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## The Evaluation of the Relationship Between the Lifelong Learning Tendency of Trainees of Public Education Centers and Their Entrepreneurial Level<sup>1</sup>

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### Abstract

The purpose of this research is to examine the relationship between the lifelong learning tendency of trainees of public education centers, which support individuals in Turkey to learn throughout their lives for them to improve the knowledge, ability, and sufficiency that they require during their lifetimes and their entrepreneurial level. The sample of the research, which was carried out using the relational scanning model, consists of a total of 930 trainees who attended the courses opened in public education centers. The data has been obtained with the "Personal Information Form", the "Lifelong Learning Tendency Scale" and "Entrepreneurship Scale". Obtained data were analyzed with descriptive statistical tests. As a result of the research, it has been concluded that there is an affirmative medium level significant relationship between the lifelong learning tendency of trainees of public education centers and their entrepreneurial level and the lifelong learning tendencies of the trainees of public education centers do not vary under to gender.

**Key Words:** Lifelong learning, Entrepreneurship, Public education centers, Trainees.

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## INTRODUCTION

Information constantly increases and changes. Nevertheless, the necessities of individuals for learning also differentiate. Such necessity has revealed the concept of lifelong learning (Demirel and Yağcı, 2012). The perspective of lifelong learning consists of learning activities that emerge at all times and in all kinds of locations, without any limitation to age and location outside of school, although it includes the learning activities at school (Bağcı, 2015), that enables the individual to gain knowledge, skills, attitudes, and competencies that will improve her/himself (Sönmez, 2008), that includes the learnings that continue lifelong.

The purpose of lifelong learning is to support the personal development of individuals by providing different learning opportunities, thus ensuring the integration of the society and the realization of economic growth (Güleç, Çelik and Demirhan, 2012). On the other hand, another force that forms the basis of the economic and social development of developed countries is the existence of entrepreneurial individuals. According to Koç (2016), the development of a country depends on the developments in economic activities in that country, and developments in economic activities depend on the number and qualifications of entrepreneurs in that country.

Entrepreneurship is a constantly changing and dynamic phenomenon, and is defined among the public as taking action to conduct a business, starting and being a business (Aytaç and İlhan, 2007), establishing a new business that can make a profit, or expanding an existing business, creating new products, services, and resources, using resources effectively (Başar, Tuğberk and Emre, 2001; Bird, 1988). Furthermore, entrepreneurship is expressed as the establishment of an organization to perceive an opportunity and to obtain an opportunity (Mueller and Thomas, 2001), to realize innovations, see opportunities and to make the same commercially viable (Naktiyok and Timuroğlu, 2010). Today, it is defined as the process of taking more risks, catching-up on innovations, and realizing opportunities, evaluating these opportunities and putting these into practice (Altuntaş, 2016; Bozkurt, 2007).

In the knowledge-based society, entrepreneurship has come to the fore as the central power of economic growth policy. In our era where knowledge, innovation creativity are at the forefront, important opportunities have arisen for entrepreneurial individuals (Ceylan, 2017 cited in Carree and Thurik, 1998 ).

The Council of Europe defines the concept of lifelong learning as the learning activities that individuals carry out throughout their lives for them to improve their knowledge, skills, and competencies concerning personal, social, or employment. In addition to the entrepreneurial skills of individuals, the increase of their knowledge and thus their intellectual capital in science are provided by lifelong learning (Özbilen and Oklay, 2017 cited in Othman, Hashim and Wahid, 2012). In the Ministry of National Education Lifelong Learning Institutions Regulation, it has been stated that all kinds of learning activities carried out throughout life to improve the knowledge, skills, and competencies of an individual to and an individual, social, and employment are lifelong learning (General Directorate of Lifelong Learning, 2018). Public education centers are active institutions that provide lifelong learning opportunities to adults. The public education centers are the lead of institutions realizing educational activities that appeal to all ages and all kinds of professions in Turkey. It has drawn attention that there are a few studies examining the lifelong learning tendencies of the trainees attending the courses opened in the public education centers, which play a major role in lifelong learning (Akyol et. al., 2018; Kılınç and Yenen, 2015).

When the literature on lifelong learning is examined, it has been observed that the conceptual framework of lifelong learning, its historical development, and its place in the European Union (Akbaş and Özdemir, 2002; Aksoy, 2013; Bağcı, 2011; Beycioğlu and Konan, 2008; Güleç et. al., 2012) and the lifelong learning competencies, perceptions and tendencies of administrators and lecturers working or students in formal education institutions have been focused on various variables (Ayra, 2015; Demirel and Yağcı, 2012; Diker Coşkun and Demirel, 2012; Gencel, 2013; Oral and Yazar, 2015). However, lifelong learning shall be considered an educational campaign that includes learning activities other than formal education (Aksoy, 2013; Diker Coşkun and Demirel, 2012; Sönmez, 2008).

When the literature on entrepreneurship is examined; it has been observed that there are many studies aimed at determining the entrepreneurship levels of university students and various professional groups who are reviewed as potential entrepreneurs (Akçakanat et. al., 2014; Aksoy and Yalçınsoy, 2017; Ensari and Alay, 2017; Kılıç et. al., 2012; Özdemir, 2015; Tiftik and Zincirkiran, 2014; Türkmen and İşbilir, 2015). In the literature, there is no study examining the relationship between the entrepreneurship levels of the trainees attending public education center courses or the relationship between the lifelong learning tendency of trainees of public education centers and their entrepreneurial level.

This study, which focuses on the concepts of lifelong learning and entrepreneurship, which are frequently mentioned in the 21st century, has been carried out to determine the lifelong learning and entrepreneurship levels of adults who attend the courses opened in the public education centers in terms of gender variable and to identify the relationship between these two concepts. It is thought that entrepreneurial individuals need to be lifelong learners due to the fact that knowledge-based power comes to the fore rather than the labor force in the field of production, as in every field in the 21st century in which the understanding of knowledge-based society is dominant. For this reason, in this study, the current lifelong learning tendencies and entrepreneurship levels of the public education center trainees were tried to be drawn and the relationship between the two concepts was tried to be determined. Thus, it is hoped that the study will guide the development of policies that will provide individual and social benefits in the long run by making micro-scale evaluations and analyzes of the current situation. In addition, since there is no study in the literature examining the entrepreneurship levels of public education center trainees, the relationship between lifelong learning tendencies and entrepreneurship levels, it is hoped that the study will fill the gap in the field and the results will shed light on new research.

