# A Comparative Analysis Regarding The Effects of Financial Literacy and Digital Literacy on Internet Entrepreneurship Intention\*

## **ABSTRACT**

Internet has a great influence on the career plans of individuals as well as economies, life styles and even cultural transformations. In this sense, in recent years, internet has gained a close relationship with entrepreneurship which is frequently discussed in business literature. The interactive nature of internet and entrepreneurship has brought a contemporary concept called "Internet Entrepreneurship" also labelled as digital entrepreneurship and IT-based entrepreneurship, refers to seeking of opportunities by using digital media and other information and communication technologies. Moreover, an entrepreneur candidate is expected to have financial information in a degree due to the fact that every kind of entrepreneurship must be regarded as an investment project at the same time. On the other hand, in order to be an internet entrepreneur, a comprehensive knowledge of internet is quite important and necessary. Thus, the aim of this study is to examine the effects of financial literacy, in addition to digital literacy, on the individual's intention of internet entrepreneurship. Research was employed with two groups based on low/high financial and digital literacy levels and the difference among those groups was tested in terms of internet entrepreneurship intention.

**Keywords:** Financial Literacy, Digital Literacy, Internet Entrepreneurship, Internet Entrepreneurship Intention.

## Finansal Okuryazarlık ve Dijital Okuryazarlığın İnternet Girişimciliği Niyetine Etkilerine İlişkin Karşılaştırmalı Bir Analiz

## ÖZET

İnternet; ekonomiler, yasam tarzları ve hatta kültürel dönüsümler üzerinde olduğu gibi bireylerin kariyer planları üzerinde de önemli etkiye sahiptir. Bu anlamda, son yıllarda, internet işletmecilik literatüründe sıklıkla tartışılan girişimcilik ile yakın bir ilişkiye sahip olmuştur. İnternet ve girişimciliğin etkileşimli doğası, dijital medyayı ve diğer bilgi ve iletişim teknolojilerini kullanarak fırsatların aranması anlamına gelen "İnternet Girişimciliği" adında, dijital girişimcilik ve BT-tabanlı girişimcilik olarak da adlandırılan, yeni bir kavramı ortaya çıkarmıştır. Bununla birlikte, her girişimcilik türünün aynı zamanda bir yatırım projesi olarak kabul edilmesinden dolayı bir girişimci adayının belirli bir düzeyde finans bilgisine sahip olması beklenmektedir. Öte yandan, İnternet girişimcisi olmak için kapsamlı bir internet bilgisi oldukça önemli ve gereklidir. Dolayısıyla, bu çalışmanın amacı, dijital okuryazarlığın yanı sıra finansal okuryazarlığın bireylerin internet girişimciliği niyetine etkilerini incelemektir. Araştırma, düşük/yüksek finansal ve dijital okuryazarlık seviyelerinde olmak üzere iki grup ile yürütülmüş ve bu gruplar arasındaki fark İnternet girişimciliği niyeti açısından test edilmiştir.

Anahtar Kelimeler: Finansal Okuryazarlık, Dijital Okuryazarlık, İnternet Girişimciliği, İnternet Girişimciliği Eğilimi.

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Ali BAYRAKDAROĞLU

<sup>&</sup>lt;sup>1</sup>Yrd. Doç. Dr., Muğla Sıtkı Koçman Üniversitesi İktisadi ve İdari Bilimler Fakültesi İşletme Bölümü,

fkaya@ mu.edu.tr

<sup>&</sup>lt;sup>2</sup>Doç. Dr., Muğla Sıtkı Koçman Üniversitesi İktisadi ve İdari Bilimler Fakültesi İşletme Bölümü, abayrakdaroglu@ mu.edu.tr

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#### 1. Introduction

Internet and entrepreneurship are outstanding topics of recent years. Besides the effects of Internet in daily lives of individuals, its intermediary role in setting up one's own business is remarkable. The term "Internet Entrepreneurship", which is generated from the association of internet and entrepreneurship, is commonly discussed both in literature and in practice. Even if internet entrepreneurship has become famous with Amazon.com, Facebook. com, Google.com in worldwide, many small and big internet enterprises have been arising in various regions of the world.

