Gender Differences in Enhancing Students' Employability Skills

Theresia Dominic[11]
Katherine Fulgence[12]

Abstract

Men and women have different ways of capturing pieces of information given to them for learning purposes. This study highlights the potential differences in students' inclination towards developing employability skills. Descriptive characteristics and associations between gender and level of skills, the level of students' involvement in extra-curricular activities (ECAs) and their intention to become self-employed were investigated. Stratified random sampling was used to collect data from degree groups. Thereafter, data from 359 university students were collected using a questionnaire. The results indicate that all students display average levels of core skills but male and female students differ significantly in their level of core competencies, with males displaying higher levels of core competencies than females. In addition, the results from the chi-square test indicate a significant association between gender and the level of participation in ECAs. Moreover, as students face two career choices between paid and self-employment, males are more likely to choose self-employment than female students. Further analysis indicates the contribution of degree programme, parents' background and students' experience in doing business as factors that affect their employability. Theoretically, the study highlights gender differences in terms of employability skills, engagement in ECAs and intention to become self-employed considering the stated factors. As regards policy and practical relevance, higher learning institutions are recommended to consider gender differences as they develop relevant ECAs in order to enhance students' employability skills equally regardless of their gender.

Keywords: Gender, employability, employability skills, self-employment.

Introduction

The issue of employability has been foremost in different universities (Clarke, 2017; Vargas et al., 2019), because employers have been very vocal about the ability of universities to deliver graduates who can make an effective contribution to the modern workplace. They seek graduates who can demonstrate practical knowledge and competencies in their respective disciplines (social science, pure science or applied science). On the other side, Governments seek to support programmes which enhance employability skills, as well as focusing on enhancing entrepreneurial skills, so that graduates will be able to employ themselves (Li & Liu, 2011; MIT, 2011; Shimba, 2018), after realizing the role played by entrepreneurs in the private sector in reforming the economy. To do this, several universities have been directed to integrate employability skills in their course curricula so that students can be equipped with the core

[11] *University of Dar es Salaam Business School, Tanzania*
Email: dominic.theresia@udsm.ac.tz
[12] Dar es Salaam Univeristy College of Education, Tanzania
Email: katherine.fulgence@outlook.com

competencies required to become employed. This means that graduates should complete their studies in a work-ready mode while demonstrating a high level of employability skills (Clarke, 2017).

The underlying need for those skills has been brought about by the increasing effects of globalization, which calls for highly skilled, well-educated candidates who can meet future challenges (Costea et al., 2012; Fulgence, 2016). Moreover, the skills gap problem becomes more critical when prospective employees lack those skills that are most needed in the 21st century, such as the ability to communicate, speak more than once language, inter-personal skills, the ability to work in a team and to use their initiative (Sabarwal, 2013; Sumra & Katabaro, 2017). Obviously, in order to provide students with the required skills, each group of students needs to be assessed in terms of the efforts they make to acquire these skills. This is why higher learning institutions (HLIs) have agreed that employable graduates should be their key output, which is taken into consideration when developing their curriculum (Hager and Holland, 2006).

However, stakeholders in the labour market have questioned the ability of the programmes to develop transferable or employability skills (Holmes, 2013), also termed core skills and graduate competencies (Yorke & Knight, 2007; Fulgence, 2016). For example, questions are asked about whether university programmes have the same impact on female and male students with regard to the development of core skills (Stuart et al., 2011). These questions arise because the extant literature shows that male students are more inclined to capture employment opportunities than females (Edmond et al., 2017; Johansen, 2013). Hence, the under-representation of women in employment positions (in both paid and self-employment) has been consistent across cultures and countries due to the lack of support, fear of failure, and lack of competencies (Johansen, 2013; Nwankwo et al., 2012; Shinnar et al., 2012). In addition, the engagement of students in extra-curricular activities (ECAs) to improve their skills and how these institutions encourage students to change their mindset from getting employed to becoming self-employed once they complete their studies needs to be investigated.

