

Learning Agility of School Administrators: An Empirical Investigation

Mustafa Özgenelⁱ

Istanbul Sabahattin Zaim University

Şebnem Yazıcıⁱⁱ

Ministry of National Education

Abstract

In this study, it was aimed to determine whether school administrators' learning agility levels differ according to their gender, seniority, school levels served, educational status, ages and administrative duties (principal and vice-principal). The research was carried out according to the survey model frequently used in quantitative research methods. A total of 428 volunteer administrators composed of 160 school principals and 268 vice-principals participated in the study. The data were collected with the "Marmara Learning Agility Scale" developed by Yazıcı and Özgenel (2020). The collected data were analyzed using t-test and ANOVA tests in the SPSS statistics program. According to the analysis, school administrators' overall level of learning agility is very high. While learning agility levels did not differ significantly according to the gender and school levels of the administrators, the level of learning agility of administrators who have postgraduate education is higher than that of who's having only a bachelor's degree. In addition, the learning agility levels of school principals are higher than vice principals. Similarly, administrators with higher seniority and age have higher learning agility than administrators with lesser seniority and age.

Keywords: Agility, Learning, Learning Agility, School Administrators

DOI: 10.29329/ijpe.2021.329.16

ⁱ **Mustafa Özgenel**, Assoc. Prof., Faculty of Education, Istanbul Sabahattin Zaim University, ORCID: 0000-0002-7276-4865

Correspondence: mustafa.ozgenel@izu.edu.tr

ⁱⁱ **Şebnem Yazıcı**, Dr., Ministry of National Education, ORCID: 0000-0001-8816-287X

INTRODUCTION

The developments and globalization process in the field of science and technology affect the daily lives of individuals and societies as well as organizations. Organizations have come under pressure to compete more and to produce and deliver innovative products and services. Employees with equipped, metacognitive skills and high potential are needed to sustain their existence, meet their needs and shape their future achievements in this brutal and competitive environment. In other words, organizations that have to survive and develop themselves against the shocking power of change in the world today have realized that the current job performance of the employees is not enough to carry them into the future (Robinson et al., 2009). Organizations that realize that employees should offer innovative and value-added products or services to the organization instead of ordinary performance require individuals with high learning agility (Gravett and Caldwell, 2016; Korn Ferry, 2015).

The concept of learning agility is a new concept that has been researched over the past two decades. The concept of learning agility has been put forward as a result of research on leadership and talent development and is used as a determining factor in the identification of high potential individuals in organizations serving in many different fields (The Tallent Strategy Group, 2015; Gravett ve Caldwell, 2016; Korn Ferry, 2018-2019). Lombardo and Eichinger (2000) are the authors who first defined the concept of learning agility in the study "High Potentials as High Learners". While these authors explain the concept of learning agility, they reveal the relationship between learning and performance than learning components. According to the authors, the most important factor that will increase the performance of the organizations and lead the organization to success is the determination of the agile and high potential employees who can learn (Lombardo and Eichinger, 2000). Moreover, the authors suggested that the prerequisite for having high potential is learning agility. It was concluded that individuals with high research potential have high levels of learning agility (Allen, 2016; Connolly, 2001; De Meuse, Dai, Swisher, Eichinger, and Lombardo, 2012; Dries, Vantilborgh and Pepermans, 2008; Eichinger and Lombardo, 2004).

According to Lombardo and Eichinger (2000), agile individuals are high-potential individuals who know how to demonstrate the necessary skills or learn new skills in the face of challenging situations for the first time. In other words, individuals who know what to do and how to act in an uncertain situation are agile (Hallenbeck and Santana, 2019). There are four elements in the focus of the concept of learning agility. These; human behavior includes high-level cognitive processes, evaluating what is learned from experiences, and applying these three features perfectly (De Meuse, 2017b; De Meuse, Dai, and Hallenbeck, 2010). The fact that these individuals can experiment and learn quickly until they get the desired result enable them to easily perform practices that require behavior at different levels within the organization (Yazıcı, 2020). In addition, these characteristics of learning agility have been supported by the research results that it is a different structure independent of personality and IQ (Bedford, 2011; Connolly, 2001; Eichinger and Lombardo, 2004). In this field, Lombardo and Eichinger (2000) are the first researchers to measure individuals' learning agility by developing the CHOICES Architec® survey. The authors identified four factors that define learning speed and different aspects of learning agility. (i) *People Agility*: They are individuals who know themselves well, learn the right lessons from experiences, behave calmly and flexibly under pressure, and build constructive relationships with different people. (ii) *Results Agility*: They are trusted individuals who can achieve superior results under difficult circumstances and give countenance to others to perform high. (iii) *Mental Agility*: It identifies individuals who are comfortable with complex events, carefully examines problems and establishes connections between different elements (Gravett and Cadwell, 2016). (iv) *Change Agility*: Expresses people who are curious, broad-minded, willingly participates in activities that can gain experience and develop skills.

Individuals with learning agility are more flexible, comfortable and calm when facing difficulties compared to other colleagues. They are individuals who are willing to have challenging work experiences that can improve themselves and who can do the necessary learning (Mitchinson and Morris, 2012). Experience is like a role and task map that defines a person's past career (Lewis, 2015).

Every situation encountered within the organization creates experiences for employees. Employees shape the personal qualities necessary to deal with difficulties in working conditions (McCall, Lombardo and Morrison, 1988). According to DeRue, Ashford and Myers (2012), the process of learning from experience gives people speed and flexibility. Individuals with high learning agility are trying to obtain appropriate learning and different experiences for themselves without being stuck on a single point of view. Therefore, individuals with high learning agility can accelerate with experience, while looking at new situations from a flexible perspective in practice. In an organization, the flexible perspective of the employees enables the organization to react quickly and easily to challenging and uncertain situations (McCall, 2004). Thus, it provides more experience and learning opportunities and individuals' job performance increases (Hunter and Schmidt, 1996).

