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Organizational Agility in the VUCA Environment of Businesses: A Field Study [a]

Abstract

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Abstract

Aim: Today's business world is defined by the concept of VUCA, which consists of Volatility, Uncertainty, Complexity, and Ambiguity. Consequently, the evolution of businesses toward an agile organizational structure has become a critical factor. The aim of this study is to determine the level of organizational agility in private health insurance companies operating in the VUCA world and to examine whether sociodemographic variables create a difference in the perception of organizational agility.

Methods: The research examines whether the sample's perception of agility differs based on gender, age, education level, status, and tenure. Data were collected from one hundred participants employed by insurance companies operating in Istanbul, utilizing a survey methodology.

Results: According to the findings, differences were observed in the speed dimension of organizational agility between the "18-24" and "35-44" age groups Furthermore, statistically significant differences were found in the flexibility, responsiveness, and speed dimensions, as well as the overall score, between "specialist" and "supervisor, executive, assistant manager" positions. The overall mean score of participants' perceptions of organizational agility was determined to be 3.92.

Conclusion: A significant difference was found between organizational agility according to age and the position (status) worked in. The level of organizational agility was also determined to be high (3.92). The high perception of organizational agility after the pandemic in our study findings can be expressed as insurance companies attach importance to the concept of agility in this sense and organize and/or will organize their ways of doing business accordingly.

Keywords: VUCA, organizational agility, health insurance, organizations

INTRODUCTION

Today, in order for businesses to gain competitive advantage over others and maintain their market share, they need to develop structures and processes in line with the demands of the variables in their internal and external environment (Akkaya and Tabak, 2018). In the management processes for businesses, the main basis of future predictions and strategic plans and targets in parallel with

this is the data and experiences of the past years. In the strategic management process, business projects for the future are developed by utilizing the experienced data and introducing new strategies and methods. However, if the current time and conditions do not benefit businesses to make strategic forecasts, this situation indicates the existence of a VUCA environment. In the VUCA world-defined by Volatility, Uncertainty, Complexity, and Ambiguity-businesses must quickly adapt to these changes in their environment and evolve into agile organizational structures in order to survive. The global coronavirus pandemic that began in 2020 stands as the most concrete example of the VUCA concept. Therefore, the pandemic has shown that adapting to changing environmental conditions is of vital importance for businesses in all sectors. In particular, this health crisis has highlighted the importance of agility in the adaptation processes of health insurance companies, just as it has for all healthcare institutions operating in the field. Based on this, the present study was conducted to determine the level of organizational agility in health insurance companies and to evaluate the factors that influence it.

CONCEPTUAL FRAMEWORK

Concept of VUCA

The acronym VUCA, describing an environment characterized by Volatility, Uncertainty, Complexity, and Ambiguity, has become a frequently encountered management concept in both academic and business spheres today. Initially employed by the U.S. military in the post-Cold War 1990s to describe the turbulent, contentious, and uncertain aspects of the multipolar world order, VUCA quickly evolved into a military mantra guiding commanders in preparing for ambiguous and unknown situations.

With the accelerating pace of change in the business world, this concept has gained popularity and has started to be used in management science terminology to determine the current and future leadership positions of companies in all sectors and of all sizes (Bernstein, 2014). The fields of business and management sciences adopted the concept of VUCA following the financial crisis of 2008 - 2009, during which companies worldwide were confronted with similar conditions in their social and economic environments (Schick et al., 2017). The global financial crisis of 2008 clearly demonstrated that existing management approaches were inadequate for addressing the challenges faced by the business world. This period led to a clearer understanding of the effects of the VUCA environment and positioned it as the foundation for new solutions. Consequently,

businesses must now recognize that the current world is a VUCA world and must develop new management philosophies accordingly (Zaucha, 2019). Today, the VUCA environment is regarded as a fundamental challenge for businesses and is accepted as the "new normal" and the "new world order" of business environments (Gandhi, 2017).The components of the VUCA framework are presented below.

Volatility

The first component of the VUCA concept volatility, is defined as a rapid change in events and conditions, but not in a predictable or recurring manner. Change occurs frequently and is sometimes unpredictable (Bennett and Lemoine, 2014). Today, the unexpected and overwhelming occurrence of change makes it impossible for businesses to predict change. In fact, volatility is defined as the turbulence generated by ever-increasing change and the speed of that change (Yurdasever, 2020). Volatility causes instability and affects the dynamics of decision-making, the degree of turbulence and the speed of change (Bernstein, 2014).

Market fluctuations require businesses to be prepared for uncertain threats and possibilities. However, these rapid and drastic changes create instability for leaders and businesses (Çiçeklioğlu, 2020). Therefore, the extreme fluctuations in the economy, socio and geopolitical areas make it difficult for businesses to manage these changes with the management styles they applied in a stable world in the past. In this new world order, the past experiences and best practices of businesses do not offer them adequate solutions for the current and future business world (Condreanu, 2016). At this point, agility is expressed as the key to cope with variability. In this context, businesses need to direct their resources effectively in order to build excess capacity and be flexible to change (Bennett and Lemoine, 2014).