Researchers worldwide share a concern about gender differences in the level of core skills and female students' lower participation in ECAs. Perceived gender differences in skill levels have caused an imbalance in career choice, at least for women (Kurtz-costes et al., 2014). For example, some studies indicate that female students have a better understanding of computers in the preliminary years of their studies than male students. However, female students display less confidence when exposed to the real-world environment. The study explained that cultural influences brought about the difference (Edmond et al., 2017; Mawanga, 2018). A specific example is indicated by Margolis et al. (2001), who showed that young women struggle to maintain their confidence in building core skills needed in the workplace, such as information technology skills, because the field is dominated by men in the college. Johansen (2013) showed that, although women were provided with courses to equip them with employability skills, they were under-represented in the self-employment sector. Some studies have attributed the differences to gender discrimination, lack of mentors, and females' lack of interest in male-dominated fields, e.g. computer games, technology, engineering and mathematics-related courses. Further studies indicate that these differences have been attributed to scarce resources, insufficient practical experience and lack of female role models (Edmond et al., 2017; Otache, 2019).

Interestingly, previous literature indicates that since females are exposed to more opportunities than male students, they are more likely to become employed shortly after graduating (Connor, Tyers, Modood, & Hillage, 2004). However, despite the helpful courses availed to students, the problem of employability skills is repeatedly discussed due to the mismatch between the skills produced in local universities and the needs of the skills by industries (McCowan, 2014). Studies further show mixed results as regards the engagement of females and males in ECAs as well as in developing employability skills due to contextual and perceptual differences (Edmond et al., 2017; Otache, 2019). Moreover, students' intention to become either self-employed and/or secure employment taking into consideration their level of employability skills and engagement in ECAs has not been thoroughly researched (Fulgence, 2016; James & Yun, 2018). For example, Rahman, Majid, Zubair, Yusof, Ghalib, Dzulkifli, Janon and Shuib (2012) recommend that providing students with employability skills and encouraging them to participate in ECAs are key to enhancing their employability, whether in formal or self-employment.

Given the relevance of employability skills and ECAs in preparing employable graduates (James & Yun, 2018), it was imperative to explore the current status of male and female students concerning their skills and engagement in ECAs, as well as their intention to become either self-employed or seek paid employment. The study therefore aimed to discover the potential differences in male and female students' inclination towards developing their employability skills through participating in ECAs. Three research questions are asked;

i. Do male and female students significantly differ in terms of the level of core competencies needed for employment?
ii. What is the level of students' involvement in extra-curricular activities (ECAs)? Are male students more likely to participate in ECAs than female students?
iii. What factors predict the likelihood of students' intention to become self-employed?

Literature Review

Theoretically, men and women have different ways of capturing pieces of information given to them for learning purposes (Edmond et al., 2017; Slater, Lujan, & Dicarlo, 2007). Slater et al. (2007), who picked up on these differences from Fleming's VARK model, concluded that due to these differences instructors/lecturers need to be cognizant of them and broaden their range of teaching styles. In doing so, the institutions will be able to transfer core competency skills to all groups effectively. Furthermore, Rochford & Mongino (2006) indicate that females prefer more 'variety' in the social context of learning than males, such as the opportunity to engage in other activities independently, with peers, in groups, or with teachers. Since university students engage in ECAs in various social contexts, this study assumed there would be gender differences.

Gender Ratio at the University of Dar es Salaam

The University is guided by the country's strategy to become an industrialized and middle-income country by 2025. Therefore, the University is expected to provide both males and females with the right mix of high-quality skills for the rapid development of human resources, as indicated in the educational and training policy (MoEVT, 2014). In 1993, after the University realized there was a gender imbalance in different areas of expertise and at managerial level, it was identified as one of the areas requiring strategic reform. It was also realized that if this imbalance continued to grow it would trickle down to graduates who enter the labour market after graduating. In 1997, the Gender Dimension Programme was formed to facilitate a number

of gender-responsive activities, such as students' leadership at the University and a wide range of students in the gender club (to mention a few). Together with the gender-responsive activities, major policies of the University have been reviewed for gender sensitivity, with the result that different procedures were reviewed positively to respond to gender insensitivity. At the end, there was a clear vision about what the University was expecting in the process of engendering all practices to make sure that men and women at the University are assured of equal rights and opportunities in all spheres and structures of the University (IGS, 2006).