According to Yukl (2018), the ability to learn requires self-awareness, which analyzes one's cognitive processes, strengths, and weaknesses. Individuals with learning agility are highly self-aware, using the knowledge they have gained and willing to receive feedback from others for their development. These qualities are an important factor for agile individuals to progress in their careers, to show high performance and to achieve success in the long run (Anseel, 2017; Haring, Shankar and Hofkes 2016; Mitchinson and Morris, 2012). Some researchers identified the most important element of learning from experience as a willingness to learn (Allen, 2016; Hallenbeck and Santana, 2019), while others stated it as motivation (Carette and Anseel, 2012; Day, Zaccaro and Halpin, 2004; Jonier and Josephs, 2007).

The attraction of the learning agility structure is also reflected in leadership research. Researches in this field showed that there is a strong relationship between learning agility and the performances and achievements of leaders (De Meuse, 2017a; De Meuse, 2017b, Dries, Vantilborgh & Pepermans, 2012; Lombardo & Eichinger, 2000). Today, leaders are expected to adapt more quickly to the complex, variable, uncertain and unknown situations they face in business environments that differ with globalization (Horney, Pasmore and O'Shea, 2010). It is reported that it has a positive relationship with learning agility promotion and career success, which is seen as an important factor in determining leaders who will provide these qualities (Connolly, 2001; Dai, De Meuse, and Tang, 2013; De Meuse et al., 2010; Eichinger and Lombardo, 2004). Individuals who can learn from a high level of experience are more successful in dealing with uncertainties than others and have higher performance (Eichinger and Lombardo, 2004). Therefore, while learning agility is seen as an important factor in career development, it is seen as an important objective criterion in bringing the individuals with high potential to cope with the turbulent and competitive business environment (Corporate Leadership Council, 2005; Goebel, 2013). Learning agility has not been fully clarified in educational practice today and is still a very controversial issue. Recently, there are opinions based on the learning agility structure included in education programs and the problem-solving approach based on learning agility (Azionya and Oksitycz, 2019). Some universities and schools perceive learning agility as a learning culture (Almeida, 2019; Mcgrath, 2018). It is also mentioned about agile software and application strategies that prioritize developing agility in education which has been discussed a lot recently (Briggs, 2014). Looking at the studies in the literature, Howard's (2017) research with intern teachers is salient. Howard tried to establish a theoretical framework in the field of education by making applications to measure learning agility in the training of trainee teachers. According to the findings of the study, a statistically significant relationship was found between the learning agility levels of teachers and their performances. In fact, the understanding of agility in education provides the link between technique, strategy, and values. In this way, it allows teachers to re-think the purpose of education rather than just their plans and programs (Gales and Gallaon, 2018).

The pressure of change has also influenced education and has been forced to meet varying demands. There is a need for teachers and educational leaders who can cope with these difficulties, are curious, questioning, can learn by experience and flexibly apply what they learn, make learning easy and enjoyable, high performance and potential. The most important resource for education leaders to be successful is their experience. However, the lack of clarity on which experiences are developmental and the diversity of the definition of individuals with learning agility show that it still needs to be

addressed (Hezlett and Kuncel, 2012; McCall, 2004). As the structure is new, more research in this area and discussion of the results seem to be an important need. When it is analyzed in the literature, it is seen that studies on the concept of learning agility are generally conducted on for-profit organizations and leaders (De Meuse, 2017b; Dries et al., 2012; Eichinger and Lombardo, 2004; Lombardo and Eichinger, 2000). It is thought that conducting studies on learning agility in the field of education and especially in schools will contribute significantly to the learning agility literature, the structure, definition, and explanation of the concept of learning agility, and the results obtained will be a source for other researches. Therefore, the purpose of this study is to examine the learning agility levels of school administrators (principals and assistant principals) according to various variables. In line with the main purpose of the research, it was tried to search for answers to the following sub-goals: (i) What is the level of learning agility of school administrators? (ii) Do school administrators' learning agility levels differ significantly by gender? (iii) Do school administrators' learning agility levels differ significantly by age? (iv) Do school administrators' learning agility levels differ significantly according to their seniority? (v) Do school administrators' learning agility levels differ significantly from their educational level? (vi) Do the learning agility level of school administrators differ according to their administrative duties (principal and vice principal)? (vii) Do school administrators' learning agility levels differ significantly according to the school levels they work at?

METHOD

Research Model

In this study, the research was carried out according to the survey model since the level of learning agility of school administrators was examined according to diverse variables. The survey model is a model of collecting information about the characteristics of the participants, using the answers given by the participants to certain questions (Goertz and Mahoney, 2012).

Study Group

The data of the study were obtained from 428 volunteer school administrators working in public schools in Istanbul Küçükçekmece district. While 95 (22.2%) of the administrators who participated in the study were women; 333 (77.8%) are men. 244 (57%) of the administrators have only a bachelor's degree and 184 (43%) have postgraduate degrees.

Data Collection Tools

In the study, the data were collected through the Information Form and the "Marmara Learning Agility Scale".

Marmara Learning Agility Scale: The scale was developed by Yazıcı and Özgenel (2020). It consists of 30 items and 5 sub-dimensions (People Agility [1, 2, 3, 4], Change Agility [5, 6, 7, 8, 9, 10], Mental Agility [11, 12, 13, 14, 15, 16, 17, 18], Results Agility [19, 20, 21, 22, 23, 24] and Self Awareness [25, 26, 27, 28, 29, 30]). The scale is a 5-point Likert scale (1-Never, 2-Rarely, 3-Sometimes, 4-Mostly, 5-Always). The high score or arithmetic average obtained from the scale or sub-dimensions is evaluated as high learning agility. Arithmetic averages obtained from the scale were evaluated according to the score ranges stated: 1.00-1.79 = very low; 1.80-2.59 = low; 2.60-3.39 = medium; 3.40-4.19 = high; 4.20-5.00 = very high. In this study, the Cronbach Alpha reliability coefficient of the scale was calculated as .943.

