Doğuş Üniversitesi Dergisi, 23 (2) 2022, 293-306

HOW DO COMPETITIVE AGGRESSIVENESS AND AUTONOMY OF SMALL AND MEDIUM-SIZED ENTERPRISES (SMES) DIFFER REGARDING THEIR SIZE AND AGE?^(*)

KOBİ'LERİN AGRESİF REKABETÇİLİKLERİ VE ÖZERKLİKLERİ ONLARIN BÜYÜKLÜKLERİNE VE FAALİYET SÜRELERİNE GÖRE NASIL FARKLILAŞIR?

Mehmet CİVELEK⁽¹⁾

Abstract: SMEs play a vital role in the development of national economies. But these businesses encounter with several barriers when performing this role. To cope with these impediments, some entrepreneurial attitudes that are dimensions of Entrepreneurial Orientation (EO), namely, competitive aggressiveness and autonomy enable SMEs to achieve better performance levels by increasing their revenues and income. However, depending on the characteristics of SMEs these behaviors might differ. In this regard, the purpose of this paper is to determine and examine whether competitive aggressiveness and autonomy of SMEs differ depending on their age and size or not. To fulfil this aim, the researcher has collected data from 479 SMEs in Turkey by employing a questionnaire survey. To find differences between characteristics of firms regarding selected entrepreneurial attitudes, Independent sample T-test is applied. According to the results, competitive aggressiveness of SMEs does not differ depending on their age and size. But while autonomy of smaller and larger SMEs does not differ, older SMEs have more autonomy comparing to their younger counterparts. The reasons of those result might stem from firmentrepreneurial level characteristics of SMEs.

Keywords: Competitive Aggressiveness, Autonomy, Entrepreneurial Orientation, SMEs, Age-size of SMEs

JEL: D22, L11, L26

Öz: KOBİ'ler ülke ekonomilerinin kalkınmasında çok önemli bir rol oynamaktadırlar. Fakat, bu rolü oynarken birçok engelle karşılaşmaktadırlar. Bu engellerin üstesinden gelmek için girişimcilik vöneliminin ölçütleri olan agresif rekabetçilik ve özerklik gibi girişimci davranışlar KOBİ'lerin karlılık ve gelirlerini arttırarak onların daha yüksek performans sevivelerine erişmelerini sağlayabilirler. Fakat bu davranışlar, KOBİ'lerin özelliklerine göre farklılık gösterebilir. Bu bağlamda, bu çalışma ile KOBİ'lerin agresif rekabetçilik ve özerkliklerinin onların faaliyet sürelerine ve büyüklüklerine göre değişip değişmediğinin belirlenmesi ve analiz edilmesi amaçlanmaktadır. Bu amacı gerçekleştirmek için araştırmacı bir anket çalışmasına başvururak Türkiye'de bulunan 479 KOBİ'den veri toplamıştır. KOBİ'ler arasındaki bu farklılıkların bulunması amacıyla Bağımsız örneklem T testine başvurulmuştur. Analiz sonuçlarına göre, KOBİ'lerin agresif rekabetçilikleri onların faaliyet süreleri ve büyüklüklerine göre değişmemektedir. Fakat KOBİ'lerin özerklikleri onların büyüklüklerine göre değişmezken, daha uzun süre faaliyet gösteren KOBİ'ler daha az süre faaliyet gösterenlere kıyasla daha fazla özerkliğe sahiptirler. Bulunan bu sonuçların sebepleri İşletmelerin kendi ve girişimciliklerivle ilgili özelliklerinden kaynaklanıyor olabilir.

Anahtar Kelimeler: Agresif Rekabetçilik, Özerklik, Girişimcilik Yönelimi, KOBİ, KOBİ'lerin faaliyet süreleri ve büyüklükleri

^(*) Credit Risk Management in SMEs adlı doktora tezinden üretilmiştir.

⁽¹⁾ Doğuş Üniversitesi, İktisadi ve İdari Bilimler Fakültesi, Uluslararası Ticaret ve İşletmecilik Bölümü; m civelek@windowslive.com, ORCID: 0000-0002-1247-5308

Geliş/Received: 09-10-2021; Kabul/Accepted: 08-02-2022

1. Introduction

Small and medium sized enterprises (SMEs) make crucial contributions on export and production of high value-added products that enable countries to achieve higher GDP amount. These facts also enable SMEs to achieve better performance level by increasing their income. Majority of businesses are SMEs all around the world, while more that 99% of all business are SMEs in Turkey and European Union. According to European Commission SBA Fact Sheet (2019:3), SMEs created 73.9% and 66.5% of total employment in Turkey and European Union, respectively. In this regard, SMEs are essential players in the development of economic potential of Turkey.

Although SMEs provide above mentioned benefits for Turkish economy, bank credit access is still the biggest concern of SMEs in Turkey. Thus, finding a solution that enables Turkish SMEs encountering reduced credit obstacles might be noteworthy to analyze. In this regard, this paper investigates some components of entrepreneurial orientation (EO) and tries to find out the differences in autonomy and competitive aggressiveness of SMEs depending on their size and lenght of doing business. This is because depending on their size (Rahman, Civelek, and Kozubíková, 2016:646; Anderson and Eshima, 2013:415), and the lenght of doing business (Laforet, 2013:490; Rosenbusch, Brinckmann, and Bausch, 2011:442), they might have higher entrepreneurial oriantation levels that makes them to have better financial conditions (Rauch, Wiklund, Lumpkin, and Frese, 2009:762) to receive external finance (Moss, Neubaum, and Meyskens 2015: 28).

