

Investigation of Organizational Agility Perceptions of Business People in a Low-Income Province

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Abstract

The purpose of this research is to examine the perception levels of the business people operating in a low income province in Turkey regarding the organizational agility of the business for which they work and whether they differ in terms of some demographic variables. Yozgat, which is one of a low-income province, is chosen for sampling. In this research, which is designed as single survey model, one of the quantitative research models, organizational agility scale was applied to business people working in different sectors. As a result of the analysis of the data obtained from 224 business people, it was found that the organizational agility perceptions towards the organizations of the business people and the competency, flexibility and responsiveness subscales scores forming the scale were high and the quickness subscale score was very high. In addition, the organizational agility perceptions of business people towards their organizations were examined in terms of different demographic variables.

Keywords: Organizational Agility, Business Person.

Introduction

The twenty-first century brought rapid and dramatic changes in the manufacturing and service sectors of organizations (Razmi & Mohammad Ghasemi, 2015). In such a case, the globalization process is undoubtedly one of the most important factors that deeply affect the business world by increasing the level of competition in most industries (Lawler & Worley, 2006). Through globalization, innovation in a production process anywhere in the world may affect similar organizations at distant places and trigger the emergence of a global competition. This situation compels organizations to be able to keep up with change in time and to respond to the demands of their customers more quickly in order to survive (Firat, 2018).

Businesses operate in a dynamic, constantly changing, competitive environment influenced by customers. At the same time, shortening of product life times, increasing product variety and rapidly changing technology are effective on businesses (Ustasüleyman, 2008). When the history of commercial competition is analyzed, it is seen that companies have to adapt their operations to constantly changing business environments (Christian, Govande, Staehle, & Zimmers, 1999). However, responding quickly to the changes requires having a certain knowledge capacity and being quick with well-thought-out strategies (Bakan, Sezer, & Kara, 2017). In this context, agility, which is referred as one of the most important features of organizations in opposing market turbulences, enables the organization to make efficient, quick and continuous changes under changing conditions when required (Brown & Bessant, 2003; Razmi & Mohammad Ghasemi, 2015). Therefore, organizational change experts invite business leaders to develop agile companies, which means organizations that anticipate and respond to rapidly changing conditions to effectively manage both technical and stakeholder complexity (Young, 2013). As a matter of fact, as suggested by Sherehiy, Karwowski and Layer (2007), the concept of organizational agility is based on previously developed organizational adaptability and organizational flexibility concepts.

In the literature, the concept of agility was examined in relation to many different topics such as change, production, environmental uncertainty, leadership, information technologies, and many new concepts such as 'agile organization', 'agile business processes', 'agile system' are derived from the agility concept; however, it is seen that organizational agility comes to the forefront from these concepts (Basri, 2019). The term agile defined in dictionary as quick, rapid, active, the ability to move quickly and easily, and the ability to think in a quick and smart way (Hornby, 2000). The concept of organizational agility (Yusuf, Sarhadi, & Gunasekaran, 1999), which was established in the early 90s after the solution of managing a changing and dynamic environment (Yusuf et al., 1999), may be defined as being able to respond quickly to external changes (Sun, 2015) and a series of capabilities and values that lead the organization to survive and advance in the business environment (Khoshsima, 2003; Sharifi & Zhang, 1999). As can be understood from the definitions made, in today's unpredictable and competitive business world, companies must have different competitive features to compete (Özeroğlu, 2019). In this context, it can be said that the main reason for the losses in the performances of the businesses is the inability to produce goods and services compatible with consumer preferences (Akkaya & Tabak, 2018). Organizational agility demonstrates a company's ability to make the changes required to maintain and improve its performance (Worley et al., 2014). Therefore, agile organizations are described as organizations with features such as flexibility, quickness and adaptation in unpredictable and constantly changing business environments (Gagel, 2018). Agile organizations can understand and predict changes in the business environment (Jafarnejad & Shahaei, 2007), which makes agile organizations effective in adapting to ongoing changes in their environment (Bushey, 2019). In 2009, a report was prepared by the Economist Intelligence Unit by applying a survey to 349 executives around the world about the benefits, challenges and risks of creating a more agile organization. According to this report, 90% of the managers to whom the survey was applied stated that organizational agility is vital for business success. Furthermore, in another research conducted at the Massachusetts Institute of Technology following results are specified that agile companies have 30% higher profit than non-agile companies, and they grow 37% faster (Basri, 2019). As stated by Joiner and Josephs (2007), to enjoy sustainable success, companies need to develop an organizational agility that matches the increasing level of change and complexity in their business environment. Băjenaru, Borozan, Tomescu & Savu (2014) lists the general agility features that may be applied in all aspects of the business as organization flexibility, receptivity, speed, culture of change, low integration and complexity; stimulation of personalized and quality products and necessary skills. Sharifi and Zhang (1999) stated that for a business to be agile, there should be four characteristics such as responsiveness, competency, flexibility and quickness. Although it varies according to different sectors in the market, responsiveness is the ability of a business to meet customer demands and needs as a result of technological and environmental changes; competency is the ability to achieve business goals effectively and efficiently; flexibility is the skill of managers to use different processes and alternatives to achieve the goal while providing organizational agility in businesses; quickness is the capability of a business to realize the product or service from production to the final destination in the most effective and shortest time (Akkaya & Tabak, 2018).

