

The Effects of COVID-19 Pandemic on Working Life: An Evaluation on Individual and Organizational Competencies

Evrim Mayatürk Akyol, Onur Kazancı, Barış Bostancı*

Faculty of Economics and Administrative Sciences, Department of Business Administration, Izmir, Turkey

Katip Celebi University, Izmir, Turkey

ARTICLE INFO

Keywords:

Covid-19 Competency Individual Competencies Organizational Competencies

ABSTRACT

In a rapidly changing world, people need to create differences in order to participate in the labor market, and in the same way, for businesses to remain strong in the market. Especially due to the high uncertainties caused by the Covid-19 pandemic, it has become a must to update and possess the competencies that will make the difference at the individual and organizational level. This paper examined the competencies in the Covid-19 process, taking into account the history of competencies, their development over time and the types of competencies. In particular main aims of this paper are to suggest individual and organizational competencies that enable to exceed the average performance in the current pandemic conditions, to make contribution to 'competencies and Covid-19' literature, and to create a road map for the future managers and organizations. In this context, relevant literature was reviewed in detail and opinions were shared accordingly. As a result, cognitive and emotional attitudes of employees and managers are considered as individual competencies, whereas competencies related to agility, digitalization, human resources management, and teamwork are suggested as organizational ones. However, it would not be wrong to state that the two types of competencies are not completely separate from each other.

1. Introduction

The concept of competency whose origins occurred in old Europe and China states basic features that create superior performance in general. As time goes by, this concept gained a scientific meaning and thereafter researches and regulations were made. In the context of these perspectives, competencies are evaluated on individual level, referring to the willingness and ability of employees or managers to use their capacities (McClelland, 1973; Boyatzis, 1982; Spencer & Spencer, 1993) and also, they are considered from an organizational perspective,

Cite this article as:

Akyol, E. M., Kazancı, O. & Bostancı, B. (2021). The Effects of COVID-19 Pandemic on Working Life: An Evaluation on Individual and Organizational Competencies. *International Journal of Applied Research in Management and Economics*, 4(4):56-73. https://doi.org/10.33422/ijarme.v4i4.766

© The Author(s). 2021 **Open Access.** This article is distributed under the terms of the <u>Creative Commons Attribution 4.0 International License</u>, <u>which permits</u> unrestricted use, distribution, and redistribution in any medium, provided that the original author(s) and source are credited.



^{*}Corresponding author E-mail address: baris478@gmail.com

focusing on the analysis of competitiveness (Prahalad & Hamel, 2006; Eisenhardt & Martin, 2000).

In addition to these, whether it is a natural or a manmade disaster, an organization will finally face some crises (Kash & Darling, 1998, p. 179) and they are described in different ways. For example, according to Bundy et al. (2017, p. 1662) an organizational crisis is accepted as salient, unexpected, and disruptive event by managers and stakeholders. Chong (2004, p. 43) states the crises as negative incidents causing the demise of an organization, as well. Similarly, organizational crises are defined as high-impact events risking the viability of the organization and are characterized by ambiguities about causes, effects, and solutions of them (Pearson & Clair, 1998, p. 60). In this context, developments in different environmental conditions can signal crises by causing decrease in market share and productivity (Kash & Darling, 1998, p. 180).

Crises can be managed more effectively if the organizations prepare for them. In other words, since global developments are unpredictable, organizations need to be able to cope with the potential for dramatic changes in the way they do business. Within this framework, distinctive competencies in uncertain and turbulent environment have come to the fore in particular. To strategize those crises, especially ones like Covid-19, competencies which in demand should be decided in individual and organizational level. Characteristics of Covid-19 pandemic such as uncertainty, obscurity, and extensiveness require an effective management.

In this direction, the concept of competence is primarily dealt with in the context of its history and types. Explanations are given to establish relationships between crisis periods and competencies. Accordingly, individual and organizational competencies were discussed, based on studies from the Covid-19 period.

2. The Concept of Competency in the Context of its Development and Types

The competency movement has no single root like many others. The notion of competence has been there for centuries and can be traced back to the Middle Ages guilds where apprentices acquired skills by training with a master and were awarded credentials when they met the levels of craftsmanship associated with and established by trade (Horton, 2000). Some thoughts are going back that time. The Chinese Empire has accepted variations in human abilities for 3,000 years through the use of civil service exams in selection for government employment (Anastasi, 1968). The industrial revolution brought significant societal changes in sectors like agriculture, manufacturing, production, and transportation. Jobs and work study in these industries and expertise required to do those work have arisen (Horton, 2000). In the late 19th and early 20th centuries, the English scientist Sir Francis Galton and the American psychologist James McKeen Cattell led the development of objective methods of evaluating human intellectual capabilities (Anastasi, 1968; Shippmann et al., 2000, as cited in Hoge, Tondora, & Marrelli, 2005).

In 1911, Scientific Management's father, Frederick Taylor, brought the philosophy that "the increased production of workers was to be linked to raises and bonuses" (Horton, 2000). The Industrial Psychology brought awareness of the importance of individual differences between individuals and employees to be emphasized as unemployment rates increased 20 percent in the years following World War I. These other elements were linked to the rise in the concept of competence. Researchers began systematically identifying and analyzing diverse performance indicators during the 1940s and 1950s (Flanagan, 1954; Fleishman, 1953).

There was a constant shift to a service-oriented economy during the 1970s and therefore economic competitiveness began to be emphasized. Quality of education and general skills,

researching knowledge and competence understanding the basis of excellence in the job market have also been challenges for the US to promote economic competitiveness (Horton, 2000). David McClelland, a psychology professor at Harvard University, published an article in American Psychologist, "Testing for Competence Rather Than for Intelligence," to clarify whether intelligence tests could reveal skill sets related to job success in the early 1970s. The work that began with this article was aimed at clarifying one basic question: "What is it that differentiates strong performers from average performers? If these differentiators are known and can be measured, they can be used to hire better employees, assess and appraise employees, and help them improve their performance". These differentiating features were defined as "competencies." This paper however opened the debate over how to test for competency. Richard Boyatzis and many others have popularized it since, such as T.F. Gilbert (1978) who used the term in performance improvement relation.

The United States government issued the Uniform Guidelines on Employee Selection Procedures in 1978. The Guidelines stated that employee selection had to be based on job-related skills. (Equal Employment Opportunity Commission, Civil Service Commission, Labor Department & Justice Department, 1978; Shippmann et al., 2000, as cited in Hoge, Tondora, & Marrelli, 2005). In 1994, the Clinton Administration assigned the National Skills Standards Board (NSSB) to promote the development of a voluntary national skills standards system that could be evaluated and accredited (Horton, 2000). These standards were intended to be used: "...by the nation to ensure the development of a high skill, high-quality, high-performance workforce, including the most skilled frontline workforce in the world (NSSB, 1998, sec. 502).