Involvement of Students in Enhancing their Employability Skills

Employability skills are those basic skills necessary for getting and doing well in a job, either in paid or self-employment (Saunders & Zuzel, 2010; Tomlinson, 2012). The literature shows several aspects of employability, the socio-economic perspective – the ability of different labour force groups to gain and maintain employment (Clarke, 2017), the organizational perspective – where recruiters through different approaches attract competent people to attain organizational goals (Nauta et al., 2009), and the *individual perspective*, which includes the disposition, skills, attributes and behaviour that makes a person suitable for employment, i.e. either employed or self-employed (Yorke & Knight, 2007). Therefore, this study looks at the *individual perspective* and assesses the current status of students' skills and their level of involvement in ECAs while considering gender differences.

Conceptualization of Core Skills

An assessment of students' skills can be rather vague, especially when the students are not exposed to the real work environment. However, during their participation in ECAs and field practical training they are given tasks that test their basic understanding of the key drivers of business success and their understanding of business situations, i.e. *business acumen*. These skills enable a person to understand the risks and opportunities surrounding a business and the ability to have a deep understanding of strategic thinking models (Saunders & Zuzel, 2010). As adopted from Yorke & Knight (2007 p.27), core skills include numeracy, information retrieval, language skills, self-management, critical analysis, communication, oral presentations, business acumen and attention to detail. Involvement in ECAs such as sports, professional clubs and students' associations helps them to develop employability skills, such as the ability to work in a team and to lead, as well as critical thinking (Dania et al., 2014, p.121). The activities distinguish graduates in the job market because students who have engaged in ECAs tend to meet people through volunteering work, at conferences, inspirational talk events, career talks and professional clubs, thereby improving their career pathway (Stuart et al., 2011) While all students are encouraged to participate in these activities, establishing the difference in their level of participation and the group that is more likely to participate in ECAs is relevant for policy and scientific development.

The employability of individuals will depend on how well they apply and deploy the knowledge, skills and attitudes effectively to secure employment (either paid or self-employment). Going back to the literature, some studies predict that self-employed females perform less well in terms of sales and increased profits than their male counterparts because they adopt a slow rate of expansion. Furthermore, they find it more difficult to secure start-up capital than their male counterparts (Anderson, 2012; Kim et al., 2008). However, Edmond et al. (2017) indicate that females are more likely to establish a number of businesses than males but not in terms of speed of growth. Going back to this study, it was imperative to see whether these contradictory

predictions apply to female students in general, and hence assess whether female students are less likely than males to intend to become self-employed.

Methodology

The data for this study were collected between February and May in 2017 as part of a survey conducted to assess the employability of university graduates in Tanzania. The sample population comprised 1,500 third-year students from the University of Dar es Salaam (UDSM), who have attended several employability seminars organized by the University. Stratified random sampling was used to obtain a representative sample. Initially, the students were divided into three groups; (i) Bachelor of Arts; (ii) Bachelor of Commerce; and (iii) Bachelor of Science degree programmes. Thereafter, 250 questionnaires were randomly distributed to each stratum, making a total of 750 questionnaires.

The questionnaires were self-administered by the students, but at some point, the researcher was available face-to-face to provide guidance. It contained measures for perceived employability skills in the first section, while in the second section the respondents were asked to provide their demographic background data and future expectations. At the end, 359 questionnaires were filled in, making a response rate of 47.8 percent. The sample comprised 198 females and 161 males, aged between 18 and 22. The students were all in their final year of study and registered in Bachelor of Arts degree programme (22.1%), Bachelor of Commerce degree programme (28.2%) and Bachelor of Science degree programme (49.7%).