Uncertainty

The second component, uncertainty, signifies situations where cause-and-effect relationships exist, but sufficient information about the current state is lacking (Bennett and Lemoine, 2014). As volatility increases and data constantly shifts, the level of uncertainty escalates (Gandhi, 2017). It also refers to the difficulty in interpreting the events and/or situations faced by businesses. Although the causes and consequences of the events encountered are predictable, it cannot be predicted how they will affect the future of the business, whether they are important, whether a quick reaction/response and efficient resource investment are required. Therefore, it becomes

difficult to find an effective solution in such an environment and to determine the conditions under which it will be applied (Zaucha, 2019).

In today's business world, uncertain outcomes and disruptive features in organizational structures and business models challenge businesses, especially with the lack of clear conditions regarding customer preferences, sectors and markets (Çiçeklioğlu, 2020). In this context, businesses need to realize that information is critical to reduce uncertainty. Going beyond existing sources of information, collecting new data and evaluating this data from new perspectives can be stated as one of the important factors in clarifying uncertainty (Bennett and Lemoine, 2014).

Complexity

Complexity, the third component of the VUCA concept, refers to situations in which there are many interconnected variables, information and procedures that are difficult to manage because they are often multiform and intricate (Bennett and Lemoine, 2014). With the development of technology, communication and information flow has become fast and smooth, and globalization has led to an increase in the level of complexity faced by businesses. The interdependent, multi-layered data network created by the acceleration of communication and information flow and the reduction in trade barriers with globalization have led to a more integrated and interdependent world economy. This situation brings both opportunities and challenges for businesses (Dhillon and Nguyen, 2020).

The increasing mobility of people around the world, the intense use of technology and the disappearance of borders increase the complexity of the world around us, making it difficult for businesses to understand and even manage the intricate structures that exist in both the external and internal environment (Condreanu, 2016). The most effective and efficient way to deal with complexity is for the business to restructure operations to adapt to external environmental complexity. Research also shows that businesses that adapt themselves to adapt to environmental change perform better than businesses that maintain their past structures and processes despite the changing business environment. Therefore, it becomes important for businesses to try to adapt their business processes to reflect environmental complexities in order to manage this process (Bennett and Lemoine, 2014).

Ambiguity

Ambiguity, the last component of the VUCA concept, is defined as a lack of clarity about the meaning of an event (Kaivo-oja and Lauraeus, 2018). It is also defined as the lack of clarity and

difficulty in determining the reasons behind the events and the questions of who, what, where, how and why (Sullivan, 2012; Lawrence 2013). Ambiguity refers to the potential for misinterpretation of events and situations, the confusion of cause and effect, and the blurring of facts (Çiçeklioğlu, 2020). In ambiguous situations, since there is no precedent, clarity and predictions about what to expect are limited (Bennett and Lemoine, 2014). Therefore, it can be stated that in such an environment, the ability to gather more information or make predictions by utilizing past experiences is limited.

Ambiguity is directly linked to increased innovative solutions. This can lead to a lack of clarity about what events or solutions mean, as innovations offer unprecedented, untested pathways (Zaucha, 2019). An example is the introduction of a new business model to the market or the launch of a technology application that has never been experienced before. In this case, it becomes difficult to make predictions about the future as well as not having enough information about the current situation of the initiative that will find an application area for the first time (Yurdasever, 2020). Ambiguous environments usually occur when there is a new product, market, innovation or opportunity (Bennett and Lemoine, 2014).

The important step that businesses need to take to reduce ambiguity in innovations such as introducing a new product or entering a new market is to experience the current situation. They should analyze the results of the strategies they apply through trial and error. Thus, business managers will be able to determine which strategies are useful or not in situations where the old rules of the business world no longer apply (Bennett and Lemoine, 2014).

ORGANIZATIONAL AGILITY

Globalization, technological developments and outsourcing have increased unpredictability and uncertainty in all sectors, and the ability of businesses to adapt to unexpected changes has become critical. The efforts of businesses to adapt to the changes in their environment have led to the development of one of the latest concepts in management sciences and this concept is defined as agility. Agility affects the success of all organizations and stands out as an important element for businesses to survive and grow in uncertain and turbulent markets (Ganguly et al., 2009).

With the adoption of the agility approach, the concept of agile organization was also shaped and started to be used more in the business management literature. Agile organization, in other words, organizational agility, defines a flexible structure that can quickly adapt to environmental

changes, as well as an organizational structure that has the ability to offer various products to the market in line with changing customer demands and needs (Eshlaghy et al., 2010). Sharifi and Zhang (1999) define agility as the ability to cope with unexpected changes, to use these changes as an opportunity and to survive against environmental threats that the business world has never faced before (Sharifi and Zhang, 1999).Organizational agility is considered a core competency that enables strategic thinking, innovation, competitive advantage, transforming change into opportunity and being proactive. Therefore, agility has become a survival imperative for businesses rather than a preference (Harraf and Wanasika, 2015).