There are much more milestones about development of the concept of competence, British movement, academic studies in 1970-1980s etc. As a result, it can be said that competency date back to over 2000 years.

In "Education and Jobs: The Great Training Robbery", Berg (1970) summed up researches exhibiting that school grades or education level was linked to occupational achievement as a factory laborer or air traffic controller. Also, on behalf of high degree of intelligent professions such as scientific researchers Taylor, Smith, and Ghiselin (1963) have shown that superior on duty success is never related to better college notes. From this point of view, David McClelland objected the intelligence tests in American schools and education system. He stated that these intelligence tests made an assessment for education system and teaching-learning process not for jobs. Unless the training processes are changed, no benefits could get into account for selecting superior performance for jobs. For these purposes McClelland suggested that points gaining importance in testing the concept of "competence" proposed as a different approach instead of traditional intelligence tests can be expressed as follows (McClelland, 1973, p. 7-13):

- 1. The best testing is criterion sampling.
- 2. Tests should be designed to reflect changes in what the individual has learned.
- 3. How to improve on the characteristic tested should be made public and explicit.
- 4. Tests should assess competencies involved in clusters of life outcomes.
- 5. Tests should involve operant as well as respondent behavior.
- 6. Tests should sample operant thought patterns to get maximum generalizability to various action outcomes.

A performance theory is the corner stone of the competency notion. The theory exercised in this method, as seen in Figure 1, is a simple theory of contingency. It is assumed that maximal success happens when the skill or capacity of the employee is compatible upon the work demands and the organizational climate (Boyatzis, 1982).

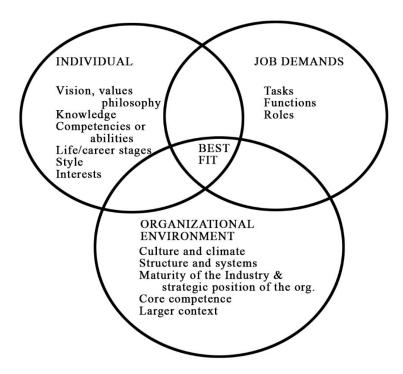


Figure 1. Theory of Action and Job Performance: Best Fit Source: Boyatzis (2008, p. 7)

The talent of the individual is represented by values, vision, and personal philosophy; knowledge; competencies; stage of life and career; interests; and style. The work roles and tasks required to be carried out can be defined as job demands. Research reported in last decades or so tells us that excellent leaders, executives, skilled practitioners and people in key positions, from sales to bank tellers, seem to need three groups of behavioral patterns as threshold skills and three clusters of competencies as defining outstanding results (Boyatzis, 2008, p. 6-7). The powers threshold groups can be indicated as expertise and experience, knowledge and blend of basic cognitive competencies, like memory and deductive reasoning.

In many countries of the world, there are three competency groups that distinguish excellent performers from average ones. They were compiled by Boyatzis (2008) as; cognitive competencies, which include structure consideration and model identification; emotional intelligence competencies, embodying self-awareness and self-management competencies, for instance sentimental self-awareness and sentimental self-control; and social intelligence competencies, compromising public consciousness and relationship management competencies, like empathy and team work.

In addition to this, Spencer and Spencer (1993) described competency as "an underlying characteristic of an individual that is causally related to criterion-referenced effective and/or superior performance in a job or situation." Five different sorts of competency features exist according to them. These are **motives**, the things an individual is continuously concerned of trying to prompt action, **traits**, human features, and reliable sensory or context reactions, **self-concept**, behaviors, beliefs or self-image of an individual, **knowledge**, information an individual has about different aspects, and **skill**, capacity to accomplish a specified mentally or physically function.

Sort or degree of a competency has strategic offerings for human resource planning. As can be seen in the figure, competencies in knowledge and skills tend to be noteworthy, and attributes in individuals comparatively surface. The self-concept, trait and motive competencies are more hidden, "deeper," and core to personality (Spencer and Spencer, 1993).

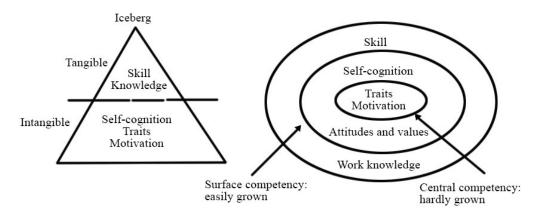


Figure 2. The Iceberg Model of Competence Source: Spencer & Spencer (1993, p. 11)

Self-conception competencies lie somewhere in between. Via planning, psychotherapy and/or supportive developmental interactions, attitudes and values like self-confidence may pass through changes but with far more effort and time. Most firms pick on the principle of come in sight experience and expertise and any of believe that candidates get the intrinsic motivation and distinctive competencies, and also that effective management will plant them. In reality, reverse is more fruitful: organizations should choose skills for core motives and traits, and profess the expertise and skills necessary to undertake significant jobs (Spencer & Spencer, 1993, p. 12).

Competencies can be split into two groups, "threshold" and "differentiation", according to the work success criteria they expect, & Spencer & Spencer (1993). These are **threshold competencies** which are basic attributes that everyone in a role needs to be minimally successful but also do not differentiate the ordinary person from the superior, while **differentiating competencies** distinguish superior from average performers.

Boyatzis tried to establish an assessment method to distinguish superior performance from average performance. Therefore, he utilized from previous steps which were suggested by many scholars like Klemp (1979), Primoff (1973) & McClelland (1975) (Boyatzis, 1982). The Job Competence Assessment method has five steps which are identification of criterion measure, job element analysis, behavioral event interviews, tests and measures and competency model. Names above had contributions especially for first four steps. Boyatzis handled these assessment methods in the fifth step in order to "expand a generic model of the competence of managers" in his book (Boyatzis 1982). He provided a data and integrated model which can be used in real life.