However, there are many studies are found in the literature regarding entrepreneurship education (Baručić and Umihanić, 2016; Edokpolor and Somorin, 2017; Gedeon, 2017), entrepreneurship culture (Doody et al., 2016; Hechavarría, 2016; Cowling and Lee, 2017) and entrepreneurial tendency (Demirci, 2013; Tanrıverdi et al., 2016; Yao et al., 2016), but little is known about internet entrepreneurship. Even so the main philosophy of both conventional entrepreneurship and internet entrepreneurship is identical, some distinguishable points call for attention of researchers. In addition, the literature traditionally refers to risk-taking, openness to change, tolerance to ambiguity etc. qualifications of individuals while discussing their entrepreneurial tendency, however, when it comes to internet entrepreneurship, the knowledge and experience of individuals on digital world can make them step forward. In other words, self-perception of individual concerning the control on cyber world may foster his intention of internet entrepreneurship. In short, in addition to this perception- also described as digital literacy- it is likely that the finance knowledge of entrepreneur candidate, who act with the profit-seeking mission by taking risk, also has an effect on Internet entrepreneurship intention. In this respect, this study aims at examining internet entrepreneurship concept in the context of two significant variable: Digital literacy and financial literacy. In other saying, the purpose of present study is to analyze the effects of digital literacy and financial literacy on internet entrepreneurship intention through two test groups.

## 2. Literature Review

Entrepreneurship is one of the most prominent topics of a country's agenda in the world, besides its popularity in academic area. This is because entrepreneurs not only incubate innovation but also contribute to economic growth and job creation. Therefore, it is also an emerging education program especially in business discipline (Chen, 2014: 2). Moreover, many education programs are designed through the findings of various researches from different points of view. Traditionally, entrepreneurship intention is promoted by business education. However, entrepreneurship is a very broad term which combines many abilities, competences and education backgrounds. In recent years, entrepreneurship education has been assumed as a process which enables the individuals to gain creativity, innovativeness, risk-taking, planning and project managing abilities (Marangoz, 2016: 17). For example, today, it is thought that the use of new technologies like IT and web based platforms could be the drivers and promoters of entrepreneurship programs' efficiency (Hejazinia, 2015: 243). In addition, internet, which has a direct influence on our daily lives, has also changed the way of setting up a business dramatically. From this point of view, business environment now face an emerging and trending entrepreneurship alternative: internet entrepreneurship. Actually, the relation between entrepreneurship and internet has been titled with various concepts as Digital Entrepreneurship (Hair et al., 2012; Cameron, 2014; Bogdanowicz, 2015; Nambisan, 2016; Standing and Mattsson, 2016), IT Entrepreneurship (Chen, 2013; Chen, 2014; Ojala, 2016; Saundarajan et al., 2016), IT-based Entrepreneurship (Hejazinia, 2015) and Internet Entrepreneurship (Yelkikalkan et al., 2010; Yıldırım and Başer, 2016; Wang and Lin, 2016; Xiaoyu et al., 2017) etc. However, due to the fact that internet is a comprehensive phenomenon that touches all types of IT and digital technologies, internet entrepreneurship concept is embraced in this study. Additionally, although entrepreneurship literature is full of researches regarding traditional entrepreneurship intention, little is known about Internet entrepreneurs and internet entrepreneurial behavior has remained largely unexplored (Chen, 2014: 3).

As a concept, internet entrepreneurship, which is introduced as the entrepreneurship alternative of this century, refers to "creating a project in virtual platform and serving the project to the potential customers on the internet by targeting a financial gain" (Yelkikalkan et al., 2010: 489). Profit-seeking goal may be seen as the primary achievement of an entrepreneur candidate whether entrepreneurship way is online or offline. To make profit or to find a profitable business idea is the backbone of business education, indeed finance. This is because it is not enough to have an innovative business model, but also an entrepreneur candidate must search for financial sources which

leverage the entrepreneur's innovative idea. The necessity for financial knowledge points the financial literacy out. In simple terms, financial literacy is a level of competence that enables the individual to make rational decisions on the choice of financial instruments in order to use and manage the money effectively (Akbulut and Rençber, 2015: 406). OECD defines the term as "a combination of awareness, knowledge, skill, attitude and behavior necessary to make sound financial decisions and ultimately achieve individual financial wellbeing" (OECD INFE, 2011: 3). In addition to the contribution of financial literacy to individual financial wellbeing, in some studies, financial literacy is attached to entrepreneurship as an effective factor (Akbulut and Rençber, 2015; Sezici and Çelikkol, 2016). Based on close relationship between financial literacy and entrepreneurship, some institutions like Habitat Association and United Nations Development Programme (UNDP) have organized "financial literacy education" for entrepreneurs. This is a tool used by development organizations and governments in order to reduce youth unemployment through entrepreneurship training (Krause et al., 2016). According to Orbánová and Velichová (2013), those kind of support activities, is to teach young entrepreneur candidates, as early as in the process of learning, the ability to see profitable business ideas, to make use of them after graduation and to apply them in the market, to show them how to manage the potential risks and to help them to dispose of the necessary financial knowledge and skills.