The meaning of organizational agility varies according to the research areas of the researchers (Bakan et al., 2017), so there are different types of organizational agility defined by different experts in the literature. The most known of these classifications is market capital agility and operational adaptation agility. Agility to create market capital is defined as the ability to respond quickly to the target market's need through continuous monitoring and use of the business environment, and to perceive volatile environments as an efficient opportunity for new strategic directions. Agility, which provides strong market capital, may help companies using available information to enable their positioning of themselves better in order to perceive opportunities in target markets and to be aware of the change in international markets. Operational adaptation agility is primarily related to the company's ability to learn in international business operations and the rapid adaptation triggered by the opportunity arising in international markets. Operational adaptation agility emphasizes a firm's ability to integrate its knowledge with temporal situations to organize new experiential information to gain comparative advantage in turbulent contexts (Cheng, Zhong, & Cao, 2020).

Due to the rapid changes and intense competition, researchers are trying to produce strategies that can ensure the sustainability of the organizations and be effective and suitable for them (Bakan et al., 2017). Based on this idea, it is emphasized that in today's modern environment, every agile organization must have the power to produce different short-lived products at the same time, redesign their daily products, change the production method, and react efficiently to changes (Razmi & Mohammad Ghasemi, 2015). For this, organizations need to have a high speed in decision making, flexibility and adaptability, and at the same time have a skilled, creative and responsible workforce who can work well in a team. All of them are characteristics of organizational agility. Therefore, it is recommended that traditional organizations acquire these characteristics of agility. However, studies have shown that very few companies meet the agility characteristics on a practical level. Although many organizations are undergoing transformation, their notice of its importance is considered a plus point for them (Munteanu, 2019). In fact globalization, which is also expressed as the process of free movement of labor and capital between countries, is an inevitable process that can affect all economic decision makers positively or negatively from individuals to companies and the state (Özmen & Kıran, 2018).

Organizational agility is still a new concept and the studies on this subject are rather limited compared to other subject areas. When the researches on organizational agility were examined, it was found that organizational information sharing (Coşkun, 2019), information management (Bakan et al., 2017), employees' perceptions on organizational culture (Basri, 2019) and visionary leadership (Özeroğlu, 2019) has positively affected organizational agility. It was also revealed that there is a significant relationship between organizational agility and business performance (Ustasüleymanoğlu, 2008). On the other hand, in the research of Felipe, Roldán & Leal-Rodríguez (2017) in which the effect of organizational culture on organizational agility was examined; positive relationships have found between adhocracy culture, clan culture and hierarchy culture and organizational agility; however, no positive relationship has found between market culture and organizational agility.

Purpose of the Research

Rapid growth and development are witnessed with new requirements in all of businesses all over the world (Rasouli, Soodi & Jafarzadeh, 2016). Therefore, the agility of all organizations is important for organizations to continue their activities. In this context, in this study, it is aimed to examine the organizational agility levels of the companies operating in one of a low income province in Turkey, Yozgat, according to the perceptions of the members of the organization. In line with this purpose, answers to the following questions were sought.

1. How is the perception of organizational agility of business people towards their organizations?
2. Do business people's organizational agility perceptions differ significantly according to their demographic variables (age, gender, task, experience in the sector, duration in the institution, operation period, sector, number of employees, general success situation and export situation)?

Method

This research, which examines the perceptions of the business people operating in one of a low income province in Turkey regarding their organizational agility, is designed as single survey model, one of the quantitative research models. According to Karasar (2012) survey models are research approaches aiming to describe a situation that existed in the past or still exists. The single survey model aims to determine the formations of individual variables in type or quantity.

Population and Sampling

The population of the research is consisted of business people in 2019 operating in various sectors in Yozgat which is a province with low income. The sample of the study is consisted of 224 business people

selected from the universe by the convenience sampling method which is one of the non-probability sampling methods. 31 (14%) of the participants are female and 193 (86%) are male. The values regarding the personal information of the business people who make up the sample group are presented in Table 1.

Table 1: Frequency and Percentage Values of Personal Information

Variable	Groups	<i>f</i>	%
Gender	Female	31	14
	Male	193	86
	Total	224	100
Age	30 and below	40	18
	31-40	98	44
	41-50	45	20
	50 and above	41	18
	Total	224	100
Task	Manager	121	54
	Manager Assistant	39	17
	Employee	64	29
	Total	224	100
Experience in the Sector	1 year and less	13	6
	2-10 years	88	39
	11-15 yıl	61	27
	16-20 years	26	12
	21 and over	36	16
	Total	224	100
Duration in the Institution	1 year and less	22	10
	2-10 years	102	46
	11-15 years	55	25
	16-20 years	19	9
	21 and over	26	12
	Total	224	100
Operation Period	1-5 years	45	20
	6-10 years	51	23
	11-15 years	63	28
	More than 15 years	65	29
	Total	224	100
Sector	Mechanical / Boiler / Equipment	15	7
	Metal Works	17	8
	Furniture	19	9
	Food	67	30
	Plastic	5	2
	Chemical Substances	3	1
	Defense Industry	3	1
	Other	95	42
	Total	224	100
Number of Employees	50 and below	203	91
	51 and above	21	9
	Total	224	100
General Success Situation	Below mean	19	8
	Mean and above	205	92
	Total	224	100
Export Situation	Yes	20	9
	No	204	91
	Total	224	100

Data Collection Tools

Organizational Agility Scale, which was developed by Sharifi and Zhang (1999) and adapted into Turkish by Akkaya and Tabak (2018) was used. Organizational agility scale, which is a five-point Likert-type graded scale, consists of 17 items and four sub-dimensions. The internal consistency coefficients for the scale are $\alpha = .84$ for the competency dimension, $\alpha = .81$ for the flexibility dimension, $\alpha = .74$ for the responsiveness dimension, $\alpha = .85$ for the quickness dimension, and $\alpha = .92$ for the general scale. These values demonstrated that the scale has internal consistency.