The aim of Boyatzis' research was determined to itemize each competence related to the effectiveness of director, irrespective of a specific job or organization. As a result of the studies, a list of 24 competencies was obtained and these competencies were gathered under 6 basic clusters. These competencies are as follows in Boyatzis' book "The Competent Manager" (Boyatzis, 1982, p. 60-190): The Goal and Action Management Cluster (Efficiency Orientation, Proactivity, Diagnostic Use of Concepts, Concern with Impact), Leadership Cluster (Self-Confidence, Use of Oral Presentations, Logical Thought, Conceptualization), The Human Resource Management Cluster (Use of Socialized Power, Positive Regard, Managing Group Process, Accurate Self-Assessment), The Directing Subordinates Cluster (Developing Others, Use of Unilateral Power, Spontaneity), The Focus on Others Cluster (Self-Control, Perceptual Objectivity, Stamina and Adaptability, Concern with Impact) and Specialized

Knowledge (Relevant Knowledge, Function, Product and Technology Focused, Recognition vs. Utility, Memory).

Based on Boyatzis' competency model study, Spencer and Spencer have also reviewed over 200 job-related competencies. These types of competencies are aligned from Spencer and Spencer's book called "Competence at Work: Models for Superior Performance" (Spencer & Spencer, 1993, p. 25-89): Achievement and Action Cluster (Achievement Orientation, Concern for Order, Quality and Accuracy, Initiative, Information Seeking), Helping and Human Service Cluster (Interpersonal Understanding, Customer Service Orientation), The Impact and Influence Cluster (Impact and Influence, Organizational Awareness, Relationship Building), Managerial Cluster (Developing Others, Directiveness: Assertiveness and Use of Positional Power, Teamwork and Cooperation, Team Leadership), Cognitive Cluster (Analytical Thinking, Conceptual Thinking, Technical/ Professional/ Managerial Expertise) and Personal Cluster (Self-Control, Self Confidence, Flexibility, Effectiveness Organizational Commitment).

As well as individual and managerial competencies, organizational ones are discussed in the context of diverse approaches. One of them is Prahalad and Hamel's "core competence approach" and they describe core competencies as "collective learning in the organization, especially how to coordinate diverse production skills and integrate multiple streams of technologies". Mixture of tools and expertise that differentiate a business on the marketplace is a core competency. In services as in manufacturing, the power of core competency is felt just as strongly. Communication, engagement and extensive willingness to work along all organizational limits are core competencies. It includes a lot of people levels and all the duties. Through use, core competence doesn't diminish. Competencies are improved as they are implemented and exchanged, except for tangible assets which worsen in time. Yet competencies also need to be guarded and cultivated; otherwise, knowledge disappears. Competencies are the epoxy connecting current entities. They're still the catalyst for creating new companies. Diversification trends and market entry can be driven by them, not simply by market attractiveness (Prahalad & Hamel, 2006).

Additionally, "dynamic capabilities approach" offers an important perspective on organizational competencies, as well. For example, specific processes such as strategic decision making, product development, and alliancing and new knowledge instead of existing one are considered as part of the dynamic capabilities approach. Accordingly, cross-functional teams play an important role by means of bringing together different sources of knowledge and expertise (Eisenhardt & Martin, 2000). Similarly, Ur Rehman & Saeed (2015, p. 23-26) emphasize that evaluating and integrating resources, coordination of capabilities serving for the new product development, creation of cross-functional teams and job rotation, and decentralized structure are dynamic capabilities.

With the 21st century, digitalization has started to be at the center of the whole business world. It develops day by day and has started to find its place in practice, has been the subject of many predictions about the intensity of use and its future until before the pandemic crisis. It is associated with many issues, especially virtual teams, the use of information and communication technologies, and remote working issues, has become a leading role in the discussion of competencies during and after the pandemic by taking a much more serious approach with the emergence of the pandemic. In this context, current debates focus on digital competencies and how to demonstrate leadership competencies in the age of digitalization. With this digitalization process accelerated by the pandemic, the digital competencies will be developed within the framework of which individual competencies will develop and which competencies new types of leaders should have, while organizational competencies are

discussed how organizations should be structured around a set of digital infrastructure, agility and leaders they should have.

Ferrari (2012), who argued that digital competencies are not just technical competencies, examined digital competencies in the axis of information management, collaboration, communication and sharing, creation of content and knowledge creation, ethics and responsibility, evaluation and problem solving, and technical operations. Ananiadoui and Claro (2009) discussed 21th century skills and competencies around three-dimension: information, communication and ethics and social impact. Regarding the leadership competencies of the new age, Jordan (2018) listed what transformational digital leaders should have as follows: humble, self-awareness, adaptable, tolerance to uncertainty, visionary, influencing & persuading others, informed decision-making, fast execution, engaged, hyper-awareness and build networks.

The pandemic crisis that accelerated the transformation initiated by digitalization has shown to everyone that the world will never be the same as before. For this reason, the need for new competencies in the new business world has become more controversial. This process, which started with how to train the current workforce, has made organizations question which competencies they will gain to their employees at individual level and which competencies they should have at the organizational level in order to survive. Agreeing that the focus should be on the aftermath of the pandemic process, the researchers pointed out that digital and leadership competencies will determine the future of businesses.

3. Covid-19 and Competencies

Individual and organizational competencies coming into prominence in Covid-19 period are explained in this part of the study.

3.1. Individual Competencies and Covid-19

This current pandemic crisis showed up as a balancer. The virus does not discriminate people of different race, wealth, nationality, religion, position and so on. On the other hand, outcomes of the infection differ greatly. The large part of the patients pulls through the illness with insignificant results (Stokes et al., 2020). However, a small part composed of the aged average around 80 years old passed away (Kimball et al., 2020). In the analysis, any earthling could be infected more or less, which means that as part of the business all employees, managers and owners share the same boat.

From the point of competencies, technical ones remain mostly the same. We still do what we do. Required skills, abilities and knowledge does not differ but behavioral competencies of leaders must be evolved to manage this new pandemic and post-pandemic era.

If we consider that one of the significant factors in organization sustainability is managerial performance (Gandolfi & Stone, 2016), it will be inevitable for managers to make some preparations involving effects of the current pandemic – related practices such as curfew and conditions of online working from home in particular on managerial working dynamics. Under uncertain conditions and based on very human nature, managers are likely to make erroneous and regretful decisions with concerns about failure, fear and anxiety (Bell, 1982), which could negatively influence performance of both workers and organization as a whole.

Managers currently have to attach critical importance to communication with employees (Coombs, 2007). Meanwhile they must avoid to pretending as if they comprehend the whole condition. Every person could have its unique experiences to handle the present uncertainty.

