

Assessing the Relationship between Demographic Factors and Employability among University Graduates in the Maldives

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Abstract

Graduate employability has become a global concern currently. Higher Education Institutions (HEI's), human resource managers and policy makers are keen to find answers for factors contributing to Employability. In Maldives, unemployment rate of the youth (15-24 years) is 22% which is not due to lack of jobs but due to a gap in the skills needed for employability. The purpose of the current study is to find out whether there is a relationship between demographic factors and employability of graduates in Maldives. A cross sectional institutions-based quantitative study was conducted among graduates from two HEI's in Maldives and simple random sampling method was used for the purpose of the study. 396 questionnaires were turned in with a response rate of 66%. The findings from the study shows that from the seven demographic factor dimensions, the derived values were statistically significant for the dimensions Age and Time taken for employment after graduation $R^2 = 0.040$, $F(1, 314) = 0.512$ ($p < 0.05$) for Employability. The mean difference among the age group and time taken for employment after graduation, there was not much difference showed when tested by Post-hoc Tukey HSD test. Even though, the term employability gives the impression that getting employed depends on the individual and their willingness to do beyond their knowledge, employability can be regarded as an approach where increasing graduands readiness to develop and sustain qualities that are useful in the labour market.

Key words: Demographic factors, Graduate employability, High Education Institutions, Maldives.

Introduction

In the recent years and even now, to develop potential human resource for job market, higher education institutes (HEIs) do play a vital role in developing employability (Majid, Hussin, Norman, & Kasavan, 2020). Higher education institutes do assist in producing employable graduates who can serve with dedication and innovative skills according to the demand (Hosain, Mustafi, & Parvin, 2021) and in order to achieve this higher education systems (HES) has gone through lots of transformations (Okolie, Igwe, Eneje, Nwosu, & Mlanga, 2019). Swift technological changes have made a great impact on the uselessness of the acquired knowledge in this fast moving era, which has led to drastic changes in the job structure and skill demands where organizations are looking out for graduates which can handle intricacy in the workplace, which has raised queries regarding the nature of the graduates leaving tertiary education (Mainga, Daniel, & Alamil, 2022). Human resource managers and

policy makers have been trying to find answers to the question how (aging) employees can be contributing to their organizations in positive ways, (Schrimpf, Froehlich, & Venegas, 2021) explains that previous research has discussed the factors of employability at the level of individuals and these include sequential age, education, job related skills, personality traits and learning activities.

In order to reinforce the professional objectives HEIs do focus on employability as a logical response in ensuring that the graduate are students are ready to the job market (Cheng, Adekola, Albia, & Cai, 2021) Cheng et al., (2021) states that even though, after all these developments in HEIs some researchers are exhausted of this responsibility of HEIs in advancing employability. Due to various reasons despite of the high number of HEIs established globally 1.21 youths (15.5% of the global population; females 30% and males 13%) aged 15-24 are deprived of education, employment, or training and about 776 million of the young population are unemployed (Angun & Alpaydin, 2022). Similarly, In the Maldives, unemployment rate of the youth (15-24 years) is 22% which is not due to lack of jobs but due to a gap in the skills needed for employability (Ministry of Education, 2019).

UNESCO report (2012) states that the enrolment of students for tertiary education has increased fivefold from 28.6 million to 152.2 million with the years 1970-2007, but with this unemployment rates has increased from 5.6% to 6.2% from 2007 to 2010 indicating concerns for the dynamic workforce of the nations as majority of them are high education graduates (Tang, 2019). Thus, Angun and Alpaydin, (2022) indicated that to survive in the business world and achieve the dream of creating a better future for the graduates a comprehensive skill set is needed.

Majid et al., (2020) explains that employability skills such as communication; teamwork; problem solving; initiative and enterprise; planning and organizing; self-management; long-life learning and competence in technology are valuable assets to employers. Thus, based on the existing research Employability can be categorized in to two, the first being the employability performance i.e., employability is considered as a combination of different dimensions known as interior factors such as personal knowledge, technical and team working skills and external factors include demand and supply of job market.

