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PAGES: 170-173

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# The Effects of Skillset of University Graduates on the Ease of Finding Skilled Employees

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#### **Abstract**

Both for firms and for the countries, it is vital to find qualified human capital in order to compete in the highly competitive world economy conditions. On the other hand, it is also clear that university education has the most important role to establish a skillset and qualification for the graduates. In this context, the main of this study is to analyse the effects of skillset of university graduates on the ease of finding skilled employees. Main finding of the study is that ease finding of skilled employees increase, as the skillset of university graduates increases. For this reason, it is a critical policy to increase the quality of university education in order to improve skillset of human capital and sustainable economic development. It is concluded that university and industry collaboration is vital to design optimal academic and practical skillsets of the graduates and to determine how to achieve these targets.

Keywords: Skillset, University Graduates, Skilled Employees

## Üniversite Mezunlarının Beceri Düzeylerinin Niteliklik İşgücü Bulma Üzerindeki Etkileri

#### Özet

Rekabet düzeyinin yüksek olduğu dünya ekonomisi koşullarında, hem firmalar hem de ülkeler için, nitelikli insan sermayesi bulmak rekabet edebilmek için büyük öneme sahiptir. Diğer yandan, üniversite eğitiminin mezunlar için beceriler ve nitelik kazandırma konusunda en önemli role sahip olduğu açıktır. Bu bağlamda, bu çalışmanın amacı, üniversite mezunlarının beceri düzeylerinin, yetenekli işgücü bulma kolaylığı üzerindeki etkilerini incelemektir. Çalışmada ulaşılan temel sonuç, üniversite mezunlarının beceri düzeyi arttıkça, nitelikli personel bulma kolaylığının arttığı yönündedir. Bu nedenle, insan sermayesi becerisini ve sürdürülebilir ekonomik kalkınmayı geliştirmek için üniversite eğitiminin kalitesinin artırılması önemli bir politika olarak karşımıza çıkmaktadır. Üniversite ve sanayi işbirliğinin, mezunların optimal akademik ve pratik becerilerini tasarlamak ve bu hedeflere nasıl ulaşılacağını belirlemek için hayati olduğu sonucuna ulaşılmaktadır.

Anahtar Kelimeler: Beceri Seti, Üniversite Mezunları, Nitelikli İşgücü

#### 1. INTRODUCTION

It is vital to find qualified human capital both firms and the countries in order to compete and growth in the highly competitive world economy conditions. It is also clear that university education has the most important role to establish a skillset and qualification for the graduates. For this reason, the main of the study is to analyse the relationship between the effects of skillset of university graduates on the ease of finding skilled employees for 140 countries 2018 data by using ANOVA test.

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#### 2. LITERATURE

Human capital is the most important factor to achieve sustainable economic development and take up the challenge from the global competition. For this reason, university education is the most important factor affecting the qualifications and skillset of the human capital. In the literature, there are many studies concluded that the continuing professional and personal development by university and industry collaboration are essential to success in both professional career and personal life (see Hoffmann and Ash, 2001, Fallows and Steven, 2000; Mason et al, 2009; Yorke, 2006; Cassidy, 2006; Fallows and Steven, 2013; Morley, 2001; Andrews and Higson, 2008; Harvey, 2000).

Bridgstock (2009) claimed that "Graduate employability is agreed to be a key influence on economic growth

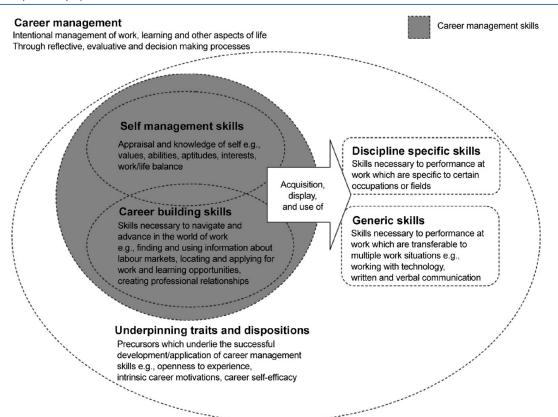


Figure.1. Conceptual model of graduate attributes for employability including career management skills.