Thus, leader's compassionate approach become more and more crucial (König et al., 2020). The leader must be sympathetic and supportive to performance decreases, delays, psychological issues etc. (Nunes Costa et al., 2020). On which being authentic will have beneficial effects (Luthans & Avolio, 2003). Indeed, leaders are obliged to be as vulnerable with subordinates as they could. They should make no bones about accepting their inner challenges and expressing the struggles which they meet. They abstain from dressing up an unattainable and invulnerable superhero.

Moreover, fear, anxiety and panic phenomena to which people are exposed in crisis periods of time appear as an important factor to affect communication (Sandman, 2003). Such an atmosphere of uncertainty about sanitation for workers could become motivation – reducing and even make the job meaningless (Bailey & Madden, 2016). Therefore, excessively professional and unnecessarily long speeches could be confusing for workers whose mental concentration has already been dissociated due to uncertainties (Coombs & Holladay, 2012, p. 162). In this process, the fact that managers choose a clear and easily understood language of brief sentences in their communication with workers and use analogies in statements, when necessary, could benefit a sound process of both formal and informal communicative changes.

Leader's supportive actions on employees should not remain limited to job-related factors. Cognitive and emotional support may help people with managing this overwhelming situation (Naeem et al., 2020). While psychological applications in leadership of executives play an improving role for effectiveness (Polsfuss & Ardichvili, 2008), encouraging employees to have a psychological support in this situation, especially CBT (cognitive behavioral therapy), could play fundamental part in helping them with managing their anxiety, depression and so on (Olatunji et al., 2010).

Global economy faced an inevitable and irreversible damage (Fernands, 2020). Returning to pre-crisis situation may not be possible in anyway (Mckibbin & Fernando, 2020). Because of the new attitudes, needs and behaviors will emerge, and they should thus be managed, imagination will become a quite important competency for leaders not only for adjustment to these new conditions but also taking the advantage of shaping them (Reeves, et al., 2020).

On the other hand, inevitable layoffs will emerge because of the economic constraints and become a destructive issue for both employees and companies (Mogaji, 2020) which are inevitably overwhelming for employees in emotional and cognitive terms. Managers or owners have to deal with this situation kindheartedly (Lord & Saad, 2020). The question "if layoff is inevitable or not?" will become a key factor in which case managers must choose a face to face, clear attitude and use of an empathetic and polite speech tone when he or she has to speak.

Covid-19 pandemic with its related anxiety and uneasiness has even caused people to behave cautiously to their immediate family and friends. It is inevitable for such behavioral patterns to appear reverberations around business environment, as well. It may not only be sufficient that directors could prevent Covid-19 from spreading among other employees when a worker has contracted it within the business. Furthermore, managers will also have to stop the disease from becoming a means of stigma for infected patients. (Bhanot et al., 2021). The contracted person or his even fellow workers in the same union where he has been attendant are quite likely to be discriminated by other employees, as well. To enable such a likelihood not to appear, managers should be able to make sense of worries of employees and encourage them to work for the sake of organizational purposes by means of using their own empathic skills. Practice of social distancing introduced for sanitation purposes has to be prevented from becoming a social isolation. One of the most important factors to stop discrimination in this process is solidarity (Phomhakdy and Kleiner, 1999). Therefore, leaders should not personalize the phenomenon

but rather have to enable the organization to respond to it as a whole and try to penetrate the feeling of togetherness in all organizational climate.

Of course, it is only not leaders who are expected to be affected by Covid-19 pandemic in organizational sense. Because the virus responsible for the disease does not specifically target at any given demographic or socio-economic classes, workers are not supposed to be exempted from the disease at all. Therefore, it could be of great use for them to develop some skills on their own in order to adjust themselves to the "new normal" frequently cited about during and after the pandemic.

Fighting stress and uncertainty is an important individual activity which employees should develop as their managers do. In spite of similarities, skills that employees and managers are supposed to develop are likely to vary. The uncertainty in question has been experienced not only in business life of employees but also in their privacies perhaps more severely. In the process of the pandemic when people feel profoundly anxious that they could lose their health or even lives, there have been anxieties about losing their employment, as well.

The online working from home chosen by most companies for their employees to prevent the disease from spreading during the pandemic manifests itself as a practice through which they have to develop their behavioral skills. In this process employees are quite possible to keep on and even increase the motivation for the job, for which it could be of great use that daily rituals prior to the pandemic should be repeated as much as possible at home and new rituals are to be progressed in line with the temporary online work from home. Moreover, it could also be beneficial for them to work in most available time and conditions which have been determined in advance.

Although online work from home has been perceived as free and casual job, the process can become a continuous practice thanks to current progressive communication technologies. Such a 24/7 pace of job caused by stress of being constantly worked and controlled can lead to a burnout syndrome among employees. To be able to cope with stress caused by the burnout syndrome, employees should prefer a direct contact. Processes of work should be limited to given times and efforts which are to be taken into account. It should be determined which channels of communication would be used under what conditions. Of course, managers ought to behave to employees considerately and emphatically so that they could prevent burnout syndrome from emerging (Giurge & Bohns, 2020).

Considering remote working conditions caused by Covid 19 pandemic, managers are supposed to develop their own technologic knowledge and experience one hand and create an organizational climate in which subordinates manage to progress their competencies on the other (Dirani et al., 2020). In this connection, they can not only allow the digital transformation to occur in the course of the pandemic by introducing available processes of human resources but also take important steps on the inevitable path to their organizations' adjusting themselves to digital working conditions (Gigauri, 2020).

Ability of managers to develop their mentorship skills to carry them to virtual environment / online could have positive impacts on performance of organization workers who have been psychologically and physiologically affected by Covid 19. Mentorship is an element which can strengthen individual learning and development, increase mutual respect and interaction and reinforce interrelation security and interdependence in organizations (Ragins, 2012). Accordingly, it seems to create new and different viewpoints of assessing interpersonal chats rather than competitions as meetings on development of mentorship approach (Korn Ferry, 2020, p. 39).

As seen above, it can be said that staff and subordinates should first of all have flexibility to adjust themselves to rapid and unexpected developments likely to appear in global crises which affects human health such as Covid 19. To add, staff and subordinates can well be suggested to have to develop their competencies based on technicality and performance regarding remote working and its related adjustment in technology and applications; it can be called as "cognitive competencies". On the other hand, the most important competencies which managers/ staff are expected to develop in the course of the pandemic by introducing crisis in particular can be thought of as humanistic emotional qualities including empathy, tenderness, compassion, and understanding and they can be summarized as "emotional competencies".

3.2. Organizational Competencies and Covid-19

It is impossible to separate organizational competencies from individual ones completely. As Sparrow (1995, p. 174) points out, individual employee behaviors and management skills are organization-specific, and thus, they are analyzed within the scope of organizational competencies, as well.