The second category is skills and capabilities from the perspective of personal ability which is a combination of competitive skills and abilities which helps graduates to accomplish employment and development (Hosain, Mustafi, & Parvin, 2021). Hosain et al., (2021) further explains that most of the existing researched studies stressed that graduate employability is kind of soft skills needed to achieve career success.

Unemployment has become a topic of attention among higher education institutions due to the increasing rate of unemployability world-wide (Tang, 2019; Angun & Alpaydin, 2022). Thus, this study is conducted to find out whether there is a relationship between demographic factors such as gender, age, highest qualification, type of employment, time taken to get employment after graduation and job and area of study and employability in Maldives.

Methodology

A cross sectional institutions-based study was conducted among graduates from two HEI's in Central Male' area, in the Maldives. These two institutions are two very prominent

tertiary education institutions in Maldives, simple random sampling method was utilized for this study. The study population of this study was 1662. The study focused on graduates who had completed bachelor's and postgraduate diploma from these two institutions in the year 2018 and 2019. The graduands were invited to participate in this study using google form through email, and Viber. However, only 396 were able to participate in this survey with a response rate of 66%.

The conceptual framework used for this research is based on finding out whether there is any relationship between demographic factors and employability among graduates in the Maldives.

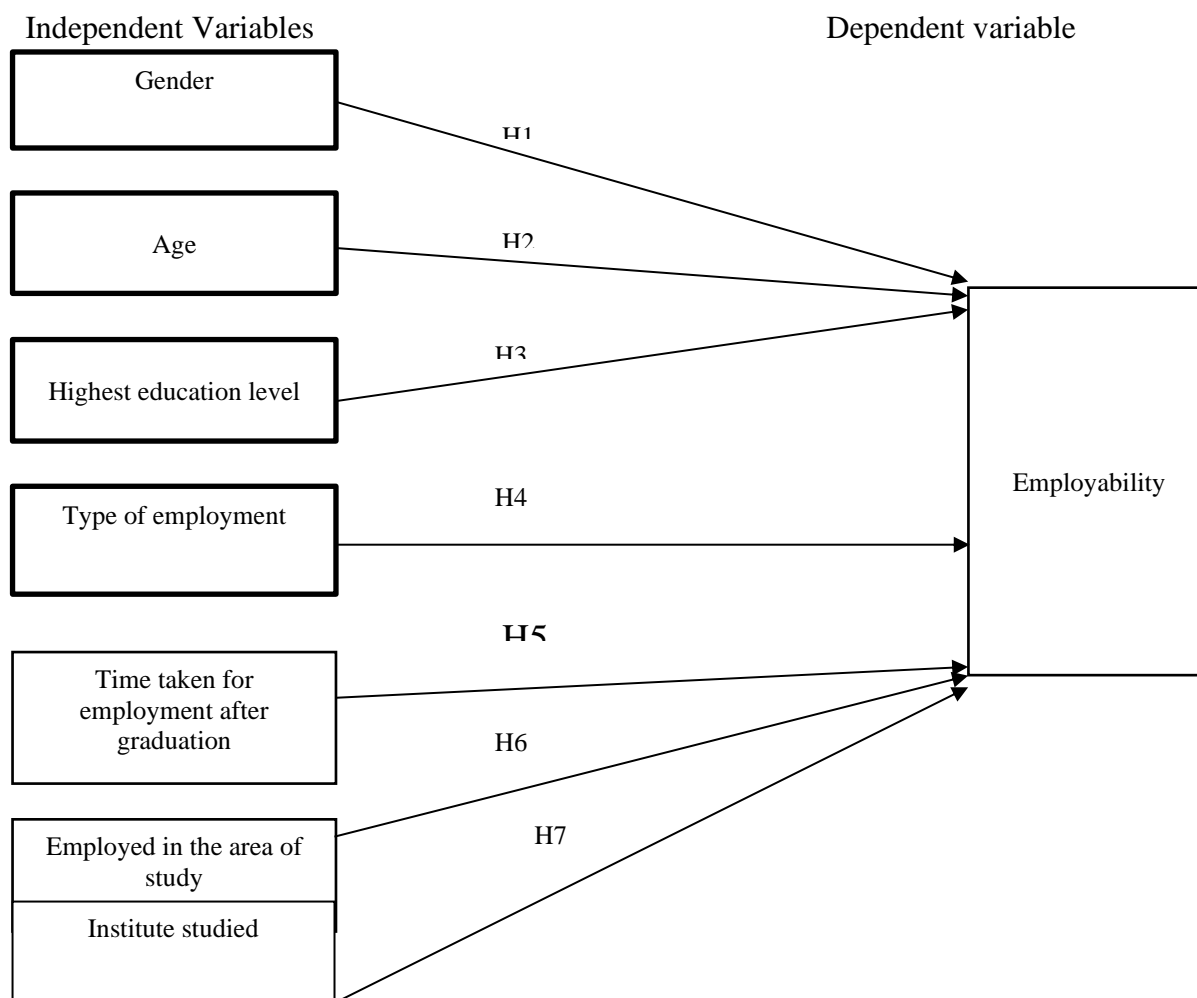


Figure 1: *Conceptual framework indicating the Hypothesis for the research.*

The Hypothesis for this study to be proven are whether there is a relationship between the determinants of the Demographic Factors and Employability

H1- There is a relationship between gender and employability.

H2 -There is a relationship between age and employability.

H3 -There is a relationship between Highest education level and employability.

H4 -There is a relationship between Type of employment and employability.

H5 -There is a relationship between time taken for employment after graduation and employability.