Data Analysis Techniques

The Statistical Package for Social Sciences (SPSS) Version 23 was used to statistically analyze the data. The descriptive statistics were used to show the mean score of male and female students before conducting a t-test to answer the first research question - Do male and female students differ significantly in terms of their level of core skills competence? The analysis involved one continuous variable calculated from the total core skills and one categorical independent variable (i.e. gender). We applied descriptive statistics again to show the mean values and level of ECA involvement. We ran a t-test to check whether there is a significant difference between males and females in their ability to demonstrate the core skills. Thereafter, a chi-square test was applied to explore the relationship between two categorical variables, which are gender and involvement of students in ECAs. Finally, we ran the logistic regression to take care of the third research question to predict whether or not the students would report the intention to become self-employed. The dichotomous nature of the dependent variable required the use of logistic regression.

Findings

Table 1 shows the descriptive statistics for the variables used for assessing the level of core skills. The students were asked to rate their level of competence in demonstrating the skills on a Likert scale of 1 to 5. We present means for the entire sample and a detailed comparison of scores in Appendix 1. Overall, the results suggest that students are doing well in the skills of *self-management, communication* and *critical analysis*, the least being *business acumen*. Additionally, male students seemed to score higher than female students, as, for example, males scored higher ($\overline{x}_m$=4.1, n=161) than females ($\overline{x}_f$ =3.78, n=198) in the self-management skill. This was similar for the rest of the skills and a graphic comparison can be seen in Appendix 1.

Table 1: Mean Scores for Level of Core Skills of Male and Female Students

	$\bar{x}$ (n=359)	s	$\bar{x}_m$ (n=161)	$\bar{x}_f$ (n=198)
Business acumen	3.26	1.117	3.66	2.93
Numeracy	3.27	1.099	3.54	3.05
Creativity	3.48	1.128	3.73	3.29
Language skills	3.60	1.220	3.68	3.53
Attention to detail	3.65	1.041	3.73	3.58
Information retrieval	3.71	1.141	3.86	3.59
Oral presentations	3.72	1.110	3.91	3.56
Critical analysis	3.72	1.181	3.97	3.53
Communication skills	3.80	1.072	3.96	3.67
Self-management	3.92	1.132	4.10	3.78

Min=1 Max=5; s=standard deviation, $\bar{x}$=sample mean, f=female m=male

In order to test whether there is a significant difference in terms of their level of core competencies, we applied the *Mann Whitney U Test* between two independent groups of female and male students. It is a non-parametric alternative to the t-test for independent samples.

Table 2: Mann-Whitney Test

Gender	**n**	**Mean (core skills)**	**Mean Rank (core skills)**	**Sum of Ranks**
Male	161	38.15	207.71	33441.00
Female	198	34.48	157.47	31179.00
Total students	359			

	Core skills Total Score
Mann-Whitney U	11478.000
Wilcoxon W	31179.000
Z	-4.569
Asymp. Sig. (2-tailed)	0.000

Grouping Variable: Gender of Participant
Dependent variable: Core skills (transformed to continuous variable)

Although there was a slight difference in the mean scores, as the results from the Mann-Whitney U test revealed a significant difference in the level of core skills of male (*Md* = 38.15, *n* =161) and female students (*Md* = 34.48, *n* = 198), *U* = 11478, *z* = –4.569, *p* = 0.000, *r* = 0.24. The effect size (r) was calculated as r = z / square root of N where N = the total number of students. If z = -4.569 and N = 359 (Table 2), the *r* value is therefore 0.24. This would be considered a small effect size using Cohen's (1988) criteria of 0.1 as a small effect, 0.3 as a medium effect and 0.5 as a large effect. Therefore, male and female students significantly differ in their level of core competencies. Male students display a higher level of core competencies than female students. However, the differences indicate a small effect size (*r*=0.24).