Furthermore, if the subject is internet entrepreneurship, as the definition points out, digital knowledge gains importance due to the fact that creating successful projects in virtual platform depends on digital ability. Internet entrepreneurs are expected to have the culture and technologies of the internet in their attempts to set up a business in common (Wang and Lin, 2016: 754). In other words, in comparison to entrepreneurs in traditional industries such as food, restaurant, retail, tourism, and manufacturing, entrepreneur candidates of internet are expected to be more knowledgeable, technology dependent or tech-savvy and personally innovative than conventional entrepreneurs (Chen, 2013: 233). To solve the problems of digital world, various digital related abilities are needed and those abilities are called "digital literacy". According to Öksüz et al. (2016), digital literacy-dependent abilities are among the required features of 21st century individuals. So digital literacy is a must if the young entrepreneur candidate has a business idea on the internet.

Literacy definitions vary with contemporary needs, therefore, especially in technological terms, many new approaches like information literacy, computer literacy, media literacy-even social media literacy-take part in literature depending on rapid change of internet. As one of those new terms "digital literacy", sometimes called e-literacy, refers to "the evaluation and application of new data comes from digital environment and the ability of reading and interpretation of media in order to reproduce information and visuals through digital manipulation (arrange)" (Coşkun et al., 2013: 1262). Moreover, according to Hargittai (2005) most of the existing literature is based on individuals' perception of their computer skills, often referred to as self-efficacy, instead of measuring through observations or survey items that measure users' actual digital knowledge and internet-related terms and functions (Hargittai, 2005: 372). The self-perception of digital ability can be labelled as computer self-efficacy or (Chen, 2013; Chen, 2014) or perceived behavioral control (Wang and Lin, 2016). Whatever the term is used, digital literacy is a remarkable component of internet entrepreneurship. Both financial literacy and digital literacy are expected to have a meaningful effect on internet entrepreneurship intention which can be defined as "self-acknowledged conviction by a person that they intend to set up a new business venture on internet and consciously plan to do so at some point in the future" (Hejazinia, 2015: 247).

## 3. Methodology

Methodology of the study was formed within the frame of "Does the internet entrepreneurship intention increase with the high level of financial and digital literacy?" research question. Thus, the aim of this study is to test the effects of financial literacy, in addition to digital literacy, on the individual's intention of internet entrepreneurship. Hence, independent variable of the study is internet entrepreneurship intention, whereas financial literacy and digital literacy constitute dependent variables. The hypotheses of study are defined as below:

- H<sub>1</sub>: Literacy has a significant effect on Internet entrepreneurship intention.
- H<sub>2</sub>: There is a significant difference of literacy levels on Internet entrepreneurship intention.

For testing the hypothesis above, first step begins with examining the statistically significant effects of financial and digital literacy of individuals on internet entrepreneurship intention. The individuals who have high level of

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financial and digital literacy are expected to have high level of internet entrepreneurship intention, whereas individuals with low financial and digital literacy level are expected to have low level of internet entrepreneurship intention. Thus, both financial and digital literacy are considered to have interpretive effect on the individuals' intention of internet entrepreneurship.

In the next step, in case of a significant effect of literacy (financial and digital) level on internet entrepreneurship intention, differential effect of literacy levels on intention of internet entrepreneurship was tested. This is because varying levels of financial and digital literacy are estimated to differentiate the intention of internet entrepreneurship. Hence designed research model of the study is illustrated in Figure 1 below.