In addition to this, King et al. (2001, p. 99) state that knowledge and skills about product change and quality, competing flexibly, managing information technology, and managing risks are critical organizational competencies as well as training employees on use of these knowledge and skills, while employees' training, participation of employees in strategy development process, flexible organization structure and culture, project teams, effective information system, innovative changes are suggested as organizational competencies by Kuzmanova (2012, p. 109).

Another study focusing on organizational competencies was conducted by Sparrow (1995, p. 175). Selection of right people, large-scale development programs, technology, and alliances or joint ventures are evaluated as competencies in the study.

Additionally, the technical and non-technical (managerial and behavioral) levels are considered as two main parts of organizational competencies. R&D, manufacturing and distribution are discussed in the context of the technical level (Wang & Guild, 1995, p. 8). Likewise, Ur Rehman & Saeed (2015, p. 26, 31) point out that marketing and technical competencies are main two kinds of organizational competencies. In this direction, strong brand name and sales force, strong R&D department and new manufacturing technology are featured competencies.

Finally, according to Oredo and Njihia (2014, p. 157), change management is a critical organizational competency especially in the area of cloud competing, as well.

However, some of these organizational competencies play a crucial role in activities of businesses during Covid-19 period. It can be argued that these competencies can be classified under the headings of (a) agility, (b) digitalization, (c) proactive and inclusive human resources management, and (d) teamwork. These competencies are described below:

Agility: An agile, sensitive, and planning or readiness-focused approach enables effective crisis management. In this context, six key steps including coping, rethinking, initiating, sensing, intervening, and sandbagging can be followed to prepare for a crisis. A crisis management plan is developed by organizations for responding properly, this plan is reexamined in terms of its effectiveness, changes about the plan are communicated to all employees, internal and external environments are monitored closely in order to catch early signals of a potential crisis, all relevant risk factors are evaluated in order to decide on the best strategy, and all back-up resources are mobilized in case of insufficient intervention efforts, respectively (Chong, 2004, p. 43-45). Kash and Darling (1998, p. 180) state that strategic planning including crisis management means sustaining and guaranteeing organization life in

parallel. Additionally, crisis plans should be designed flexibly for adapting to different conditions. In other words, crisis management plans supporting the organization's robustness and resilience enhance the organization's capacity to restore itself after a crisis (Paraskevas, 2006, p. 899). In brief, the organizations investing in the risk plan may protect themselves in Covid-19 period (Deloitte, 2020, p. 4).

On the other hand, Bundy et al. (2017, p. 1664) state that coordination of technical and human dimensions and design of organizational structures are critical points in terms of preventing from and dealing with crises. Similarly, crisis management should be viewed as a living system, and thus, it may provide flexibility for organization structure and information flow (Paraskevas, 2006, p. 902). Thus, a robust information system plays an important role in interpreting data gathered from environment into opportunities and threats and providing a concrete foundation for strategies related to crisis management (Kash & Darling, 1998, p. 182). In this context, Pearson and Clair (1998, p. 71-72) point out that some factors such as coordination of stakeholders and information dissemination determine the success of crisis management. Therefore, synergistic contributions are fostered and potential miscommunications are managed. During Covid-19 period, creating an information hub matters, since employees reach necessary information, data are updated on a daily basis, members' understanding is reframed, and experts' opinions and forecasts are used thanks to this center (Reeves et al., 2020a, p. 8).

Digitalization: Some issues such as remote work/teleworking and online shopping require digitalization. Firstly, the organizations whose digital infrastructure is ready about remote work, will be able to overcome these kinds of problems more successfully. Also, ensuring cyber security, and protection of networks and data come to the fore in terms of remote work (Deloitte, 2020, p. 2). Similarly, Fadel et al. (2020, p. 193) state that teleworking should be encouraged in this period. According to participants of Göktepe's study (2020, p. 635-636), ensuring cyber security and protection of networks and data are priority for business sustainability because of their contributions in taking measures against risks and remote management of work day.

Secondly, close relationships with the customers are discussed as another organizational competency because of diminishing consumer demand. In this context, organizations' investment in online shopping plays an important role (Craven et al., 2020, p. 7). For example, Master Kong which is a noodle and beverage producer focused on e-commerce and smaller stores instead of offline and large retail channels during Covid-19 period. Similarly, most stores of Lin Qingxuan which is a cosmetics company were changed into online sales centers and in this direction, digital tools and social media channels were used to engage customers virtually (Reeves et al., 2020b, p. 35-36).

While carrying out these processes, organizations plan for Covid-19 recovery to include investment in Artificial Intelligence (AI), Internet of Things (IoT), Blockchain, and Cloud technologies, as well (IBM, 2020, p. 3).

Proactive and Inclusive Human Resources Management: The organizations investing in human resources departments, systems and infrastructure can make a difference in this period. On the other hand, the organizations providing equal rights to their employees as much as possible will be the reason for preference (Deloitte, 2020, p. 5, 7).

In this context, according to Göktepe (2020, p. 633-634), strategic workforce planning is a main dimension of crisis management practices. In this research, managers point out that organizations design new scenarios and models related to strategic workforce planning and follow changing needs of skills and abilities by means of reviewing workforce back-up plans. Also, a number of employees of some hotels, restaurants, and cinema chains were shared with

specific companies such as Hema which had urgent need of labor in China, because of sudden increase in online shopping whereas a Chinese travel agency encouraged employees to develop new products and services for eventual recovery (Reeves et al., 2020b, p. 36, 39). In addition to these, human resources departments should establish appropriate policies and performance systems to working remotely (Gigauri, 2000, p. 2).

Health promotion is another critical point. Accordingly, training employees about prevention of disease plays an important role during this period (Fadel et al., 2020, p. 193). For example, health checks and preventative equipment come to the forefront in kitchenware manufacturer Supor's activities (Reeves et al., 2020b, p. 36).

Finally, human resources departments should support employees about career transition, because most laid off employees feel great pressure to find a new job in Covid-19 crisis period. In this context, trait-based assessment and guided skills development increase the likelihood of finding a new job quickly and succeeding in it (Korn Ferry, 2020, p. 48-49).

