quantum organization. The aim of this study, therefore, is to provide information on quantum organizations and their characteristics based on the concept of organizational development as discussed in the relevant literature because it offers a different perspective on the organizations of today, and to discuss the applicability of the concept of quantum organization in educational organizations.

Accordingly, the study is important due to the fact that it opens into discussion an organizational model which may be necessary for the managerial processes of our time, which are indecisive, unstable, unclear, inexplicit and ever-changing. In this context of the study, first of all, domestic and foreign publications on the subject matter were reviewed to obtain some data and finally answers were sought for the following sub-problems:

1. What are organizational development, quantum paradigm and quantum organization?
2. What kind of an interaction exists between the concepts of organizational development and quantum organization?

2. Organizational Development

There are five fields of change that influence organizational structures of our time; information explosion, fast product obsolescence, change of labor structure, increase of interest in both personal and social problems, and growing internationalization (Balcı 2002). Each of these changes constitutes, in essence, an answer to new situations encountered in the level of organization. That is, they indicate that organizational development is a necessity. When we consider that this need is a natural process, the primary necessity that emerges is identification and analysis of the natural structure of the organization.

Previous assumptions regarding organizations (that an organization is a simple closed system, that an operational environment is sufficiently fixed for a management, and that certain series of levels exist in an organization) have given way to new realities (that organizations are complicated open systems which deeply influence their environments and are influenced by their environments, that the simple linear model of the cause and effect relationship and that many actions could lead to unexpected results either for positive or negative (Glass 1998). Accordingly, organizations are structures with complicated, surprising, misleading and uncertain characteristics (Bolman and Deal 2003). Therefore, it is more realistic for organizations to act in accordance with these characteristics for organizational development such as uncertainity and complexity (Sommer, Loch and Dong 2008).

Although the concept of organizational development has different definitions, it is possible to identify this concept in a general way as a kind of answer to a change. Brown and Harvey (2006), on the other hand, defined organizational developmentas a long-term effort for improving an organization's ability of coping with change, solving problems and renewing itself by an effective management of the organizational

culture. It is understood from this definition that organizational development is a necessity for an organization. That is, organizational development is a necessity arising from the needs of focusing on the cultural change of each period and increasing social awareness. Koçel (2003) defines organizational development, in its most general sense, as the process of developing the organizational performance as a whole.

A common point of all views of organizational development is that they all unite in the fact that organizational development is a process of change. Moreover, it is seen that this process involves an organization as a whole, that it influences the organizational culture and arranges the interrelationships among the structure, technology and processes, and that it involves activities for developing the health, efficiency and effectiveness of organization with the help of a change expert who utilizes knowledge and techniques of the behavioral science (Budak and Budak 2004; Şahin 2009).

3. Quantum Paradigm

The need of organizations for transformation/change also exposes them to a paradigm problem. Although a paradigm is essentially about understanding universe and about how an individual sees, thinks and behaves, it is actually described as a coherent and consistent approach identified to cope with life (Kilmann 2011). Accordingly, a change of paradigm is needed when it is necessary to transform the structural and leadership characteristics in organizations. Such need also means to change those reasons underlying our thinking (Zohar 1997, pp.25: cited by Kilmann 2011). Thus, change of paradigm in organizations brings about a deep transformation.

In this context, organizations of our time must directly and indirectly follow the change of paradigm in order to survive and to achieve their goals effectively. In this following process, organizations should adopt strategies which are focused on keeping pace with the speed of change in a globalizing world. As a matter of fact, present organizations have already embarked on various quests feeling that former ways and approaches are now useless (Erçetin and Kamacı 2008; Kilmann 2011).

It is known that those organizations which act based on the Newtonian paradigm, which can be considered as an old paradigm, reflect what the Western world sees and thinks, accept the universeas a movement of static "molar" objects and defend the unique existence of a single and absolute universe (Kilmann 2011). On the other hand, this judgment also defends that the minds and awareness an organization's staff have no influence on the universe, and it asserts a discrimination between awareness and matter. So while the Newtonian paradigm offers a single and a unique perspective in explaining events and facts, the quantum paradigm offers a multiple and relative perspective. This is because, in the quantum paradigm, events and facts may not be explained by a simple observation and reflection; there is, beyond them, a focus on such processes as intuition, invention, noticing, imagination, creativity, etc. So the quantum approach is primarily based on creating awareness and consciousness among employees of an organization (Kilmann 2011). This process of creating awareness and consciousness may also be considered as the effort for establishing an infrastructure in an organization. The Newtonian and quantum perspectives are explained in more detail in Table 1 in order to better understand this effort.