Data Analysis

The data obtained through the Marmara Learning Agility Scale used in the study were transferred to the Statistical Package for the Social Sciences (SPSS) program and analyzed by calculating the kurtosis, skewness and reliability coefficients and given in Table 1.

Table 1. School administrators' learning agility average, standard deviation, kurtosis and skewness values

	Skewness	Kurtosis	Cronbach Alpha
People Agility	.710	.331	.699
Change Agility	.653	.407	.881
Mental Agility	.594	.421	.863
Results Agility	.338	.041	.820
Self-awareness	.161	.805	.820
Learning agility	.509	.455	.943

When the kurtosis and skewness values of the measurement tools in Table 1 are examined, it is seen that the values remain between -1 and +1 that the data show the normal distribution and it is decided to perform parametric tests. According to the Alpha reliability coefficients of the scale, the overall reliability and sub-dimensions of the scale (People Agility sub-dimension is acceptable) were found to be "high level". In the analysis of the data, the t-test was used for independent groups to determine whether there was a significant difference between the two groups, and the ANOVA test was used to determine whether there were significant differences between more than two groups.

FINDINGS

Frequency (*N*), average (*M*), standard deviation (*SD*) coefficients of the learning agility levels of school administrators were calculated and given in Table 2.

Table 2. School administrators' learning agility average, standard deviation, kurtosis and skewness values

	N	M	SD	Evaluation
People Agility	428	4.39	.485	Very- high
Change Agility	428	4.18	.574	High
Mental Agility	428	4.16	.511	High
Results Agility	428	4.17	.491	High
Self-awareness	428	4.39	.443	Very High
Learning agility	428	4.24	.420	Vert High

When Table 2 is examined; while the school administrators' people agility ($M = 4.39$) and self-awareness ($M = 4.39$) and general learning agility ($M = 4.24$) were at a very high level; change agility ($M = 4.18$), mental agility ($M = 4.16$) and results agility ($M = 4.17$) are at "high" level.

Independent groups t-test results to determine whether school administrators' learning agility levels differ significantly by gender are given in Table 3.

Table 3. t-test results of the school administrators' learning agility levels by gender

Variables	Groups	N	M	SD	t	df	p
People Agility	Female	95	4.38	.56	.189	426	.850
	Male	333	4.39	.46			
Change Agility	Female	95	4.19	.62	.106	426	.915
	Male	333	4.18	.56			
Mental Agility	Female	95	4.17	.53	.293	426	.769
	Male	333	4.15	.50			

Results Agility	Female	95	4.11	.49	1.44	426	.149
	Male	333	4.19	.48			
Self-awareness	Female	95	4.33	.51	1.38	426	.168
	Male	333	4.40	.42			
Learning agility	Female	95	4.22	.47	.553	426	.594
	Male	333	4.25	.40			

When Table 3 is examined, it can be seen that the learning agility levels of school administrators do not differ significantly according to their gender ($p > .05$).

Independent group t-test results, which are conducted to determine whether the learning agility levels of school administrators differ according to their educational status (Bachelor=BA; Postgraduate=P.Grad.), are given in Table 4.

Table 4. t-test results of school administrators' learning agility levels according to educational status

Variables	Groups	N	M	SD	t	df	p
People Agility	Bachelor	244	4.36	.53	1.515	426	.131
	Postgraduate	184	4.43	.40			
Change Agility	Bachelor	244	4.14	.63	1.714	426	.087
	Postgraduate	184	4.24	.48			
Mental Agility	Bachelor	244	4.09	.54	3.014	426	.003
	Postgraduate	184	4.24	.44			
Results Agility	Bachelor	244	4.15	.52	1.135	426	.257
	Postgraduate	184	4.20	.44			
Self-awareness	Bachelor	244	4.36	.44	1.531	426	.127
	Postgraduate	184	4.42	.43			
Learning agility	Bachelor	244	4.20	.45	2.266	426	.024
	Postgraduate	184	4.29	.35			

When Table 4 is analyzed, while the level of mental agility and general learning agility of school administrators differ significantly in their educational status ($p < .05$); it does not differ significantly in other sub-dimensions ($p > .05$). Mental agility ($M = 4.24$) and general learning agility levels of school administrators with a postgraduate degree ($M = 4.29$) are higher than mental ($M = 4.09$) and general learning agility ($M = 4.20$) of administrator with bachelor's degree.

Independent groups' t-test results conducted to determine whether school administrators' learning agility levels differ according to their administrative duties are given in Table 5.

Table 5. t-test results of school administrators' learning agility levels by administrative duties

Variables	Groups	N	M	SD	t	df	p
People Agility	Vice-Principal	268	4.34	.50	2.681	426	.008
	Principal	160	4.47	.43			
Change Agility	Vice-Principal	268	4.13	.61	2.753	426	.006
	Principal	160	4.28	.49			
Mental Agility	Vice-Principal	268	4.11	.53	2.133	426	.003
	Principal	160	4.22	.45			
Results Agility	Vice-Principal	268	4.14	.52	1.550	426	.122
	Principal	160	4.22	.43			
Self-awareness	Vice-Principal	268	4.37	.46	.828	426	.408
	Principal	160	4.41	.40			
Learning agility	Vice-Principal	268	4.20	.45	2.394	426	.017
	Principal	160	4.30	.35			

As seen in the results in Table 5, school administrators' level of people agility, change agility, mental agility and general learning agility levels differ significantly to their administrative duties ($p < .05$). Also, results agility and self-awareness levels do not differ significantly ($p > .05$). People agility level of school principals ($M = 4.47$), change agility ($M = 4.28$), mental agility ($M = 4.22$) and general learning agility levels ($M = 4.30$), are higher than vice-principals' people agility ($M = 4.34$), change agility ($M = 4.13$) mental agility ($M = 4.11$) and general learning agility levels ($M = 4.20$).