The main purpose of this study is to research the relationship between the lifelong learning tendency of trainees of public education centers and their entrepreneurial level. In line with this purpose, responses to the following inquiries have been sought:

- ✓ Is there any relationship between the lifelong learning tendency of trainees of public education centers and their entrepreneurial level?
- ✓ Is there any significant difference in the lifelong learning tendency of trainees of public education centers in terms of the gender variable?
- ✓ Is there any significant difference in the entrepreneurial levels of trainees of public education centers in terms of the gender variable?

## **Methodology**

### ***Research Design***

The research has been carried out by using the correlational survey model among the quantitative research methods. Correlational survey models are research models carried out to determine the existence and/or level of co-change between two or more variables. Relations determined through this method cannot be interpreted as a true cause and effect relationship; however, if the situation is known in one variable, the results give some clues to predict the other situation (Karasar, 2017). In this study conducted in this direction, the correlation type correlational survey model has been used to determine the relationship between the lifelong learning tendencies and entrepreneurship levels of the trainees attending various courses opened in public education centers; and the comparison type correlational survey model has been used to determine as to whether the lifelong learning tendencies and entrepreneurship levels vary according to gender variables.

### ***Population and Sample***

The population of the research conducted consists of 30.900 trainees that attended 1.850 courses in total established in January, February, and March 2019 in public education centers that operate activities in the province of Sakarya. The sample of the research has been chosen by simple random sampling method to represent the population because of the control and cost difficulties. This method is the sampling method in which each unit selected from the population has an equal chance of being selected and the selection of units does not affect the selection of other units (Büyüköztürk et. al., 2015). The sample of the research consists of a total number of 930 trainees that attended courses established

in public education centers operating in the province of Sakarya. Information on the demographic characteristics of the trainees participating in the research has been provided in Table 1.

**Table 1**

*Demographic Characteristics of the Trainees Participating in the Research*

<b>Demographic Variable</b>	<b>Category</b>	<b>f (940)</b>	<b>%</b>
Gender	Female	745	80.11
	Male	185	19.89

In Table 1, it has been observed that 745 (80.11%) of the trainees of public education centers participating in the research are female, 185 (19.89%) of those are male and the number of female trainees is more than four times that of male trainees.

### ***Data Collection Tools***

In the research, the Likert-type titled "Lifelong Learning Tendency Scale" (LLTS) consisted of 17 articles developed by Gür-Erdoğan and Arsal (2016) to determine the lifelong learning tendencies of the trainees and the Likert-type titled "Entrepreneurship Scale" (ES) consisting of 36 articles developed by Yılmaz and Sünbül (2009) to determine the entrepreneurship levels have been used.

Lifelong Learning Tendency Scale (LLTS): The Cronbach Alpha reliability coefficient obtained in the development study of the "Lifelong Learning Tendency Scale" (LLTS) developed by Gür-Erdoğan and Arsal (2016) has been calculated as 0.82 for the sub-dimensions and 0.86 for the whole scale. In addition to this, the criterion validity has been calculated as 0.71, the test retest reliability co-efficient has been calculated as 0.71 and the  $\omega$  co-efficient has been calculated as 0.89.

In the study, reliability and validity analyses have been conducted for the scale. As a result of the reliability analysis made, it has been determined as 0.94 for the "Willingness to Learn" sub-dimension, as 0.92 for the "Openness to Improvement" sub-dimension which are the sub-dimensions of the Cronbach Alpha co-efficient scale, and as 0.96 for the whole scale. According to Büyüköztürk (2015), the reliability coefficient of the

measurement tools used to measure psychological structures with values of 0.70 and above is an indication that the scale scores are sufficient for reliability. In this context, it can be mentioned that the scale is reliable since all of the values determined are more than the specified critical value.

As a result of the Confirmatory Factor Analysis (CFA) analysis (Jöreskog and Sörbom, 1993) performed in order to examine the scale validity, it has been observed that  $\chi^2/\text{sd}=4.49$ , GFI=0.94, CFI=0.99, IFI=0.99, NFI=0.99, AGFI=0.92, RMSEA=0.061 and SRMR=0.024. Different researchers determined good fit and acceptable fit values to these indexes and statistics calculated for the CFA. According to this, it has been stated by Kline (2011) and Schermelleh-Engel, Moosbrugger, and Muller (2003) that values less than 5 for  $\chi^2/\text{sd}$  shall be considered as the acceptable fit. In addition to this, in general, the values of 0,95 and above for GFI, CFI, IFI, and NFI indexes are considered as the good fit; the values between 0,90 and 0,95 are considered an acceptable fit (Kline, 2011; Meyers, Gamst and Guarino, 2006; Schermelleh-Engel et. al., 2003). The value of 0,90 and above is considered the good fit indicator; and the value of 0,85 is considered as the acceptable fit indicator for the AGFI index (Schermelleh-Engel et. al., 2003). A value less than 0,05 is considered as the good fit; and a value less than 0,08 is considered an acceptable fit for RMSEA (Byrne and Campbell, 1999; Schermelleh-Engel et. al., 2003). The value less than 0,05 is considered a good fit; and the value less than 0,10 is considered the acceptable fit for SRMR statistics (Meyers et. al., 2006). Once such values are evaluated, it can be stated that the two-dimensional structure of the LLTS is valid within the scope of this study.

**Entrepreneurship Scale:** The Cronbach Alpha reliability coefficient obtained in the development study of the "Entrepreneurship Scale" (ES) developed by Yılmaz and Sünbül (2009) has been calculated as 0.33 for the scale validity.

As a result of the reliability analysis made in this study, it has been determined as 0.96 for the whole scale of the Cronbach Alpha coefficient. Such calculated value is higher than the critical value stated by Büyüköztürk (2015) and reflects that the scale is reliable.

As a result of the Confirmatory Factor Analysis (CFA) analysis performed in order to examine the scale validity, it has been observed that  $\chi^2/sd=4.47$ , GFI=0.87, CFI= 0.98, IFI=0.98, NFI=0.98, AGFI=0.85, RMSEA=0.061 and SRMR=0.042. Different researchers determined good fit and acceptable fit values to the above-mentioned indexes and statistics calculated for the CFA. According to this, it has been stated by Kline (2011) and Schermelleh-Engel et. al. (2003) that values less than 5 for  $\chi^2/sd$  shall be considered as the acceptable fit. In addition to this, in general, the values of 0,95 and above for GFI, CFI, IFI, and NFI indexes are considered a good fit; the values between 0,90 and 0,95 are considered as the acceptable fit (Kline, 2011; Meyers et. al., 2006; Schermelleh-Engel et. al., 2003). A value of 0,90 and above is considered the good fit indicator; and the value of 0.85 is considered as the acceptable fit indicator for the AGFI index (Schermelleh-Engel et. al., 2003). A value less than 0,05 is considered a good fit; and a value less than 0,08 is considered an acceptable fit for RMSEA (Byrne and Campbell, 1999; Schermelleh-Engel et. al., 2003). The value less than 0,05 is considered as the good fit; and the value less than 0,10 is considered as the acceptable fit for SRMR statistics (Meyers et. al., 2006). Once the values are examined, it can be mentioned that all statistics other than GFI are acceptable. Marsh et. al. (1988) stated that the values of 0,85 and above are considered the acceptable fit for GFI. In such context, it can be stated that the ES verifies its one-dimensional structure and is valid within the scope of this study.