Table 1 The Newtonian and Quantum Perspectives

Newton	Quantum
Newtonian belief	Complexity believed
Absolute truth	Multiple possibilities
Absolute perspective	Contextualism
Uniformity	Pluralism, diversity
Certainty	Uncertainty, ambiguity
Simplicity	Complexity

Zohar 1997, 9; Cited by Fris J. & Lazaridou A. (2006). An additional way of thinking about organizational life and leadership: The quantum perspective. *Canadian Journal of Educational Administration and Policy*, Issue: 48, pp. 1-29.

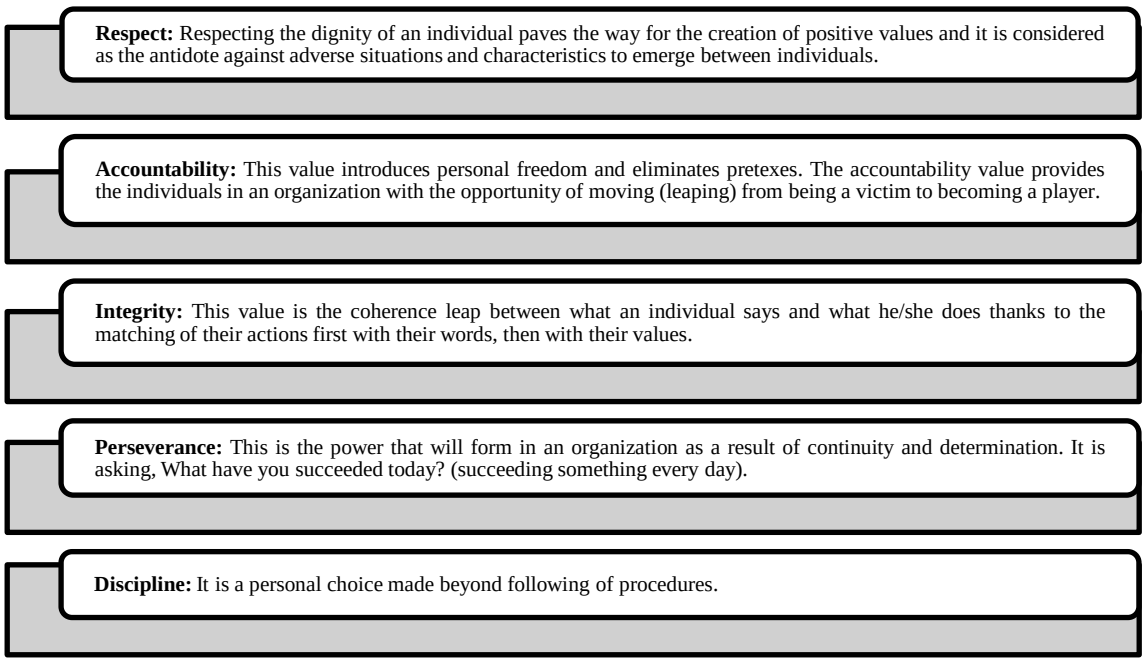
It is understood from Table 1 that unlike the Newtonian paradigm, which more defends certainty, absoluteness and simplicity, the Quantum paradigm defends uncertainty, contextuality and multiple possibilities in organizations. The fact that the quantum paradigm places importance to plurality and diversity in an organization can be considered as a superiority to the Newtonian uniformity paradigm because Newtonian organizations do not fluctuate or improve in the process of self-organizing. Thus, it can be stated that there is a relationship between complexity and self-organizing structures (Cramer 1993, Kaye 1993, Mainzer 1994, Favre et al. 1995 cited byMcKelvey 1997) in quantum organization. All the traditional management functions (like planning, control, organization, budgeting and assessment) were created from top to bottom. Members of a subunit in Newtonian organizations are not informed regarding the management of their own units, they are not included in the processes and they remain passive. Therefore, they might not assume any responsibility in the organization (Mapes 2003). It can also be said, on the other hand, that the quantum paradigm is a set of leaps for organizations.

When we consider the quantum paradigm as a set of leaps, some leap values reflecting this paradigm and forming its core come to the fore. These values are important to highlight the philosophy of the quantum paradigm.