The uncertainty in the environment has deeply affected insurance companies along with the pandemic. In addition, due to the changing demands of customers and digitalization, insurance companies have had to tolerate and respond to changes by offering new products and services.The capabilities that agile organizations should have in order to respond appropriately to changes in the business environment are basically gathered in four main categories. These four capabilities were first introduced to the literature by Sharifi and Zhang (1999). Although there are different definitions in the literature, it is stated that these four capabilities are generally accepted. Sharifi and Zhang (1999), Zhang and Sharifi (2000), Crocitto and Youssef (2003), Lin et al. (2006), Mohammadi et al. (2015) state the four basic capabilities of organizational agility as responsiveness, competence, flexibility and speed. These capabilities are briefly mentioned below.

Responsiveness

Responsiveness, one of the core capabilities of organizational agility, is a fundamental element enabling businesses to survive and gain a competitive advantage. Nowadays, increasing and changing customer demands and needs, driven by developments in technology and digitalization, have become even more pronounced with the coronavirus pandemic. Therefore, it is necessary for businesses to be able to respond to these emerging changes appropriately and in a timely manner. Responsiveness is defined as the ability to perceive changes in the environment, manage them correctly, and integrate them into the system (Nejatian and Zarei, 2013). It is also described as the ability of businesses to identify changes occurring in their environment, respond to these changes quickly and proactively, and survive without being harmed by them (Zhang and Sharifi, 2000). From a business perspective, although responsiveness may vary by sector, it is generally described as the ability of a business to meet customer demands and requirements arising from environmental changes within the VUCA environment it operates in. In this context,

responsiveness plays an important role in the evolution of today's businesses towards an agile organizational structure (Akkaya and Tabak, 2018).

Competency

Businesses need to possess and develop fundamental capabilities, and make their existing ones dynamic, to achieve their goals and gain a competitive advantage. These capabilities, which ensure the efficiency of a business's activities, make a significant contribution to the agility process of businesses. Creating a strategic vision, using appropriate technology, ensuring product/service quality, change management, employee empowerment, and product diversity are listed among the capabilities that businesses should possess for an agile organization (Zhang and Sharifi, 2000).

Flexibility

There is no single correct method for businesses to respond to changes occurring in their environment; they need to provide different responses at different times. At this point, flexibility emerges as an important capability (Harraf and Wanasika, 2015). Flexibility is the ability of a business to use different processes and options to achieve its targeted goals. In another definition, it is considered the ability of the organization to adjust its internal structures and processes in response to environmental changes (Sherehiy et al, 2007). It is stated that within the scope of businesses' flexibility capabilities, it is important to provide flexibility in product volume, flexibility in product design and configuration, organizational structure flexibility, and personnel/employee flexibility (Zhang and Sharifi, 2000). Flexible businesses should be able to take quick action, and by making their organizational structure flexible, they should also provide a competitive advantage through market adaptation, product and/or service diversity, and technological innovations.

Speed

Speed, another agility capability, is the capacity of businesses to perform tasks and operations in the shortest possible time. The rapid introduction of new products and services to the market, fast delivery of products and services to the customer, and the quick finalization of processes by shortening operational times are indicators of a business's agility capability (Sharifi and Zhang, 1999). In addition to these processes, it is stated that learning time and the time it takes to adapt to change are also determinants of the speed capability (Sherehiy et al., 2007). It is mentioned that there is a strong relationship between the ability to respond and the ability to take quick action. In this context, the decision-making process where businesses determine their reaction to changes in

their environment reflects their responsiveness capability, while the process of implementing the decisions made and/or reflecting them to the customer is expressed as an indicator of their speed (Akkaya and Tabak, 2018).

Along with all this information from the literature, the agile organizational structure is among the rising trends during the pandemic period. In the pandemic and post-pandemic period, agility emerges as the most frequently heard concept in literature or among sectors. Agility creates value for companies in three areas: speed, customer satisfaction, and employee engagement along with attracting new-generation talent to companies. This, in turn, will provide companies with a competitive advantage. While the agile organizational structure can be applied in every sector, the banking, insurance, and telecom sectors are pioneers in Turkey, followed by the automotive, chemical, and steel sectors (McKinsey Turkey, 2021). Consequently, for private health insurance companies, which are service-oriented businesses focused on human health, the extent of uncertainty arising in the external environment became clearly evident with the pandemic. In this context, it is apparent that private health insurance companies also need to transition to an agile organizational structure to turn the sectoral impacts of external environmental uncertainty into a competitive advantage. Based on this, the following research questions have been formulated:

1. What is the level of organizational agility of private health insurance companies?

2. Is there a statistically significant difference between employees' perceptions of organizational agility in relation to their sociodemographic characteristics?

In line with all these explanations, the research hypotheses have been formulated as follows:

H_1: Employees' perceptions of organizational agility differ regarding gender.

