

Challenges of International Ranking of Egyptian Universities from the Academicians' Perspective

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Abstract The purpose of the current study is to identify the challenges of international ranking of Egyptian universities as perceived by university academicians, and analyze the significant differences among the participants' responses based on their gender, position title, specialization, and experience. A 28 items survey covered the four areas of challenges of university rankings was used. A sample of 325 academicians in eleven Egyptian state universities was surveyed. Responses received only from 247 academicians, representing a response rate of 76 percent. The responses indicated that the most ranking challenges for Egyptian universities ascending by means were: 'Faculty Challenges', 'Research Challenges', 'Institution Challenges', and 'Quality Challenges', all of these challenges were in high level. There were no significant differences at the 0.05 level among the university academicians related to their gender, position title, specialization, and experience.

Keywords: *challenges, international ranking, Egyptian universities, academicians' perspective*

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1. Introduction

University Rankings are an aspect of what has become known as the international 'battle for excellence'; they are used to determine the status of institutions, assess the quality and performance of the higher education system, and measure global competitiveness [1]. University rankings have emerged first in response to globalization and the pursuit of new knowledge as the basis of economic growth in such a globalized economy [2]. Rankings provide a healthy competition which serves as self-improvement tools for universities as it provide them incentives to improvements of their performances [3]. University administrators depend on university rankings as indicators of improvement over time and in comparison to other universities [4]. Governments use university rankings to shape their policies to drive the economy, academics use them to determine their scientific partnerships, and to choose the best job offer, and commercial companies use rankings to make correct decisions about their investments in different educational establishments [5].

Modern rankings have emerged because of what was perceived to be a lack of publicly available information about the quality and performance of higher education institutions [1]. University rankings have become powerful mediators of the meaning of higher education quality [6], they are used as a benchmarking or quality assurance tool, some governments used rankings to decide whether a particular institution should be

classified or how it should be formally recognized [7]. Rankings are shaping the horizon of governments and stakeholders on the quality of higher education intuitions [8].

Clarke [9] argued that the growing demand for rankings has been 'fuelled by several trends in higher education, including increasing participation rates, higher costs, and the view of students as consumers who expect value for money' (p. 35). Students and parents use university rankings to determine in which university they have to study to guarantee a prestigious job after graduation [5]. Usually top-ranking universities attract high performing local and international students [2,10]. Parents and students are the main audiences of university rankings, beside governments and foundations giving scholarships to students [3]. The usefulness of rankings to students is well assured by the Swedish National Agency for Higher Education which noted:

"Students invest both time and money in their education; as a result, it is important for potential students to have access to comprehensive and relevant information about higher education before they choose" ([11], p. 6).

University rankings have an impact on an institution's external resources by attracting investment and increasing institutional revenues [12]. Top-ranking universities usually attract additional funding from public and non-public sources [2]. Besides, rankings, once established, have become important components for universities to shape their institutional identity [13]; they are moving universities away from local-linked approaches to offer an international character based on international standards to offer global

opportunities for students [3]. Fowles, et al. [13] who have also focused on reputational effects of rankings wrote that: “University ranking has high public visibility, the ranking business has flourished, and institutions of higher education have not been able to ignore it” (p. 790).

There are many rankings that focus on everything from the fame and fortune of a particular institution to student-teacher ratio, extracurricular activities, internships, undergraduate education, employment after graduation, and affordability [6]. Global rankings of world universities vary in the criteria used for excellence, the “Big Three” global university rankings are: The Academic Ranking of World Universities (ARWU), known as the Shanghai Ranking, the QS (Quacquarelli Symonds) World University Rankings, and the Times Higher Education World University Ranking (THEWUR) [14]. Table 1 provides the indicators used by ARWU, QS, and THEWUR to determine what counts as a world-class higher education institution:

Table 1. Indicators used by the “Big Three”

	ARWU	QS	THEWUR
Quality of Education	Measured by # of alumni who have won Fields Medals or Nobel Prizes 10%	Faculty-Student Ratio 20%	Teaching (the learning environment) 30%
Research Output	Papers indexed in SCI or SSCI 20% Highly cited researchers 20%	Citation per faculty in Scopus database 20%	Citations (research influence) 30%
Prizes	Faculty won Fields and Nobel Prizes 20% and papers published in Science of Nature 20%		
Reputation		Academic survey 40% Employer survey 10%	Research volume (income and reputation) 30%
Industry			Income from industry 2.5%
International		International students 5%, International faculty 5%	International outlook 7.5%
Per Capital Performance	Weighted scores across five indicators divided by FTE academic staff 10%		

Source: [6].