4. Quantum Leap Values

Quantum leap values are defined as values which can be a part of the grand vision of reaching the highest level possible in the life of an individual or organization (Mapes 2003, pp. 123). In other saying, these values, as characteristics which concretize the quantum approach, are the preconditions necessary for internalization of the quantum paradigm in an organization. These five different leap values that are highlighted in the quantum approach are respect, accountability, integrity, perseverance and discipline. These values are explained in Figure 1 below (Mapes 2003):

Figure 1. Quantum Leap Values in Organizations



Mapes JJ (2003) *Quantum Leap Thinking: An owner's guide to the mind.* Naperville, Illinois: Sourcebooks, Inc.)

It is understood from Figure 1 that the quantum paradigm essentially contains five leap values including respect, accountability, integrity, perseverance and discipline. It is thus revealed that it is necessary to create a difference regarding these fundamental leap values among the staff of quantum organizations taking especially the quantum paradigm as their references.

5. Quantum Organization

Studies in the literature make a continuous emphasis on the need for the quantum organization. In this regard, a quantum organization is defined as an organizational capacity where, by its nature, a continuous introverted organizational learning takes place and personal values are considered same as behaviors and which creates an atmosphere of trust, safety and a sense of belonging that strengthens organization (Deardorff and Williams 2006). In this direction, a quantum organization may be said to be consisting of the three fundamental elements.Quantum organization stages consist of organization itself, fluidity movement (trust, values, co-thinking, learning, dialogue and spirit) and leader. Quantum node is the intersection point of these three elements.

The quantum node in an organization is the source of synergy that emerges for producing innovative, unique and new ideas. That is, a quantum organization is about the emergence of unique solutions, ideas and insights. In any organization, this process occurs through self-sharings which align the individual skill sets, abilities, insights, personal experiences, individual identities, personal values and enterprising targets of all the staff of an organization with the organization (Deardorff and Williams 2006). It is possible to define the most general characteristics of quantum organizations in the following way (Kilmann 2011):

1. **Inclusion of awareness in self-designing systems:** The staff of a quantum organization may be energetically included in the design of the organization's formal systems (including the systems of strategy, structure and awarding).
2. **Organizations as conscious participants actively participating in self-designing processes:** In a quantum organization, active participant members may use their own self-awareness in order to design value-laden processes (strategic, managerial and business processes that are identifiable, controllable and improvable).
3. **Cross-border processes which openly emphasize and take inspiration from knowledge:** A quantum organization explains cross-border processes in order to manage disputes (it is not my job/problem, that's not the responsibility of my department) that occur in the organization in the most efficient and effective way possible.
4. **Conscious self-management of a flexibly designed organization:** All the members of a quantum organization may be active participants in self-management systems. That is to say, members may assume their own responsibilities for each of the management functions (the processes of recruitment (gathering, identifying and choosing candidates), training, development, retaining and promotion) in a quantum organization.
5. **Internal commitment of active participants:** Members of a quantum organization are passionately committed to the organization in order to increase their self-awareness and consciousness further. This represents the primary component/content in the long-term success of the organization. Just like similar organic changes in the brain bringing about profound changes.
6. **Strengthened relationships among active participants:** This characteristic is considered as the collaborative networks of quantum organizations.
7. **Infinite self-transformation of flexibly designed organizations:** Self transformation cycles may protect the life of an organization.

Aside from these, organizations also involve the characteristics of asking questions until answers are consumed (until the actual problem is found) and forming a belief that employees create a difference for

the organization (Mapes 2003). According to this, quantum organizations seek creation of awareness. In quantum organizations, there is also a reference to what is called "the sensitive commitment to the point of origin", which is described as the butterfly effect (Goldoff 2000; Smith and Higgins 2003). This reference can be explained by the statement of the theory of complexity that ignoring, in any manner, the initial conditions or the initial situation of a system might render it impossible to make predictions about that system (Ercil and Şener 2015, pp.352). According to Kiel (1994, p.4; cited by Goldoff 2000), the nonlinear relations occurring among relevant variables in chaotic and complicated systems can lead to highly disproportional effects in another place of the system. Managers might include these effects in their systems as a fulcrum. Accordingly, Kiel suggests that the best results in an organization can be achieved not by huge efforts but by small and well-focused actions (Goldoff 2000). It is seen here that the chaos theory offers an explanation for quantum organizations. According to the chaos theory, significant results of probability-based situations enable interpreting fractal self-similarities (Smith and Higgins 2003, pp.100).

The quantum metaphor provides organizations with an alternative perspective instead of the classical one. We encounter the expression “quantum state of organization” in this perspective. Each interaction with a customer in an organization is described as a quantum state of the organization (Boxer 2014).