### ***Data Collection***

The data of the research has been collected from 930 trainees who attended courses established in the public education centers in the province of Sakarya by the researcher between 01.01.2019-31.03.2019. During data collection, the researcher has provided information to the participants on the purpose, importance of the research and the issues to be considered while responding to the measurement tool, and provided them with the relevant measurement tool (LLTS and ES) has been distributed to the participants, and the trainees have been asked to respond the inquiries in the measurement tool voluntarily.

### **Data Analysis**

The quantitative data analysis methods have been used in the research data analysis. Lisrel 8 (Jöreskog and Sörbom, 1993) program has been used for the Confirmatory Factor Analysis, and the statistics package program, which is used for social sciences, has been used for all other analyzes. To determine whether there is any difference in the lifelong learning tendency of trainees of public education centers in terms of the gender variable, parametric comparison tests have been used. Primarily, the normality of the data has been examined for the demographic subgroup in each research problem with Kolmogorov-Simirnov and Shapiro-Wilk normality tests. Since the scale scores in terms of gender variable examined have not distributed normally, the analysis has been performed by using the nonparametric test Mann-Whitney U. In circumstances where more than two groups have been compared, multiple comparison tests have been used to determine which groups has a significant difference. Primarily, the normality assumption has been tested to determine the relationship between the lifelong learning tendency of trainees of the public education centers and their entrepreneurial levels. Since it has been observed that the data has not been distributed normally, the relationship between variables has been examined by using the Spearman Rho rank differences correlation. To determine the size of the relationship, the cut-off scores have been used. According to this, the calculated correlation value of 0.00 means that there is no relationship between the variables, if it is between 0.01-0.29, it shall be considered as low, if it is between 0.30-0.70, it shall be considered a medium, if it is between 0.71-0.99, it shall be considered as high and if it is 1.00, it shall be considered that it is an excellent relationship (Büyüköztürk, 2015).

### **FINDING**

This section includes the findings related to data analysis obtained within the scope of the research.

Since it has been observed that the lifelong learning and sub-dimensions of the trainees of the public education centers and the scale scores of entrepreneurship have not normally distributed in normality tests, the relationship between the variables has been analyzed by

using the Spearman Rho correlation coefficient. The results regarding the calculated Spearman Rho coefficient values have been presented in Table 2.

**Table 2**

*The Spearman Rho Coefficients Related to the Relationship between the Lifelong Learning Tendency of Trainees of Public Education Centers and Their Entrepreneurial Levels*

	Willingness to Learn	Openness to Improvement	Lifelong Learning Tendency
Entrepreneurship	0.453*	0.454*	0.482*

It has been observed in the Table 2 that there is an affirmative medium level ( $rs = 0.453$ ;  $p < 0.01$ ) significant relationship between the entrepreneurship levels of the trainees of the public education centers and the "Willingness to Learn" sub-dimension and an affirmative medium level ( $rs = 0.454$ ;  $p < 0.01$ ) between the former and the "Openness to Improvement" sub-dimension. When the total scale scores are examined; it has been observed that there is an affirmative medium level ( $rs = 0.482$ ;  $p < 0.01$ ) significant relationship between the entrepreneurship level and the lifelong learning tendency as in the sub-dimensions.

It has been observed that the sub-dimensions and scale scores of the LLTS scale of the trainees of the public education centers have not normally distributed in the normality tests performed according to the gender variable. Under such circumstances, the Mann-Whitney U test has been used to compare the two samples in this sub-problem. The scores of the male and female trainees of the public education centers have been compared with the Mann-Whitney U test and the results have been presented in Table 3.

**Table 3**  
*Comparison of Lifelong Learning Tendencies and Sub-Dimensions by Gender Variable*

	Gender	N	Mean Rank	Mean Total	U	p
Willingness to Learn	Female	745	463.63	345401.5	67516.500	0.668
	Male	185	473.05	87513.5		
Openness to Improvement	Female	745	443.71	330567.50	52682.500	0.000*
	Male	185	553.23	102347.50		
LLTS	Female	745	469.76	349968.00	65742.000	0.332
	Male	185	448.36	82947.00		

\* There is a significant difference at the p <0.05 level.

When the scale scores of the trainees of the public education centers in at Table 3 have been examined; it has been observed that the gender-based differentiation is only in the "Openness to Improvement" sub-dimension ( $U= 52682.500$ ;  $p<0.05$ ). When the mean rank of the "Openness to Improvement" sub-dimension has been examined, it has been observed that the mean rank of female trainees is lower than the mean rank of male trainees. Therefore, it can be mentioned that the differentiation is in favor of male trainees.

It has been observed that the entrepreneurship scale of the trainees of the public education centers has not normally distributed in the normality tests performed according to the gender variable. As a result of this, the Mann-Whitney U test has been used to compare the two samples in this sub-problem. The scores of the male and female trainees of the public education centers have been compared with the Mann-Whitney U test and the results have been presented in Table 4.

**Table 4**  
*Comparison of Entrepreneurship Level by Gender Variable*

	Gender	N	Mean Rank	Mean Total	U	p
Entrepreneurship	Female	745	443.71	330567,50	52682.500	0.000*
	Male	185	553.23	102347.50		

\* There is a significant difference at the  $p<0.05$  level.

When the scale scores of the trainees of the public education centers in Table 4 have been examined; it has been observed that the gender-based differentiation is at the entrepreneurship level ( $U = 52682.500$ ;  $p<0.05$ ). When mean ranks have been examined, it has been observed that the mean rank of male trainees is higher than the mean rank of female trainees. Therefore, it can be mentioned that the differentiation is in favor of male trainees.