**Source:** Bridgstock, R. (2009). The graduate attributes we've overlooked: Enhancing graduate employability through career management skills. Higher Education Research & Development, 28(1), 31-44.

in the worldwide knowledge economy and the significance of universities to this agenda is self-evident. Recent policy moves towards support of universities in this task, through strategic employability funding; enhancement of teaching and learning for employability; work-integrated learning programs. However, graduate employability programs emphasising individual skills and knowledge need to be complemented by targeted geographical and industry development, continuing (lifelong) education programs beyond university and social inclusion initiatives in order to be effective (see also Figure.1)."

Brown et al (2003) stated that "the economic welfare of individuals and the competitive advantage of nations have come to depend on the knowledge, skills and enterprise of the workforce. Those with degree-level qualifications are seen to play a particularly important role in managing the 'knowledge-driven' economy of the future".

Tanyel et al (2010) stated that "as the business environment changes, the desired skills and abilities of business school graduates change". On the other hand, when theoretical education is supported by on-the-job training, the qualification and skillset of the students develops better.

Raymond et al (1993) stated that "Lack of work experience, unrealistic expectations, and poor written communication skills are perceived by employers as weaknesses of many business school graduates. Internships and projects provide a "real-world" experience and help students learn to think and solve problems and develop their communica-

tion skills, which are all critical components of an education. Experience also helps students grasp the importance of dependability and initiative. "Hands-on" learning experiences combined with the academic skills that students learn in the classroom help to provide business school graduates with a competitive advantage in the workplace."

Crebert et al (2007) stated that "while graduates recognized the contribution university had made to their generic skills development, they greatly valued the experience of learning in the workplace during placement and subsequently in employment. The importance of teamwork, being given responsibility, and collaborative learning emerged as the most important factors for effective learning in the three contexts under consideration". Students also recognized that their academic knowledge and skills must be supported by the on-the-job training and workplace experince.

Tomlinson (2008) stated that "the UK Government is calling upon higher education students to see their learning as an investment that will give them direct benefits in the labour market. At the same time, the relationship between educational credentials and their returns in labour market has been changing in recent times. Students perceive their academic qualifications as having a declining role in shaping their employment outcomes in what is perceived to be a congested and competitive graduate labour market. While academic credentials are still seen as a significant dimension of their employability, students increasingly see the need to add value to them in order to gain an

advantage in the labour market".

Andrews and Higson (2008) claimed that "Three significant themes emerged for graduate employability: Business Specific Issues (Hard business-related knowledge and skills); Interpersonal Competencies (Soft business-related skills); Work Experience and Work-Based Learning. Business graduates are equipped with more than hard business-focused skills and competencies. Work experience, and an ability to utilise softer business-related skills and abilities are also vital."

Jackson (2015) claimed that "Work-integrated learning is widely considered instrumental in equipping new graduates with the required employability skills to function effectively in the work environment. Evaluation of work-integrated learning programs in enhancing skill development remains predominantly outcomes-focused with little attention to the process of what, how and from whom students acquire essential skills during work placement."

It is clear that university and industry collaboration is vital to design optimal academic and practical skillsets of the graduates and to determine how to achieve these targets.

#### 3. DATA AND METHOD

The data is obtained from the Global Competitiveness Index Report for the year 2018 and 140 countries. The variables are Skillset university graduates and Ease finding of skilled employees (for the both variable the scale is 1-7 scale, 7 is the best).

The method is ANOVA test. The countries are classified into three groups by skillset level of the university graduates, low, medium and high. It is analysed that whether ease finding of skilled employees increase or not, as skillset of university graduates increases.

#### 4. EMPIRICAL RESULTS

Table.1 shows descriptive statistics for ease finding of skilled employees. According to the results, the mean of the ease finding of skilled employees for the countries with low skillset university graduates is 3,53 (the scale is 1-7, 7 is the best), with medium skillset university graduates is 4,17 and with high skillset university graduates is 4,93.