H_2: Employees' perceptions of organizational agility differ regarding age.

H_3: Employees' perceptions of organizational agility differ regarding education level.

H_4: Employees' perceptions of organizational agility differ regarding their position within the institution.

H_5: Employees' perceptions of organizational agility differ regarding their duty period (tenure) within the institution.

1. RESEARCH METHODOLOGY

1.1. Purpose and Significance of the Study

The aim of this study is to determine the level of organizational agility in private health insurance companies operating in the VUCA (Volatility, Uncertainty, Complexity, and Ambiguity) world and whether sociodemographic variables make a difference on the perception of organizational agility. For insurance companies that will initiate the agile transformation process, it can be a guiding light in terms of evaluating employee perceptions and making the necessary business planning. Due to the lack of existing research that directly overlaps with this topic in the current literature, it is thought that this study will fill a gap in the literature on a sectoral basis.

1.2. Population and Sample

According to the most recently published December 2021 employment data of the Insurance Association of Turkey (TSB), the number of employees in the headquarters and regions was 15.289. (TSB, 2022). With a 95% confidence interval and a 10% margin of error, it was deemed appropriate to have at least 96 people in the study. One hundred employees from four insurance companies determined by the convenience sampling method constituted the sample of the study due to the fact that financial, time and insurance companies are not constantly in the working offices due to their transition to the hybrid working model after the pandemic and the limited accessibility of the participants due to the hybrid model.

1.3. Data Collection Method

The data were collected through survey technique, with the questionnaire consisting of two sections. The first section includes a sociodemographic information form comprising five items related to demographic and occupational variables: gender, age, education level, position held, and years of experience. The second section utilizes the Organizational Agility Scale. This scale was originally developed by Sharifi and Zhang (1999) and later translated into Turkish and validated for reliability and validity by Akkaya and Tabak (2018). Akkaya and Tabak (2018) determined the internal consistency coefficient as 0.92 to measure the reliability of the organizational agility scale. As a result of confirmatory and exploratory factor analyses, the structure of the organizational agility scale consisted of a four-factor structure similar to the original scale. The second level factor model was found to be within the accepted goodness of fit values for the structure of the organizational agility scale and the structural validity of the scale was confirmed.

The scale consists of 17 items in total, including 8 items related to the competency dimension, 3 items on flexibility, 3 items on responsiveness, and 3 items on speed. To measure organizational agility, a 5-point Likert-type scale was used, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The organizational agility scale was applied by Çetin (2024) in the health sector. (KMO) sampling adequacy test showed a value of 0.90 and the sample size was evaluated as very good. In Bartlett's sphericity test, $p<0.01$ was obtained and the items were found suitable for factor analysis. In the factor analysis, it was stated that the variance obtained for the organizational agility scale was at a good level, considering that the variance ratio between 40% and 60% is considered sufficient. In the present study, the internal consistency of the scale was analyzed for reliability, and the Cronbach's alpha coefficient was determined to be 0.96, indicating a high level of reliability. Prior to conducting analyses and evaluations, the data were tested for normal distribution using measures of central tendency and dispersion, histogram plots, and the one-sample Kolmogorov-Smirnov test. The results confirmed that the data followed a normal distribution, and thus, parametric hypothesis tests were applied. Descriptive statistics were used to analyze the demographic variables, and frequency tables as well as measures of central tendency and dispersion were presented. The hypotheses were tested to examine whether there were statistically significant differences in organizational agility levels and perceptions based on demographic characteristics of employees in private health insurance companies. To determine whether participants' demographic characteristics influenced the dimensions of the organizational agility scale, independent samples t-tests were used for comparisons between two groups, while one-way ANOVA was applied for comparisons among more than two groups. When significant differences were identified among the groups, post hoc comparisons were conducted using the Tukey test to identify the specific groups contributing to the differences.

1.4. Ethical Approval

In order to conduct the research, ethical committee approval and permission were obtained from Marmara University Institute of Health Sciences on May 23, 2022 (Approval no: 23.05.2022-58)

2. ANALYSIS

2.1. Demographic Findings

Table 1 provides a detailed overview of the frequency and percentage distributions of the participants, categorized regarding their sociodemographic characteristics, offering insight into the composition of the study sample.

Table 1. Distribution of Participants by Socio-demographic Characteristics

Variables		n	%
Gender	Female	61	61.0
	Male	39	39.0
Age	18 -24	4	4.0
	25-34	34	34.0
	35-44	41	41.0
	45-54	21	21.0
Education Level	High School	2	2.0
	Associate Degree	11	11.0
	Bachelors Degree	61	61.0
	Masters Degree	26	26.0
Position Held	Assistant Specialist	12	12.0
	Specialist	21	21.0
	Senior Specialist	19	19.0
	Supervisor/Executive/ Assistant Manager	22	22.0
	Manager	18	18.0
	Director/Group Manager	6	6.0
	Assistant General Manager	2	2.0
Tenure	0-1 years	20	20.0
	2-5 years	21	21.0
	6-10 years	17	17.0
	11-15 years	25	25.0
	16 years and more	17	17.0
Total		**100**	**100**