## DISCUSSION AND CONCLUSION

In the research, it has been concluded that there is an affirmative medium level significant relationship between the lifelong learning tendency of trainees of public education centers and their entrepreneurial level. This conclusion can be interpreted as individuals with lifelong learning tendencies have entrepreneurship characteristics and/or entrepreneurial individuals have lifelong learning tendencies. The Entrepreneurship characteristics are included in the competencies determined in international policies on lifelong learning. For instance, eight key competencies that individuals should have for lifelong learning are identified in the report titled "Key Competencies in Lifelong Learning-European Framework" published by the European Union Education and Culture Commission. One of these key competences is initiative and entrepreneurship competence (European Union Commission, 2007). According to Günük et. al. (2012), an individual's success in lifelong learning is subject to the level of having these competencies.

In research where the relationship between the lifelong learning tendencies and entrepreneurship of individuals has been examined, it has been concluded that there is an

affirmative and significant relationship between lifelong learning and entrepreneurship competencies of university students (Asgariyazdı et. al., 2019), that the lifelong learning tendencies have a partial mediating role in the relationship between personality characteristics and entrepreneurship tendencies of university students (Aykan et. al., 2019), that there is an affirmative very-high level significant relationship between lifelong learning tendencies and social entrepreneurship characteristics of lecturer candidates (Sezen-Gültekin and Gür-Erdoğan, 2016), that lifelong learning has an important role in the development of entrepreneurship competence (Lans et. al., 2004). These results are also consistent with the results of the current research. By taking into consideration that individuals with their learning responsibilities can be active learners in the lifelong learning process, entrepreneurial individuals can be more active in being aware of lifelong learning activities, following on the activities, and participating in the activities.

According to another result of the research, the lifelong learning tendencies of the trainees of public education centers do not vary under to gender. It can be mentioned that gender does not have any effect on the lifelong learning tendencies of the trainees. The research conducted by Akyol et. al. (2018) with the trainees of the public education centers and many research conducted (Demirel and Döş, 2020; Duymuş and Sulak, 2018; Oral and Yazar, 2015; Tanatar, 2017; Woonsun, 2013; Yılmaz, 2018) on different working groups (lecturers, lecturer candidates, university students, academic staff members, and various professional groups) supports this result. In addition to this, in the research conducted by Johnstone and Rivera (1966) on the participation in activities within the scope of adult education, the distribution of participation by gender has been searched and it has been reached the conclusion that both male and female participated in lifelong learning activities at the same rate. On the other hand, there are researches that determine a difference in the lifelong learning tendencies of individuals in favor of female (Aydın, 2018; Crick et. al., 2004; Çetinkaya et. al., 2019; Kılıç, 2015; Korkmaz, 2019; Kozikoğlu and Altunova, 2018; Meerah et. al., 2011; Satiroğlu, 2019; Yılmaz and Beşkaya, 2018) and in favor of male (Aydın et. al., 2017; Bahadır, 2019; Denat et. al., 2016; Ekşioğlu et. al., 2017; Mülhim, 2018). These results are inconsistent with the results of the current research. The reason for this difference in results may be that the research have been

conducted on different working groups. The fact that there is no difference in lifelong learning tendencies between males and females in the current research may be because the individuals who participated in the study were adults who attended the courses in the public education centers. In the end, adults prefer to attend courses voluntarily. The willingness to participate in the courses can be considered an indicator that individuals have lifelong learning tendencies. All individuals participating in the courses can have a positive perspective on lifelong learning and the lifelong learning tendencies of male and female individuals are similar.

According to another result obtained in the research, the entrepreneurship levels of trainees of the public education centers reflect a significant difference in favor of males as per the gender variable. Due to the rapidly changing social values in recent years, women have moved away from their traditional roles and commenced to take a more active part in social life; the importance that both their parents and themselves that they have attached to their educational life have been increased and women have the same learning opportunities as men. In addition to this, the importance attached to women's entrepreneurship in recent years, various support programs that encourage women to entrepreneurship have enabled women to be more involved in business life effectively. Therefore, it has been expected that gender is not a variable that affects entrepreneurship in recent research. However, on the contrary, it has been determined that gender affects the entrepreneurship level and that the entrepreneurship levels of male trainees are higher than that of females. Despite all the developments in favor of women in recent years, the perception of gender-based discrimination in the society, the traditionally adopted role of making money in the family for men, the role of doing housework for women, and the perception that power should belong to men in a patriarchal society may increase the motivation of entrepreneurship in males and decrease the same in females. According to Goffee and Scase (1992), traditionally determined gender roles in society cause women to be dependent on men. Due to this dependency, many women determine their most important purpose in their lives as being a good mothers and a good wives. Women go out of business life temporarily or permanently, since they interiorize the fact that being a spouse/motherhood duties are assigned to them. The hierarchical order brought about

by the patriarchal structure plays a determining role in women's participation in entrepreneurial activities and business life (Özçatal, 2009). Once the research on entrepreneurship level, entrepreneurial tendency, entrepreneurial intention, and entrepreneurial personality characteristics conducted with different working groups (lecturers, lecturer candidates, university students, and various professional groups) are examined, it has been observed that many types of researches (Brice, 2004; Canuzakov et. al., 2017; Ceylan, 2017; Crant, 1996; Davidsson, 1995; Farrington et. al., 2012; Karakulle and Karakaya, 2017; Özdemir and Toker, 2018; Schiller and Crewson, 1997; Siyanbola et. al., 2009; Şalvarcı Türel and Coşkun, 2018; Van der Lingen and Van Niekerk, 2015; Wang and Wong, 2004; Zhao et. al., 2005) support this result. Furthermore, there are researches in which it has been determined that the entrepreneurship levels of a female are higher than males (Akhtar et. al., 2009; Kılıç et. al., 2012), and there are also researches in which it has been determined that the gender variable is not effective at the entrepreneurship level (Asamani and Mensah, 2013; Bacak and Dalkiran, 2016; Honça and Çetinkaya, 2019; Özdemir, 2015; Murathan, 2019; Nas and Temel, 2018; Seçgin, 2016; Yavuz and Yavuz, 2017). Consistent with the recent research results, the fact that males have a higher level of entrepreneurship than females is supported by many researches, but some types of researches have also determined that there is no difference in the entrepreneurship levels of males and females. The fact that there are researches with different results on this subject may be since these researches are carried out at different times and places with different measurement tools on different working groups. Furthermore, the cultural structure that differs from country to country, from geographical region to region, or even from province to province may have also affect an effect on gender on the entrepreneurship level.

## RECOMMENDATIONS

The General Directorate of Lifelong Learning and the Ministry of Labor, Social Services and Family, the Ministry of Industry and Technology, the Ministry of Commerce, the Economic Policy Board, the Education, and Training Policies Board, the Science, Technology and Innovation Policies Board, and other nongovernmental organizations can

work in coordination to direct trainees of public education centers to entrepreneurship activities; and the studies can be conducted by and between public education centers and public/private institutions such as İŞKUR, TÜSİAD, KÖSGBE, Development Agency, Social Assistance, and Solidarity Foundations, municipalities, or private sector representatives to increase cooperation and coordination.