Students' Involvement in Extra-curricular Activities (ECAs)

Furthermore, a list was provided in the questionnaire to assess how often (on a scale of 1 to 5) students participate in activities, such as volunteering for work, attending extra courses,

attending conferences, etc. (Table 3). Learning how to write a CV, reading self-help books and materials about interviewing skills were observed to be the activities repeatedly done by the students. Fewer students reported having participated in competitions and networking with professionals, resulting in a low score (Table 3), which indicates mean scores for each activity, but a much greater difference was seen in activities such as "attending non-credit courses", "reading on-line materials about self-employment" and "examining websites about career development", whereby male students scored higher than female students. These activities improve students' likelihood of being ready for the work environment, as they produce more friendship networks and links with the university and increase cultural and social capital. Thus, ECAs may be less of an 'optional extra' and more of a means of acquiring vital social capital that will influence students' attainment, progression and future employment (Stuart et al., 2011). Moreover, the results indicate that female students scored higher (but less than male students) in 'reading self-help books', 'learning how to write a CV' and 'reading materials about interviewing skills'.

Table 3: Level of Students' participation in extracurricular activities (ECAs)

Activities	**Mean - All**	**Mean - Male**	**Mean - Female**	**Absolute difference**	**di**
Learn how to write a CV	3.68	3.76	3.61	0.153	
Read self-help books	3.67	3.73	3.62	0.104	
Read materials about interviewing skills	3.66	3.73	3.61	0.122	
Listen to inspirational speakers online	3.56	3.61	3.51	0.102	
Attend non-credit courses outside the university like entrepreneurship courses	3.54	3.73	3.38	0.344	
Listen to inspirational speakers live	3.53	3.52	3.55	0.032	
Read online materials about self-employment	3.51	3.67	3.37	0.299	
Read online materials about career plan	3.49	3.58	3.42	0.153	
Volunteering /Work placements	3.41	3.56	3.28	0.273	
Reading & watching videos about entrepreneurs	3.38	3.50	3.28	0.222	
Attending conferences & workshops of any kind	3.38	3.44	3.33	0.109	
Participating in students' professional clubs or professional organizations	3.35	3.40	3.30	0.101	
Engaging in career talks with professionals	3.33	3.33	3.34	0.011	
Examining websites dedicated to career development	3.32	3.47	3.19	0.277	
Writing a self-employment plan	3.27	3.33	3.21	0.116	
Writing an employment plan	3.21	3.34	3.10	0.236	
Finding out about self-assessment tests like aptitude tests, psychometric tests, personality tests	3.19	3.27	3.13	0.141	
Participating in competitions of all sorts	3.06	3.21	2.94	0.269	
Exchanging business cards with professional, investors, entrepreneurs and service providers	2.90	3.01	2.81	0.199	

Note: Max = 1, Min = 5, N=359

We later tested whether there is an association between gender and participation in ECAs. We divided the scores of the level of participation into three groups to get a categorical variable and test its association with gender.

Table 4: Gender versus Participation in Extra-curricular Activities (ECAs)

	Gender of Participant		
Students' involvement in ECAs	Male	Female	Total
Highly involved in the activities	42 (42.4%)	57 (57.6%)	99 (100%)
Less involved in the activities	83 (53.5%)	72 (46.5%)	155 (100%)
Rarely involved in the activities	36 (34.3%)	69 (65.7%)	105 (100%)
Total	161 (44.8%)	198 (55.2%)	359 (100%)

Results from the Chi Square Test

	Value	df	Asymptotic Sig. (2-sided)	Symmetric Measures		Approx. Sig.
Pearson Chi-Square	9.715[a]	2	0.008	Phi	0.164	0.008
Likelihood Ratio	9.792	2	0.007	Cramer's V	0.164	0.008
Linear-by-Linear Association	1.493	1	0.222			
N	359					

a. *0 cells (0.0%) have expected count less than 5. The minimum expected count is 44.40.*