The majority of the participants were women, comprising 61% of the sample. In terms of educational attainment, 2% of the participants had completed high school, 11% held an associate degree, and 26% had obtained a master's degree. The largest group, however, consisted of

participants with a bachelor's degree, representing 61% of the total. When examined by job position, 22% of the participants were employed as supervisor, executive, assistant manager while 21% held specialist roles. Senior specialists accounted for 19%, and managers for 18%, indicating that approximately 40% of the participants can be classified as mid-level managers. Regarding tenure within their organizations, the largest proportion (25%) had 11–15 years of work experience. Participants with 2–5 years of experience made up 21%, while those with 6–10 years and over 16 years each represented 17% of the sample. In terms of age distribution, 41% of participants were between 35 and 44 years old, followed by 34% aged 25 to 34 and 21% between 45 and 54.

The mean scores and standard deviations of participants' responses regarding their perceptions of organizational agility are presented in Table 2.

Table 2. Findings Regarding Participants' Perceptions of Organizational Agility

Scale/ Dimension	Min. Achieved	Max. Achieved	Mean ($\bar{X}$)	Std. Deviation
Competency	1	5	3.91	0.676
Flexibility	1	5	3.95	0.816
Responsiveness	1	5	3.96	0.807
Speed	1	5	3.86	0.780
General	1.03	5	3.92	0.707

When Table 2 is examined, it is seen that the arithmetic averages (min: 1, max: 5) of the participants' opinions on organizational agility vary between 3.86 and 3.96 and the total average is 3.92. This shows that the organizational agility level of these participating enterprises is above average. When analyzed on a sub-dimension basis, it can be stated that the "responsiveness" sub-dimension has the highest level of perception with a mean of 3.96. Similarly, the "speed" sub-dimension is the dimension perceived at the lowest level according to the opinions of the participants (with a mean of 3.86).

Parametric hypothesis tests are used for normally distributed data. In the study, since the data conformed to the normal distribution, independent t-test was applied in the comparison of two independent groups and one-way variance (ANOVA) analysis was applied in the comparison of more than two independent groups to test whether the socio-demographic characteristics of the participants differed according to the organizational agility scale and dimensions. In cases where

there was a difference in more than two independent group comparisons, Tukey test was applied to determine the groups that made a difference.

The findings of the independent t-test analysis on whether organizational agility perceptions differ according to gender are presented in Table 3.

Table 3. Analysis Findings Regarding Differences in Organizational Agility Perceptions by Gender

Variables		Mean	Std. Deviation	t	p
Competency	Female	3.83	0.728	1.460	0.148
	Male	4.04	0.572		
Flexibility	Female	3.92	0.861	0.455	0.650
	Male	4.00	0.749		
Responsiveness	Female	3.86	0.886	1.419	0.159
	Male	4.10	0.649		
Speed	Female	3.86	0.775	0.454	0.957
	Male	3.85	0.797		

In the analysis of whether organizational agility perceptions differ according to gender, no statistical difference was found in any dimensions ($p>0.05$). Therefore, H_1 hypothesis "Employees' perceptions of organizational agility differ according to gender" is rejected.

ANOVA test analysis findings on whether organizational agility perceptions differ according to age are presented in Table 4.

Table 4. Analysis Findings Regarding Differences in Organizational Agility Perceptions by Age

Variables	Tenure	Mean	Std. Deviation	F	p
Competency	18-24	4.25	0.4677	0.987	0.402
	25-34	3.93	0.8119		
	35-44	3.79	0.6523		
	45-54	4.03	0.4729		
Flexibility	18-24	4.83	0.,3333	2.445	0.069
	25-34	4.06	0.7989		
	35-44	3.78	0.8684		
	45-54	3.92	0.6984		
Responsiveness	18-24	4.75	0.5000	1.962	0.125
	25-34	4.05	0.8856		
	35-44	3.81	0.7889		

	45-54	3.93	0.6800		
Speed	18-24	4.75	0.5000	2.713	**0.049** (*)
	25-34	3.98	0.7008		
	35-44	3.71	0.8373		
	45-54	3.79	0.7263		

In the analysis of whether organizational agility perceptions differ according to age, a statistical difference was found in the speed sub-dimension ($p<0.05$). Accordingly, H_2 hypothesis "Employees' perceptions of organizational agility differ according to age" is accepted. The findings of the Tukey test analysis, which is used in multiple comparisons to determine in which age groups the difference occurs, are presented in Table 5.