Transactions and Data Analysis

Data collection tools were distributed by the researcher to 226 business people who voluntarily participated in the research. 2 of these scales filled by participants and returned were found to be missing or incorrect were not included in the analysis. Thus, 224 scales were included in the analysis. The collected data were analyzed using SPSS 22.0 program. In the analyzes, the significance of the difference between the means was tested at .05 level. In the interpretation of arithmetic means, the followings were considered, the range 1.00-1.79 "very low", the range 1.80-2.59 "low", the range 2.60-3.39 "medium", the range 3.40-4.19 "high" and the range 4.20-5.00 "very high". Descriptive statistics, t-test, one-way analysis of variance (ANOVA), Mann Whitney-U Test and Kruskal Wallis-H Test were used to analyze the data.

Findings

The arithmetic mean, standard deviation and skewness-kurtosis values related to the scales used in the study and the relationships between the scales are presented in Table 2.

Table 2. Descriptive Statistics of the Variables and Correlation Analysis Findings

	Skewness	Kurtosis	\bar{x}	SD
Competency	-1,138	1,484	4.16	5.48
Flexibility	-1,078	1,366	4.10	2.38
Responsiveness	-1,107	1,515	4.09	2.46
Quickness	-1,193	1,464	4.23	2.36
Scale total	-1,222	2,230	4.15	11.22

n=224

When Table 2 is analyzed, it is seen that the "organizational agility" (= 4.15) perceptions of the business people regarding their organizations was found at high level. \bar{x} In addition, it is seen that "competency" (= 4.16), "flexibility" (= 4.10) and "responsiveness" (= 4.09) perceptions of participants are at high level, "quickness" (= 4.23) sub-dimension perception is at very high level, which are the sub-dimensions that make-up the scale. $\bar{x}\bar{x}\bar{x}\bar{x}$

Independent group t test was carried out to determine whether the perceptions of the business people who make up the sample group regarding level of organizational agility of the organizations for which they work differentiate significantly according to the gender variable.

As can be seen in Table 3, as a result of carried out independent groups t test, for the perceptions of the business people regarding the level of organizational agility of the organizations for which they work, any significant difference has not been found between the arithmetic means of the groups for the gender variable, either for scale total score (t = .70; p .05) or its sub-dimensions scores forming the scale that are competency (t = .60; p .05), flexibility (t = 1.15; p .05), responsiveness (t = .00; p .05) and quickness (t = .76; p .05).

Table 3. Independent group t test results carried out to determine whether the perceptions of the business people who make up the sample group regarding level of organizational agility of the organizations for which they work differentiate significantly according to the gender variable.

Score	Groups	N	\bar{x}	ss	Sh \bar{x}	t Test		
						t	Sd	p
Competency	Male	193	33.36	5.30	.38	.60	222	.55
	Female	31	32.72	6.53	1.17			
Flexibility	Male	193	12.37	2.30	.17	1.15	222	.25
	Female	31	11.84	2.85	.51			
Responsiveness	Male	193	12.27	2.41	.17	.00	222	1.00
	Female	31	12.27	2.80	.50			
Quickness	Male	193	12.74	4.41	.32	.76	222	.45
	Female	31	12.40	4.33	.78			
Scale Total	Male	193	70.74	4.41	.32	.70	222	.49
	Female	31	69.23	4.33	.78			

One-way analysis of variance (ANOVA) test was carried out to determine whether the perceptions of the business people who make up the sample group regarding level of organizational agility of the organizations for which they work differentiate significantly according to the age variable.

Table 4. One Way Analysis of Variance (ANOVA) Test Results, Carried Out To Determine Whether The Perceptions Of The Business People Who Make Up The Sample Group Regarding Level of Organizational Agility Of The Organizations For Which They Work Differentiate According To The Age Variable.

f, \bar{x} and SD Values					ANOVA Results					
Score	Group	N	\bar{x}	ss	Var. K.	KT	Sd	KO	F	p
Competency	30 and below 40	35	35.25	3.36	Between G.	463.18	3	154.39	5.46	.001
	31-40	98	33.78	5.33	Intra G.	6222.36	220	28.28		
	41-50	45	32.74	6.09	Total	6685.55	223			
	50 and above 41	30	30.71	5.90						
Flexibility	30 and below 40	12	12.68	1.91	Between G.	41.72	3	13.91	2.50	.060
	31-40	98	12.51	2.53	Intra G.	1222.54	220	5.56		
	41-50	45	12.29	2.35	Total	1264.26	223			
	50 and above 41	11	11.42	2.33						
Responsiveness	30 and below 40	12	12.83	1.75	Between G.	46.75	3	15.58	2.64	.051
	31-40	98	12.48	2.42	Intra G.	1300.19	220	5.91		
	41-50	45	12.05	2.80	Total	1346.94	223			
	50 and above 41	11	11.45	2.59						
Quickness	30 and below 40	12	12.81	2.06	Between G.	19.10	3	6.37	1.15	.330
	31-40	98	12.96	2.37	Intra G.	1218.43	220	5.54		
	41-50	45	12.45	2.73	Total	1237.53	223			
	50 and above 41	12	12.23	2.12						
Scale Total	30 and below 40	73	73.57	7.27	Between G.	1468.73	3	489.58	4.05	.008
	31-40	98	71.73	11.41	Intra G.	26599.44	220	120.91		
	41-50	45	69.53	12.71	Total	28068.17	223			
	50 and above 41	65	65.81	10.95						

As can be seen in Table 4 as a result of one-way analysis of variance (ANOVA), the difference between the arithmetic means of the groups for flexibility ($F=2.50; p>.05$), responsiveness ($F=2.50; p>.05$) and

quickness ($F=2.64; p>.05$) sub-dimensions was not found significant but the difference between the arithmetic means of the groups for competency ($F=5.46; p<.05$) sub-dimension and scale total ($F=4.05; p<.01$) was found significant. Complementary analysis (post hoc) was carried out to determine from which groups the significant difference determined for the competency sub-dimension and scale total scores was caused. For this purpose, the homogeneity of the variances was first examined by Levene analysis and it was found that the variance was homogeneous for the scale total score ($L_F = 2.29; p>, 05$), but the variance was not found homogeneous for the competency sub-dimension ($L_F = .02; p, 05$).< Thus, LSD test was preferred when the variances were homogeneous and Dunnett C test was preferred when the variances were not homogeneous. The obtained results are presented below.