The researchers who will work in this field should examine the lifelong learning tendencies and entrepreneurship levels of the trainees of the public education center and different demographic variables (occupation, whether there is an entrepreneur in the family, income level of the parents, education level of the parents, the type of high school they graduated from, the university they graduated from, etc.). It is recommended to conduct comparative research on lifelong learning and entrepreneurship levels of the trainees of other institutions (vocational education centers, open education schools, continuing education centers, municipal course centers) that carry out adult education activities. In addition, qualitative, experimental or mixed studies can be conducted to reveal the current situation in more detail regarding the lifelong learning tendency and entrepreneurship level of the trainees.

## REFERENCES

- Akbaş, O. and Özdemir, S. M. (2002). Avrupa Birliğinde yaşam boyu öğrenme. *Milli Eğitim Dergisi*, 156, 112-126.  
[http://dhgm.meb.gov.tr/yayimlar/dergiler/Milli\\_Egitim\\_Dergisi/155-156/akbas.htm](http://dhgm.meb.gov.tr/yayimlar/dergiler/Milli_Egitim_Dergisi/155-156/akbas.htm)
- Akçakanat, T., Mücevher, M. H. and Çarıkçı, İ. H. (2014). An investigation on the entrepreneurship tendencies among verbal, quantitative, and equally weighted undergraduate students based on the demographic variances: An example of SDU. *Journal of Economics and Administrative Sciences*, 16(2), 137-154.  
<https://doi.org/10.5578/jeas.8992>
- Akhtar A., Keith J. T., and Riaz, H. T. (2009). Entrepreneurial inclinations of prospective

- teachers. *New Horizons in Education*, 56(2), 1-16. <https://pdfs.semanticscholar.org/b236/81b1de9b3b7358e2d39c1031d87cbc97365b.pdf>
- Aksoy, C. and Yalçınsoy, A. (2017). A Study on Entrepreneurship Tendencies of University Students. *Journal of Business Studies*, 9(4), 341-359. <https://doi.org/10.20491/isarder.2017.335>
- Aksoy, M. (2013). Lifelong Learning as a Concept and the European Union Adventure of Lifelong Learning. *Journal of Social Sciences of the Turkic World*, 64, 23-48. [https://dergipark.org.tr/tr/pub/bilik/issue/25367/267740](https://dergipark.org.tr/tr/pub/bilig/issue/25367/267740)
- Akyol, B., Başaran, R. and Yeşilbaş, Y. (2018). Life satisfaction levels and lifelong learning tendencies of trainers going to public education centers. *Journal of Mehmet Akif Ersoy University Faculty of Education*, (48), 301-324. <https://dergipark.org.tr/tr/pub/maeuefd/issue/39596/412680>
- Altuntaş, H. T. (2016). *The effectiveness of entrepreneurship support programs on active employment policy: KOSGEB new entrepreneurship program example and TR21 analysis* (Publication No: 439990) [Master Thesis, Namık Kemal University]. Ulusal Tez Merkezi.
- Asamani, L. and Mensah, A. O. (2013) Entrepreneurial inclination among Ghanaian University students: The case of University of Cape Coast, Ghana. *European Journal of Business and Management*, 19, 113-125. <https://www.iiste.org/Journals/index.php/EJBM/article/view/7279>
- Asgariyazdi, A., Farz, H. S. and Tirgoor, F. (2019). The role of quality in higher education and lifelong learning in entrepreneurship competencies of undergraduate students. *Pedagogika*, 3, 240-256. <https://www.ceeol.com/search/article-detail?id=819063>
- Aydin, A., Aydin Sayilan, A., Demirci, D., Aslan, H. and Mercan, Y. (2017, Kasım). *Is Gender Role Effective on Lifelong Learning Tendencies in University Students?*

- [Conference presentation]. 1st International Social Sciences and Educational Research Symposium (ISCER, 2017), Necmettin Erbakan University, Antalya. <https://www.nobelyayin.com/sunumlar/iscer-ozet-2017.pdf>.
- Aydın, B. (2018). *The relationship between lifelong learning tendencies and career development desires of primary school teacher candidates* (Publication No: 519188) [Master Thesis, Bolu İzzet Batsal University]. Ulusal Tez Merkezi.
- Aykan, E., Karakuş, G. and Karakoç, H. (2019). The effect of university students' individual innovation and lifelong learning trends on entrepreneurship orientation. *Sustainability*, 11, 6201, 1-16. <https://doi.org/10.3390/su11226201>
- Ayra, M. (2015). *The relationship between teachers' lifelong learning tendencies and professional self-efficacy beliefs* (Publication No: 412297) [Master Thesis, Amasya University]. Ulusal Tez Merkezi.
- Aytaç, Ö. and İlhan, S. (2007). Entrepreneurship and entrepreneurial culture: A sociological perspective. *Selcuk University Journal of Social Sciences*, 18, 101-120. <http://dergisosyalbil.selcuk.edu.tr/susbed/article/view/440>
- Bacak, Ç., and Dalkırın, O. (2016). A study for the evaluation of entrepreneurship level of fourth-grade students in recreation and sports management department. *International Journal of Social Sciences and Education Research*, 2(1), 45-49. <https://doi.org/10.24289/ijsser.279083>
- Bağcı, E. (2011). Lifelong education policies in Turkey in the process of membership to the European Union. *Ondokuz Mayıs University Journal of the Faculty of Education*, 30(2), 139-173. <https://dergipark.org.tr/tr/pub/omuefd/issue/20249/214848>
- Bağcı, Ş. E. (2015). Lifelong learning in Turkey: Marketist and conservative. *Mülkiye Dergisi*, 39(3), 211-244. <https://dergipark.org.tr/tr/pub/mulkije/issue/279/1298>
- Bahadır, Z. (2019). *The analysis of the lifelong learning tendencies and meaning of life*