Table 5. Analysis Findings Regarding Differences in Organizational Agility Perceptions by Age (Tukey Test)

Dependent Variable	(I) Age	(J) Age	Mean Diff. (I-J)	p
Speed	**18-24**	25-34	0.7696	0.229
		35-44	1.0426*	**0.050 (*)**
		45-54	0.9563	0.104
	25-34	18-24	0.7696	0.229
		35-44	0.2730	0.413
		45-54	0.1867	0.813
	35-44	**18-24**	1.0426*	**0.050 (*)**
		25-34	0.2730	0.413
		45-54	0.0863	0.974
	45-54	18-24	0.9563	0.104
		25-34	0.1867	0.813
		35-44	0.0863	0.974

According to the results of the Tukey test analysis, a statistical difference was found between the "18-24" age group and the "35-44" age group in the organizational agility speed sub-dimension.($p<.05$) When the average levels are considered, the averages of the "18-24" age group and the "35-44" age group were found to be 4.75 and 3.71, respectively. It can be stated that the mean difference between the two groups is 1.04. Accordingly, it can be stated that the organizational agility perception of the participants in the "18-24 age" group is higher than the participants in the "35-44" age group. The ANOVA test analysis findings on whether the

perceptions of organizational agility differ regarding the level of education are presented in Table 6.

Table 6. Analysis Findings Regarding Differences in Organizational Agility Perceptions by Education Level

Variables	Tenure	Mean	Std. Deviation	F	p
Competency	High School	4.312	0.4419	0.368	0.776
	Associate Degree	3.943	1.1502		
	Bachelors Degree	3.928	0.5373		
	Masters Degree	3.831	0.7482		
Flexibility	High School	4.500	0.7071	0.385	0.764
	Associate Degree	3.969	1.1590		
	Bachelors Degree	3.967	0.7063		
	Masters Degree	3.871	0.9241		
Responsiveness	High School	4.166	0.2357	0.108	0.955
	Associate Degree	3.969	1.1874		
	Bachelors Degree	3.929	0.6614		
	Masters Degree	4.012	0.9774		
Speed	High School	4.500	0.7071	0.956	0.417
	Associate Degree	4.090	0.8830		
	Bachelors Degree	3.786	0.7201		
	Masters Degree	3.884	0.8740		

In the analysis of whether the perceptions of organizational agility differ according to the level of education, no statistical difference was found in all dimensions ($p>0.05$). Therefore, H_3 hypothesis “Employees' perceptions of organizational agility differ regarding the level of education.” is rejected.The ANOVA test analysis findings on whether organizational agility perceptions differ according to the position held are presented in Table 7.

Table 7. Analysis Findings Regarding Differences in Organizational Agility Perceptions by Position Held

Variables	Position Held	Mean	Std. Deviation	F	p
Competency	Assistant Specialist	4.020	0.9940	2.252	**0.045(*)**
	Specialist	4.256	0.5038		
	Senior Specialist	3.690	0.6392		
	Supervisor/ Executive/ Assistant Manager	3.704	0.5125		
	Manager	4.013	0.4132		
	Director / Group Manager	3.541	1.2084		
	Assistant General Manager	4.250	0.7071		
Flexibility	Assistant Specialist	4.222	1.1131	2.938	**0.011(*)**
	Specialist	4.333	0.5868		
	Senior Specialist	3.754	0.8303		
	Supervisor/ Executive/ Assistant Manager	3.545	0.7313		
	Manager	4.148	0.4157		
	Director / Group Manager	3.500	1.2247		
	Assistant General Manager	4.333	0.9428		
Responsiveness	Assistant Specialist	4.222	1.1488	2.671	**0.020(*)**
	Specialist	4.333	0.6236		
	Senior Specialist	3.754	0.6924		
	Supervisor/ Executive/ Assistant Manager	3.560	0.6537		
	Manager	4.092	0.5808		
	Director / Group Manager	3.666	1.3333		
	Assistant General Manager	4.500	0.7071		
Speed	Assistant Specialist	3.944	0.7632	2.485	**0.028(*)**
	Specialist	4.365	0.6227		
	Senior Specialist	3.614	0.8259		
	Supervisor/ Executive/ Assistant Manager	3.636	0.5990		
	Manager	3.870	0.6171		
	Director / Group Manager	3.555	1.2590		
	Assistant General Manager	3.666	1.8856		

In the analysis of whether organizational agility perceptions differ according to the position held, a statistical difference was found in all dimensions ($p < 0.05$). Accordingly, the H_4 hypothesis, which was formed as "Employees' perceptions of organizational agility differ according to the position they work in the organization" was accepted. Tukey test analysis findings used in multiple comparisons to determine the positions (status) where the difference occurs are presented in Table 8.