Table 5. Tamhane's T2 Test Results, performed to Determine the Groups Which Competency Sub-dimension Scores Differentiate Between According To Age Variable

Groups (i)	Groups (j)	$\bar{x}_i - \bar{x}_j$	$Sh_{\bar{x}}$	p
30 and below	31-40	1.47	.76	.28
	41-50	2.51	1.05	.11
	50 and above	4.54	1.06	.00
31-40	30 and below	-1.47	.76	.28
	41-50	1.04	1.06	.91
	50 and above	3.06	1.07	.03
41-50	30 and below	-2.51	1.05	.11
	31-40	-1.04	1.06	.91
	50 and above	2.02	1.29	.54
50 and above	30 and below	-4.54	1.06	.00
	31-40	-3.06	1.07	.03
	41-50	-2.02	1.29	.54

As can be seen in Table 5, as a result of the Tamhane test carried out in order to determine the groups which organizational agility scale competency sub-dimension scores differentiate between business people who make up the sample group according to the age variable; such significant difference was found to be realized at $p <.01$ level in favor of the aged 30 and under between the aged 30 and under and the aged 50 and over; similarly at $p <.05$ level in favor of the aged 31-40 between the aged 31-40 and the aged 50 and above. The differences between the means of other groups were not significant ($p>.05$).

Table 6. LSD Test Results, performed to determine the Groups Which Scale Total Score Differentiate between according To Age Variable

Groups (i)	Groups (j)	$\bar{x}_i - \bar{x}_j$	$Sh_{\bar{x}}$	p
30 and below	31-40	1.84	2.06	.37
	41-50	4.04	2.39	.09
	50 and above	7.76	2.44	.00
31-40	30 and below	-1.84	2.06	.37
	41-50	2.20	1.98	.27
	50 and above	5.92	2.05	.00
41-50	30 and below	-4.04	2.39	.09
	31-40	-2.20	1.98	.27
	50 and above	3.72	2.37	.12
50 and above	30 and below	-7.76	2.44	.00
	31-40	-5.92	2.05	.00
	41-50	-3.72	2.37	.12

As can be seen in Table 6, as a result of the LSD test carried out in order to determine the groups which organizational agility scale scores differentiate between business people who make up the sample group according to the age variable; such significant difference was found to be realized at $p < .01$ level in favor of the aged 30 and under between the aged 30 and under and the aged 50 and over; at $p < .01$ level in favor of the aged 31-40 between the aged 31-40 and the aged 50 and above. The differences between the means of other groups were not significant ($p > .05$).

One-way analysis of variance (ANOVA) test was carried out to determine whether the perceptions of the business people who make up the sample group regarding level of organizational agility of the organizations for which they work differentiate significantly according to the task variable.

Table 7. One Way Analysis of Variance (ANOVA) Test Results, Carried Out to Determine Whether The Perceptions of The Business People Who Make Up The Sample Group Regarding Level of Organizational Agility of The Organizations For Which They Work Differentiate According To The Task Variable.

f, \bar{x} and SD Values					ANOVA Results					
Score	Group	N	\bar{x}	ss	Var. K.	KT	Sd	KO	F	P
Competency	Manager	121	33.13	5.14	Between G.	81.88	2	40.94	1.37	.26
	Manager Assistant	39	34.54	6.21	Intra G.	6603.67	221	29.88		
	Employee	64	32.76	5.60	Total	6685.55				
Flexibility	Manager	121	12.32	2.27	Between G.	1.30	2	.65	.11	.89
	Manager Assistant	39	12.41	2.63	Intra G.	1262.97	221	5.72		
	Employee	64	12.19	2.46	Total	1264.26				
Responsiveness	Manager	121	12.39	2.10	Between G.	7.03	2	3.51	.58	.56
	Manager Assistant	39	12.36	2.86	Intra G.	1339.92	221	6.06		
	Employee	64	11.99	2.81	Total	1346.94				
Quickness	Manager	121	12.83	2.10	Between G.	5.46	2	2.73	.49	.61
	Manager Assistant	39	12.64	2.89	Intra G.	1232.07	221	5.58		
	Employee	64	12.47	2.48	Total	1237.53				
Scale total	Manager	121	70.67	9.83	Between G.	161.59	2	80.79	.64	.53
	Manager Assistant	39	71.95	13.62	Intra G.	27906.58	221	126.27		
	Employee	64	69.41	12.12	Total	28068.17				

As can be seen in Table 7 as a result of one-way analysis of variance (ANOVA), the difference between the arithmetic means of the groups for competency ($F = 1.37$; $p > .05$), flexibility ($F = .11$; $p > .05$), responsiveness ($F = .58$; $p > .05$), quickness ($F = .49$; $p > .05$) sub-dimensions and the scale total score ($F = .64$; $p < .05$) was not found significant.

Kruskal Wallis-H Test was carried out to determine whether the perceptions of the business people who make up the sample group regarding level of organizational agility of the organizations for which they work differentiate significantly according to the variable of experience in the sector.