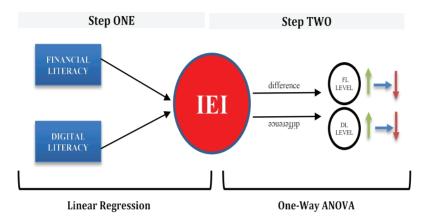


Figure 1. Research Model

A questionnaire was employed for data collection concerning the variables which research model points. It is composed of three parts -excluding 6 demographic questions- and 16 items. Eight of 16 measures financial literacy (adapted from Atkinson and Messy, 2012), five items aim at identifying digital literacy (adapted from van Deursen et al., 2014) and lastly internet entrepreneurship intention is tested with three items (adapted from Wang and Lin, 2016)<sup>1</sup>. Participants are asked to answer within 5 point Likert scale. Items of financial and digital literacy obtained from Likert scale that are continuous data were transformed into discrete data by considering mean value. In other words, dummy variable was employed by grouping mean value to three forms as low, medium and high levels. Analyses concerning internet entrepreneurship intention was processed in the form of continuous data by calculating the arithmetic mean (Table 1).

Variable Variable Definition Explanation INTERNET ENTREPRENEURSHIP Tested with 8 items. IEI point Likert scale INTENTION Arithmetic mean was calculated. (Dependent variable) Tested with 5 items. FLFINANCIAL LITERACY Dummy variable was used. (Independent variable) Tested with 3 items. DLDIGITAL LITERACY Dummy variable was used. (Independent variable)

**Table 1. Data Definition** 

Survey was conducted with business students who are assumed to have high level financial literacy and engineering students who are expected to have high level of digital literacy. Data was collected from bachelor students due to the assumption of high level of entrepreneurship intention owing to their defined literacy types. Totally, 175 bachelor students have responded to the face-to-face questionnaire. Table 2 exhibits the descriptive statistics of participants.

<sup>1</sup> The items of questionnaire can be found in Appendix A.

**Table 2. Descriptive Statistics of Participants** 

ES	S	Sex	1	Level of Aver Spending	U		oreneurship ucation		eneur in the amily
BI	Male	Female	Low	Medium	High	Yes	No	Exist	Do not exist
/ TA	82	93	109	57	9	81	94	52	123
Ş	46,9%	53,1%	62,3%	32,6%	5,1%	46,3%	53,7%	29,7%	70,3%
FREQUENC	Fir	nancial Liter	racy	D	igital Literac	y	Internet En	trepreneursl	hip Intention
ΕQI	Low	Medium	High	Low	Medium	High	No	No idea	Yes
Ŧ	75	49	51	46	84	45	66	70	39
	42,9%	28,0%	29,1%	26,3%	48,0%	25,7%	37,7%	40,0%	22,3%

46,9% of participants are male whereas 53,1% of them are female. In general, they have low level of spending. Only 5,1% of them have high level of spending. Approximately, half of the participants were taken entrepreneurship course and the other half were not. Most of them have expressed that there are no entrepreneur in their family. With reference to the financial literacy of participants, almost 43% have low, 28% of them have medium and 29% of participants have high level. On the other hand, approximately 26% of participants have low level of digital literacy whereas 48% have medium and 26% have high. With respect to internet entrepreneurship intention, 38% of research participants stated that they have intention to run a business on the internet, on the contrary, 22% of them have an intention to start an internet business. 40% of them have no idea about their intention.

To test the reliability of scale Cronbach's Alpha and to see the normal distribution of data collected Kolmogorov-Smirnov tests were checked. Levene test was employed for variance homogeneity. Equation generated to examine the effects of financial and digital literacy on internet entrepreneurship intention was measured with multiple regression analysis. To test whether there is a significant difference between groups concerning intention of internet entrepreneurship, one-way analysis of variance2 was used. Moreover, LSD (Fisher's Least Significant Difference), Tukey and Tamhane's T2 tests were employed to detail where the significant difference come from. All analyses were conducted by using SPSS 17 program.

## 4. Findings and Discussion

Before regression and variance analyses, some outline specifications were tested: Firstly, in order to decide on the reliability of scale, Cronbach's Alpha was tested and Alpha coefficient was found as 0,72. So it can be concluded that the scale used in the research is quite reliable (Hair et al., 2010:125). Moreover, normality<sup>3</sup> and variance homogeneity<sup>4</sup> were also tested and it is seen that all outline specifications provided the appropriate conditions.

Within research question of the study, the hypotheses concerning the first step of research model (see Figure 1) are below:

H<sub>o</sub>: Literacy has no significant effect on Internet entrepreneurship intention.

H<sub>1</sub>: Literacy has a significant effect on Internet entrepreneurship intention.

To test the hypotheses above, multi linear regression model was formed as following:

IEI = Constant + FL + DL +

Table 3 represents the findings of regression model.