H6 -There is a relationship between employed in the area of study and employability.

H7 -There is a relationship between employed Institute studies and employability.

The tool used for the research was adapted from Bezuidenhout (2011), the questionnaire consists of 19 items for the dependent variable employability, excluding the 7 demographic variables as the independent variable. This scale measures whether the demographic variables have any relationship with employability. Employability as a survey questionnaire is measured using Likert scales. The Likert scale consists of a number of statements which expresses either favorable or unfavorable attitude towards the given purpose which the participant is asked to respond for the Likert scale of 1-5 which is 1) Strongly disagree, (2) Disagree, (3) Neither agree nor disagree (4) Agree, (5) Strongly agree.

The Statistical Package for Social Sciences (SPSS) version 25 program was used for data analysis. A simple linear regression test was used to determine the statistical significance among the variables Demographic Factors and Employability. Post Hoc analysis using One-way ANOVA, Tukey's test was done to understand how different groups differ with the chosen variable.

Results

Simple linear regression was carried out to find the statistical significance among the variables for the study.

Data Analysis using Simple linear regression

Table 1: *Gender in relation to Employability*

Model	R	R ²	F	df1	Model Selection		Sig.	
					Unstandardized Coefficients	Standardized Coefficients		
					B	Std. Error	Beta	
1	0.047 ^a	0.002	0.692	1	Constant	0.111		0.000
					4.304			
					Gender	0.062	-0.47	0.406
					-0.052			

Dependent Variable: Employability

a. Predictors: (Constant), Gender

Linear regression analysis was carried out to calculate and predict the impact of Gender on Employability. Using The model of Gender, to predict Employability (Model 1), shows that the derived values were statistically not significant for the Employability, $R^2 = 0.047$, $F(1, 314) = 0.692$, ($p > 0.05$).

The statistical hypothesis test for the p-value is:

H_{0a}: There is no relationship between Gender and Employability

H_{1a}: There is a relationship between Gender and Employability

The P value from the coefficients table shows that the independent variable (Gender) does not have significant effect on Employability ($p > 0.05$).