Table 8. Kruskal Wallis-H Test Results, Carried Out to Determine Whether The Perceptions Of The Business People Who Make Up The Sample Group Regarding Level Of Organizational Agility Of The Organizations For Which They Work Differentiate According To The Variable Of Experience In The Sector.

Score	Groups	N	\bar{x}_{rank}	χ^2	sd	p
Competency	1 year and less	13	121.42	2.22	4	.70
	2-10 years	88	115.53			
	11-15yl	61	115.20			
	16-20 years	26	110.58			
	21 and over	36	98.68			
Flexibility	1 year and less	13	125.92	2.62	4	.62
	2-10 years	88	112.95			
	11-15yl	61	115.51			
	16-20 years	26	116.90			
	21 and over	36	98.26			
Responsiveness	1 year and less	13	143.19	3.32	4	.51
	2-10 years	88	109.20			
	11-15yl	61	113.20			
	16-20 years	26	110.67			
	21 and over	36	109.63			
Quickness	1 year and less	13	99.92	2.68	4	.61
	2-10 years	88	109.29			
	11-15yl	61	115.57			
	16-20 years	26	128.37			
	21 and over	36	108.22			
Scale total	1 year and less	13	123.38	1.47	4	.83
	2-10 years	88	111.99			
	11-15yl	61	116.20			
	16-20 years	26	114.10			
	21 and over	36	102.39			

As can be seen in Table 8 as a result of the Kruskal Wallis-H Test conducted to determine whether the competency ($\chi^2 = 2.22$; $p > .05$), flexibility ($\chi^2 = 2.62$; $p > .05$), responsiveness ($\chi^2 = 3.32$; $p > .05$) and quickness ($\chi^2 = 2.68$; $p > .05$) sub-dimensions scores of the organizational agility scale and scale total score ($\chi^2 = 1.47$; $p > .05$) of business people who make up the sample group differentiate significantly according to the variable of experience in the sector, the differences between the mean ranks of the groups were not found significant.

Kruskal Wallis-H Test was carried out to determine whether the perceptions of the business people who make up the sample group regarding level of organizational agility of the organizations for which they work differentiate significantly according to the variable of working time in their institutions.

As can be seen in Table 9 as a result of the Kruskal Wallis-H Test conducted to determine whether the competency ($\chi^2 = 7.45$; $p > .05$), responsiveness ($\chi^2 = 8.83$; $p > .05$) and quickness ($\chi^2 = 2.03$; $p > .05$) sub-dimensions scores of the organizational agility scale and scale total score ($\chi^2 = 1.47$; $p > .05$) of business people who make up the sample group >>> differentiate significantly according to the variable of working time in their institutions, the differences between the mean ranks of the groups were not found significant, but the scores of the flexibility ($\chi^2 = .01$; $p > .05$) sub-dimension demonstrated a significant difference according to the variable of working time in their institutions.< Since there is no special method to

determine from which groups the difference was caused, the groups were compared in pairs between each other with Mann Whitney-U analysis.

Table 9. Kruskal Wallis-H Test Results, Carried Out to Determine Whether The Perceptions Of The Business People Who Make Up The Sample Group Regarding Level Of Organizational Agility Of The Organizations For Which They Work Differentiate According To The Variable Of Working Time In Their Institutions.

Score	Groups	N	\bar{x}_{rank}	χ^2	sd	p
Competency	1 year and less	22	127.07	7.45	4	.11
	2-10 years	102	119.72			
	11-15yıl	55	110.86			
	16-20 years	19	93.42			
	21 and over	26	89.25			
Flexibility	1 year and less	22	130.75	12.57	4	.01
	2-10 years	102	116.82			
	11-15yıl	55	120.77			
	16-20 years	19	77.79			
	21 and over	26	87.98			
Responsiveness	1 year and less	22	148.64	8.83	4	.07
	2-10 years	102	111.72			
	11-15yıl	55	109.57			
	16-20 years	19	102.26			
	21 and over	26	98.67			
Quickness	1 year and less	22	117.02	2.03	4	.73
	2-10 years	102	114.73			
	11-15yıl	55	115.12			
	16-20 years	19	109.61			
	21 and over	26	96.50			
Scale total	1 year and less	22	133.09	7.69	4	.10
	2-10 years	102	116.58			
	11-15yıl	55	114.35			
	16-20 years	19	92.00			
	21 and over	26	90.12			

Table 10. Mann Whitney U Test Results, Performed to Determine the Groups Which Flexibility Scores Differentiate Between According To The Variable Of The Working Time In The Institution

Groups	1 year and less	2-10 years	11-15yıl	16-20 years	21 years and above
1 year and less	$\bar{x}_{rank}=130.75$	p>.05	p>.05	p<.05	p<.05
2-10 years		$\bar{x}_{rank}=116.82$	p>.05	p<.05	p<.05
11-15yıl			$\bar{x}_{rank}=120.77$	p<.01	p<.05
16-20 years				$\bar{x}_{rank}=77.79$	p>.05
21 and over					$\bar{x}_{rank}=87.98$

As can be seen in Table 10, as a result of the Mann Whitney-U analysis carried out in order to determine the groups which organizational agility scale flexibility sub-dimension scores differentiate between business people who make up the sample group; such significant difference was found to be realized at p <.05 level in favor of the group whose working time is 16-20 years between the groups of which working time is below 16 years and 16-20 years; and similarly realized at p <.05 level in favor of the group whose

working time is 21 years and above between the groups of which working time is below 16 years and 21 years and above. The differences between mean rank of the other groups were not significant ($p > .05$).

One way analysis of variance (ANOVA) test was carried out to determine whether the perceptions of the business people who make up the sample group regarding level of organizational agility of the organizations for which they work differentiate significantly according to the variable of operation period.