The results of ANOVA analysis conducted to determine whether the learning agility levels of school administrators differ according to the school level they work in are given in Table 6.

Table 6. ANOVA results according to the seniority of the learning agility levels of school administrators

	Occupational Seniority	N	M	SD	Variance Source	Sum of Squares.	df	Mean Square	F	p	Sig.
People Agility	A-10 years and under	67	4.24	.62	Between G.	2.35	4	.589	2.53	.040	C>A D>A
	B-11-15 years	67	4.36	.42	Within G.	98.45	423	.233			
	C-16-20 years	110	4.43	.48	Total	100.8	427				
	D-21-25 years	94	4.47	.41							
	E-26 years and above	90	4.39	.46							
	Total	428	4.39	.48							
Change Agility	A-10 years and under	67	3.94	.68	Between G.	5.60	4	1.40	4.38	.002	B>A, C>A, D>A, E>A
	B-11-15 years	67	4.14	.56	Within G.	135.2	423	.320			
	C-16-20 years	110	4.24	.57	Total	140.8	427				
	D-21-25 years	94	4.23	.57							
	E-26 years and above	90	4.29	.43							
	Total	428	4.18	.57							
Mental Agility	A-10 years and under	67	4.03	.61	Between G.	1.65	4	.413	1.59	.176	---
	B-11-15 years	67	4.19	.45	Within G.	109.9	423	.260			
	C-16-20 years	110	4.14	.54	Total	111.6	427				
	D-21-25 years	94	4.17	.44							
	E-26 years and above	90	4.22	.47							
	Total	428	4.16	.51							
Results Agility	A-10 years and under	67	4.09	.57	Between G.	1.42	4	.357	1.48	.207	---
	B-11-15 years	67	4.15	.44	Within G.	101.8	423	.241			
	C-16-20 years	110	4.15	.50	Total	103.3	427				
	D-21-25 years	94	4.17	.49							
	E-26 years and above	90	4.27	.42							
	Total	428	4.17	.49							
Self-awareness	A-10 years and under	67	4.36	.51	Between G.	2.71	4	.679	3.53	.008	D>B, E>A, E>B, E>C
	B-11-15 years	67	4.27	.44	Within G.	81.34	423	.192			
	C-16-20 years	110	4.34	.43	Total	84.0	427				
	D-21-25 years	94	4.42	.40							
	E-26 years and above	90	4.51	.41							
	Total	428	4.39	.44							
Learning Agility	A-10 years and below	67	4.12	.53	Between G.	1.83	4	.457	2.62	.034	D>A, E>A
	B-11-15 years	67	4.21	.38	Within G.	73.75	423	.174			
	C-16-20 years	110	4.24	.42	Total	75.58	427				
	D-21-25 years	94	4.27	.38							
	E-26 years and above	90	4.33	.36							
	Total	428	4.24	.42							

When the results in Table 6 are examined, it is seen that the level of mental agility and results agility do not differ significantly according to their seniority ($p > .05$). However, people agility, change agility, self-awareness and general learning agility levels differ significantly according to their seniority ($p < .05$). Post-hoc Sheffe test results after ANOVA were evaluated to determine which groups this difference occurred. Accordingly, the agility levels of school administrators who have 16-20 years ($M = 4.43$) and 21-25 years ($M = 4.47$) seniority in people agility are higher than the administrators with 10 years or less ($M = 4.24$) seniority level. Level of change agility of school administrators', who have 11-15 years ($M = 4.14$), 16-20 years ($M = 4.24$), 21-25 years ($M = 4.23$),

and 26 years and over (M = 4.29) occupational seniority is higher than the level of change agility of school administrators', who have 10 years and below (M = 3.94) occupational seniority. Self-awareness levels of school administrators with 21-25 years (M = 4.42) occupational seniority are higher than self-awareness levels of school administrators with 11-15 years (M = 4.27) seniority. Self-awareness levels of school administrators with a seniority of 26 years or more (M = 4.51) are higher than those of 10-year and below (M = 4.36), 11-15 years (M = 4.27) and 16-20 years (M = 4.34). Finally, the general learning agility of school administrators with professional seniority of 21-25 years (M = 4.27) and 26 years or more (M = 4.33) is higher than that of school administrators with professional seniority of 10 years or less (M = 4.12).

The results of one-way variance (ANOVA) analysis conducted to determine whether the learning agility levels of school administrators differ according to their ages are given in Table 7.

Table 7. ANOVA results according to age variable of learning agility scale scores