Table 2: Age in relation to Employability

Model	R	R ²	F	df	Model Selection		Sig.
					Unstandardized Coefficients B	Standardized Coefficients Beta	
1	0.170 ^a	0.029	9.399	1	Constant 3.983	0.081	0.000
Residual =314					Age 0.115	0.037	0.170 0.002

Dependent Variable: Employability
a. Predictors: (Constant), Age

Linear regression analysis was carried out to calculate and predict the impact of Age on Employability. Using The model of Age, to predict Employability (Model 1), shows that the derived values were statistically significant for the Employability, $R^2 = 0.170$, $F(1, 314) = 9.399$, ($p > 0.05$).

The statistical hypothesis test for the p-value is:

H_{0a}: There is no relationship between Age and Employability

H_{2a}: There is a relationship between Age and Employability

The P value from the coefficients table shows that the independent variable (Age) does have significant effect on the Employability ($p > 0.05$), but the beta values is low.

This shows that the independent variable has an extremely limited explanatory power on the change in Employability.

Table 3: Highest education level in relation to Employability

Model	R	R ²	F	df	Model Selection		Sig.
					Unstandardized Coefficients B	Standardized Coefficients Beta	
1	0.099 ^a	0.010	3.116	1	Constant 4.064	0.090	0.000
Residual =314					Highest Education level 0.128	0.072	0.99 0.078

Dependent Variable: Employability
a. Predictors: (Constant), Highest education level

Linear regression analysis was carried out to calculate and predict the impact of Highest education level on Employability. Using The model of Highest education level, to predict Employability (Model 1), shows that the derived values were statistically not significant for Employability, $R^2 = 0.099$, $F(1, 314) = 3.116$, ($p > 0.05$).

The statistical hypothesis test for the p-value is:

H_{0a}: There is no relationship between Highest education level and Employability

H_{3a}: There is a relationship between Highest education level and Employability

The P value from the coefficients table shows that the independent variable (Highest education level) does not have significant effect on the Employability ($p > 0.05$).

Table 4: *Type of employment in relation to Employability*

Model	R	R ²	F	dfl	Model Selection		Sig.	
					Unstandardized Coefficients	Standardized Coefficients		
					B	Std. Error	Beta	
1	0.051 ^a	0.003	0.816	1	Constant	4.300	0.098	0.000
Residual =314					Type of employment	-0.075	0.083	-0.051
								0.367

Dependent Variable: Employability

a. Predictors: (Constant), Type of employment

Linear regression analysis was carried out to calculate and predict the impact of Type of employment on Employability. Using The model of Type of employment, to predict Employability (Model 1), shows that the derived values were statistically not significant for the Employability, $R^2 = 0.051$, $F(1, 314) = 0.816$, ($p > 0.05$).

The statistical hypothesis test for the p-value is:

H_{0a}: There is no relationship between Highest education level and Employability

H_{4a}: There is a relationship between Highest education level and Employability

The P value from the coefficients table shows that the independent variable (Highest education level) does not have significant effect on the Employability ($p > 0.05$).

Table 5: *Time taken for employment after graduation in relation to Employability.*

Model	R	R ²	F	dfl	Model Selection		Sig.	
					Unstandardized Coefficients	Standardized Coefficients		
					B	Std. Error	Beta	
1	0.051 ^a	0.003	0.822	1	Constant	4.160	0.067	0.000
Residual =314					Type of employment	0.019	0.020	0.051
								0.365

Dependent Variable: Employability

a. Predictors: (Constant), Time taken for employment after graduation

Linear regression analysis was carried out to calculate and predict the impact of Time taken for employment after graduation on Employability. Using The model of Time taken for employment after graduation, to predict Employability (Model 1), shows that the derived values were statistically not significant for the Employability, $R^2 = 0.051$, $F(1, 314) = 0.822$, ($p > 0.05$).