<sup>2</sup> The reason for using one-way ANOVA rather than two-way ANOVA is the purpose of measuring each independent variable one by one on dependent variable.

In this study, coefficient of skewness and kurtosis were used besides Kolmogorov-Simirnov test in order to test normality of independent variables. If those coefficients fall between -1,5 and +1,5, distribution approximates normal distribution (Tabachnick, Barbara G., and Fidell, Linda S., Using multivariate statistics, 6th ed. Boston: Pearson, 2013). Some studies assume those coefficients between -2 and +2 (George, D., & Mallery, M., SPSS for Windows Step by Step: A Simple Guide and Reference, 2010)

<sup>4</sup> Findings of Levene test for testing variance homogeneity are presented in Appendix B.

**Table 3. Findings of Regression Analysis** 

Variables	Coefficient	Std. Error	t Statistics	Sig. Level	
		Model:			
Constant	0,075	0,137	0,545	0,586	
FL (financial literacy)	0,204	0,068	4,024	0,000	
DL (digital literacy)	0,710	0,079	14,031	0,000	
ANOVA F statistics	221,610	Tolowan	as Value 0 625 (EL	and DL)	
ANOVA F statistics p level	0,000	<b>Tolerance Value</b> 0,635 (FL and DL)			
R <sup>2</sup> (%)	71,7	VIF (Variance I	nflation Factor) 1,	575 (FL and DL)	

Note: Tests were done at 1% level.

Tolerance value and VIF levels test multicollinearity problem in the model. For each independent variable, tolerance value is required to be higher than 0,50 and VIF level must be at a level of 2 (İslamoğlu and Alnıaçık, 2016). According to those levels, there is no multicollinearity problem in the model. As a result of pre-tests, regression analysis was employed. Moreover, the explanatory power of model is 71,7% (R<sup>2</sup>).

F statistics of ANOVA and p level (221,610; 0,000) prove that regression model is significant in explaining dependent variable. In general, regression model founded is meaningful. In other words, it can be stated that both financial literacy (0,204; 0,000) and digital literacy (0,710; 0,000) were significant in explaining internet entrepreneurship intention. When the effects of other variables (DL) are kept stable, one unit increase in financial literacy (FL) leads to 0,204 unit increase in the intention of internet entrepreneurship; whereas, if the effects of other variables (FL) are kept stable one unit increase in digital literacy (DL) causes 0,710 unit increase in internet entrepreneurship intention. As a result, both financial literacy and digital literacy have a positive and significant effect on internet entrepreneurship intention. In addition, digital literacy has more influence on that intention in comparison to the effect of financial literacy. In conclusion,  $H_0$  "Literacy has no significant effect on Internet entrepreneurship intention." is rejected. Another research question is whether internet entrepreneurship intention varies by digital literacy and financial literacy levels. Regarding that question, the hypotheses were set as the following:

 $H_0$ : There is no significant difference among literacy levels in terms of internet entrepreneurship intention.

H<sub>1</sub>: There is no significant difference among literacy levels in terms of internet entrepreneurship intention.

To test the hypotheses above one-way variance analysis (ANOVA) was employed. Two independent variables of the study were analyzed separately. Therefore, one-way ANOVA was used. Additionally, literacy levels of individuals were grouped into three. Hence, financial and digital literacy levels are classified as low, medium and high. Findings of ANOVA on financial literacy are shown in Table 4.

Table 4. Findings of ANOVA on Financial Literacy

Dependent Variable: IEI	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	89,736	2	44,868	58,259	,001
Within Groups	132,464	172	,770		
Total	222,199	174			
Test of Homogeneit	y of Variances				
Levene Statistic	Sig.				
,845	,431				

As a result of Levene test, which tests the difference of group variations, it is founded that there is no significant difference on group variances (p=0,431>0,05). So prerequisite for ANOVA was ensured. When F value of ANOVA is 58,259, it can be reached that p level is significant (p<0,01). Accordingly, there is a significant difference on the levels of financial literacy in terms of internet entrepreneurship intention. To see where the difference result from post-hoc tests were carried out. Because the number of observations is not equal, Scheffe test was employed. Findings of Scheffe post-hoc test are presented in Table 5 below.