	Age	N	M	SD	Variance Source	Sum of Squares.	df	Mean Square	F	p	Sig.
People Agility	A) 30 years and under	31	4.25	.58	Between G.	1.69	5	.34	1.44	.206	---
	B) 31-35 years	56	4.32	.54	Within G.	99.10	422	.23			
	C) 36-40 years	87	4.36	.52	Total	100.80	427				
	D) 41-45 years	108	4.42	.43							
	E) 46-50 years	75	4.49	.45							
	F) 51 years +	71	4.39	.41							
	Total	428	4.39	.48							
Change Agility	A) 30 years and under	31	4.02	.64	Between G.	4.94	5	.99	3.07	.010	D>A; D>B; D>C; E>A; E>B
	B) 31-35 years	56	4.01	.64	Within G.	135.86	422	.32			
	C) 36-40 years	87	4.13	.63	Total	140.81	427				
	D) 41-45 years	108	4.29	.48							
	E) 46-50 years	75	4.29	.60							
	F) 51 years +	71	4.19	.44							
	Total	428	4.18	.59							
Mental Agility	A) 30 years and under	31	4.19	.55	Btw. G.	1.69	5		.70	.589	---
	B) 31-35 years	56	4.04	.54	In G.	99.10	422	.29			
	C) 36-40 years	87	4.11	.48	Total	100.80	427	.41			
	D) 41-45 years	108	4.20	.46							
	E) 46-50 years	75	4.24	.46							
	F) 51 years +	71	4.13	.51							
	Total	428	4.16	.64							
Results Agility	A) 30 years and under	31	4.24	.47	Between G.	1.46	5	.29	1.21	.302	---
	B) 31-35 years	56	4.07	.55	Within G.	101.82	422	.24			
	C) 36-40 years	87	4.11	.51	Total	103.28	427				
	D) 41-45 years	108	4.19	.47							
	E) 46-50 years	75	4.24	.49							
	F) 51 years +	71	4.19	.43							
	Total	428	4.17	.49							
Self-awareness	A) 30 years and under	31	4.47	.45	Between G.	3.47	5	.69	3.64	.003	A>B; A>C; D>B; D>C; E>B; E>C; F>B; F>C
	B) 31-35 years	56	4.23	.49	Within G.	80.58	422	.19			
	C) 36-40 years	87	4.28	.43	Total	84.06	427				
	D) 41-45 years	108	4.42	.43							
	E) 46-50 years	75	4.46	.42							
	F) 51 years +	71	4.48	.40							
	Total	428	4.39	.44							
Learning Agility	A) 30 years and under	31	4.23	.47	Btw. G.	2.04	5	.40	2.34	.040	D>B; E>B; E>C;
	B) 31-35 years	56	4.11	.48	In G.	73.53	422	.17			
	C) 36-40 years	87	4.18	.45	Total	75.58	427				
	D) 41-45 years	108	4.29	.36							
	E) 46-50 years	75	4.33	.41							
	F) 51 years +	71	4.26	.35							
	Total	428	4.24	.42							

When Table 7 is examined; It was revealed that there was no significant difference in the people agility, mental agility and result agility levels of school administrators ($p > .05$). Change, Agility, self-awareness, and general learning agility levels differ significantly according to their ages ($p < .05$). Post-hoc Scheffe test was conducted after ANOVA to determine which groups the differences occurred. Considering the results, level of change agility of school administrators who are between the ages of 41-45 ($M = 4.29$) higher than agility levels of school administrators aged 30 and under ($M = 4.02$), 31-35 ($M = 4.01$) and 36-40 ($M = 4.13$). Also, school administrators between 46-50 years of age have higher agility levels in change ($M = 4.29$) than school administrators who are between 30 years old and under ($M = 4.02$) and 31-35 years old ($M = 4.01$). Self-awareness levels of school administrators aged 30 and under ($M = 4.47$), age 41-45 ($M = 4.42$), age 46-50 ($M = 4.46$) and age 51 and older ($M = 4.48$), age 31-35 ($M = 4.23$) and 36-40 years ($M = 4.28$) are higher than the self-awareness level of school administrators. Finally, the overall learning agility levels of school administrators who are in the 41-45 age range ($M = 4.29$) are higher than the learning agility levels of school administrators in the 31-35 age range ($M = 4.11$). Also, the general learning agility levels of school administrators in the 46-50 age range ($M = 4.33$) are higher than the general learning agility levels of the school administrators in the age range of 31-35 age ($M = 4.11$) and 36-40 age ($M = 4.18$).

CONCLUSION AND DISCUSSION

In this study, the learning agility levels of school administrators (principals and vice-principals) working in public schools were examined according to various variables. According to the results of the research, while the agility and self-awareness people agility of the school administrators and the general learning agility are at a very high level; change agility, results agility, and mental agility are at a "high" level. Based on these findings, it can be thought that school administrators are individuals who learn faster from experience and others and have high-performance management potential. In addition, the fact that administrators make a difference in human relationships and self-awareness agility levels shows that administrators are sufficient to establish relationships with others and to recognize their strengths and weaknesses. Similar to these findings, Lombardo and Eichinger (2000) found that individuals' levels of learning agility were associated with both current performance and long-term potential. In this area, De Meuse (2017) revealed that learning agility has a significant relationship in measuring leadership performance and potential. In another study conducted on teachers recently, it has been determined that it has a positive relationship between learning agility and performance and predicts it (Yazıcı, 2020). In addition, Haring, Shankar and Hofkes (2016) concluded that the high level of human relations agility and self-awareness are an important finding in determining the level of performance. According to the findings we have obtained, individuals who have discovered their strengths and weaknesses are more inclined to accept opportunities and feedback that will contribute to their development. Individuals with high self-awareness also have high levels of people agility. Individuals who can learn the right information from others and seek solutions to the problems they face with different perspectives are individuals with potential that increase their performance over time. Therefore, it can be concluded that the school administrators constituting the sample of the research are individuals with high performance and potential.

Another finding obtained from the research is that school administrators' gender did not make a significant difference in learning agility. This finding is similar to other research results. For example, in the research conducted by De Meuse, Dai, Hallenbeck, and Tang (2008) and De Meuse, Dai, Eichinger, Page, Clark, and Zewdie (2011), they found that there was no relationship between gender and learning agility. Moreover, Catenacci-Francois (2018) concluded that there is no relationship between gender and learning agility, and the gender role does not support the relationship between overall performance. It is thought that gender does not differ in general terms and that gender-specific characteristics of administrators do not affect learning agility.