Since having different EO can make SMEs to have various performance levels and income, finding differences between older-younger and smaller and larger SMEs regarding competitive aggressiveness and autonomy might create a value addition in entrepreneurship literature. Thus, the research questions are as follows: Does competitive aggressiveness of SMEs differ regarding their size and age? and Does autonomy of SMEs differ depending on their size and age?

Miller (1983:771) has identified entrepreneurial orientation with three dimensions, innovativeness, risk taking and proactiveness and then other studies have also focused more on these dimensions (Lumpkin and Dess, 1996:137; Stambaugh, Lumpkin, Mitchell, Brigham, and Cogliser, 2020:222; Teles and Schachtebeck, 2019:84). Since, competitive agressiveness and autonomy are less investigated components of EO in the entrepreneurship studies, this paper focuses on both of these dimensions by considering film-level characteristics such as size and age of SMEs and fulfills this research gap.

The remaining parts of the paper is desined in the following sequence: Section 2, Literature Review provides details about the variables that this research considers to analyse. The methodological approaches that the authors follow and information about research data will be presented in the Research Methodology section. The results of this paper will be illustrated and discussed in Section 4, Results and Discussions. Finally, section 5 concludes and summarize crucial points of this research.

2. Literature Review

As other components of entrepreneurial orientation, competitive aggressiveness of SMEs also makes them to perform better in their revenues and sales. This is because competitive aggressiveness consists of offensive actions of businesses to defeat their

competitiors (Lumpkin and Dess, 1996:136; Teles and Schachtebeck, 2019:85; Raats and Krakauer, 2020:55).

Concerning to autonomy, it consists of independent actions to make decisions, to create new notions, and strategies regarding firms' operations (Beltrame, Floreani, Grassetti, Mason, and Miani, 2018:171; Soininen, Puumalainen, Sjögrén, and Syrjä, 2012:931). Autonomous behavior also stimulates firms' executives to be more innovative, to act with more entrepreneurial attitudes (Miller, 1983:772; Teles and Schachtebeck, 2019:85) and to be more creative (Lumpkin and Dess, 1996:136; Teles and Schachtebeck, 2019:85; Yu, Lumpkin, Praveen Parboteeah, and Stambaugh, 2019:155). For these reasons, firms having more competitive aggressiveness and autonomy are more likely to perform better and access to external sources. Depending on their size and the lenght of doing business, competitive aggressiveness and autonomy of SMEs might differ. Even though some studies in the literature compare competitive aggressiveness and autonomy of SMEs and autonomy of SMEs and tries to find the differences in their competitive aggressiveness and autonomy. This fact is another contribution of this paper to fulfill this research gap in the literature.

Corresponding to firm size and EO, the amount of financial assets and financial power create differences in EO of larger and smaller businesses. This is because firms that own more financial assets and resources are more likely to have more capabilities regarding EO (Kowalik, Danik, Král, and Řezanková, 2017:33; Rahman, Civelek, and Kozubíková, 2016:637). Moreover, due to having more financial power, and lower level of fear of failure, larger enterprises might behave more aggressively to explore new markets compated with smaller businesses (Pett and Wolf, 2012: 50). Thus, larger SMEs are also more interested in making strategic alliances with foreign businesses (Brouthers, Nakos, and Dimitratos, 2015:1170) and this fact increases their competitive aggressiveness (Teles and Schachtebeck, 2019:88). For these reasons, comparing with their smaller counterparts, larger firms can behave more aggressively to save their position in the market (Pett and Wolf, 2012: 50; Rahman, Civelek, and Kozubíková, 2016:638). On the other hand, some researchers remark that smaller firms can also show aggressive attitudes against their rivals (Bedi and Vij, 2015:1026). Due to having these arguments a research hypothesis can be created as follows:

H1: A statistically significant difference exists between the mean volumes of competitive aggressiveness of larger and smaller SMEs.

Concerning autonomy, Belas and Sopkova (2016:630) and, Rahman, Civelek, and Kozubíková (2016:638) compare autonomy of SMEs regarding their size and prove the fact that smaller SMEs are less autonomous in comparison with larger enterprises. Kozubikova, Vojtovič, Rahman, and Smrčka (2016:178) also declare the differences between larger and smaller firms and express the fact that managerial form and quality of assets might be other determinant factors to explain differences between smaller and larger SMEs regarding competitive aggressiveness and autonomy. Thus, the following hypothesis was set by the researcher by based on these previous studies;

H2: There is a statistically significant difference between the mean volumes of autonomy of larger and smaller SMEs.