Table 8. Analysis Findings Regarding Differences in Organizational Agility Perceptions by Position Held (Tukey Test)

Dependent Variable	(I) Position	(J) Position	Mean Difference (I-J)	p
Flexibility	Specialist	Assistant Specialist	0.1111	1
		Senior Specialist	0.5789	0.224
		Supervisor /Executive/ Assistant Manager	0.7878*	**0.020(*)**
		Manager	0.1851	0.989
		Director / Group Manager	0.8333	0.241
		Assistant General Manager	0	1
Responsiveness	Specialist	Assistant Specialist	0.1111	1
		Senior Specialist	0.5789	0.220
		Supervisor /Executive/ Assistant Manager	0.7727*	**0.023(*)**
		Manager	0.2407	0.958
		Director / Group Manager	0.6666	0.504
		Assistant General Manager	0.1666	1
Speed	Specialist	Assistant Specialist	0.4206	0.711
		Senior Specialist	0.7510*	**0.032(*)**
		Supervisor /Executive/ Assistant Manager	0.7287*	**0.030(*)**
		Manager	0.4947	0.384
		Director / Group Manager	0.8095	0.236
		Assistant General Manager	0.6984	0.867

When the results of the analysis in Table 8 are examined, except for the competency dimension, there was a statistical difference between "specialist" and "supervisor, executive, assistant manager" positions in flexibility, responsiveness, speed sub-dimensions. ($p<0.05$). Also, in the speed sub-dimension, there was a statistical difference between "specialist" and "senior specialist" ($p<0.05$).

When the mean levels of the answers given to the sub-dimensions are analyzed, the mean levels of the answers given by "specialist" and "supervisor, executive, assistant manager" positions in the flexibility dimension are 4.33 and 3.55, and the mean levels of the answers given by 'specialist' and "supervisor, executive, assistant manager" positions in the responsiveness dimension are 4.33 and 3.56. It can be stated that the difference between the two groups in the flexibility dimension is 0.78, while the difference between the same two groups in the responsiveness dimension is 0.77. Accordingly, it can be stated that the organizational agility perceptions of the participants working in the "specialist" position in the flexibility and responsiveness dimensions are higher than the participants working in the "supervisor, executive, assistant manager" position.

Table 9. Analysis Findings Regarding Differences in Organizational Agility Perceptions by Tenure

Variables	Tenure	Mean	Std. Deviation	F	p
Competency	0-1 years	4.075	0.7889		
	2-5 years	3.898	0.6621		
	6-10 years	3.963	0.7067	0.507	0.731
	11-15 years	3.840	0.7469		
	16 years and more	3.794	0.3825		
Flexibility	0-1 years	4.300	0.8911		
	2-5 years	4.127	0.6706		
	6-10 years	3.843	0.8343	1.985	0.103
	11-15 years	3.720	0.9163		
	16 years and more	3.784	0.5885		
Responsiveness	0-1 years	4.283	0.9506		
	2-5 years	4.047	0.7248		
	6-10 years	3.862	0.7174	1.386	0.245
	11-15 years	3.840	0.8825		
	16 years and more	3.745	0.6294		
Speed	0-1 years	4.216	0.6777		
	2-5 years	3.920	0.7063		
	6-10 years	3.705	0.7895	1.658	0.166
	11-15 years	3.680	0.9693		
	16 years and more	3.784	0.5644		

In the speed dimension, the average of the opinions of the participants working as "specialist" and "supervisor, executive, assistant manager" is 4.36 and 3.63, and in the speed sub-dimension, the average of the responses of the participants working as 'specialist' and "senior specialist" is 4.36 and 3.61. It can be stated that the mean difference between "specialist" and "supervisor, executive, assistant manager " in the speed dimension is 0.72, and between 'specialist' and "senior specialist" is 0.75. According to these analysis results, it can be stated that the organizational agility perceptions of the participants working in the "specialist" position in the speed sub-dimension are higher than the participants working as "senior specialist" and "supervisor, executive, assistant manager".The findings of the ANOVA test analysis on whether the perceptions of organizational agility differ regarding the length of service in the organization are presented in Table 9.

In the analysis of whether the perceptions of organizational agility differ according to tenure in the organization, no statistical difference was found in all dimensions. ($p>0.05$) Therefore, H_5 hypothesis "Employees' perceptions of organizational agility differ regarding their duty period (tenure) within the institution." is rejected.

3. DISCUSSION

This study aims to determine the organizational agility level of private health insurance companies and whether sociodemographic variables make a difference on the perception of organizational agility. In doing so, it seeks to highlight the importance and impact of the concept of organizational agility-which is gaining increasing significance in today's world-in private health insurance businesses that are both service enterprises and focused on human health. Since there is no existing study in the literature that directly overlaps with this topic, it is believed that this research can make a valuable contribution in that regard. According to the research findings, the participants' mean scores regarding organizational agility (on a scale from 1 to 5) range between 3.86 and 3.96, with an overall average of 3.92. Based on reference values for arithmetic means of 5-point Likert scales: 1.00–1.79 is considered very low, 1.80–2.59 low, 2.60–3.39 moderate, 3.40–4.19 high, and 4.20–5.00 very high (Özeroğlu, 2019). In this context, it can be stated that the participants' perceptions of organizational agility in insurance businesses (3.92) are high. When the literature is reviewed, it is observed that in a study conducted by Özeroğlu (2019) among employees of private hospitals, which are health and service businesses, and in another study by Gökçe (2023) on the effect of organizational agility on organizational change in five-star hotel businesses,

perceptions of organizational agility were found to be at a high level. However, due to the lack of a study that directly measures the level of organizational agility in the insurance sector, it is noted that no direct comparison can be made in this regard.