FL Level	Mean	(I) FL	(J) FL	Mean Difference (I-J)	Std. Error	Sig.
Low	2,0977	Low	Medium	-,711746031*	,161200556	0,000
Low	2,0977	Low	High	-1,719215686*	,159277312	0,000
Medium	2 2005	Medium	Low	,711746031*	,161200556	0,000
Medium	2,8095	Medium	High	-1,007469654*	,175550163	0,000
11:-1.	2.0170	II: -1.	Low	1,719215686*	,159277312	0,000
High	3,8169	High	Medium	1,007469654*	,175550163	0,000

<sup>\*</sup> The mean difference is significant at the 0.01 level.

As seen in Table 5, if the financial level of participant is low, internet entrepreneurship intention (IEI) mean is 2,0977; for medium level financial literacy, IEI mean is found as 2,8095 and when the participant has high level of financial literacy, mean of IEI is 3,8169. Figure 2 exhibits the summary of post-hoc findings concerning financial literacy levels.

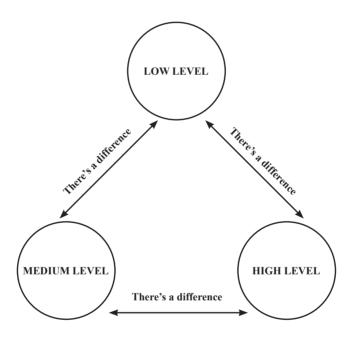


Figure 2. Differences of Financial Literacy Level regarding Internet Entrepreneurship Intention

According to Figure 2, the individuals with medium level of financial literacy have more internet entrepreneurship intention in comparison to low level of financial literacy. The mean difference between those groups is 0,711 and it is significant at level of 0,01. In a similar manner, individuals with high level of financial literacy have more internet entrepreneurship intention when compared to medium level of financial literacy. The mean difference between high and medium levels is 1,007 and it is significant at level of 0,01. Moreover, individuals who have high level financial literacy are more eager to be an internet entrepreneur in comparison to low level financial literacy group. The mean difference is 1,719, besides it is significant at level of 0,01.

Same test were reemployed for digital literacy variable and it is tested if there is any significant difference between digital literacy level groups in terms of internet entrepreneurship intention. Findings of ANOVA on digital literacy variable are presented in Table 6.

Table 6. Findings of ANOVA on Digital Literacy

Dependent Variable: IEI	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	14,714	2	7,357	6,099	0,003
Within Groups	207,485	172	1,206		
Total	222,199	174			
	Test of Hor	nogen	eity of Variances		
Levene Statistic	Sig.				
0,222	0,801				

As a result of Levene test, it is founded that there is no significant difference on group variances (p=0,801>0,05). So prerequisite for ANOVA was ensured again. When F value of ANOVA is 6,099, it can be reached that p level is significant (p<0,01). Hereunder, there is a significant difference on the levels of digital literacy in terms of internet entrepreneurship intention. To see where the difference arise from post-hoc tests were used likewise financial literacy levels. Findings of post-hoc test on digital literacy levels are presented in Table 7.

Table 7. Post Hoc Tests on Digital Literacy

DL Level	Mean	(I) FL	(J) FL	Mean Difference (I-J)	Std. Error	Sig.
T	2 1222	T	Medium	-0,568589744	0,30334743	0,149
Low	2,1333	Low	High	-1,02142857	0,31931452	0,005
M. P	2.7010	M . 1	Low	0,5685897436	0,30334743	0,149
Medium	2,7019	Medium	High	-0,452838828	0,18204487	0,037
TT: . 1.	2.6047	TT: .1.	Low	1,02142857	0,31931452	0,005
High	3,6047	High	Medium	0,452838828	0,18204487	0,037
		*The mean	n difference is	significant at the 0.05 level.		

Table 7 shows that if individuals are low level of digital literate, internet entrepreneurship intention (IEI) mean of that group is 2,1333; for medium level of digital literacy, IEI mean is found as 2,7019 and when the individuals have high level of digital literacy, mean of IEI is 3,6047. The summary of post hoc tests on digital literacy levels are shown in Figure 3.

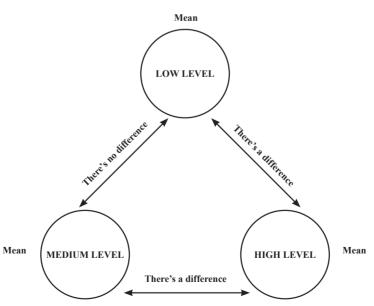


Figure 3. Differences of Digital Literacy Level regarding Internet Entrepreneurship Intention

According to the summary of post hoc tests presented in Figure 3, there is no significant difference between individuals with medium level of digital literacy in terms of internet entrepreneurship intention in comparison to low level of digital literacy. However, individuals with high level of digital literacy have more internet entrepreneurship intention when compared to medium level of digital literacy. The mean difference between high and medium levels is 0,452 and it is significant at level of 0,05. Moreover, individuals who have high level digital literacy are more eager to be an internet entrepreneur in comparison to low level digital literacy group. The mean difference is 1,021, besides it is significant at level of 0,05.