Regarding firm age and competitive aggressiveness, businesses having more years experiences indicate better financial (Islam, Khan, Obaidullah, and Alam, 2011:290)

and innovative performances and implement better entrepreneurial strategies (Sorensen and Stuart, 2000:81) than their younger counterparts. This is because firms having more operational experiences makes older SMEs to be well informed about market conditions (Thapa, 2015:583; Sorensen and Stuart, 2000:82; Laforet, 2013:499). Younger firms also have lack of established routines and awareness regarding their competitors' activities (Anderson and Eshima 2013:417). For these reasons, older SMEs have more competitive aggressiveness than their younger counterparts. Moreover, some studies also prove the differences between competitive aggressiveness of older and younger SMEs but these studies have opposing results to the studies mentioned above (Anderson and Eshima 2013:417; Belas and Sopkova, 2016:631). The reason for that is young businesses are more prone to make radical changes in their goods with the aim of market penetration and to weaken their competitors (Anderson and Eshima 2013:417). In this regard, Kozubíková and Zoubková (2016:201) declare the fact that younger firms apply more aggressive actions to compete with their rivals comparing to their older counterparts. These mounting empirical evidences enable the researcher to set another hypothesis as presented below:

H3: A statistically significant difference exists between the mean volumes of competitive aggressiveness of younger and older SMEs.

Corresponding to firm age and autonomy, there are also various empirical results that some scholars confirm. Due to being less experienced in administrative operations, younger enterprises can face with extra expenses that can decline their incomes. Furthermore, younger firms put more emphasis on their survival than their growth (Cowling, Liu, Ledger, and Zhang, 2015:490; Belas and Sopkova, 2016:631). These factors might limit young firms to take autonomous decisions and perform autonomous actions and make them more conservative in comparison with older businesses (Bedi and Vij, 2015:1027). In this context, Kozubikova, Vojtovič, Rahman, and Smrčka (2016:168) confirm the fact that experienced SMEs are more autonomous than their younger counterparts. These authors also remark the fact that the workers of older companies might be more familiar with the processes of their works. Thus, they can be more autonomous to create and implement their opinions in business operations (Kozubikova, Vojtovič, Rahman, and Smrčka, 2016:178). Although some researchers also state the differences between autonomy of older and younger SMEs, they have quite opposite outcomes (Eisenhardt, 1989:572; Rosenbusch, Brinckmann, and Bausch, 2011:453; Moss, Neubaum and Meyskens, 2015:47). According to these researchers less disciplined structure and more risk taking attitude enable young enterprises to take more autonomous action comparing to older SMEs. Having these empirical results makes this research to set another hypothesis as follows:

H4: There is a statistically significant difference between the mean volumes of autonomy of younger and older SMEs.

3. Research Methodology

This research targets to explore the differences between entrepreneurial orientation of SMEs regarding their size and age. In line with this target, the researchers created a self-administered online questionnaire survey to gain data from SMEs. E-mail addresses of SMEs have been gained from the several chambers of commerce that are located in different regions of Turkey. Then, the researchers performed a stratified random sampling method to select the respondents from different strata that consist

of the geographical regions where SMEs are located. Randomly selected firms were e-mailed by the researcher. Finally, 479 company executives have fulfilled the surveys.

The constructs and the measurements are illusturated below in Table 1. The researcher used the constructs and measurements that some studies had already performed the validity and reliability analyses (Belás & Sopková, 2016; Pett & Wolf, 2016). The researcher also applied five-points Likert scale to scale the responses from the statements (written in Table 1, under the column of "Measurements") as follows; "1-Completely disagree, 2-Disagree, 3- Neither agree nor disagree, 4- Agree and 5-Completely agree". Thus, higher volumes from this scale indicate higher competitive aggressiveness and autonomy of SMEs vice versa.

Variables	Measurements						
Competitive Aggressiveness	• Our activities in relation to competition are often aggressive.						
	We often do activities that are directed against competitors.Our firm has had a reputation of using price						
Autonomy	 reduction for new product or service introduction The owners of company act independently. The staff in our company is reasonably autonomous with the implementation of specific business operations. The firm supports the initiatives of employees in terms of identifying and implementing of business 						
Firm size	 opportunities. How many workers does your company has except you? 						
	□ 0-9 □10-49 □50-249						
Firm age	 How long has your company been operating? □ less than 2 years □ 2-4 □ 5-10 □ more than 10 years 						

Table 1. Measurements in the Questionnaire

On the other hand, as depicted in Table 1, the year of activity (firm age) and firm size are evaluated by the survey questions that consist of categorical and ranked data. Therefore, higher volumes in the responses show longer year experiences and larger size.

Family Business Institute defines young firms as businesses that the length of doing business is less than 10 years while, older firms' length of doing business is more than 10 years. In parallel with the definition of Family Business Institute, this paper also uses the same classification for younger and older SMEs. Regarding size of SMEs, EU commission (2003:1) defines the fact that micro firms have employees between 0 to 9, number of staff headcount in small enterprises differ between 10 to 49, while the volumes of number of workers differ between 50 to 249 in medium sized enterprises. But for analyse purposes, the researchers have categorized size of SMEs as follows: smaller firms consist of microenterprises, while larger firms include small and medium sized enterprises (Laforet, 2013:495).