- with some demographic variables* (Publication No: 551056) [Master Thesis, Sakarya University]. Ulusal Tez Merkezi.
- Başar, M., Tuğberk T. and Emre D. (2001). *Girişimcilik ve girişimcinin yol haritası iş planı*. Eskişehir Ticaret Odası Yayınları.
- Beycioğlu, K. and Konan, N. (2008). Lifelong learning and European education policies. *Electronic Journal of Social Sciences*, 7(24), 369-382. <https://dergipark.org.tr/tr/download/article-file/70036>.
- Bird, B. J. (1988). Implementing entrepreneurial ideas: The case for intentions. *Academy of Management Review*, 13(3), 442-454. <https://doi.org/10.2307/258091>
- Bozkurt, Ö. (2007). The importance of personality traits in entrepreneurship tendency. *Journal of Entrepreneurship and Development*, 1(2), 93-111. <http://acikerisim.lib.comu.edu.tr:8080/xmlui/handle/COMU/982>
- Brice, J. (2004). *The role of personality dimensions on the formation of entrepreneurial intentions* [Conference presentation]. In Annual Usasbe National Conference, 18, 1-9. [https://www.academia.edu/32255175/The\\_role\\_of\\_personality\\_dimensions\\_on\\_theFormation\\_of\\_entrepreneurial\\_intentions](https://www.academia.edu/32255175/The_role_of_personality_dimensions_on_theFormation_of_entrepreneurial_intentions)
- Büyüköztürk, Ş. (2015). *Sosyal bilimler için veri analizi el kitabı*. PegemA.
- Büyüköztürk, Ş., Çakmak, E. K., Akgün, Ö.E., Karadeniz, Ş. and Demirel, F. (2015). *Bilimsel araştırma yöntemleri*. Nobel Yayınları.
- Byrne, B. M. and Campbell T. L. (1999). Cross-cultural comparisons and the presumption of equivalent measurement and theoretical structure: A look beneath the surface. *Journal of Cross-Cultural Psychology*, 30, 555-574. <https://doi.org/10.1177/0022022199030005001>
- Canuzakov, K., Geri, S., Demirhan, B. and Tekeli, S. C. (2017). Entrepreneurship

- characteristics of university students who take 'Physical education and sport' education. *International Journal of Humanities and Social Science*, 7(2), 157-165. [https://www.ijhssnet.com/journals/Vol\\_7\\_No\\_2\\_February\\_2017/21.pdf](https://www.ijhssnet.com/journals/Vol_7_No_2_February_2017/21.pdf)
- Çetinkaya, B., Gülaçtı, F., Çiftçi, Z. and Kağan, M. (2019). Examination of teachers' lifelong learning tendencies and professional satisfaction in terms of various variables. *Trakya Journal of Education*, 9(4), 809-823. <https://doi.org/10.24315/tred.52975>
- Ceylan, A. K. (2017). Examining the entrepreneurship of university students in terms of socio-demographic characteristics: Batman University Vocational School research. *International Journal of Social Science*, 59, 459-474. <https://doi.org/10.9761/JASSS7202>
- Crant, J. M. (1996). The proactive personality scale as a predictor of entrepreneurial intentions. *Journal of Small Business Management*, 34(3), 42-49. <https://www.semanticscholar.org/paper/The-Proactive-Personality-Scale-as-a-Predictor-of-Crant/08b1e75c304add9ab462e40825496b7c87848537>
- Crick R. D., Broadfoot P. and Claxton G. (2004). Developing an effective lifelong learning inventory: The ELLI project. *Assessment in Education*, 11(3), 247-272. <https://doi.org/10.1080/0969594042000304582>
- Davidsson, P. (1995). Determinants of entrepreneurial intentions. *Paper prepared for the RENT IX Workshop*, 11, 23-24. <https://pdfs.semanticscholar.org/8690/66b0890c6d097443bf0f6f3a0ca983bfa12b.pdf>
- Demirel, B. and Dös, B. (2020). Investigation of lifelong learning tendencies of police officers. *Kastamonu Journal of Education*, 28(1), 309-327. <https://doi.org/10.24106/kefdergi.3593>
- Demirel, M. and Yağcı, E. (2012). Perceptions of primary school teacher candidates about lifelong learning. *Hacettepe University Faculty of Education Journal*,

*Special Issue*, 1, 100-111.

<http://www.efdergi.hacettepe.edu.tr/yonetim/icerik/makaleler/613-published.pdf>

Denat, Y., Dikmen, Y., Filiz, N. Y. and Başaran, H. (2016). Lifelong learning trends in nursing students. *Human Rythm Journal*, 2(1), 39-45.  
<https://dergipark.org.tr/tr/pub/johr/issue/40171/477895>

Diker Coşkun, Y. and Demirel, M. (2012). Lifelong learning tendencies of university students. *Journal of Hacettepe University Faculty of Education*, 42, 108-120.  
<https://dergipark.org.tr/tr/pub/hunefd/issue/7794/102006>

Duymuş, Y. and Sulak, S. (2018). The effect of undergraduate education, gender, and department on prospective teachers' lifelong learning tendencies. *Boundless Journal of Education and Research*, 3(2), 58-74.  
<https://doi.org/10.29250/Sead.427723>

Ekşioğlu, S., Tarhan, S. and Gündüz, H. Ç. (2017). Investigation of the relationship between lifelong learning tendencies, self-efficacy expectation and personality traits. *Kastamonu Journal of Education*, 25(5), 1925–1940.  
<https://www.researchgate.net/publication/321917809>

Ensari, M. Ş. and Alay, H. K. (2017). A research on the mediating effect of the family's entrepreneurial history on the relationship between the innovative tendency of university students and their entrepreneurial potential. *Pamukkale University Journal of Social Sciences Institute*, 28, 235-248.  
<https://doi.org/10.5505/pausbed.2017.43875>

European Union Commission (2007). *Key competencies for lifelong learning European reference*.  
<https://www.britishcouncil.org/sites/default/files/youth-in-action-keycomp-en.pdf>

Farrington, S., Gray, B. and Sharp, G. (2012). The influence of gender and ethnicity on the perceptions of an Entrepreneurial career in the South African context. *The*