Table 4 shows the results of cross-tabulation and the chi-square test for independence, indicating a significant association between gender and the level of participation in ECAs, i.e □ 2 (1, n=359) = 9.715, p=0.008, phi = 0.164. Therefore, male students are more likely to participate in ECAs than female students. We performed a direct logistic regression to predict the impact of a number of factors on the likelihood that the students would report that they intended to become self-employed. One categorical variable (i.e. intention to become self-employed 1=yes and 0=no), which was the dependent variable, was used. The model contained seven independent variables including our variable of interest, which was *gender* (others were parents' background, experience, participation in ECAs, pure science specialization, social science specialization, and enrolment in professional clubs). Prior to reading the model results, we assessed whether there is a predictive capacity. The results of the model can be seen in Table 5.

Table 5: Logistics Regression – showing Variables in the Equation

	B	**S.E.**	**Wald**	**Sig.**	**Exp(B)**
Gender, (1=Female 0=Male)	-1.20	.328	13.46	.000	.30
Parents' background (1=self-employed 0=Not)	1.95	.324	36.22	.000	7.03
Students' experience (1= < 3 years in business, 0= < 3 or none).	1.20	.352	11.63	.001	3.32
Extra-curricular activities ECAs (1=More than 3 activities, 0= Less or none).	.300	.345	.76	.384	1.35
Degree specialization in pure science (1=Yes, 0=No).	1.23	.518	5.66	.017	3.43
Degree specialization in social science (1=Yes, 0=No).	1.98	.567	12.15	.000	7.22
Enrolled in professional clubs (1=Yes, 0=No)	-.03	.406	.00	.948	.97

Constant	-2.73	.545	25.18	.000	.07
Dependent variable: Intention to become self-employed, 1=Yes 0=No			*df=1*		

The model containing the predictors was statistically significant, chi-square (7, N = 359) is equal to 147.08, $p < .001$, indicating that the model was able to distinguish between students who intended to become self-employed and those who did not. The model as a whole explained between *35 percent* (Cox and Snell R-square value) and 49.6 percent (Nagelkerke R-squared value) of the variance in self-employment intention, and correctly classified 83 percent of cases. These values indicate that the model had good predictive capacity.

As shown in Table 5, only four of the independent variables made a statistically significant contribution to the model at 0.05 level (i.e. gender, parents' background, experience and social science degree specialization). The strongest predictor of reporting the intention to become self-employed was social science degree specialization, recording an odds ratio of 7.22. This indicated that the students who had registered in social science degrees were 7 times more likely to report the intention to become self-employed than those who took other degree specializations, controlling for all other factors in the model. This implies that students in social science fields (Bachelor of commerce degrees), are more inclined towards self-employment due to the nature of the subjects, which include business management, marketing, finance and accounting. In addition, students from pure science fields (Bachelor of Science) are less likely to follow this route. With these results we are not concluding which group has a greater intention than the others, but are exploring the predictors of students' status concerning their choice of a career.

The odds ratio of 7.03 for parents' background indicates that students who had self-employed parents were 7 times more likely to report the intention to become self-employed than those whose parents were employed in firms or working as civil servants. Moreover, the odds ratio of 3.32 for students' experience indicates that students who had been doing business for more than 3 years[13] were 3.32 times more likely to report the intention to become self-employed than those who had been doing business for a short time. The odds ratio of 0.30 for gender was less than 1, indicating that for every additional student, female students are 0.30 times *less* likely to report the intention to establish their own business, controlling for other factors in the model.