Teamwork: Establishing a crisis management team and appointing these teams for scenario analysis are basic efforts made by organizations in crisis periods (Kash & Darling, 1998, p. 185). In other words, bewaring of bureaucracy, and thus, setting up small teams are critical in terms of making rapid tactical decisions in this period, as well (Reeves et al., 2020a, p. 8). These teams should have some characteristics and roles such as being cross-functional, getting input from both inside and outside of the organization, and identifying all possible disasters and responses to them (Kash & Darling, 1998, p. 185). Also, a crisis management team will have more ideas about solutions and the corporate culture encouraging expression of diverse perspectives will support roles of these teams (Reeves et al., 2020a, p. 8).

Organizations should set up a cross-functional team by appointing members from diverse functions in order to lead common workstreams, as well (Craven et al., 2020, p. 4). According to Podolak (2002, p. 54-57), team leader, finance director, legal representative, security director, risk manager, communications specialist, and human resources representative are key members of a crisis management team. Team leader is responsible for making decision and policy in precrisis, crisis, and postcrisis periods. Finance director takes a place in this team by arranging emergency funds, handling financial transfers, and recording the costs related to crisis. While legal representative examines the legal implications of actions taken by the team, security director trains employees in crisis management, informs other members about crisis' nature, and coordinates the program details. Risk manager evaluates the impacts of the crisis and helps with information management. Communications specialist controls the flow of information inside and outside of the organization. Finally, human resources representative assesses problems before dangerous situations realize.

Likewise, network teams are more effective in difficult scenarios and make correct decisions more frequently than hierarchical ones. Also, information is shared among members freely in a network structure (Schraagen et al., 2010). For example, Huazhu operating 6000 hotels across China set up a crisis team and internal information platform called Huatong to provide employees with relevant information on time (Reeves et al., 2020b, p. 35). Finally, when the events occurred in Covid-19 period are evaluated, that organizations with strong procurement teams and having good relationships with their suppliers feel more confident are seen (Craven et al., 2020, p. 4).

4. Conclusion

Considering individual and organizational competencies, the crisis phenomenon caused by Covid 19 pandemic could be said to be a little more different from previous ones caused by

economic basis. As a result, Covid 19 pandemic accounted for a global crisis which is supposed to assessed in the light of human data rather than economic ones. The previous crises had impacts by influencing organizations or communities and countries, which created a vertical impact from top to bottom. However, the crisis led by Covid 19 pandemic emerged by effecting the human who is the lowermost member of the organizational structure.

This situation did not change but transform the competencies which individuals and organizations should have or developed in the processes of crisis. Even if those competencies remained unchanged on their bases, individual competencies that staff members and subordinates are supposed to acquire could be said to have turned into more informal structures. Of course, organizations would be inevitably alleged to take steps in the sense that they should develop motivations of employees in other words humans as well as their economic anxieties.

From individual competencies in particular, it is clear that individuals could have to exhibit a more different performance in the structure of the communication so as to cope with covid 19 and its related results. The current situation in which fear and panic appear based on human health not on economic sense, creates hinderances in perceptions of people. Therefore, it could be claimed that both managers and all employees are supposed to develop their capacities as well as their formal and informal communicative channels more understandably in the crisis in particular.

Compassion appears as another one of the most important individual competencies on which managers have to rely during the present crisis phenomena. Employees feel worried about their own and families' health and even lives. In addition, pandemic-associated working life crisis and thus economic difficulties cause numerous businesses to resort to processes of layoff. Moreover, fear and anxieties which employees feel about one another or among themselves increase during this period of time. Considering such factors, it is inevitable that employees experiences in their motivation and thus performance. To eliminate performance decreases due to this situation, managers are obliged to develop some skills in being authentic, since doing so will increase their capacities in acting compassionately and play a role in removing handicaps of formal and informal communications between them and their subordinates.

During the pandemic process when many businesses adopted online working at home, management of motivation-based difficulties became a significant skill for staff and their subordinates as well.

In terms of organizational competencies, the most important competence that we encountered to manage the current pandemic process could be maintained to be agile. Organizational agility which is a quite important competence even in economy-related crises could help adjust to different scenarios during this health crisis that human factor has been in priority.

Additionally, cautious formation of functional groups so as to eliminate the problems likely to occur in periods of crisis would be an important parameter for effectiveness of organizational decisions to be made in intra and post crisis. It should be considerate to choose individuals who have the competencies regarding the present situation from among all the business departments during formation of the groups involved.

Considering that the crisis has been affecting almost all sectors across the world, it is of great importance to develop relationships of organizations with their partners and establish a confidence-based interaction. Mutual trust among individuals in different businesses as well as confidence between organizations could help increase reliance, efficiency and effectiveness.

Planning is another important issue in Covid 19 crisis as well as in every crisis periods. However, creation of planning only based on economic parameters would not be sufficient. Conduction of comprehensive, flexible and effective planning processes seem to be

compulsory for health security of managers and employees who have to work in offices and crowded production lines as well as keeping motivation of remote workers during the pandemic.

As seen above, organizational and individual competencies as well as those chosen in Covid 19 crisis in terms of efficiency and sustainability tend to transform rather than change. Such health periods of crisis show that human and human related competencies have been of priority further, which should be considered to be quite normal in the crisis caused by panic phenomenon related to fears of health and life in humans.

Covid 19 pandemic showed that it is difficult to manage the capitalist system based on humans assumed to ever decide on economic and rational basis. The system that depends on human presence and sustenance has failed to withstand inability of people to work for a long time, which has caused countries in general and organizations in particular to encounter a great economic crisis. Livelihood in the USA and EU nations has come across drops in growth and even reductions. Various economists and business institutions claim that it is not possible to return to previous days both in privacy and working processes.

In this context, it would not be wrong to say that people should transform their competencies in terms of their sustenance and efficiency considering the fact that organizations and individuals do not have a rational nature both in psychology and physiology. Organizations could accept that they would have to establish an output structure independent of this irrational human nature or create a process of production compatible with it.