Table 11. One Way Analysis of Variance (ANOVA) Test Results, Carried Out To Determine Whether The Perceptions Of The Business People Who Make Up The Sample Group Regarding Level Of Organizational Agility Of The Organizations For Which They Work Differentiate According To The Variable Of Operation Period.

f, \bar{x} and SD Values					ANOVA Results					
Score	Group	N	\bar{x}	ss	Var. K.	KT	Sd	KO	F	p
Competency	1-5 years	45	32.68	6.36	Between G.	26.95	3	8.98	.30	.83
	6-10 years	51	33.73	5.44	Intra G.	6658.60	220	30.27		
	11-15 years	63	33.32	4.21	Total	6685.55	223			
	More than 15 years	65	33.27	6.00						
Flexibility	1-5 years	45	12.27	2.65	Between G.	1.60	3	.53	.09	.96
	6-10 years	51	12.44	2.22	Intra G.	1262.67	220	5.74		
	11-15 years	63	12.30	2.04	Total	1264.26	223			
	More than 15 years	65	12.20	2.65						
Responsiveness	1-5 years	45	12.03	2.78	Between G.	3.54	3	1.18	.19	.90
	6-10 years	51	12.32	1.98	Intra G.	1343.40	220	6.11		
	11-15 years	63	12.29	2.03	Total	1346.94	223			
	More than 15 years	65	12.37	2.94						
Quickness	1-5 years	45	12.31	2.72	Between G.	8.39	3	2.80	.50	.68
	6-10 years	51	12.77	1.99	Intra G.	1229.14	220	5.59		
	11-15 years	63	12.78	2.07	Total	1237.53	223			
	More than 15 years	65	12.82	2.63						
Scale Total	1-5 years	45	12.31	2.72	Between G.	100.24	3	33.14	.26	.85
	6-10 years	51	12.77	1.99	Intra G.	27967.93	220	127.13		
	11-15 years	63	12.78	2.07	Total	28068.17	223			
	More than 15 years	65	12.82	2.63						

As can be seen in Table 11 as a result of one-way analysis of variance (ANOVA), the difference between the arithmetic means of the groups for competency ($F = .30$; $p > .05$), flexibility ($F = .09$; $p > .05$), responsiveness ($F = .19$; $p > .05$), quickness ($F = .50$; $p > .05$) sub-dimensions and the scale total score ($F = .26$; $p < .05$) was not found significant.

Kruskal Wallis-H Test was carried out to determine whether the perceptions of the business people who make up the sample group regarding level of organizational agility of the organizations for which they work differentiate significantly according to the variable of the sector they work in.

As can be seen in Table 12 as a result of the Kruskal Wallis-H Test conducted to determine whether the competency ($\chi^2 = 6.51$; $p > .05$), flexibility ($\chi^2 = 10.72$; $p > .05$), responsiveness ($\chi^2 = 7.23$; $p > .05$) and quickness ($\chi^2 = 5.56$; $p > .05$) sub-dimensions scores of the organizational agility scale and scale total score ($\chi^2 = 7.42$; $p > .05$) of business people who make up the sample group differentiate significantly according to the variable of the sector they work in, the differences between the mean ranks of the groups were not found significant.

Table 12. Kruskal Wallis-H Test Results, Carried Out to Determine Whether The Perceptions Of The Business People Who Make Up The Sample Group Regarding Level Of Organizational Agility Of The Organizations For Which They Work Differentiate According To The Variable Of The Sector They Work In.

Score	Groups	N	\bar{x}_{sira}	x^2	sd	p
Competency	Mechanical / Boiler / Equipment	15	126.43	6.51	7	.48
	Metal Works	17	91.85			
	Furniture	19	105.82			
	Food	67	124.61			
	Plastic	5	114.00			
	Chemical Substances	3	139.83			
	Defense Industry	3	105.33			
	Other	95	106.07			
Flexibility	Mechanical / Boiler / Equipment	15	127.87	10.72	7	.15
	Metal Works	17	127.35			
	Furniture	19	113.97			
	Food	67	122.81			
	Plastic	5	126.30			
	Chemical Substances	3	163.00			
	Defense Industry	3	89.50			
	Other	95	98.26			
Responsiveness	Mechanical / Boiler / Equipment	15	103.67	7.23	7	.41
	Metal Works	17	107.74			
	Furniture	19	103.16			
	Food	67	127.41			
	Plastic	5	99.20			
	Chemical Substances	3	152.17			
	Defense Industry	3	84.00			
	Other	95	106.45			
Quickness	Mechanical / Boiler / Equipment	15	117.83	5.56	7	.59
	Metal Works	17	115.56			
	Furniture	19	106.71			
	Food	67	122.99			
	Plastic	5	134.60			
	Chemical Substances	3	140.00			
	Defense Industry	3	114.50			
	Other	95	102.78			
Scale total	Mechanical / Boiler / Equipment	15	122.90	7.42	7	.39
	Metal Works	17	108.32			
	Furniture	19	108.08			
	Food	67	126.40			
	Plastic	5	115.20			
	Chemical Substances	3	150.67			
	Defense Industry	3	101.67			
	Other	95	102.78			

Mann Whitney-U Test was carried out to determine whether the perceptions of the business people who make up the sample group regarding level of organizational agility of the organizations for which they work differentiate significantly according to the variable of the number of employees in their workplace.

Table 13. Mann Whitney-U Test Results, Carried Out To Determine Whether The Perceptions Of The Business People Who Make Up The Sample Group Regarding Level Of Organizational Agility Of The Organizations For Which They Work Differentiate According To The Variable Of The Number Of Employees In Their Workplace.