The statistical hypothesis test for the p-value is:

H_{0a}: There is no relationship between Time taken for employment after graduation and Employability

H_{5a}: There is a relationship between Time taken for employment after graduation and Employability

The P value from the coefficients table shows that the independent variable (Time taken for employment after graduation) does not have significant effect on the Employability ($p > 0.05$).

Table 6: *Employed in the area of study in relation to Employability.*

Model	R	R ²	F	df	Model Selection		Sig.	
					Unstandardized Coefficients	Standardized Coefficients		
					B	Std. Error	Beta	
1	0.010 ^a	0.000	0.035	1	Constant	4.232	0.095	0.000
					Type of employment	-0.015	0.079	-0.010
Residual =314								0.853

Dependent Variable: Employability

a. Predictors: (Constant), Employed in the area of study

Linear regression analysis was carried out to calculate and predict the impact of Employed in the area of study on Employability. Using The model of Employed in the area of study, to predict Employability (Model 1), shows that the derived values were statistically not significant for the Employability, $R^2 = 0.010$, $F(1, 314) = 0.035$, ($p > 0.05$).

The statistical hypothesis test for the p-value is:

H_{0a}: There is no relationship between Employed in the area of study and Employability

H_{5a}: There is a relationship between Employed in the area of study and Employability

The P value from the coefficients table shows that the independent variable (Employed in the area of study) does not have significant effect on the Employability ($p > 0.05$).

Table 7: *Institute studied in relation to Employability.*

Model	R	R ²	F	df	Model Selection		Sig.	
					Unstandardized Coefficients	Standardized Coefficients		
					B	Std. Error	Beta	
1	0.040 ^a	0.002	0.512	1	Constant	4.158	0.084	0.000
					Type of employment	0.043	0.060	0.040
Residual =314								0.475

Dependent Variable: Employability

a. Predictors: (Constant), Institute studied

Linear regression analysis was carried out to calculate and predict the impact of Institute studied on Employability. Using The model of Institute studied, to predict Employability (Model 1), shows that the derived values were statistically not significant for the Employability, $R^2 = 0.040$, $F(1, 314) = 0.512$, ($p > 0.05$).

The statistical hypothesis test for the p-value is:

H_{0a}: There is no relationship between Institute studied and Employability

H_{5a}: There is a relationship between Institute studied and Employability

The P value from the coefficients table shows that the independent variable (Institute studied) does not have significant effect on the Employability ($p > 0.05$).

Age, and Employability

For the variable Employability the following dimensions of the variable demographic factors was not significant. Gender ($F= 3.116$, $P = .078$), Highest level of Education ($F= 0.816$, $P = .367$), Type of Employment ($F= 0.822$, $P = .365$), Employed in the area of study ($F= 0.035$, $P = .853$), Institute studies ($F= 0.512$, $P = .475$). Age ($F= 4.803$, $P = .009$) and Time taken for employment after graduation ($F= 2.488$, $P = .043$) was significant for Employability.

Table 8: Difference in Employability for Age

Age	N	Mean	F	df	sig
18-25 years	83	4.1103	9.399	314	.002
26-35 years	143	4.1980			
35 years and above	90	4.3392			

One-way ANOVA was employed to examine if there is a significant difference in Employability based on Age. Age was classified into three categories: (i) 18-25 years, (ii) 26-35 years and (iii) 36 years and above.

The results of the analysis conducted accordingly are shown in Table 8. According to the results, there is a significant difference in Age for Employability among the three groups: $F(313) = 3.397$, $p = .009$. Despite the significant result, the difference in mean scores between the groups is low. Following this result, a post-hoc procedure using Tukey HSD test was conducted to find out where exactly the difference lies. The investigation revealed that not much difference lies between 18-25 years ($M=4.1103$), 26-35 years ($M=4.1980$) and 36 years and above (4.3392).

Table 9: Difference in Employability for Time taken for employment after graduation.