- Southern African Journal of Entrepreneurship and Small Business Management*,  
5. <https://doi.org/10.4102/sajesbm.v5i1.24>
- Gencel, İ. E. (2013). Pre-service teachers' perceptions of lifelong learning competencies. *Education and Science*, 38(170). <http://egitimvebilim.ted.org.tr/index.php/EB/article/viewFile/1847/558>
- General Directorate of Lifelong Learning (2018). *Hayat boyu öğrenme kurumları yönetmeliği*. Milli Eğitim Bakanlığı Hayat Boyu Öğrenme Genel Müdürlüğü. <https://hbogm.meb.gov.tr/www/hayat-boyu-ogrenme-kurumlari-yonetmeliigi/icerik/791>
- Goffee, R. and Scase, R. (1992). *Kadınlar iş başında*. (Çev. A. Fethi). Eti Kitapları.
- Güleç, İ., Çelik, S. and Demirhan, B. (2012). What is lifelong learning? An evaluation on the concept and its scope. *Sakarya University Journal of Education*, 2(3), 34-48. <https://dergipark.org.tr/tr/pub/suje/issue/20631/219952>
- Günuç, İ., Odabaşı, H. F. and Kuzu, A. (2012). Factors Affecting Lifelong Learning. *Gaziantep University Journal of Social Sciences*, 11(2), 309-325. <https://dergipark.org.tr/en/download/article-file/223340>
- Gür-Erdoğan, D., and Arsal, Z. (2016). The development of lifelong learning trends scale (LLLTS). *Sakarya University Journal of Education*, 6(1), 114-122. <https://doi.org/10.19126/suji.32361>
- Honça, A. A. and Çetinkaya, T. (2019). A research for determining entrepreneurship levels of university students. *OPUS–International Journal of Society Researches*, 10(17), 1454-1475. <https://doi.org/10.26466/opus.531718>
- Johnstone, J. W. and Rivera, J. R. (1966). Volunteers for learning: A study of the educational pursuits of American adults. *The Annals of the American Academy of Political and Social Science*. <https://doi.org/10.1177/000271626636600177>

Jöreskog, K. G. and Sörbom, D. (1993). LISREL 8: Structural equation modeling with the Simplis command language. *Scientific Software International*, 1.

<https://trove.nla.gov.au/work/10611643>

Karakulle, İ. and Krakaya, A. (2017). A research on the entrepreneurship tendency of university students. *Academic Journal of Social Studies*, 5(46), 596-614.

<https://doi.org/10.16992/ASOS.12291>

Karasar, N. (2017). *Bilimsel araştırma yöntemi: Kavramlar ilkeler teknikler* (32. Baskı). Nobel Yayıncılık.

Kılıç, H. (2015). *Primary subject teachers' individual innovativeness levels and lifelong learning tendencies (Within Denizli province)* (Publication No: 384164) [Master Thesis, Pamukkale University]. Ulusal Tez Merkezi.

Kılıç, R., Keklik, B. and Çalış, N. (2012). A research on the entrepreneurship tendencies of university students: The case of Bandırma İİBF business department. *Journal of the Faculty of Economics and Administrative Sciences of Süleyman Demirel University*, 17(2), 423-435. <https://docplayer.biz.tr/6450910-Universite-ogrencilerinin-girisimcilik-egilimleri-uzerine-bir-arastirma-bandirma-iibf-isletme-bolumu-ornegi.html>

Kılınç, H. H. and Yenen, E. T. (2015). Lifelong learning tendencies of public education center trainees. *International Journal of Social Science*, 35, 187-198. <https://doi.org/10.9761/JASSS2940>

Kline, R. B. (2011). Principles and practice of structural equation modeling. *New York: The Guilford Press*. [ftp://158.208.129.61/suzuki/PP\\_SEM\\_3e.pdf](ftp://158.208.129.61/suzuki/PP_SEM_3e.pdf)

Koç, E. (2016). *Tüketici davranışları ve pazarlama stratejileri (Global ve yerel yaklaşım)*. Seçkin Yayıncılık.

Korkmaz, Ç. (2019). *The relationship between classroom teachers' lifelong learning tendencies and life and 21<sup>st</sup>-century teaching skill levels* (Publication No: 572495)

- [Master Thesis, Afyon Kocatepe University]. Ulusal Tez Merkezi.
- Kozikoğlu İ. and Altunova N. (2018). The power of pre-service teachers' self-efficacy perceptions regarding 21<sup>st</sup>-century skills to predict their lifelong learning tendencies. *Journal of Higher Education and Science*, 8(3), 522-531. doi.org/10.5961/jhes.2018.293
- Lans, T., Wesselink, R., Biemans, H. J. A. and Mulder, M. (2004). Work-related lifelong learning for entrepreneurs in the agri-foodsector. *International Journal of Training and Development*, 8(1), 73-89. <https://doi.org/10.1111/j.1360-3736.2004.00197.x>
- Marsh, H.W., Balla, J. R., and McDonald, R. P. (1988). Goodness-of-fit indexes in confirmatory factor analysis: the effect of sample size. *Psychological Bulletin*, 103(3), 391-410. <https://doi.org/10.1037/0033-2909.103.3.391>
- Meerah, T. S. M., Lian, D. K. C., Osman, K., Zakaria, E., Iksan, Z. H., and Soh, T. M. T. (2011). Measuring life-long learning in the Malaysian Institute of higher learning context. *Procedia Social and Behavioral Sciences*, 18, 560–564. <https://doi.org/10.1016/j.sbspro.2011.05.082>
- Meyers, L. S., Gamst, G. and Guarino, A. J. (2006). *Applied multivariate research: Design and interpretation*. London: SAGE Publications. <https://www.abebooks.com/9781506329765/Applied-Multivariate-Research-Design-Interpretation-1506329764/plp>
- Mueller, S. L. and Thomas, A. S. (2001). Culture and entrepreneurial potential: A nine country study of locus of control and innovativeness. *Journal of Business Venturing*, 16(1), 51-75. [https://www.academia.edu/25594323/Culture\\_and\\_entrepreneurial\\_potential](https://www.academia.edu/25594323/Culture_and_entrepreneurial_potential)
- Mülhim, M. A. (2018). *Investigation of individual innovativeness levels and lifelong learning tendencies of physical education and sports school students-Bartin*

- University case* (Publication No: 530583) [Master Thesis, Bartın Kocatepe University]. Ulusal Tez Merkezi.
- Murathan, T. (2019). Determination of entrepreneurship levels of physical education teacher candidates. *International Social Mentality and Researcher Thinkers Journal*, 5(24), 1518-1526. <https://doi.org/10.31576/smryj.364>
- Naktiyok, A. and Timuroğlu, M. K. (2010). The effect of students' motivational values on their entrepreneurial intentions and an application. *Journal of Ataturk University Faculty of Economics and Administrative Sciences*, 23(3), 85-103. <https://dergipark.org.tr/tr/pub/atauniiabd/issue/2672/35000>
- Nas, K. and Temel, V. (2018). Entrepreneurship levels of physical education and sports vocational school students. *Atatürk University Journal of Physical Education and Sport Sciences*, 20(3), 134-144. <https://dergipark.org.tr/tr/pub/ataunibesyo/issue/39710/449141>
- Oral, B. and Yazar, T. (2015). Öğretmen adaylarının yaşam boyu öğrenmeye ilişkin algılarının çeşitli değişkenlere göre incelenmesi. *Elektronik Sosyal Bilimler Dergisi*, 14(52). <https://doi.org/10.17755/esosder.72011>
- Özbilen, F. M. and Oklay, E. (2017). The relationship between teachers' organizational trust and entrepreneurship levels. *International Journal of Educational Sciences*, 4(10), 21-37. <https://doi.org/10.16991/INESJOURNAL.1338>
- Özçatal, Ö. (2009). Socio-demographic and cultural factors affecting women's labor market participation and working conditions. *Proceedings of the International Congress of Interdisciplinary Women's Studies*. Sakarya University Publications.
- Özdemir, H. Ö. and Toker, Ö. (2018). Education level and gender effects on entrepreneurship of university students. *Politics, Economics and Administrative Sciences Journal of Kirsehir Ahi Evran University*, 2(1), 159-172. <https://dergipark.org.tr/tr/pub/aeuiibfd/issue/38137/440297>