Generally, Rankings provide a useful instrument for public accountability, supplying information to consumers and policymakers on capacities in terms of higher education which in turn helps in assessing the measurable differences in service quality and taking right decision in improving their academic standards.

2. A brief overview of Egyptian Higher Education

Egypt has the largest education system in the Middle East and North Africa region [15]. Higher education

system in Egypt is regarded as the oldest education system in the world, as it dates to the opening of the Al-Azhar University in 365 AH/975 CE [16]. The higher education system in Egypt includes 24 public universities and 23 private universities, in addition to the American University in Cairo and 150 institutions [17].

In Egypt the public or state universities usually absorb the overwhelming majority of Egyptian students. Being national institutions, they often use Arabic-language curricula, and work under political censorship and repression which limit critical approaches [18]. Generally, higher education in Egypt has been for long-suffering from different problems inherent in overly centralized governance, overcrowding, poor quality of education, and widespread inefficiencies [19].

2.1. Challenges of Egyptian Higher Education

2.1.1. Quality Challenges

According to the Arab human development report (2003), the most important challenge in the education field lies in the deterioration of education quality, the report pointed that higher education in most Arab countries lacks a clear vision and policies that govern educational processes as a whole [18]. Higher education institutions in the Arab world are constrained by low-quality education, and mismatch between education and the needs of labor market [20]. Arab universities usually produce low-caliber graduates who cannot compete in the global market [21], and who have shown relatively poor performance in the workplace [22]. There is widespread consensus that Arab universities are under-performing, delivering outcomes that do not reflect the size of the investment [23]. In this regard, Guessoum [24] noted that the state of most Arab universities is known to be poor. According to the global competitiveness ranking (2013-2014) compiled by the World Economic Forum (WEF), Egypt ranked 118 out of 148 countries in terms of the overall competitiveness of its institutions and higher education policies [25].

Most universities in the Arab countries have a poor international reputation; therefore, considerable efforts are being made at the regional level to enhance the quality of higher education bodies, and local initiatives are being implemented to create regional quality assurance commissions [26]. Nearly all Arab countries have established national agencies for assessing the quality of higher education institutions. In Egypt, the National Authority for Quality Assurance and Accreditation of Education (NAQAAE) was established in 2006 [27]. Despite the efforts made to enhance the education quality, Al-Kabi [5] and Badran [10] noted that most quality assurance commissions concentrate their efforts only to comply with the rules of higher education accreditation bodies, which are linked directly to governments, rather than really attempt to improve the education quality.

2.1.2. Research Challenges

Higher education in the Arab world is witnessing the development of a poor scientific research environment [27]. Scientific research is the midst of a crisis in Arab countries [12]. Currently most Arab universities suffer from lack of strategic plans, lack of independence, weak

research, and therefore lack of innovation [28]. Weakness in scientific research in Arab universities is due to lack of strategic future planning, disinterest by the private sector, and dependence on imported foreign expertise [29,30]. Because scientific research is facing a crisis, Arab universities are not able to compete on the international levels [12,31].

One of the main reasons why the Arab universities lagged back behind world class universities is lack of research excellence [5], as the poor contribution of Arab universities to the production of knowledge affects their position in global rankings [32]. While several higher education institutions in the Arab world have progressed in size, their contribution to the scientific literature remains relatively modest [27]. And research production has been found to be disproportionately low, relative to the population or the financial capabilities of each Arab country [24].

Funding is a major obstacle to scientific research, studies [33,34,35] indicated that lack of funding and research resources are serious challenges faced by faculty members in most Arab universities. Aladwan [36], the secretary general of the Association of Arab Universities, presents a list of some of the challenges confronting research activities in Arab universities. Prominent among them has been the low rates of expenditure and consequent low output from scientific research. According to Al-Kabi [5] high-quality research needs a financial support, while most Arab universities complain of shortages in money and equipment.