As a result of our research, it has been revealed that school administrators' mental agility and general learning agility levels differ significantly according to their educational status. It was determined that there was no significant difference in other sub-dimensions. The level of mental

agility and general learning agility of school administrators with a postgraduate degree is higher than the level of mental agility and general learning agility of school administrators with a bachelor's degree. These findings coincide with the research in the literature. Turhan and Yaraş (2013), in their study about contributions of graduate education on occupational development of administrators, teachers, and supervisors, found that postgraduate education made an important contribution to the problem-solving skills of administrators. Also, it was determined that the managers who received postgraduate education in the research had important contributions in the development of competencies such as decision making, effective communication, and cooperation. Another research that supports these results belongs to Özmantar and Çetin (2017). In their study, they concluded that school principals who received postgraduate education exhibit their leadership skills more. Dai and colleagues (2013) stated that learning agility has a high level of meaningful relationship with education and that it increases the level of learning agility as the level of education increases. Mental agility and general learning agility levels of school administrators with a postgraduate degree are higher than school administrators with a bachelor's degree. According to the results of this research, it is thought that school administrators who receive postgraduate education contribute more to their occupational development create a significant difference in learning agility levels. The level of school administrators' ability to identify problems in the face of complex, challenging situations and to connect with different or similar situations is higher among school administrators with a postgraduate degree. Therefore, postgraduate education can contribute more positively to school administrators' performances.

It has been demonstrated that school administrators' level of people agility, change agility, mental agility and general learning agility levels differ according to their administrative duties (principal and vice-principals). Besides, it was found that agility and self-awareness levels did not differ significantly in result creation. The levels of school principals in people agility, change agility, mental agility and general learning agility levels are higher than vice-principals' people agility, change agility, mental agility, and general learning agility levels. These results of the research overlap with the literature. In the research conducted by Korn Ferry (2016) Research Company, senior managers were more agile than lower-level managers. Also, Dries Vantilborgh and Pepermans (2012) point out that individuals with high levels of learning agility experience more work experiences, so they are more likely to become senior managers. According to the research findings, the general learning agility levels of school principals are higher than the deputy principals. Individuals with high learning agility tend to acquire and learn from various experiences quickly from their experiences. This situation contributes positively to their careers, such as promotion and salary increase (Dai et al., 2013). Higher levels of learning agility in school principals contribute to their knowledge and skills and support them to be successful and effective managers and leaders. For this reason, it is the desired result that school principals make a difference compared to their deputies in acquiring and developing their leadership skills over time. Besides, according to the findings, it was determined that school principals interact with more people than deputy principals, are open to innovations willing to change, and have high problem-solving skills. On the other hand, there was no significant difference in managing turmoil and uncertainty and discovering themselves according to their job status.

It has been determined that there is no significant difference in terms of learning agility levels in the context of school levels where school administrators work. These results are in line with the research results of Şakar (2016). However, in the research of Sayın and Arslan (2018) to measure the performance of school administrators, it was observed that primary school administrators had higher performances than high school administrators and high school administrators than secondary school administrators. In this study, the fact that learning agility does not differ according to school levels is thought to be an independent structure in measuring individual performance (De Meuse et al., 2010). It can be said that individual differences in learning agility, getting the right experiences, fast learning and problem solving do not make a difference in terms of school levels of school administrators.

According to the findings, the mental agility and result agility levels of school administrators did not differ significantly according to their seniority. At the same time, it has been revealed that the

level of people agility, change agility, self-awareness and general learning agility differ according to the seniority of school administrators. In general, learning agility levels of school administrators with higher occupational seniority years is higher than those with lower occupational seniority years. Eichinger and Lombardo (2004) concluded that there is an important relationship between learning agility levels and career success. It was stated that individuals with high levels of learning agility progress more in their careers and perform better than others in their position. Reaching similar findings, De Meuse, Dai, Swisher, and Lombardo (2012) revealed that individuals with high learning speeds progress faster in their careers and have higher performances. According to these results, it is thought that as the time spent in the occupation increases, they discover themselves more, develop their thoughts and behaviors, and establish more constructive relationships with other colleagues. Also, as the seniority of the managers' increases, their awareness in the occupation increases, and the necessary change is more ready. Another finding of the research is that the mental agility and result agility levels of school administrators do not cause a change according to their occupational seniority. This finding of the study is inconsistent with the findings in the literature. In the global research conducted by De Meuse and colleagues (2008) to measure managers' levels of learning agility, managers' levels of agility and mental agility in creating results are higher than other levels of agility. These findings in the literature did not differ according to their seniority in producing effective solutions for the problems faced by school administrators, integrating different perspectives within the school and providing necessary conditions.

It has been determined that the school administrators' agility, mental agility, people agility, and levels of results agility did not differ significantly by age. In addition to these findings, it is determined that the level of agility, self-awareness and general learning agility in change varied significantly by age. In general terms, learning agility levels increase as the age of school administrators increases. The age variable of the administrators is partially similar to the findings obtained in the seniority variable. In general terms, learning agility levels increase as the age of school administrators increases. The age variable of the administrators is partially like the findings obtained in the seniority variable. However, De Meuse and colleagues (2008, 2011), Eichinger and Lombardo (2004) revealed that there was no significant difference in terms of age variable regarding learning agility in general. The findings of this research differ from other research in the literature. In the study, self-awareness levels of the age groups 30 and under were higher than the age range of 31-50. This finding is similar to Haring et al. (2016) research results. In their research, self-awareness levels between the ages of 25-35 and gold are higher than the administrators between the ages of 36-65. It is known that leadership skill requires a high level of self-awareness skill (Avolio and Gardner, 2005). It is believed that administrators who are 30 years old and under the beginning of their management career in the research have high self-awareness, they have discovered themselves, have the power to know and plan what they want to do. Also, general learning agility levels were found to be high in the age of 46 and 50, self-awareness levels over the age of 51, and change agility in the 41-50 age range. This situation is not surprising. According to the research results of Kondakçı, Zayim, and Çalışkan (2010), managers with more work and experience feel more ready for change. Education differs from other organizations in terms of structure and management. Teaching and later education management are thought to be an occupation based on experiences, as their age increases, they develop their unique thoughts, discover their talents, feel the need for change more and turn.