Score	Groups	N	\bar{x}_{rank}	Σ_{rank}	U	z	P
Competency	50 and below	203	108.84	22094.50	1388.50	-2,635	.008
	50 and above	21	147.88	3105.50			
	Total	224					
Flexibility	50 and below	203	110.33	22396.50	1690.50	-1,579	.114
	50 and above	21	133.50	2803.50			
	Total	224					
Responsiveness	50 and below	203	108.75	22076.50	1370.50	-2,724	.006
	50 and above	21	148.74	3123.50			
	Total	224					
Quickness	50 and below	203	108.43	22010.50	1304.50	-2,993	.003
	50 and above	21	151.88	3189.50			
	Total	224					
Scale total	50 and below	203	108.23	21971.00	1265.00	-3,068	.002
	50 and above	21	153.76	3229.00			
	Total	224					

As can be seen in Table 13 as a result of the Mann Whitney-U Test carried out to determine whether the perceptions of the business people who make up the sample group regarding level of organizational agility of the organizations for which they work differentiate significantly for competency ($z=-2.635$; $p<.01$), responsiveness ($z=-2.724$; $p<.01$) and quickness ($z=-2.993$; $p<.01$) sub-dimensions scores of the organizational agility scale and scale total score ($z=-3.068$; $p<.01$) according to the variable of working time in their institutions, the differences between the mean ranks of the groups were found significant. Such difference was realized in favor of groups with 51 or more employees in the workplace for all of the sub-dimensions and scale total score. As a result of the Mann Whitney-U Test conducted to determine whether flexibility ($z=-1.579$; $p>.05$) scores differentiate significantly according to the variable of the number of employees in their workplace the differences between the means rank were not found significant.

Mann Whitney-U Test was carried out to determine whether the perceptions of the business people who make up the sample group regarding level of organizational agility of the organizations for which they work differentiate significantly according to the variable of the success of their institution.

As can be seen in Table 14 as a result of the Mann Whitney-U Test carried out to determine whether the perceptions of the business people who make up the sample group regarding level of organizational agility of the organizations for which they work differentiate significantly for competency ($z= -3.792$; $p<.001$), and quickness ($z= -2.268$; $p<.05$) sub-dimensions scores of the organizational agility scale and scale total score ($z= -3.007$; $p<.01$) according to the variable of the success of their institutions, the differences between the mean ranks of the groups were found significant. Such difference was realized in favor of groups that perceive the success of their organization as mean or above for all of the sub-dimensions and scale total score. As a result of the Mann Whitney-U Test conducted to determine whether flexibility ($z=-1.397$; $p>.05$) and responsiveness ($z= -1.844$; $p>.05$) scores differentiate significantly according to the

variable of the number of employees in their workplace the differences between the means rank were not found significant.

Table 14. Mann Whitney-U Test Results, Carried Out to Determine Whether The Perceptions Of The Business People Who Make Up The Sample Group Regarding Level Of Organizational Agility Of The Organizations For Which They Work Differentiate According To The Variable Of The Success of Their Institution.

Score	Groups	N	\bar{x}_{rank}	Σ_{rank}	U	z	P
Competency	Below mean	19	58.71	1115.50	925.50	-3,792	.000
	Mean and above	205	117.49	24084.50			
	Total	224					
Flexibility	Below mean	19	92.87	1764.50	1574.50	-1,397	.162
	Mean and above	205	114.32	23435.50			
	Total	224					
Responsiveness	Below mean	19	86.58	1645.00	1455.00	-1,844	.065
	Mean and above	205	114.90	23555.00			
	Total	224					
Quickness	Below mean	19	80.97	1538.50	1348.50	-2,268	.023
	Mean and above	205	115.42	23661.50			
	Total	224					
Scale total	Below mean	19	69.76	1325.50	1135.50	-3,007	.003
	Mean and above	205	116.46	23874.50			
	Total	224					

Mann Whitney-U Test was carried out to determine whether the perceptions of the business people who make up the sample group regarding level of organizational agility of the organizations for which they work differentiate significantly according to the variable of the export situation.

Table 15. Mann Whitney-U Test Results, Carried Out to Determine Whether The Perceptions Of The Business People Who Make Up The Sample Group Regarding Level Of Organizational Agility Of The Organizations For Which They Work Differentiate According To The Variable Of The Export Situation.

Score	Groups	N	\bar{x}_{rank}	Σ_{rank}	U	z	P
Competency	Yes	20	99.58	1991.50	1781.50	-.937	.349
	No	204	113.77	23208.50			
	Total	224					
Flexibility	Yes	20	110.98	2219.50	2009.50	-.112	.911
	No	204	112.65	22980.50			
	Total	224					
Responsiveness	Yes	20	100.95	2019.00	1809.00	-.845	.398
	No	204	113.63	23181.00			
	Total	224					
Quickness	Yes	20	108.40	2168.00	1958.00	-.303	.762
	No	204	112.90	23032.00			
	Total	224					
Scale total	Yes	20	104.23	2084.50	1874.50	-.599	.549
	No	204	113.31	23115.50			
	Total	224					

As can be seen in Table 15 as a result of the Mann Whitney-U Test carried out to determine whether the perceptions of the business people who make up the sample group regarding level of organizational agility of the organizations for which they work differentiate significantly for competency ($z = -.937$; $p > .05$), flexibility ($z = -.112$; $p > .05$), responsiveness ($z = -.845$; $p > .05$) and quickness ($z = -.303$; $p > .05$) sub-dimensions scores of the organizational agility scale and scale total score ($z = -.599$; $p > .01$) according to the variable of the export situation of the workplace, the differences between the mean ranks of the groups were not found significant.