Anderson [37] indicated that limited academic freedom contributes to the deterioration of research in Arab universities. According to Andersson and Djeflat [38] the universities' lack of autonomy has prevented independent scientific research and hampered universities from taking initiatives, generating new creative ideas and introducing innovations. On the other hand, Naifah [28] claimed that scientific research in Arab universities is detached from the business and market realities and conducted merely for the sake of faculty promotion. Badran [10] added that the functional links between Arab universities with industry and the marketplace do not exist, and contractual research is minimal. Several studies reported the disconnection between scientific research in Arab universities and economic and social development [29,30,33,35,39]. In addition, Forster [40] argued that the lack of investment in high-quality research at Arab universities is one plausible reason for their low ranking.

2.1.3. Faculty Challenges

One factor affecting the quality of higher education in Egypt is lack of proper faculty salary [21]; faculty's salaries in Egyptian public universities are around \$260 per month, which is hardly sufficient to support a family [41]. To make up for economic shortages, the faculty members have recourse to private tutoring and charge students for academic notes and reading materials, Anderson [37] commented on the state of Egyptian universities saying that "The universities, and their faculty and students, are trapped in a vicious cycle of inexpensive, low quality, and not very enlightening education" (p. 773).

Many faculty members in Egyptian universities feel frustrated because of lack of professional development,

lack of research funding, and lack of financial and moral incentives [28]. The findings by Albargouty and Abosamrah [33] indicated that heavy teaching schedules, low salaries, and incentives as among the main reasons for weak research by faculty members in Egyptian universities. These factors, as Hanafi [21] claimed, make the level of education in Egyptian universities problematic. In addition, they may cause, as Aladwan [36] argued, the brain drain from Egyptian universities.

Faculty members publish very little in international journals and in languages other than the Arabic language [21]. A survey of the publications on science of education conducted by Maalof [42] has shown that only 11 percent of Egyptian and 35 percent of Kuwaiti publish outside their respective countries. Almansour [12] argued that even if faculty members are fluent in English, they often cannot afford publication fees that may be as high as three or four times their salary. It worth noting that one reason behind the Arab universities lagged back behind world class universities is the use of Arabic language to publish [5], as publishing in Arabic is not measured in the global competitive rankings and, therefore, is not considered [12].

2.1.4. Institution Challenges

Like many countries in the Arab region, Egyptian universities operate under a very centralized control system and rigid bureaucracies [43]. They lack to the institutional autonomy experience [40]. The lack of autonomy is thus connected with lack of academic freedom, lack of participation in decision-making, as well as the absence of accountability and transparency [44]. This lack of autonomy and self-management continues to produce a mismatch in the demand and supply of skills in the Egyptian labor market, which is problematic for both graduates and employers [43]. In addition, restrictions on intellectual freedom and expression discourage good researchers from conducting high-quality research [40].

It is not possible today, and it won't be possible in the future, to build world-class universities without intellectual freedom and expression being first enshrined in the cultures and working practices of universities [40]. Higher education institutions in the Arab world suffer generally and basically from lack of independence [43], they also lack freedom, connection with local problems, and lack investment by the private sector [37]. Usually they are administered as extensions of state authority [45]. Accordingly, state agencies control the curriculum design, approval of new degrees, and admission of university students [44].

More than 95% of educational decisions made by educational institutions in the Arab world are controlled by governments and specifically by the ministry of education. This type of centralized state model, with its lack of transparency, negatively affects institutions' ability to innovate and significantly reduces the capacity for innovation in the domain of research and development [32]. The state-dominated approach has led to numerous dysfunctions in the higher education system including stifled institutional autonomy, limited flexibility, rigidity of education and training programs, and more importantly, weak responsiveness to student demands, the needs of the labour market and national development goals [43]. The

absence of a public accountability system, the prevalence of a top-down authority approach which lays the grounds for the Egyptian universities' subordination to higher authorities, and the lack of partnerships with local communities are other major concerns [44].

In terms of faculty, infrastructure, equipment and learning materials, public universities in Egypt are severely underfinanced [43]. Most Egyptian universities are under-equipped; they do not have the necessary scientific equipment or materials for experiments and libraries are in a very poor condition as well [44]. Budget allocation approaches do not reflect the actual needs of the higher education institutions or provide the incentives required to align their educational processes and programs with needs of local community and expectations of the employers [46].