References

- Ananiadou, K. and M. Claro (2009), "21st Century Skills and Competences for New Millennium Learners in OECD Countries", OECD Education Working Papers, No. 41, OECD Publishing, Paris, https://doi.org/10.1787/218525261154
- Anastasi, A. (1968). Psychological Testing. New York: Macmillan.
- Bailey, C., and Madden, A. (2016). What Makes Work Meaningful-or Meaningless? MIT Sloan Management Review, 57(4).
- Baranik, L., Roling, E., and Eby, L. (2010). Why Does Mentoring Work? The Role of Perceived Organizational Support. Journal of Vocational Behavior, 76, 366-373. https://doi.org/10.1016/j.jvb.2009.07.004
- Bell, D. (1982). Regret in Decision Making under Uncertainty. Operations Research, 30(5), 961-981. https://doi.org/10.1287/opre.30.5.961
- Berg, I. (1970). Education and Jobs: The Great Training Robbery. New York: Praeger.
- Bhanot D, Singh T, Verma SK and Sharad S (2021) Stigma and Discrimination During COVID-19 Pandemic. Front. Public Health 8:577018. https://doi.org/10.3389/fpubh.2020.577018
- Boyatzis, R. (1982). The Competent Manager: A Model for Effective Performance, New York: John Wiley & Sons.
- Boyatzis, R. (2008). Competencies in the 21st Century. Journal of Management Development, 27. https://doi.org/10.1108/02621710810840730
- Coombs, W. T. (2007). Crisis Management and Communications. Institute for Public Relations, 4(5), 6.
- Coombs, W. T., and Holladay, S. J. (2012). The Handbook of Crisis Communication. Chichester, U.K: Wiley-Blackwell.

- Craven, M., Liu, L., Mysore, M., and Wilson, M. (2020). COVID-19: Implications for Business. http://www.amcham-egypt.org/bic/pdf/corona1/McKinsey_Co%20-%20COVID-19-Implications%20For%20Business.pdf Accessed 02 June 2020.
- Deloitte (2020). COVID-19: Çalışanlara ve Çalışma Hayatına Olası Etkileri (COVID-19: Its Possible Effects on Employees and Work Life. https://www2.deloitte.com/content/dam/Deloitte/tr/Documents/human-capital/covid-19-calisanlara-ve-calisma-hayatına-olasi-etkileri.pdf Accessed 18 April 2020.
- Dirani, K., Abadi, M., Alizadeh, A., Barhate, B., Garza, R., Gunasekara, N., Ibrahim, G. and Majzun, Z. (2020). Leadership competencies and the essential role of human resource development in times of crisis: a response to Covid-19 pandemic. Human Resource Development International. 23. 1-15. https://doi.org/10.1080/13678868.2020.1780078
- Eisenhardt, K. M., and Martin, J. A. (2000). Dynamic Capabilities: What Are They? Strategic Management Journal, 21, 1105-1121. https://doi.org/10.1002/1097-0266(200010/11)21:10/11%3C1105::AID-SMJ133%3E3.0.CO;2-E
- Equal Employment Opportunity Commission, Civil Service Commission, Department of Labor, & Department of Justice. (1978). Uniform Guidelines on Employee Selection Procedures. Federal Register, 43(166), 38295-38309.
- Fadel, M., Salomon, J., and Descatha, A. (2020). Coronavirus Outbreak: The Role of Companies in Preparedness and Responses. https://www.thelancet.com/action/showPdf?pii=S2468-2667%2820%2930051-7 Accessed 02 June 2020.
- Fernandes, N. (2020). Economic Effects of Coronavirus Outbreak (COVID-19) on the World Economy. Available at SSRN 3557504. https://doi.org/10.2139/ssrn.3557504
- Ferrari, A. (2012). Digital competence in practice: An analysis of frameworks. Luxembourg: Publications Office of the European Union. https://doi.org/10.2791/82116
- Flanagan, J. C. (1954). The Critical Incident Technique. Psychological Bulletin, 51(4), 327-358. https://doi.org/10.1037/h0061470
- Fleishman, E. A. (1953). The Description of Supervisory Behavior. Journal of Applied Psychology, 37(1), 1-6. https://doi.org/10.1037/h0056314
- Gandolfi, F., and Stone, S. (2016). Clarifying Leadership: High-impact Leaders in a Time of Leadership Crisis. Revista de Management Comparat International, 17(3), 212.
- Gigauri, I. (2020). Effects of Covid-19 on Human Resource Management from the Perspective of Digitalization and Work-life-balance. International Journal of Innovative Technologies in Economy. 4. https://doi.org/10.31435/rsglobal_ijite/30092020/7148
- Giurge, M. L., and Bohns, V. K. (2020). 3 Tips to Avoid WFH Burnout. Harvard Business Review (April 3, 2020).
- Goleman, D. (1998). Working with Emotional Intelligence. New York: Bantam Books. https://doi.org/10.1002/ltl.40619981008
- Goleman, D., Boyatzis, R. E., and McKee, A. (2002). Primal Leadership: Realizing the Power of Emotional Intelligence. Boston: Harvard Business School Press.
- Göktepe A. E. (2020). Kriz Döneminde İş Sürdürülebilirliğine Yönelik Yönetim Uygulamaları: Covid-19 Pandemi Araştırması Management Practices Related to Job Sustainability in Crisis Period: Covid-19 Pandemic Research. Journal of Social, Humanities and Administrative Sciences, 6(26), 630-638. https://doi.org/10.31589/JOSHAS.311

- Hoge, M. A., Tondora, J., and Marrelli, A. F. (2005). The Fundamentals of Workforce Competency: Implications for Behavioral Health. Administration and Policy in Mental Health and Mental Health Services Research, 32(5/6), 509-531. https://doi.org/10.1007/s10488-005-3263-1
- Horton, S. (2000). Introduction: The Competency Movement: Its Origins and Impact on the Public Sector. The International Journal of Public Sector Management, 13(4), 306-318. https://doi.org/10.1108/09513550010350283
- Hoyt, D. P. (1965). The Relationship Between College Grades and Adult Achievement, A Review of the Literature. Iowa City, la.: American College Testing Program. https://doi.org/10.1037/e424982008-001
- Hudson, L. (1960). Degree Class and Attainment in Scientific Research. British Journal of Psychology, 51, 67-73. https://doi.org/10.1111/j.2044-8295.1960.tb00726.x
- IBM (2020), COVID-19 and the Future of Business. NY: IBM Corporation.
- Jordan, J. (2018). 11 must-have competencies for leaders in the digital age. Human Capital & Leadership Symposium 2018, Singapore. https://www.peoplemattersglobal.com/article/leadership/11-must-have-competencies-for-leaders-in-the-digital-age-19963 Accessed 24 January 2021.
- Kimball, A., Hatfield, K. M., and Arons, M. (2020). Asymptomatic and Presymptomatic SARS-CoV-2 Infections in Residents of a Long-Term Care Skilled Nursing Facility King County. MMWR Morb Mortal Wkly Rep, 69, 377–381. https://doi.org/10.15585/mmwr.mm6913e1
- King, A., Wilcox, F., Sally, W., and Zeithaml, C. P. (2001). Managing Organizational Competencies for Competitive Advantage: The Middle-Management Edge. Academy of Management Executive, 15(2), 95-106. https://doi.org/10.5465/ame.2001.4614966
- Korn Ferry (2020). The Covid-19 Leadership Guide: Strategies for managing through the crisis. https://www.kornferry.com/content/dam/kornferry/special-project-images/coronavirus/docs/KF_Leadership_Playbook_Global_MH_V14.pdf
- König, A., Graf-Vlachy, L., Bundy, J., and Little, L. M. (2020). A Blessing and a Curse: How CEOs' Trait Empathy Affects Their Management of Organizational Crises. Academy of Management Review, 45(1), 130–153. https://doi.org/10.5465/amr.2017.0387
- Kuzmanova, M. (2012). Creation of Organizational Competencies for Change. Economics and Business, 22, 107-111.
- Lord, P., and Saad, L. (2020). Tackling the COVID-19 Pandemic. Available at SSRN 3554436. https://doi.org/10.2139/ssrn.3554436
- Luthans, F., Hodgetts, R.M., and Rosenkrantz, S.A. (1988), Real Managers. Cambridge: Ballinger Press.
- Luthans, F., and Avolio, B. J. (2003). Authentic Leadership Development. Positive Organizational Scholarship, 241, 258.
- McClelland, D. C. (1973). Testing for Competence Rather Than Intelligence. American Psychologist, January, 1-14. https://doi.org/10.1037/h0034092
- McKibbin, W. J., and Fernando, R. (2020). The Global Macroeconomic Impacts of COVID-19: Seven Scenarios. CAMA Working Paper No. 19/2020. Available at SSRN: https://ssrn.com/abstract=3547729 or http://dx.doi.org/10.2139/ssrn.3547729