Discussion

In this research, the level of perceptions of 224 business people were examined regarding organizational agility of their organizations in terms of some demographic variables. The research findings demonstrated that the perceptions of business people regarding organizational agility of their organizations and their perceptions about the competency, flexibility and responsiveness sub-dimensions that constitute the organizational agility scale were at high level, and their perceptions about the quickness sub-dimension were at very high level. Agility, which is defined as the ability to succeed in an ever-changing and unpredictable environment (Goldman, Nagel, & Preiss, 1995), is an organization's ability to dynamically respond to complex, turbulent and ambiguous and demanding internal and external factors (Young, 2013). Therefore, business people's high level of agility perceptions about their organizations may be considered as a positive situation. Özmen and Kıran (2018) found that the perceptions of organizational agility of employees in marble factories were at high level. In addition, high perceptions of business people regarding the sub-dimensions of competency, flexibility, responsiveness, and quickness, which constitute the scale, are supported by the existent literature. Indeed, organizational agility, which means the capability to feel, perceive and predicts current changes in the business environment (Razmi & Mohammad Ghasemi, 2015), is the response to changes in a turbulent market environment. Thus, agility has been theorized as an organizational comprehensive competence by responding quickly to unexpected changes that may occur in business environments and by developing changes and gaps that can compete (Gyemang & Emeagwali, 2020).

The findings revealed that the perception levels of business people regarding organizational agility and the sub-dimensions that form the scale did not differ significantly according to the gender of the business people, their tasks in the workplaces, their experience in the sector, the operation period of the institution they work for, the sector they work in and the export situation of their workplace. Özmen and Kıran (2018) found that employees' perceptions of organizational agility did not differ significantly by their gender, title, and age group, as well.

The research findings revealed that, regarding their organization, the perception levels of business people on organizational agility and competency sub-dimension of the scale differed significantly in favor of aged under 40 between aged under 40 and aged 50 and over. Any significant differences were not for other sub-dimensions. This finding from the research is quite remarkable, considering that business people aged 50 and over have a certain work and life experience so far, they may have higher expectations and perfectionism than aged 40 and under in terms of competency. Therefore, this situation leads to think that it may have been effective in reaching such a finding from the research. When the explanations about competency feature in the organizational agility literature are examined, this situation can be understood better. For example, Sharifi and Zhang (1999) expressed competency as comprehensive capabilities in enabling efficiency and productivity in achieving organizational goals and objectives; on the other hand, Akkaya and Tabak (2018) defined the competency as the potential of using the three capabilities, which are specified as quickness, flexibility, and responsiveness, in other words, as a concept related to the dynamism of the organizational agility capabilities of the business.

Research findings showed that the perceptions of organizational agility for the organizations for which business people work and the flexibility sub-dimension of the scale were in favor of those who have 16

years or more working time compared to those who have less working time. No significant differences were found for the scale total score and other sub-dimensions in terms of variable of working time. Flexibility, which is a concept associated with a series of managerial skills such as finding ways to cope with rapid changes in market conditions, presenting customers the chance to choose the features of the products they demand (Sekman & Utku, 2009), is defined as the skills of managers to use different processes and alternatives to achieve the goal while providing organizational agility in businesses (Shahaei, 2008). In this context, it is an expected situation that employees with a working time of 16 years or more have significantly higher scores in organizational agility and flexibility sub-dimension compared to employees with shorter working time.

Another research findings revealed that, regarding their organization, the perception levels of business people on organizational agility and competency, responsiveness and quickness sub-dimensions of the scale differed significantly in favor of aged 50 and over between aged under 50 and aged 50 and over. There was no significant difference found for the flexibility sub-dimension. Organizational agility, which is the result of vigilance against extensive changes in both internal and external environments (Grant, 1996), is the capability to cope with rapid, relentless and ambiguous changes and develop in a competitive environment filled with unforeseen opportunities (Cheng et al., 2020).

For the aforementioned reasons, in order to be an agile business of an enterprise, the top management must be agile and take the necessary precautions by anticipating unexpected opportunities and threats with a proactive approach (Güzel, 2013). Therefore, based on this information, it can be said that being under management of professional and experienced managers has an important place for an organization in terms of organizational agility. Considering the fact that organizations with higher numbers of employees may be managed by more professional and experienced managers than organizations with fewer employees, as a result of research it can be said that organizations with a higher number of employees are perceived as more agile.

Conclusion and Suggestions

The findings revealed that the perception levels of business people for the organizations for which they work on organizational agility and competency, quickness sub-dimensions of the scale differed significantly in favor of the organizations that demonstrate success above mean between the organizations that demonstrate success above mean and the organizations that demonstrate success below mean. Any significant differences were not for other sub-dimensions. One of the main reasons behind this finding obtained from the research may be considered as the successful organizations have already achieved a certain administrative and systematic competency.

In this regard, considering the fact that educated, professional and experienced managers will be at the top management of successful organizations and regarding the issues highlighted in the previous paragraph, it can be evaluated as an expected situation that business people may have higher levels of organizational agility perception for successful organizations. As a matter of fact, as stated by Goldman et al. (1995), one of the most basic features of agile organizations is that they are highly qualified in terms of knowledge and skills, have detailed information about the organization and are compatible and flexible in order to meet customer demands that differ with organizational changes.

As a result of the findings obtained from the research, the following suggestions may be presented; (i) a similar study may be carried out in different provinces and the obtained results may be compared; (ii) similar research may be done with other organizational behavior issues and leadership types that may be related to organizational agility; (iii) organizations may be recommended to provide training to their employees on the importance, benefits, and how to achieve organizational agility; (iv) experienced employees may mentor other employees and create experience sharing communities in their workplaces.

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