Similar results were obtained in this research literature as well as different results were obtained. The absence of learning agility research for administrators in the national field, and the limited number of research on education, school and school administrators in the international arena makes this research both important and restrictive for discussion. Also, the fact that seniority and age range present more distinctive results in this field differentiated the research. Studying learning agility with different variables in the field of educational sciences in the future will contribute to further understanding the concept of learning agility and enriching its literature.

REFERENCES

- Allen, J. (2016). *Conceptualizing learning agility and investigating its nomological network* (Doctoral dissertation). Florida International University, Florida.
- Almeida, J. (2019). *The importance of learning agility* Retrieved from <https://www.calvarydayschool.com/news-detail?pk=1015624&fromId=225357>
- Anseel, F. (2017). Agile learning strategies for sustainable careers: a review and integrated model of feedback-seeking behavior and reflection. *Current Opinion in Environmental Sustainability*, 28, 51-57.
- Avolio, B. J., & Gardner, W. L. (2005). Authentic leadership development: Getting to the root of positive forms of leadership. *The Leadership Quarterly*, 16(3), 315-338.
- Aziona, C. & Oksitycz, A. (2019). A teaching model to promote learning agility in a university course. *The Independent Journal of Teaching and Learning*, 14(1), 6-18.
- Bedford, C. L. (2011). *The role of learning agility in workplace performance and career advancement* (Doctoral dissertation). The University of Minnesota.
- Briggs, S. (2014). *Agile based learning: What is it and how can it change education?* Retrieved from <https://www.opencolleges.edu.au/informed/features/agile-based-learning-what-is-it-and-how-can-it-change-education/>
- Carette, B. & Anseel, F. (2012). Epistemic motivation is what gets the learner started. *Industrial and Organizational Psychology*, 5(3), 306-309.
- Catenacci-Francois, L. (2018). *Learning agility in context: Engineers' perceptions of psychologically safe climate on performance* (Doctoral Dissertation). Columbia University, New York.
- Connolly, J. (2001). *Assessing the construct validity of a measure of learning agility* (Doctoral dissertation). Florida International University.
- Corporate Leadership Council. (2005). *Realizing the Full Potential of Rising Talent*. Washington, DC: Corporate Executive Board.
- Dai, G., De Meuse, K. P., & Tang, K. Y. (2013). The role of learning agility in executive career success: The results of two field studies. *Journal of Managerial Issues*, 25(2), 108-131.
- Day, D. V., Zaccaro, S. J., & Halpin, S. M. (2004). *Leader development for transforming organizations: Growing leaders for tomorrow*. Mahwah, NJ: Lawrence Erlbaum.
- De Meuse, K. P. (2017a). *Learning agility-beyond the hype: What science has to say*. Minneapolis: Wisconsin Management Group.
- De Meuse, K. P. (2017b). Learning agility: Its evolution as a psychological construct and its empirical relationship to leader success. *Consulting Psychology Journal: Practice and Research*, 69(4), 267-295.
- De Meuse, K. P., Dai, G., & Hallenbeck, G. S. (2010). Learning agility: A construct whose time has come. *Consulting Psychology Journal: Practice and Research*, 62(2), 119.

- De Meuse, K. P., Dai, G., Hallenbeck, G., & Tang, K. (2008). *Global talent management: Using learning agility to identify high potentials around the world*. Los Angeles: Korn/Ferry International
- De Meuse, K. P., Dai, G., Swisher, V. V., Eichinger, R. W., & Lombardo, M. M. (2012). Leadership development: Exploring, clarifying, and expanding our understanding of learning agility. *Industrial and Organizational Psychology*, 5(3), 280-286.
- De Meuse, K. P., Dai, G., Eichinger, R. W., Page, R. C., Clark, L. P., & Zewdie, S. (2011). *The development and validation of a self-assessment of learning agility* (Technical Report). Minneapolis, MN: Korn/Ferry International.
- DeRue, D., Ashford, S., & Myers, C. (2012). Learning agility: In search of conceptual clarity and theoretical grounding. *Industrial and Organizational Psychology*, 5(3), 258-279.
- Dries, N., Vantilborgh, T., & Pepermans, R. (2012). The role of learning agility and career variety in the identification and development of high potential employees. *Personnel Review*, 41(3), 340-358.
- Eichenger, R. W. & Lombardo, M. M. (2004). Learning agility as a prime indicator of potential. *Human Resource Planning*, 27(4), 12-15.
- Gales, N. L. & Gallon, R. (2019). Educational agility. In M. Kowalczyk-Walędziak, A. Korzeniecka-Bondar, W. Danilewicz and G. Lauwers (Ed.), *Rethinking teacher education for the 21st Century* (pp. 98-110). Berlin: Verlag Barbara Budrich.
- Goebel, S. (2013). *Senior executive learning agility development based on self-discovery: An action research study in executive coaching* (Doctoral Dissertation), Georgia State University, Atlanta, Georgia.
- Goertz, G., & Mahoney, J. (2012). *A tale of two cultures: qualitative and quantitative research in the social sciences*. New Jersey: Princeton University Press.
- Gravett, L. S., & Caldwell, S. A. (2016). *Learning agility: The impact on recruitment and retention*. Springer.
- Hallenbeck, G., & Santana, L. (2019). *Great leaders are great learners: How to develop learning-agile high potentials*. Center for Creative Leadership. Center for Creative Leadership. Retrieved from <https://files.eric.ed.gov/fulltext/ED596166.pdf>
- Haring, S., Shankar, J., & Hofkes, K. (2016). *The potential of learning agility*. Retrieved from <https://www.hfmentalentindex.co.za/wp-content/uploads/2017/12/The-Potential-of-Learning-Agility-Research-Paper.pdf> on 01 Feb 2020.
- Hezlett, S. A., & Kuncel, N. R. (2012). Prioritizing the learning agility research agenda. *Industrial and Organizational Psychology*, 5(3), 296-301.
- Horney, N., Pasmore, B. & O'Shea, T. (2010). Leadership agility: A business imperative for a VUCA world, 33(4): 32-38
- Howard, D. (2017). *Learning agility in education: An analysis of pre-service teacher's learning agility and teaching performance* (Doctoral Dissertation). Tarleton State University, Texas.
- Hunter, J. E., & Schmidt, F. L. (1996). Intelligence and job performance: Economic and social implications. *Psychology, Public Policy, and Law*, 2(3-4), 447.