In the literature, it is indicated that the level of agility in businesses is likely to be associated with the demographic characteristics that reflect individuals' life stages (Sohrabi et al., 2014). In our study, a significant difference was also found between the age variable-a demographic factor-and perceptions of organizational agility. This difference occurred between the 18-24 age group and the 35-44 age group. Participants in the 18-24 age group were found to have higher perceptions of organizational agility compared to those in the 35-44 age group. This result is consistent with the findings of Gözcü (2020), who examined the relationship between organizational agility and organizational cynicism among university staff. In that study, Gözcü (2020) found that university staff under the age of 35 had higher perceptions of organizational agility. Similarly, in a study by Sağır and Gönülölmez (2019), which investigated the effects of both human capital and structural capital on business performance and whether organizational agility played a mediating role in this effect, statistically significant differences were found between participants' ages and their organizational agility scores. In our study, it can be suggested that participants aged 18-24, being new to the workforce or the institution, have higher motivation to work and more positive feelings and thoughts toward the organization. Moreover, the tendency of employees at the beginning of their careers to be flexible, open to learning, quick to adapt, and responsive to change also supports the findings of our study (Thayyib and Khan, 2021).

A significant difference was found between the organizational agility perceptions and the organizational position (status) of participants-one of the demographic variables-based on overall scores. This difference occurred between specialists and those in managerial positions such as supervisor, executive and assistant managers. Participants in non-managerial specialist roles were found to have higher perceptions of organizational agility compared to those in mid-level managerial roles. Similarly, in the study by Sağır and Gönülölmez (2019), statistically significant differences were also found in organizational agility scores based on participants' positions. It was observed that participants who were not in managerial roles had higher perceptions of organizational agility than those in upper, middle, and lower-level managerial positions. Therefore, these findings support our study. In a report published in 2009 by the Economist Intelligence Unit, which surveyed managers worldwide, 90% of respondents stated that organizational agility plays

a significant role in business success (Basri and Zorlu, 2020). Thus, this outcome may be attributed to the fact that mid-level managers tend to evaluate organizational agility more strategically, at a macro and managerial level.

In our study, no significant difference was found between gender-a demographic variable-and perceptions of organizational agility. Similar results were also obtained in the studies conducted by Sağır and Gönülölmez (2019) and Sever and Paksoy (2021).

In our study, no significant difference was found between educational level-a demographic variable-and perceptions of organizational agility. It could be expected that there would be a meaningful relationship and a higher perception level between educational attainment and organizational agility. This expectation is based on the assumption that as the level of education increases, individuals' ability to adapt to technological developments, changing environments, and working conditions-as well as their capacity to acquire and learn new information-may be directly related. In a study conducted by Rasheed et al. (2023), it was reported that organizational agility scores increased with higher levels of education (Demirler, 2024). However, in line with the findings of our study, Sağır and Gönülölmez (2019) also found no significant difference in organizational agility levels based on educational background.

In our study, no significant difference was found between the length of service (tenure) in the institution-a demographic variable-and perceptions of organizational agility. However, in one study in the literature, a significant difference was found in the flexibility and speed dimensions of organizational agility based on job tenure (Sever and Paksoy, 2021). On the other hand, in a study conducted by Bek Yağmur and Aydıntuğ Myrvang (2023) on healthcare workers' levels of organizational agility, crisis management, and organizational resilience, no difference was found between length of service and organizational agility, which is consistent with the findings of our study.

4. CONCLUSIONS

The coronavirus pandemic has emerged as a crisis affecting every sector with the most radical and economic damage the world has experienced recently. As mentioned in the literature, the pandemic is a concrete example of the VUCA world (Özen and Koç, 2021). In the VUCA world, defined as the new normal, change occurs in a continuous and unpredictable way. Therefore, the traditional management styles that businesses have always applied are no longer sufficient to cope with this new world order, so they need to switch to new management paradigms. At this point, agility and

agile organizational structure are the management philosophy that will make businesses dynamic in the face of this unknown change. Therefore, agility, which is essential for all businesses, has become a subject that should be focused on by private health insurance companies and therefore insurance companies, whose importance and demand have increased with the pandemic. In this context, our study investigated whether there is a difference between the organizational agility level of insurance companies and the organizational agility perceptions of employees in relation to their sociodemographic characteristics. A significant difference was found between organizational agility according to age and the position (status) worked in. Therefore, these hypotheses were accepted; other hypotheses (gender, education level, length of service in the institution) were rejected. The level of organizational agility was also determined to be high (3.92). The high perception of organizational agility after the pandemic in our study findings can be expressed as insurance companies attach importance to the concept of agility in this sense and organize and/or will organize their ways of doing business accordingly. Although the study was conducted with a limited number of participants, it is recommended that it be examined with different variables in larger sample groups in order to contribute to the literature.

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