- Mogaji, E. (2020). Financial Vulnerability during a Pandemic: Insights for Coronavirus Disease (COVID-19). 57-63. https://doi.org/10.2139/ssrn.3564702
- Naeem, F., Irfan, M., and Javed, A. (2020). Coping with Covid-19: Urgent Need for Building Resilience through Cognitive Behaviour Therapy. Khyber Medical University Journal, 12(1), 1–3.
- National Skill Standards Act of 1994, Sec. 502. (1998).
- Nunes-Costa, R., Lopes, C., and Leite, Â. (2020). Parenting and Management Skills: The Mediator Role of Empathy. Scandinavian Journal of Psychology, 61(3), 388-392. https://doi.org/10.1111/sjop.12624
- Olatunji, B. O., Cisler, J. M., and Deacon, B. J. (2010). Efficacy of Cognitive Behavioral Therapy for Anxiety Disorders: A Review of Meta-Analytic Findings. Psychiatric Clinics, 33(3), 557-577. https://doi.org/10.1016/j.psc.2010.04.002
- Oredo, J. O., and Njihia, J. (2014). Challenges of Cloud Computing in Business: Towards New Organizational Competencies. International Journal of Business and Social Science, 5(3), 150-160.
- Paraskevas, A. (2006). Crisis Management or Crisis Response System? A Complexity Science Approach to Organizational Crises. Management Decision, 44(7), 892-907. https://doi.org/10.1108/00251740610680587
- Phomphakdy, R. and Kleiner, B.H. (1999), "How to eliminate discrimination in the workplace", Equal Opportunities International, Vol. 18 No. 2/3/4, pp. 43-46. https://doi.org/10.1108/02610159910785808
- Podolak, A. (2002). Creating Crisis Management Teams. Risk Management, 49(9), 54-57.
- Polsfuss, C., and Ardichvili, A. (2008). Three Principles Psychology: Applications in Leadership Development and Coaching. Advances in Developing Human Resources, 10, 671-685. https://doi.org/10.1177/1523422308322205
- Prahalad, C.K., Hamel, G. (2006). The Core Competence of the Corporation. In: Hahn, D., Taylor, B. (eds) Strategische Unternehmungsplanung Strategische Unternehmungsführung. Springer, Berlin, Heidelberg. https://doi.org/10.1007/3-540-30763-X_14
- Ragins, B. (2012). Relational Mentoring: A Positive Approach to Mentoring at Work. https://doi.org/10.1093/oxfordhb/9780199734610.013.0039
- Reeves, M., Koehn, N., Neeley, T. and Berinato, S. (2020). Coronovirus: Leadership and Recorvery. Harvard Business Review Press.
- Reeves, M., Lang, N., and Carlsson-Szlezak, P. (2020a). Lead Your Business Through the Coronavirus Crisis. Harvard Business Review, February, 6-11.
- Reeves, M., Faeste, L., Chen, C., Carlsson-Szlezak, P., and Whitaker, K. (2020b). How Chinese Companies Have Responded to Coronavirus. Harvard Business Review, March, 34-42.
- Sandman, P. (2003). Beyond Panic Prevention: Addressing Emotion in Emergency Communication. Emergency risk communication CDCynergy [CD-ROM]. Atlanta: Centers for Disease Control and Prevention.

- Schraagen, J. M., Huis in 't Veld, M., and de Koning, L. (2010). Information Sharing During Crisis Management in Hierarchical vs. Network Teams. Journal of Contingencies and Crisis Management, 18(2), 117-127. https://doi.org/10.1111/j.1468-5973.2010.00604.x
- Shippmann, J. S., Ash, R. A., Battista, M., Carr, L., Eyde, L. D., Hesketh, B. (2000). The Practice of Competency Modeling. Personnel Psychology, 53(3), 703-740. https://doi.org/10.1111/j.1744-6570.2000.tb00220.x
- Sparrow, P. (1995). Organizational Competencies: A Valid Approach for the Future? International Journal of Selection and Assessment, 3(3), 168-177. https://doi.org/10.1111/j.1468-2389.1995.tb00024.x
- Spencer, L. M. Jr, and Spencer, S. M. (1993). Competence at Work: Models for Superior Performance. New York: John Wiley & Sons.
- Stokes, E. K., Zambrano, L. D., and Anderson, K. N. (2020). Coronavirus Disease 2019 Case Surveillance United States. MMWR Morb Mortal Wkly Rep, 69, 759–765. https://doi.org/10.15585/mmwr.mm6924e2
- Ur Rehman, K., and Saeed, Z. (2015). Impact of Dynamic Capabilities on Firm Performance: Moderating Role of Organizational Competencies. Sukkur IBA Journal of Management and Business, 2(2), 20-42. https://doi.org/10.30537/sijmb.v2i2.92
- Wang, C. K., and Guild, P. D. (1995). The Strategic Use of Organizational Competencies and Backcasting in Competitive Analysis. Advances in Applied Business Strategy, January, 1-26.