Since the author has already specified the alternative hypotheses in Literature Review section, only null hypotheses will be mentioned in this section. As alternative hypotheses assume the existence of statistically significant differences between the mean volumes of competitive aggressiveness and autonomy of SMEs depending on firm size and age, null hypotheses presume the nonexistence of statistically significant differences between the mean volumes of analysed EO dimensions depending size and age of SMEs. 5% significance level is chosen by the researcher to support or fail to support alternative hypotheses. In case of having p values that are less than 5% level of significance, this research supports alternative hypotheses.

To test whether the research data is normally distributed or not, Skewneess and Kurtosis measurements are taken into consideration by the researchers. The results of Test of Normality are illustrated in Table 2. As it can be seen from this table, Skewness and Kurtosis values differ between -,600 to ,288. Since these values are in the range of -1 to +1 (Hair, Ringle, and Sarstedt, 2013) and +1.5 -1.5 (Tabachnick and Fidell, 2013), it can be professed that the data that this research analyzes has normal distribution. Another important indicator to assess distribution of the sample is Levene's Test. According to Table 2, significance values from Levene' statistic are higher than 5% level of significance, thus, the variances are not statistically different between groups and they are approximately equal. By having these results, this paper also fulfills the one of other assumptions of Test of Normality, namely homogeneity of variances. For this reason, the researcher applies Independent sample T test to compare the means of competitive aggressiveness and autonomy of SMEs in different size and age. The researchers run SPSS Statistical software to perform these analyses.

Variable	Varianc	Mean	Std.	95% CI		Levene's Tes		
variable	e	Wiedli	Deviation	9570 CI	Skewness	Kurtosis	Size	Age
Comp. A.	,932	2,6131	,96530	[2,5264 2,6997]	,288	-,368	,937	,205
Autonom y	,743	3,5338	,86204	[3,4564 3,6111]	-,600	,267	,069	,059

Table 2. Test of Normality

The sample of this paper consists of SMEs that have located in Turkey. The sample profile is also demonstrated by Table 3. 185 SMEs are located in Marmara region, while 81 SMEs are in Aegean, 47 SMEs in Central Anatolia 47, 51 SMEs in Mediterranean, 41 SMEs in Black Sea, 35 SMEs in Eastern Anatolia, and 39 SMEs are in South Eastern Anatolia. These SMEs have been doing their businesses in different industries such as manufacturing, trade, service, trade, textile and other sectors such as mining, transportation, agriculture, real estate, construction, information technology and financial services.

		n	Share
Firm	micro	143	29.85%
size	Small and medium	336	70.15%
	Total	479	100%
Firm	Up to 10 years	142	29.65%
age	more than 10 years	337	70.35%
-	Total	479	100%
Region	Marmara	185	38.62%
	Aegean	81	16.91%
	Central Anatolia	47	9.81%
	Mediterranean	51	10.65%
	Black Sea	41	8.56%
	Eastern Anatolia	35	7.31%
	South Eastern Anatolia	39	8.14%
	Total	479	100%
Sector	Trade	121	25.3%
	Service	65	13.6%
	Manufacturing	246	51.4%
	Textile	54	11.3%
	Other	94	19.62%

Table 3. Sample profile.

Note: The percentages for the firms' sector do not up to 100% since it is asked by a multiple answer question

4. Results and Discussion

The results of Independent T-test related with size of SMEs and EO are depicted in Table 4. According to Table 4, p values for competitive aggressiveness and autonomy are higher than 5% significance level (competitive aggressiveness: t(477)=0.723, p= 0.470>0.05; autonomy: t(477)=0.425, p= 0.671>0.05). These findings confirm the fact that mean volumes of competitive aggressiveness and autonomy of smaller and larger SMEs do not significantly differ. For these reasons, the researchers support null hypotheses that assume the nonexistence of differences in the mean volumes of competitive aggressiveness and autonomy of SMEs regarding size of firms. By doing so, this research fails to support H1 and H2 alternative hypotheses.

Table 4. The results of T-test regarding size of SMEs, competitive aggressiveness, autonomy

	n		Mean		T test for Equality of			
					Means			
Indicator	micro	small and	micro	small and	df	t	Sig.	
		medium		medium				
Com. Agg	143	336	2.6620	2.5923	477	0.723	0.470	
Autonomy	143	336	3.5594	3.5228	477	0.425	0.671	

To find the results of this paper regarding age of SMEs and EO, as already stated Independent sample T-test has performed again. The findings from these analyses are also depicted In Table 5. P value for competitive aggressiveness is higher than the selected level of significance (t(477)= 1.204, p= 0.229>0.05). Therefore, it can be elucidated that statistically significant differences are not in existence between the mean volumes of competitive aggressiveness of younger and older SMEs. In this

regard, this study fails to support H3 hypothesis that presumes the existence of differences in the mean volumes of competitive aggressiveness of SMEs depending on their age.

n			Mean		T test for Equality of Means			
Indicator	Firm age	>10	Firm age	>10	df	t	Sig.	
	< 10 years	years	< 10 years	years				
Com. Agg.	142	337	2.6948	2.5786	477	1.204	0.229	
Autonomy	142	337	3.3779	3.5994	477	-2.583	0.010	

 Table 5. The results of T-test regarding age of SMEs, competitive aggressiveness, autonomy

On the other hand, p value for autonomy is less than 5% confidence level (t(477)= -2.583, p= 0.010<0.05). This result bears out the fact that there is a statistically significant difference between the mean volumes of autonomy of younger and older enterprises. For this reason, this paper supports H4 hypothesis that is set as the existence of differences in the autonomy of SMEs regarding their age. As it is visible from the Table 4, comparing to younger SMEs (mean volume= 3.3779), older SMEs (mean volume= 3.5994) are more autonomous.