Discussion of Findings

The study highlighted gender differences in the core skills competence of university students, with males demonstrating a higher level than their female counterparts in almost all study core skills and attributes. Research on variations in the core skills as a function of gender has provided mixed results (Babalisa, Xanthakoub, Kailac, and Stavroud, 2012; Chithra, 2013; Ajiboye et al. 2013). Chithra's (2013) study, for example, showed no difference between males and females in employability skills. This is partly attributed to cultural sensitization and socialization that resulted in the variations not being significant (Blasko et al., 2002). Other findings, such as those by Kazilan, Hamzah and Bakar (2009) and Kong (2011), show that

[13] This was not straightforward as the students who had their own business wanted to become self-employed after graduating. This was not the case because some students engaged in business to make ends meet and to afford university life. Thereafter they will seek permanent employment elsewhere.

females have a higher level of employability skills than their male counterparts, because females are more aware of core skills than their counterparts. Our findings concur with Blanker's (2012), where variations occur as regards core skills among male and female students. Two of the reasons for this are that females feel less need to achieve and have lower expectations (Sousa-Poza and Sousa-Poza (2003), thus settings themselves less challenging goals than their male counterparts. Furthermore, females tend to focus more on communication skills than other core skills, which are seen to be male dominated, hence demonstrating less competence in other core skills, a view shared by Shukla (2012). The study further considered other variables, particularly participation in ECAs, parents' background, degree specialization, etc,. (Table 5) as a function of gender apart from gender differences in the core skills. As regards ECAs, males engage in them more than their female counterparts in almost all the activities stated in this study. Furthermore, males are more inclined to choose a career in self-employment than their counterparts. These findings concur with those of other studies. The findings have both theoretical and political implications. Theoretically, contextual factors have an influence on variations in core skills as a function of gender. This might have contributed to mixed results on differences in core skills as established in the literature and this study.

Practically, there is a need to create more awareness as regards females' participation in ECAs and of developing core skills given their relevance in the world of work. In this regard, HLIs need to trace gender differences in the participation in ECAs and address issues of potential exclusion. For example, students who come from difficult backgrounds are less able to be 'present' or pay to participate as they face the issues of money and time. Another example is that students who have registered in pure science degrees are more likely to choose paid employment for future survival than those who have registered in social science degrees. This informs the University that core skills should be a cross-cutting issue across degree programmes. Indeed, other countries have dedicated parallel programmes, such as career development centres, to enable marginalized students to develop core skills through diverse programmes organized under the centres at different levels of education, Jayaram (2014). Further research needs to explore the existence of such centres in HLIs, the related ECAs and whether they are gender sensitive. This is important to ensure more participation of females in ECAs, which is relevant for developing core skills.

Employers are also encouraged to collaborate with HLIs to ensure that what is taught meets their demands, and to collaborate with career centres in the universities so that valuable information and advice is given to students. Surrounding communities are also encouraged to engage students in their programmes. Research shows that social networks established through ECAs facilitate the development of soft skills and above all offer students some opportunities to demonstrate their strengths. This is supported by this study's finding that the parents' background matters. When a student looks to a role model (e.g. a parent) or engages in actual work, he/she is likely to follow in the parent's footsteps. However, it should be noted that if a parent is considered a role model then his/her presence will encourage the child to become self-employed if there is openness between the parent and child.

Conclusion

The study aimed to find out whether there are differences between male and female university students in terms of core skills competence, engagement in ECAs and the factors predicting their intention to be self-employed. The findings show that males engage in ECAs more than females,

which is likely to develop their core skills. The findings further show that males are more likely than females to choose self-employment as a career when confronted with a choice between paid employment and self-employment, which is attributed to the degree programme, parents' background and students' experience in doing business.

In no way do these findings suggest that all students should have the same experience in capturing employability skills or that they should focus on self-employment, but rather it highlights the existing status of each group. This lets HLIs know that if they do not trace the differences, society's expectations of students' skills may disadvantage a certain group. Moreover, they should design courses and training sessions to take care of specific skills gaps, including those attributed to gender. This study has highlighted the differences in specific skills and even the intention to choose self-employment or paid employment, which calls for development activities to encourage female students to be more aggressive in enhancing their employability skills. Our study is limited by the direction we took in evaluating employability. Therefore, with more resources, employability could be evaluated using time series data, whereby students' movement in an organization and between organizations could be examined, not only before graduating but also after graduating.