- Jonier, B. & Josephs, S. (2007). *Leadership agility*. San Francisco, CA: Jossey-Bass.
- Kondakçı, Y., Zayim, M., & Çalışkan, Ö. (2010). Investigating school administrators' readiness to change in relation to teaching level of the school, experiences of the administrators, and the size of the school. *İnönü Üniversitesi Eğitim Fakültesi Dergisi*, 11(2), 155-176.
- Korn Ferry (2015). *Assessment of leadership potential: Research guide and technical manual*. Retrieved from http://static.kornferry.com/media/sidebar_downloads/KFALP_Technical_Manual_final.pdf
- Korn Ferry (2016). *viaEDGE technical manual*. Retrieved from https://dsqapj1lkrkc.cloudfront.net/media/sidebar_downloads/82205-viaEdge-Technical-Manual.pdf
- Korn Ferry (2018-2019). *Korn Ferry Assess – Potential Solution: Leadership potential report research guide and technical manual*. Korn Ferry.
- Lewis, J. L. (2015). *Korn Ferry four-dimensional executive assessment*. Retrieved from https://dsqapj1lkrkc.cloudfront.net/media/sidebar_downloads/KF4D_Executive_Manual_FINAL.pdf
- Lombardo, M. M. & Eichinger, R. W. (2000). High potentials as high learners. *Human Resource Management*, 39, 321-330.
- McCall, M. W. (2004). Leadership development through experience. *Academy of Management Executive*, 18(3), 127-130.
- McCall, M. W., Lombardo, M. M., & Morrison, A. M. (1988). *The lessons of experience*. New York: The Free Press.
- Mcgrath, A. (2018). *Learning agility: Harnessing the power of failure*. Retrieved from <https://www.asupredigital.org/learning-agility-harnessing-power-failure/>
- Mitchinson, A. & Morris, R. (2012). *Learning about learning agility*. Greensboro, N.C: Center for Creative Leadership
- Özmantar, Z. K. & Çetin Y. E. (2017). Temel eğitim kurumlarında görev yapan okul müdürlerinin liderlik becerilerinin incelenmesi [Examining the leadership skills of school principals working in basic education institutions]. *Mustafa Kemal Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 14(37), 261-284.
- Robinson, C., Feters, R., Riestler, D., & Bracco, A. (2009). The paradox of potential: A suggestion for guiding talent management discussions in organizations. *Industrial and Organizational Psychology*, Cambridge University Press, 2(4), 413-415.
- Sayın, S. D. & Aydın, H. (2018). Öğretmen ve okul yöneticilerinin performans öz değerlendirme sonuçlarının okul kademesi ve mezuniyet değişkeni açısından incelenmesi [Examining the performance self-evaluation results of teachers and school administrators in terms of school level and graduation variable]. *Iğdır Üniversitesi Sosyal Bilimler Dergisi*, 16, 537-564.
- Şakar, M. (2016). *Okul yöneticilerinin liderlik tarzları ile işe olan yaratıcı katılımları arasındaki ilişkinin incelenmesi* [Examining the relationship between school administrators' leadership styles and their creative participation in work] (Yüksek Lisans Tezi- Master Thesis). İstanbul Sabahattin Zaim Üniversitesi Sosyal Bilimler Enstitüsü, İstanbul.

- The Tallent Strategy Group, (2015). *Whos doing what to identify their best?* Retrieved from https://www.talentstrategygroup.com/application/third_party/ckfinder/userfiles/files/NTMN%20Potential%20Study%202015.pdf adresinden 01Şubat 2020 tarihinde edinilmiştir.
- Turhan, M. ve Yaraş, Z. (2013). Lisansüstü programların öğretmen, yönetici ve denetmenlerin mesleki gelişimine katkısı [Contribution of graduate programs to the professional development of teachers, administrators and supervisors]. *Elektronik Sosyal Bilimler Dergisi*, 12(43), 200-218.
- Yazıcı, Ş. (2020). *Öğretmenlerin öğrenme çeviklikleri, değişime hazır olma durumları ve performansları arasındaki ilişkiler örüntüsü* [The pattern of relationship between teachers' learning agility, readiness for change and teacher erformance] (Doktora Tezi- PhD Thesis). İstanbul Sabahattin Zaim Üniversitesi Sosyal Bilimler Enstitüsü, İstanbul.
- Yazıcı, Ş. & Özgenel, M. (2020). Marmara öğrenme çevikliği ölçeğinin geliştirilmesi, geçerlik ve güvenilirlik çalışması [Development of Marmara learning agility scale, validity and reliability study]. *Journal of History School*, 44, 365-393.
- Yukl, G. (2018). *Örgütlerde liderlik* [Leadership in organizations] (Ş. Çetin ve R. Baltacı, Çev.). İstanbul: Nobel.