As it is confirmed by the results of the analyses competitive aggressiveness and autonomy of Turkish micro and small and medium sized enterprises do not differ. These results make this paper to object to studies of Pett and Wolf (2012:48), Rahman, Civelek, and Kozubíková (2016:646), Islam, Khan, Obaidullah, and Alam (2011:289), and Thapa (2015:581) since these studies confirm the differences between EO of SMEs regarding their size. On the other hand, the results of this paper are consistent with the studies of Ismail (2014:175) because according to Ismail (2014:175) autonomy of SMEs do not differ depending on their size. Pattitoni, Petracci, and Spisni (2014:771), and Dvouletý and Blažková (2020:361) also do not find any statistically significant differences between competitive aggressiveness of larger and smaller SMEs. The reason of the nonexistence of differences between smaller and larger Turkish SMEs related with their competitive aggressiveness and autonomy might be related with the age and sectoral experience of the respondents. According to research data, around 72% of the respondents from smaller SMEs have more than 10 years sectoral experience, while 74% of the survey participants from larger enterprises have been working in the same sector for more than 10 years. Moreover, around 61% of SMEs executives are more than 45 years old in smaller enterprises, while this percentage for larger SMEs is around 59%. Since the majority of the respondents have similar sectoral experiences and in similar age, this fact might be a reason why competitive aggressiveness and autonomy of SMEs do not differ even they are in different size. Since the majority of respondents have long year sectoral experience and are older than 45 years old, these respondents might have been more aware of situations and opportunities in the markets that they have been working in. Therefore, having older workers with long year experiences might have made smaller and larger firms to have similar competitive and autonomous behaviours.

When it comes to the results of this paper related with competitive aggressiveness of older and younger SMEs, the nonexistence of differences between firm age has been confirmed. Therefore, this result makes this paper to contest the findings of Sorensen and Stuart (2000:81), Laforet, (2013:498), Anderson and Eshima (2013:413), Rosenbusch, Brinckmann, and Bausch (2011:442), Soininen, Puumalainen, Sjögrén, and Syrjä (2012:940), Belas and Sopkova (2016:630) since these studies confirm the

significant differences between EO of older and younger SMEs. On the other, the result of this paper regarding firm age and competitive aggressiveness are compatible with the studies of Civelek, Rahman, and Kozubikova (2016:72). This is because by analyzing younger and older microenterprises Civelek, Rahman, and Kozubikova (2016:72) do not find differences between competitive aggressiveness of SMEs. Entrepreneurial activities that these firms perform, the structure and operations that they have might be reasons of this result. According to Rosenbusch, Brinckmann, and Bausch (2011:444), propensity of younger firms to have more entrepreneurial attitudes is higher than their older counterparts. Similarly, Anderson and Eshima (2013:414) highlight that younger firms are more likely to behave entrepreneurially than their older peers due to having flexible structure and lack of procedures in their operation. Moreover, this structure enables younger SMEs to make fundamental changes quickly regarding their businesses (Civelek, Rahman, and Kozubikova, 2016:73). Similarly, start-ups also tend to behave aggressively in the competition among their competitors to secure their position in the markets that they operate (Teles and Schachtebeck, 2019:85). Therefore, younger firms in this study might have had more entrepreneurial attitudes regarding competitive aggressiveness to close the gap between their older counterparts. The nonexistence of the differences between older and younger SMEs regarding competitive aggressiveness might also stem from educational status of the respondents. This is because positive relationship between education and entrepreneurial orientation have been proved by some studies (Altinay and Wang, 2011:673; Kato, Okamuro, and Honjo, 2015:125; Civelek, Rahman, and Kozubikova, 2016:85; Belas and Sopkova, 2016:630). The respondents who have graduated from higher degrees, have more EO comparing to their less educated counterparts. According to the research data, 80% of the respondents in older SMEs have minimum bachelor's degree, while this percentage for younger SMEs is 72%. Since respondents in younger SMEs are well educated as their counterparts in older SMEs, they might have had similar attitudes to behave competitive aggressively.

Concerning to autonomy and firm age, this paper finds significant differences between older and younger SMEs and comparing to younger SMEs, older SMEs have more autonomous behaviors. This result contradicts with the findings of Kozubikova, Vojtovič, Rahman, and Smrčka (2016:168) since these researchers confirm the nonexistence of differences in autonomy of these businesses. However, this paper finds similar results with Belas and Sopkova (2016:630) since the authors verify the differences in autonomy of older and younger SMEs. The difference between autonomy of older and younger SMEs might be related with having more experienced workers in older businesses. This is because the experienced workers of older enterprises are more aware of processes and procedures and more autonomous when making decisions (Kozubikova, Vojtovič, Rahman, and Smrčka (2016:169; Laforet, 2013:493). Moreover, the positive relationship between experience of SMEs' executives and their entrepreneurial orientation is also proved by some researchers (Altinay and Wang, 2011:673; Kraus, 2013:428). According to research data, 82% of respondents from older SMEs have more than 10 years sectoral experience, while this percentage for the respondents in younger enterprises is only for 54%. This fact might be strong evidence to explain the differences between autonomy of older and younger SMEs.