The Relationship between Organizational Development and Quantum Organization

When we think that organizational development is the response an organization gives to a change, we come across the quantum paradigm at each point where that change is experienced. The fact, however, that the quantum paradigm continuously takes change into consideration within the frame of uncertainty and probability might be interpreted to mean that it somehow conflicts with the concept of organizational development. But it can be said that the quantum organization theory, when compared with other theories, has brought a more elaborate approach to the managerial process skills of organizations. By adopting this paradigm, quantum organizations take, in terms of managerial processes, various kinds of risks courageously and together with all stakeholders. Kilmann, O’Hara and Strauss (2010) explain this by arguing that "long-term success of an organization depends on its possessing more quantum characteristics or its staff acting more bravely". In this context, the concept of organizational courage in quantum organizations draws the attention. Besides, it is thought that the previously mentioned quantum leap values have an influence on the activation of organizational courage.

It is suggested, similarly, that the concept of organizational courage is related with the process of managing organizational fears. In this context, answers are sought for the following questions in the process of managing fears in quantum organizations (Perme 1991):

- Question what and why you fear,
- Re-selecting one's vision (Do I still want it?),
- Making fear a part of the current reality,
- Staying in the current moment (What do I need to do today?),
- Do that (I am fearful but I’ll do it anyway),
- Get into action - let it (I cannot control future but I can only control my actions today).

In addition to this, some skills to be used for an organization also draw the attention in quantum organizations. These skills are listed in Figure 2:

Figure 2 Quantum skills

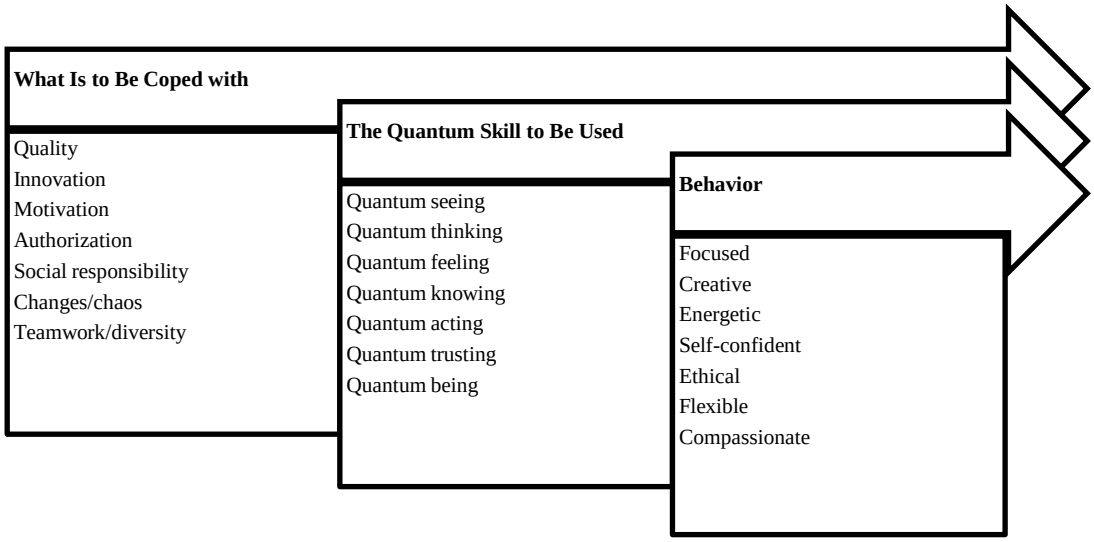


Figure 2: *The Relationship among Obstacles, Key Skills and Behaviors in Quantum Organizations*, Shelton and Darling, 2003: 359, cited by Noruzi MR (2010) Can physics quantum skills play rule in the organizations sphere? *Interdisciplinary Journal of Contemporary Research in Business*, 2(7): 61- 66)

As seen in Figure 2, the subject matter quantum skills include quantum thinking (the skill of seeing intentionally), quantum feeling (the skill of feeling one's aliveness in a vital way), quantum knowing (the skill of knowing intuitively), quantum moving (the skill of acting responsibly), quantum trusting and quantum being (the skill of being in relationship). "Quantum thinking", which is prominent and reflects the way of thinking of an organization, is vitally important for leadership and creative thinking that are highlighted in the process of organizational development (Kilmann 2011). Paul and Elder (2013), who argued that "thinking, feeling and wanting" are the three fundamental functions of mind, suggested that mind tends to create a corresponding positive emotion for each positive thought that it believes in. It is stated, in this context, that a dynamic mutual interrelationship exist among these three functions and that each influences the other two. These three functions of mind can be associated with quantum skills. It can be said, here, that thinking, feeling and wanting are important in the organizational sense, as well. A perspective for explaining quantum organization is offered by how those individuals who work with and are members of an organization use these three skills and what kind of interrelationships exist among these skills.