Table.1 Descriptive Statistics For Ease finding of skilled employees

	Skillset	Skillset university graduates			
	Low Medium High				
Mean	3,53	4,17	4,93		
Median	3,56	4,21	4,97		
Variance	0,18	0,20	0,14		
Std. Deviation	0,42	0,44	0,37		
Minimum	2,08	3,25	3,72		
Maximum	4,17	5,01	5,75		
Range	2,09	1,76	2,03		
Interquartile Range	0,56	0,64	0,37		
Skewness	- 1,05	- 0,32	- 0,99		
Kurtosis	2,13	- 0,71	3,17		

Table.2 shows the normality test results for ease finding of skilled employees. According to the results, variables distribute normally at the 0.01 significant level.

Table.2 Normality Test Results For Ease Finding Of Skilled Employees

Skillset university	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
graduates	Statistic	df	Sig.	Statistic	df	Sig.
Low	,082	43	,200*	,936	43	,019
Medium	,084	66	,200*	,969	66	,098
High	,127	31	,200*	,931	31	,046
*. This is a lower bound of the true significance.						
a. Lilliefors Significance Correction						

Table.3 shows the Levene test results for ease finding of skilled employees. According to the results, Levene's test showed that the variances are equal.

Table.3 Levene Test Results For Ease Finding Of Skilled Employees

Levene Statistic	df1	df2	Sig.
1,927	2	137	,150

Table.4 shows ANOVA Test results, according to the results, the null hypothesis is rejected at the significant level 0.01, the mean of ease finding of skilled employees is not equal by the different level skillset of university graduates.

Table.4 ANOVA Test Results

Ease finding skilled employees						
	Sum of Squares df Mean Square F Sig.					
Between Groups	35,623	2	17,812	100,620	,000	
Within Groups	24,252 137 ,		,177			
Total 59,875 139						

Table.5 shows the multiple comparisons test results, according to results, the null hypothesis is rejected at the significant level 0.01 for all pairwise group comparisons, the mean of ease finding of skilled employees is not equal by the different level skillset of university graduates for all pairwise group comparisons.

**Table.5** Multiple Comparisons Test Results

	Dependent V	ariable: Ease fi	nding skilled en	nployees	
	(I) Skillset university graduates	(J) Skillset university graduates	Mean Difference (I-J)	Std. Error	Sig.
Tukey HSD	Low	Medium	-,64236*	,08245	,000
		High	-1,40425*	,09913	,000
	Medium	Low	,64236*	,08245	,000
		High	-,76188 <sup>*</sup>	,09161	,000
	High	Low	1,40425*	,09913	,000
		Medium	.76188*	.09161	,000

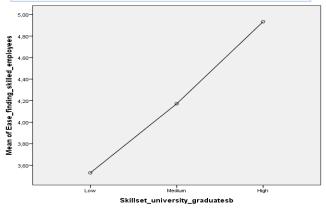
Table.6 shows homogeneous subsets for the variable ease finding skilled employees, according to results, the mean of groups has a different subset.

Figure.2. shows the relationship between ease finding of skilled employees and skillset of university graduates. According the results there is a positive relationship between the variables.

**Table.6** Homogeneous Subsets For The Variable Ease Finding Skilled Employees

	Skillset univer-	N	Subset for alpha = 0.05			
	sity graduates		1	2	3	
Tukey HSD <sup>a,b</sup>	Low	43	3,5293			
	Medium	66		4,1717		
	High	31			4,9335	
	Sig.		1,000	1,000	1,000	
Means for groups in homogeneous subsets are displayed.						
a. Uses Harmonic Mean Sample Size = 42.454.						
b. The group sizes are unequal. The harmonic mean of the group sizes is						

b. The group sizes are unequal. The harmonic mean of the group sizes i used. Type I error levels are not guaranteed.



**Figure.2.** The relationship between ease finding of skilled employees and skillset of university graduates

#### 5. CONCLUSION

It is vital to find qualified human capital both firms and the countries in order to compete and growth in the highly competitive world economy conditions. It is also clear that university education has the most important role to establish a skillset and qualification for the graduates. For this reason, the main of the study is to analyse the relationship between the effects of skillset of university graduates on the ease of finding skilled employees for 140 countries 2018 data by using ANOVA test. Main finding of the study is that ease finding of skilled employees increase, as the skillset of university graduates increases. For this reason, it is a critical policy to increase the quality of university education in order to improve skillset of human capital and sustainable economic development. It is concluded that university and industry collaboration is vital to design optimal academic and practical skillsets of the graduates and to determine how to achieve these targets.

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