Another reason why older SMEs in this research have more autonomy than their younger counterparts might be related with the sector of firms. This is because autonomy of SMEs might differ depending on their industry (McKenny, Short,

Ketchen Payne, and Moss, 2018:518). Manufacturing firms are more interested in creating novel goods and applying actions related with innovativeness. Thus, they have more abilities to make exports and international trade that enable them to take more autonomous decisions in their strategy making processes (Kathuria, Joshi, and Dellande, 2008:970; Chakraborty, 2012:77). According to research data, 35 % of younger firm operate in manufacturing industry, while 45% of older businesses are manufacturing firms. For this reason, having more firms from manufacturing SMEs might be a mounting argument to explain differences between autonomy of older and younger SMEs.

Since level of education positively influences the attitudes related with entrepreneurial orientation, policy makers, academicians, entrepreneurs and other company executives should consider the importance of education for the development of entrepreneurial behaviour. Thus, policy makers and academicians can cooperate to include some trainings and certified courses that stimulate not only entrepreneurial orientation of company executives and entrepreneurs but also potential entrepreneurs such as students. Thus, the role of universities and other educational institutions also carry high importance to develop entrepreneurial behaviours of individuals that positively influence performance, sales, internationalization of SMEs. Except educational supports, governments, local authorities and financing institutions also provide financial supports for SMEs to motive them to apply some international certifications such as ISO 9001 and ISO 14000. This is because these certifications also provide advantages for SMEs to be more competitive against their competitors. Subsidies and incentives for RandD activities and tax deductions might be alternative ways to increase entrepreneurial activities of SMEs. All these facts also enable countries to achieve better GDP levels by increasing their exports. In this regard, countries such as Turkey that faces with current account deficit problem can receive many benefits by stimulating entrepreneurial behaviours of their SMEs.

5. Conclusions

Entrepreneurial behaviours such as competitive aggressiveness and autonomy that are dimensions Entrepreneurial Orientation (EO) are some of essential attitudes that SMEs need to have for their long-term survival. This is because these behaviours motivate businesses to perform better and apply more innovative activities comparing to their competitors who have lower level of EO. In this regard, this paper aims to analyse the differences between competitive aggressiveness and autonomy of SMEs that are in various age and size. To hit this target, the data from 479 SMEs in Turkey has been collected by a questionnaire survey and analyzed in SPSS statistics. Independent sample T test was performed to find whether the differences exist in the examined variables or not.

The results related with firm size confirm the nonexistence of the differences in competitive aggressiveness and autonomy of SMEs. The age and the sectoral experience of the firm executives might be mounting evidences to explain this result. On the other hand, some significant differences between autonomy of older and younger SMEs have been proved by the analyses. The sectoral experience of the executives of SMEs and the sectors that SMEs have been operating might be reasons of these results. When it comes to competitive aggressiveness, there is not any significant difference between older and younger SMEs. Entrepreneurial operations and the structure of SMEs, and educational status of the firm executives might be some essential arguments to clarify this result. To sum up, the characteristics of SMEs

and firm executives might be reasons for the differences and similarities in the competitive aggressiveness and autonomy of SMEs.

Although this research makes significant value addition to the entrepreneurship literature, it has some limitations. For instance, this paper only analyses Turkish SMEs with different age and sizes. Moreover, the author only considers characteristics of SMEs and examine the differences or similarities between them. For these reasons, researchers can examine more SMEs from various counties and compare these firms by including other characteristics of SMEs and firm executives into their analyses.

Acknowledgements

The article came into being within the project no. 2019-20-D2-B05 entitled 'KOBİ'lerin Girişimci Davranışlarının ve Bankalarla Karşılıklı İlişkilerinin Krediye Erişimdeki Rolü ' financed by Doğuş University conducted by Mehmet Civelek in the years of 2020 and 2022.