Those organizational members, on the other hand, who manage to combine various characteristics of the quantum paradigm such as uncertainty, indecisiveness, unpredictability, plurality, diversity and holism with quantum skills can contribute to the process of "developing the internal capacity of an organization" which is one of the key concepts of organizational development (Philbin and Mikush 2006). It can also be suggested, at the same time, that these skills have a power that can trigger organizational development. A manager who can observe in their own organization the behaviors arising from these skills that tend to accelerate organizational development can find concrete clues relating to organizational development.

Moreover, the "contextuality" characteristic referenced in quantum perspective in quantum organizations offers a manner of explanation which depends on conditions, time and place. This characteristic offers a perspective and logic as to how we can understand and interpret the emotions, thoughts and behaviors of the individuals working in the relevant organization. It might provide the organizational managers of our time with the possibility of profoundly explaining the reasons of many unsolvable problems.

6. Conclusion

The literature often lays stress on the necessity of organizational development in education. But debates continue regarding how this organizational development will occur and what components will the roadmap consist of in ensuring organizational development. Especially educational organizations are expected to be more open to development and learning when compared with other organizations. It is suggested from this perspective that the concept of quantum organization, which contains the idea that organizational learning is a natural behavior of organizational spirit, will make a great contribution to the educational and other organizations of the future (Kilmann 2011). Deardorff and Williams (2006) defined quantum organizations as an organizational climate involving a high degree of integrity, reliability and sense of commitment among employees. According to them, organizational learning and quantum organizations is acknowledged as a behavioral value by employees due to the nature of organization.

Besides, it is necessary to emphasize that teamwork rather than hierarchy is taken as the basis in restructuring of quantum organizations (Zohar 1998; Porter-O'Gradyy and Malloch 2002). Zohar (1998) suggests that it is essential in quantum organizations to provide a working environment which is integrated with the understanding of bottom to top organization and holism, and which organizes itself. According to her, it is important to keep alive the capacities of all organizational staff feed from organizational vision. Vision here does not refer to "our plans for the next five years" or "this is how we plan to achieve our goals". On the contrary, the vision of an organization is its general sense of identity, its longings, its feeling about itself on the face of the world and its fundamental motivational values. On the other hand, the period of transition to quantum organization as an organizational vision also means inclusion of numerous actions of change in the organizational process. Although change is foreseeable, it can be conceived as a threat by organizations and it is argued that even the slightest changes in organizations cause a climate of stress (James 1996). And this shows how important is change for organizations. It is another fact that organizations need the skill of managing and directing change (Kotter 2012). In educational organizations, just like in other organizations, it is necessary to understand the zeitgeist when bringing continuity to the process of change and formation of the learning organization structure. And time tells us that, in educational organizations, learning, integrity, sharing, transparency, teamwork and organizational synergy have united with the spirits of organizations or, in other saying, that a climate of unification should rule among organizations and their staff, and that this should transform into an organizational behavior. In quantum organizations, this process might bring along self-organizing organizations (Lewis 1996; Di Biase and Rocha 1999; Perruched & Vinter 2002; Fuchs 2003; Hudson, 2004; Plowman et al., 2007; Weston 2009; Kilmann 2011). To explain all these characteristics with a kind of brain metaphor, the quantum organization model can be conceived as a big human brain. What is important is to seek the way of making this brain (quantum organization) the most efficient, productive and creative. Mind and consciousness which are prominent in quantum organizations (Amarasingam 2009; Killmann 2011) can be considered as the key concepts. These key concepts can shape the dynamic structure of organizations.They should be taken into consideration as they form the source of action for organizational staff.

In conclusion, the quantum organization model, especially in the context of organizational developments of educational organizations, appears to be a comprehensive and advanced organizational model for present and future. It can be said, therefore, that stress should be laid on the quantum organization model and its characteristics in educational organizations and that this can actually be used as a model in the education world, especially in the field of educational management, hence the need for more elaborate and applied studies.

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