#### 5.Conclusion

Entrepreneurship is a comprehensive influential phenomenon that combines various fields like finance and IT. The sophisticated feature of entrepreneurship has brought a contemporary term described as "Internet Entrepreneurship" which mean "using new digital technologies and knowledge to set up a business on the internet". Traditionally to become an entrepreneur, some degree of finance knowledge is required. However, to be an entrepreneur on the Internet, in other words internet entrepreneur, an individual is expected to have some degree of digital knowledge. In this study, the expected effects of financial literacy and digital literacy on internet entrepreneurship intention of individuals were tested. The findings show that both financial literacy and digital literacy have significant positive effect on individual's intention of internet entrepreneurship, whereas the effect of digital literacy is stronger in comparison to financial literacy. Based on this finding, it can be concluded that digital knowledge is more essential component of an internet enterprise. In other saying, it is necessary to know how to use digital tools and to understand what digital language- in short digital literacy- mean for a candidate of internet entrepreneurship. This finding corresponds with Chen (2014) in which computer self-efficacy was found as a significant direct and indirect influencer on IT entrepreneurial intention. Wang and Lin's (2016) study supports those findings by identifying the positive effect of perceived behavioral control on internet entrepreneurship. In addition, according to the findings of present study, the need for digital literacy must be at least medium level to run an Internet business.

As an implication of the findings, entrepreneurship course contents, which is compulsory in many business education programs, should be designed more digital-oriented to increase the digital literacy level of students, especially business students. However, those findings must be tested with different sample groups, or with various internet entrepreneurship intention scales. In conclusion, some defined antecedents of entrepreneurship in the literature as risk-taking, tolerance to ambiguity, need for success also must be examined within internet entrepreneurship intention.

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## **APPENDIX A**

ITEMS	Totally Disagree	Disagree	Neither Disagree Nor Agree	Agree	Totally Agree
Imagine that five brothers are given a gift of \$1000. If the brothers have to share the money equally, each one gets \$ 200.	1	2	3	4	5
Now imagine that the brothers have to wait for one year to get their share of the X. In one year's time will they be able to buy less than they could buy today.	1	2	3	4	5
If you lend X to a friend one evening and he gives you X back the next day, the interest has he paid on this loan is 0% (zero percentage).	1	2	3	4	5
Suppose you put \$100 into a savings account with a guaranteed interest rate of 2% per year. You don't make any further payments into this account and you don't withdraw any money. At the end of the first year, once the interest payment is made, \$102 would be in the account.	1	2	3	4	5
Suppose you put \$100 into a savings account with a guaranteed interest rate of 2% per year. You don't make any further payments into this account and you don't withdraw any money. More than \$110 would be in the account at the end of five years.	1	2	3	4	5
An investment with a high return is likely to be high risk.	1	2	3	4	5
High inflation means that the cost of living is increasing rapidly.	1	2	3	4	5
It is usually possible to reduce the risk of investing in the stock market by buying a wide range of stocks and shares.	1	2	3	4	5
I know how to make basic changes to the content that others have produced.	1	2	3	4	5
I know how to change who I share content with (e.g. friends, friends of friends or public).	1	2	3	4	5
I know how to upload files.	1	2	3	4	5
I find it hard to decide what the best keywords are to use for online searches.	1	2	3	4	5
I know how to download apps to my mobile device.	1	2	3	4	5
I will start a business on the Internet in the future.	1	2	3	4	5
I intend to start an Internet business.	1	2	3	4	5
I plan to start a business on the Internet in the future.	1	2	3	4	5

# FUNDA BAYRAKDAROĞLU - ALİ BAYRAKDAROĞLU

# APPENDIX B

	Test of Homoger	neity of Variances	
	IEI f	or DL	
Levene Statistic	df1	df2	Sig.
,222	2	172	,801
	Test of Homoger	neity of Variances	
	IEI f	FL Or FL	
Levene Statistic	df1	df2	Sig.
,845	2	172	,431