References

- Altinay, L., & Wang, C. L. (2011). The influence of an entrepreneur's socio-cultural characteristics on the entrepreneurial orientation of small firms. *Journal of Small Business and Enterprise Development*, 18(4), 673-694. https://doi.org/10.1108/14626001111179749
- Anderson, B. S., & Eshima, Y. (2013). The influence of firm age and intangible resources on the relationship between entrepreneurial orientation and firm growth among Japanese SMEs. *Journal of business venturing*, 28(3), 413-429. https://doi.org/10.1016/j.jbusvent.2011.10.001
- Bedi, H. S., & Vij, S. (2015). How do age, type, size and nature determine firms' entrepreneurial orientation?. *International Journal of Applied Business and Economic Research*, 13(3), 1015-1030.
- Belas & Sopkova, (2016). A model of entrepreneurial orientation. *Transformations in Business and Economics*, 15(2), 630–644.
- Beltrame, F., Floreani, J., Grassetti, L., Mason, M. C., & Miani, S. (2019). Collateral, mutual guarantees and the entrepreneurial orientation of SMEs. *Management Decision*, https://doi.org/10.1108/MD-11-2017-1077
- Brouthers, K. D., Nakos, G., & Dimitratos, P. (2015). SME entrepreneurial orientation, international performance, and the moderating role of strategic alliances. *Entrepreneurship theory and practice*, *39*(5), 1161-1187. https://doi.org/10.1111/etap.12101
- Chakraborty, A. (2012). Credit gap in small businesses: Some new evidence. *International Journal of Business*, 65. Erişim adresi https://scholarworks.umb.edu/accounting_finance_faculty_pubs/1/
- Civelek, M., Rahman, A., & Kozubikova, L. (2016). Entrepreneurial orientation in the segment of Micro-Enterprises: evidence from Czech Republic. *International Journal of Entrepreneurial Knowledge*, 4(1), p. 72-89. https://doi.org/10.1515/ijek-2016-0006
- Cowling, M., Liu, W., Ledger, A., & Zhang, N. (2015). What really happens to small and medium-sized enterprises in a global economic recession? UK evidence on sales and job dynamics. *International Small Business Journal*, 33(5), 488-513. https://doi.org/10.1177/0266242613512513
- Dvouletý, O., & Blažková, I. (2020). Determinants of competitiveness of the Czech SMEs: findings from the global competitiveness project. *Competitiveness*

Review: An International Business Journal, 31(3), 361-378. https://doi.org/10.1108/CR-01-2020-0007

- Eisenhardt, K. M. (1989). Making fast strategic decisions in high-velocity environments, Academy of Management Journal, 32, 543-576. Erişim adresi: https://www.jstor.org/stable/256434?seq=1#metadata info tab contents
- European Commission (2003). Recommendation Of 6 May 2003. Concerning the definition of micro, small and medium-sized enterprises. Erişim adresi: https://eur-lex.europa.eu/legal-

content/EN/TXT/?uri=CELEX%3A32003H0361.

- European Commission, SBA fact sheet Turkey, (2019). Erişim adresi: https://ec.europa.eu/neighbourhood-enlargement/sites/near/files/sba-fs-2019_turkey.pdf
- Family Business Institute (2019). Definition of young firm. Erişim adresi: https://www.familybusinessinstitute.com/
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. *Long range planning*, 46(1-2), 1-12. Erişim adresi https://ssrn.com/abstract=2233795
- Islam, M. A., Khan, M. A., Obaidullah, A. Z. M., & Alam, M. S. (2011). Effect of entrepreneur and firm characteristics on the business success of small and medium enterprises (SMEs) in Bangladesh. *International Journal of Business and Management*, 6(3), 289-299. Erişim adresi https://www.researchgate.net/profile/Md-Aminul-Islam-2/publication/50315308_Effect_of_Entrepreneur_and_Firm_Characteristics _on_the_Business_Success_of_Small_and_Medium_Enterprises_SMEs_in _Bangladesh/links/0deec52d41c9fa5e12000000/Effect-of-Entrepreneurand-Firm-Characteristics-on-the-Business-Success-of-Small-and-Medium-Enterprises-SMEs-in-Bangladesh.pdf
- Ismail, V. Y. (2014). The comparison of entrepreneurial competency in woman micro-, small-, and medium-scale entrepreneurs. *Procedia-Social and behavioral sciences*, 115, 175-187. https://doi.org/10.1016/j.sbspro.2014.02.426
- Kathuria, R., Joshi, M. P., & Dellande, S. (2008). International growth strategies of service and manufacturing firms: The case of banking and chemical industries. *International Journal of Operations & Production Management.*, 28 (10), 968-990. https://doi.org/10.1108/01443570810903113
- Kato, M., Okamuro, H., & Honjo, Y. (2015). Does founders' human capital matter for innovation? Evidence from Japanese start-ups. *Journal of Small Business Management*, 53(1), 114-128. https://doi.org/10.1111/jsbm.12094
- Kowalik, I., Danik, L., Král, P., & Řezanková, H. (2017). Antecedents of accelerated internationalisation of polish and czech small and medium-sized enterprises. *Entrepreneurial Business and Economics Review*, *5*(*3*), 31-48. Erişim adresi: https://www.ceeol.com/search/article-detail?id=569946
- Kozubikova, L., Vojtovič, S., Rahman, A., & Smrčka, L. (2016). The role of entrepreneur's gender, age and firm's age in autonomy. The case study from the Czech republic. *Economics and Sociology*. 9(2), p. 168-182. https://doi.org/10.14254/2071-789X.2016/9-2/12
- Kozubíková L., & Zoubková A. (2016), Entrepreneur's attitude towards innovativeness and competitive aggressiveness: the case study of Czech micro-enterprises, *Journal of International Studies*, 9(1), 192-204. https://doi.org/10.14254/2071-8330.2016/9-1/14