Time taken for employment after graduation	N	Mean	F	df	sig
0- 6 months	85	4.2223	2.488	311	.043
0- 6 months	26	3.9291			
12 months and above	37	4.2888			
Was employed when graduated	148	4.2383			

One-way ANOVA was employed to examine if there is a significant difference in Employability based on Time taken for employment after graduation. Time taken for employment after graduation was classified into five categories: (i) 0- 6 months, (ii) 6- 12 months, (iii) 12 months and above (iv) was employed when graduated and (v) others

The results of the analysis conducted accordingly are shown in Table 9. According to the results, there is a significant difference in Time taken for employment after graduation for Employability among the three groups: $F(3,11) = 2.488$, $p = .043$. Despite the significant result, the difference in mean scores between the groups is low. Following this result, a post-hoc procedure using Tukey HSD test was conducted to find out where exactly the difference lies. The investigation revealed that not much difference lies between 0- 6 months ($M=4.2223$), 6- 12 months ($M=3.9291$), 12 months and above ($M=4.2888$), was employed when graduated ($M=4.2383$) and others (4.2500).

Discussion

The findings from the simple linear regression done for this study shows that from the 7 demographic factors (Gender, Age, Highest education level, Type of employment, Time taken for employment after graduation, employed in the area of study and Institute studied). Only one demographic factor (Age) has an impact on Employability. There were 7 hypotheses which were tested as demographic factors for employability. From those 6 demographic factors (Gender, Highest education level, Type of employment, Time taken for employment after graduation, employed in the area of study and Institute studied) the null hypothesis was accepted as there were no significant relationship between these factors unlike age. The hypothesis age has a significant relationship with employability and was accepted.

Multiple linear regression analysis was carried to find the demographic factor dimensions Which were significant for Employability. Age and Time taken for employment after graduation were the significant dimensions for Employability in this study. A study done by Schrimpf, Froehlich and Venegas (2021) states that the aging workforce challenges companies to retain their aging employees in the workforce and it has been Enlightened in research that age is an influencing factor for employees' employability, and it supports the findings for this study. Another researcher argues that age is a crucial factor affecting graduate employment (Poon, 2016) emphasizes that men aged 33 at graduation are 6 times more unlikely to get unemployed than men aged 24 years. Therefore, the result of this study supports existing literature that age does have an impact on employability but there is no clearcut threshold impact. According to (Froehlich, Aasma, & Beausaert, 2020) mixed arguments and empirical findings have surfaced between employability and age expressing that young workforce are more competent and skilled than older workers.

To compare the mean differences one- way ANOVA was carried out and the results showed that Age and time taken for employment after graduation had an impact on Employability in Maldives context. Further to study whether a mean difference was there among the study groups of each dimensions a Post Hoc Tukey test was carried out. Age and time taken for employment after graduation showed that there was no significant difference between the groups for Employability. In the context of Maldives about 22% of the age group between 15-24 are unemployed (Ministry of Education, 2019). Another researcher explains

that HEIs due to various reasons globally 15.5% of the youths are unemployed (Cheng, Adekola, Albia, & Cai, 2021).

There are other factors also influencing employability according to (Nikunen, 2021) finding employment has been a challenge for the youth in the past years and this not only due to the high increase in the unemployment rates but getting entry to the work life has become more challenging as it is not about credentials and skills but more about personal capacities and capabilities. Hence, (Cheng, Adekola, Albia, & Cai, 2021) supports the above statement by explaining that even employers perceive that graduates need to be more open for learning beyond subject knowledge.

Conclusion and recommendations

This paper reveals that demographic factors do not contribute much on employability such as form which university the graduate has studied, gender or age. Literature has shown a glimpse that employability depends on the capacity of an individual. Therefore, future research needs to be done on areas focusing on how graduates perceive employability in the Maldives context and what other factors influence such as creativity, communication, collaboration and critical thinking or how to build capacity. Hence, the term employability gives the impression that getting employed depends on the individual and their willingness to do beyond their knowledge.

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