Özdemir, L. (2015). Evaluation of entrepreneurship tendencies of Kyrgyzstan-Turkey Manas University students in terms of socio-demographic characteristics. *Journal of the Faculty of Economics and Administrative Sciences of Süleyman Demirel University*, 20(1), 41-65. <https://iibfdergi.sdu.edu.tr/tr/yayinlanmis-sayilar/yil-2015-cilt-20-sayi-1-6217s.html>

Şalvarcı Türelî, N. and Coşkun, H. (2018). Entrepreneurial disposition of Y generation university students: Comparison between departments. Suleyman Demirel University *Journal of Social Sciences Institute*, 2(31), 326-357. <https://dergipark.org.tr/tr/pub/igusabder/issue/50564/601735>

Satıroğlu N. S. (2019). *Examining the lifelong learning tendencies of primary school teacher candidates in terms of different variables-Erzincan province example*. (Publication No: 581357) [Master Thesis, Bartın Erzincan Binali Yıldırım University]. Ulusal Tez Merkezi.

Schermelleh-Engel, K., Moosbrugger, H., and Muller, H. (2003). Evaluating the fit of structural equation models: tests of significance and descriptive goodness-of-fit measures. *Methods of Psychological Research Online*, 8, 23-74. <https://psycnet.apa.org/record/2003-08119-003>

Schiller, B. R. and Crewson, P. E. (1997). Entrepreneurial origins: A longitudinal inquiry. *Economic Inquiry*, 35(3), 523-531. <https://ideas.repec.org/a/oup/ecinqu/v35y1997i3p523-31.html>

Seçgin, Y. (2016). The relationship between university students' locus of control and their level of entrepreneurship: The case of Gaziosmanpaşa University Faculty of Economics and Administrative Sciences (İBBF). *International Journal Of Eurasia Social Sciences*, 7(25), 38-54. [https://www.researchgate.net/publication/323228980\\_UNIVERSITE\\_OGRENCILERIN\\_KONTROL\\_ODAKLARININ\\_GIRISIMCILIK\\_DUZEYLERİ](https://www.researchgate.net/publication/323228980_UNIVERSITE_OGRENCILERIN_KONTROL_ODAKLARININ_GIRISIMCILIK_DUZEYLERİ)

Sezen Gültekin, G. and Gür Erdoğan, D. (2016). The relationship and effect between

- lifelong learning tendencies and social entrepreneurship characteristics of prospective teachers. *Anthropologist*, 24(1), 113-118.  
<https://doi.org/10.1080/09720073.2016.11891996>
- Siyarbola, W. O., Afolabi, O. O., Jesuleye, O. A., Egbetokun, A. A., Dada, A. D., Aderemi, H. O. and Razak, M. (2009). Determinants of entrepreneurial propensity of Nigerian undergraduates: An empirical assessment. *International Journal of Business Environment*, 5(1), 1-28. <https://mpra.ub.uni-muenchen.de/35797/>
- Sönmez, V. (2008). *Öğretim ilke ve yöntemleri* (2. Baskı). Anı Yayıncılık.
- Tanatar, E. (2017). *The relationship between teachers' work values and lifelong learning tendencies* (Publication No: 490644) [Master Thesis, Marmara University]. Ulusal Tez Merkezi.
- Tiftik, H. and Zincirkiran, M. (2014). A survey of entrepreneurial tendencies candidate young entrepreneurs: Foundation university sample. *Journal of Management Research*, 6(2), 177-200. <https://doi.org/10.5296/jmr.v6i2.5444>
- Türkmen, M. and İşbilir, U. (2015). Examination of university students' entrepreneurial tendencies in terms of socio-demographic characteristics. *Celal Bayar University Journal of Physical Education and Sport Sciences*, 9(2), 18-28. <https://dergipark.org.tr/tr/pub/cbubesbd/issue/32240/357831>
- Van der Lingen, E. and Van Niekerk, G. (2015). Entrepreneurship traits of science, engineering, and technology (SET) students. *The Southern African Journal of Entrepreneurship and Small Business Management*, 7(1), 117-144. <https://doi.org/10.4102/sajesbm.v7i1.1>
- Wang, C. K. and Wong, P. (2004). Entrepreneurial interest of university students in Singapore. *Technovation*, 24(1), 163-172. [https://doi.org/10.1016/S0166-4972\(02\)00016-0](https://doi.org/10.1016/S0166-4972(02)00016-0)
- Woonsun, K. (2013). Korean pre-service teachers' service-learning and lifelong learning

- competency. *Procedia-Social and Behavioral Sciences*, 116, 3502-3505.  
<https://doi.org/10.1016/j.sbspro.2014.01.792>
- Yavuz, A. and Yavuz, H. İ. (2017). Determination of entrepreneurship tendencies: A research on Tashkent Vocational School students. *Journal of Social Sciences Institute*, 9(21), 89-100. <https://doi.org/10.20875/makusobed.307062>
- Yılmaz, E. and Sünbül, A. M. (2009). Developing an entrepreneurship scale for university students. *Journal of Selcuk University Institute of Social Sciences*, (21), 195-203. <https://toad.halileksi.net/olcek/universite-ogrencilerine-yonelik-girisimcilik-olcegi>
- Yılmaz, M. (2018). Lifelong learning tendencies of prospective teachers receiving pedagogical formation education. *Universal Journal of Educational Research* 6(8), 1684-169. <https://doi.org/10.13189/ujer.2018.060808>
- Yılmaz, R. and Beşkaya, Y. M. (2018). Investigation of lifelong learning tendencies and individual innovativeness levels of education administrators. *Journal of Ankara University Faculty of Educational Sciences*, 51(1), 159–181. <https://doi.org/10.30964/aebfd.406246>
- Zhao, H., Seibert, S. E. and Hills, G. E. (2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. *Journal of Applied Psychology*, 90(6), 1265-1272. <https://doi.org/10.1037/0021-9010.90.6.1265>