- Kraus, S. (2013). The role of entrepreneurial orientation in service firms: empirical evidence from Austria. *The Service Industries Journal*, *33*(5), 427-444. https://doi.org/10.1080/02642069.2011.622373
- Laforet, S. (2013). Organizational innovation outcomes in SMEs: Effects of age, size, and sector. *Journal of World business*, 48(4), 490-502. https://doi.org/10.1016/j.jwb.2012.09.005
- Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. Academy of management Review, 21(1), 135-172. https://doi.org/10.5465/amr.1996.9602161568
- Lumpkin, G. T., Cogliser, C. C., & Schneider, D. R. (2009). Understanding and measuring autonomy: An entrepreneurial orientation perspective. *Entrepreneurship theory and practice*, 33(1), 47-69. https://doi.org/10.1111/j.1540-6520.2008.00280.x
- McKenny, A. F., Short, J. C., Ketchen Jr, D. J., Payne, G. T., & Moss, T. W. (2018). Strategic entrepreneurial orientation: Configurations, performance, and the effects of industry and time. *Strategic Entrepreneurship Journal*, 12(4), 504-521. https://doi.org/10.1002/sej.1291
- Miller, D. (1983). The correlates of entrepreneurship in three types of firms. *Management science*, 29(7), 770-791. https://doi.org/10.1287/mnsc.29.7.770
- Moss, T. W., Neubaum, D. O., & Meyskens, M. (2015). The effect of virtuous and entrepreneurial orientations on microfinance lending and repayment: A signaling theory perspective. *Entrepreneurship theory and practice*, 39(1), 27-52. https://doi.org/10.1111/etap.12110
- Pattitoni, P., Petracci, B., & Spisni, M. (2014). Determinants of profitability in the EU-15 area. *Applied Financial Economics*, 24(11), 763-775. https://doi.org/10.1080/09603107.2014.904488
- Pett, T. L.,& Wolff, J. A., (2012). SME identity and homogeneity-are there meaningful differences between micro, small, and medium-sized enterprises?. *Journal of Marketing Development and Competitiveness*, 6(2), 48-59. Erişim adresi: http://www.nabusinesspress.com/JMDC/PettTL_Web6_2_.pdf
- Pett, T., & Wolff, J. A. (2016). Entrepreneurial orientation and learning in high and low-performing SMEs. Journal of Small Business Strategy, 26(2), 71-86. Erişim adresi: https://libjournals.mtsu.edu/index.php/jsbs/article/view/615
- Raats, R., & Krakauer, P. V. D. C. (2020). International Entrepreneurial Orientation: Exploring the Brazilian Context. Raats, R., & Krakauer, P., International Entrepreneurial Orientation: Exploring the Brazilian Context. Entrepreneurial Business and Economics Review, 8(1), 51-69. https://doi.org/10.15678/EBER.2020.080103
- Rahman, A., Civelek, M., & Kozubíková, L. (2016). Proactiveness, competitive aggressiveness and autonomy: a comparative study from the Czech Republic. *Equilibrium. Quarterly Journal of Economics and Economic Policy*, 11(3), 631-650. http://dx.doi.org/10.12775/EQUIL.2016.028
- Rauch, A., Wiklund, J., Lumpkin, G. T., & Frese, M. (2009). Entrepreneurial Orientation and Business Performance: An Assessment of past Research and Suggestions for the Future. *Entrepreneurship Theory and Practice*, 33(3), 761–787. https://doi.org/10.1111/j.1540-6520.2009.00308.x
- Rosenbusch, N., Brinckmann, J., & Bausch, A. (2011). Is innovation always beneficial? A meta-analysis of the relationship between innovation and

performance in SMEs. *Journal of business Venturing*, 26(4), 441-457. https://doi.org/10.1016/j.jbusvent.2009.12.002

- Soininen, J., Puumalainen, K., Sjögrén, H., & Syrjä, P. (2012). The impact of global economic crisis on SMEs: does entrepreneurial orientation matter?. *Management Research Review*. 35(10), 927-944 https://doi.org/10.1108/01409171211272660.
- Sørensen, J. B., & Stuart, T. E. (2000). Aging, obsolescence, and organizational innovation. Administrative science quarterly, 45(1), 81-112. https://doi.org/10.2307/2666980
- Stambaugh, J., Lumpkin, G. T., Mitchell, R. K., Brigham, K., & Cogliser, C. (2020). Competitive aggressiveness, community banking and performance. *Journal* of Strategy and Management, 13(2), 221-240. https://doi.org/10.1108/JSMA-03-2019-0033
- Tabachnick, B. G., Fidell, L. S., & Ullman, J. B. (2007). Using multivariate statistics. Boston, MA: Pearson.
- Teles, D., & Schachtebeck, C. (2019). Entrepreneurial orientation in south african social enterprises. Entrepreneurial Business and Economics Review, 7 (3), 83-97.
- Thapa, A. (2015). Determinants of microenterprise performance in Nepal. *Small Business Economics*, 45(3), 581-594. http://dx.doi.org/10.1007/s11187-015-9654-0.
- Wiklund, J., & Shepherd, D. (2003). Knowledge-based resources, entrepreneurial orientation, and the performance of small and medium-sized businesses. *Strategic management journal*, 24(13), 1307-1314.http://dx.doi.org/10.1002/smj.360.
- Yu, A., Lumpkin, G. T., Praveen Parboteeah, K., & Stambaugh, J. E. (2019). Autonomy and family business performance: The joint effect of environmental dynamism and national culture. *International Small Business Journal*, 37(2), 153-185. https://doi.org/10.1177/0266242618811893