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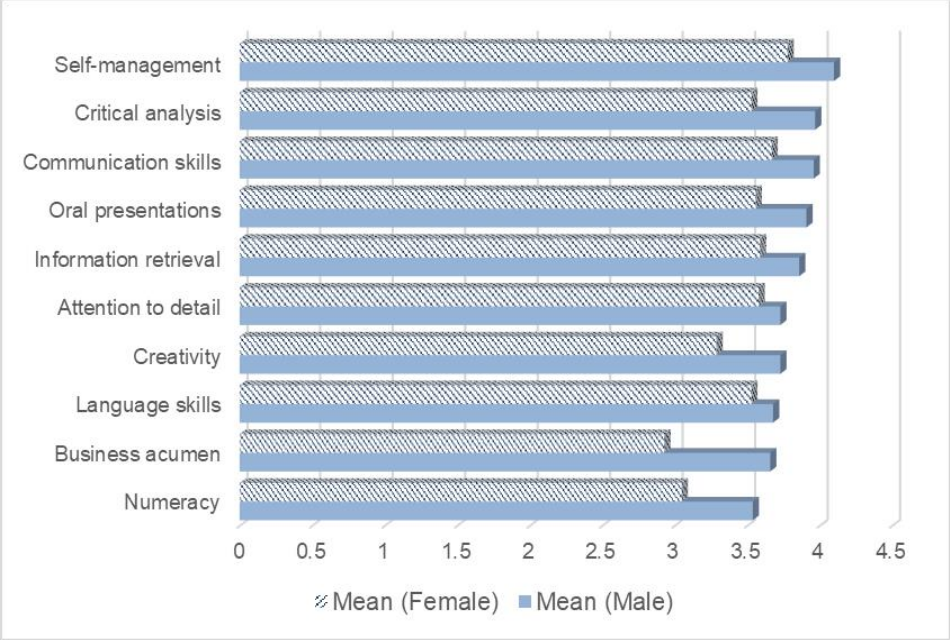
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Appendix 1: Core Skills Comparison Male vs Female Students (Mean Score)



1. Numeracy (application of numbers in practical contexts)
2. Business acumen (basic understanding of the key drivers of business success)
3. Attention to detail (focused attention in which key points are recognized)
4. Creativity (ability to produce a novel idea and turn it into a practical one)
5. Information retrieval (ability to access different sources, technologies and media)
6. Language skills (possession of more than one language)
7. Critical analysis (ability to think through a problem or situation and come up with a different viewpoint)
8. Communication skills (ability to explain what you mean in a clear and conscious way through written and spoken means)
9. Self-management (having a personal vision and goals, readiness to accept responsibility, self-starter ability and flexibility)
10. Oral presentations (ability to effectively convey information to a group and argue positively and confidently)

Appendix 2: Descriptive details of the variables in the Logistics regression

Variables	$\bar{X}$(s)
1. Intention to become self-employed	0.30 (0.46)
2. Gender 1=Female 0=Male)	0.55 (0.5)
3. Parents' background (1=self-employed 0=Not)	0.29 (0.45)
4. Students' experience (1= < 3 years in business, 0= Less or none).	0.24 (0.43)
5. Extra-curricular activities (1=More than 3 activities, 0= Less or none).	0.52 (0.5)
6. Degree specialization in pure science (1=Yes, 0=No).	0.50 (0.5)
7. Degree specialization in social science (1=Yes, 0=No).	0.28 (0.45)
8. Enrolled in professional clubs (1=Yes, 0=No)	0.72 (0.45)

Appendix 3: Output from the Logistics Regression Model

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	147.08	7	0.000
	Block	147.08	7	0.000
	Model	147.08	7	0.000

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	270.705[a]	0.350	0.496

a. Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.

Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	14.268	8	0.075

A great model with good prediction, has a sig. value higher than 0.05,