Students' knowledge is a major concern in the current higher education system in Egypt; universities' main challenge is how to make students acquire the necessary knowledge, skills and technologies with such weak background which concentrates on memorization and not on how to think and create [5]. Assessment is another factor behind the limited scope of students' knowledge, as Egyptian universities suffer from old assessment methods which focus on the final evaluation limited to measuring knowledge acquisition [44]. They generally lack modern methods in students' evaluation [47].

2.2. Egyptian Universities in the World Rankings

Scientific research is a fundamental criterion for the international positioning of the university; and one criterion for the success of a particular university in global ranking is measured by the quality of faculty members' publications [48]. Most global rankings are based on Institute of Scientific Information (ISI) or SCOPUS as measures of research productivity [5].

Egyptian universities, like the majority of Arab universities, are still low for research productivity. The latest figures from Scopus, including scientific journals, books, and conference proceedings, indicated that the total number of publications in the sixteen Arab countries as of September 7, 2016 was 673,977. These cover research outputs in the fields of science, technology, medicine, social sciences, and arts and humanities. While the USA was the world leader with 15,155,226 publications, and the other non-Arab countries from the Middle East and North Africa region, Turkey and Israel, have more publications than the entire Arab world (Turkey and Israel have together 943,883) [27]. Regarding the H-index impact for Middle Eastern countries for the years 1996-2016, it was led by Israel of 584, Turkey 339, Saudi Arabia 241, Iran 234, Egypt 213, Lebanon 157, UAE 153, Morocco 151, Tunisia 144, Jordan 130, Algeria 125, Kuwait 123, and 105 each of Sultanate of Oman and Qatar [10].

The poor quality of higher education programs in Egypt and the level of scientific research are of the most important challenges faced international rankings of Egyptian universities. Only very few Egyptian universities have been found among the Top 500 of the major world university rankings; and no university has been found

among the Top 100 of any of the world rankings. The following table presents Egyptian universities appeared among top 500 within last 5 years:

Table 2. Egyptian universities among top 500 within last 5 years

ARWU ranking		
Year	University	Rank
2015	Cairo University	401-500
2016	Cairo University	401-500
2017	Cairo University	401-500
2018	Cairo University	401-500
2019	Cairo University	301-400
(Source: ARWU, 2020)		
QS ranking		
Year	University	Rank
2015	The American University in Cairo	#=360
2016	The American University in Cairo	#=345
2017	The American University in Cairo	#=365
2018	The American University in Cairo	#=395
	Cairo University	#481-490
2019	The American University in Cairo	#=420
(Source: QS, 2020)		
THEWUR ranking		
Year	University	Rank
2015	None	—
2016	None	—
2017	None	—
2018	None	—
2019	None	—
(Source: HEWUR, 2020)		

As shown in the above table, only one state university (Cairo University) has been vigorously competing with each other and worldwide to find a place in the Shanghai (ARWU) ranking of top 500 universities. While The American University in Cairo which is a private university has been vigorously competing to find a place in the QS ranking of top 500 universities. Ironically, no Egyptian universities (state or private) were included in the THEWUR ranking of top 500 universities.

3. Purpose and Research Questions

The aim of this paper is to examine the challenges of developing world-class universities in the Arab world, especially in Egypt, and to detect the reasons behind failing to achieve that aim. The study is designed to identify the challenges of international ranking of Egyptian universities from reviewing the literature and from the academicians' perspective. Specifically, the following questions guide this research:

RQ1. How do academicians perceive the challenges of international ranking of Egyptian Universities?

RQ2. Are there significant differences by gender, position title, specialization, and experience in the level of academicians' agreement on the challenges of international ranking of Egyptian universities?

4. Methodology

4.1. Research Design

This research employed a quantitative research method. A self-designed survey is used in this research. Kerlinger [49] describes survey research as a “useful tool for educational finding and is best adapted to obtain personal and social facts, beliefs and attitudes”. The nature of this study requires obtaining data from a sample of academicians in Egyptian universities. This study on challenges of international ranking of Egyptian Universities consists of the following procedures: survey design, selection and sampling of the population, survey distribution and collection, examination of credibility and validity of the survey, and data analysis.

4.2. Participant Characteristics

The study group consists of 247 academicians in eleven different state universities in Egypt (Suez Canal University, Cairo University, Ain Shams University, Assiut University, Mansoura University, Al-Azhar University, South Valley University, Alexandria University, Menoufia University, Beni Suf University, and Aswan University). Participants were selected randomly in accordance with the simple random sampling technique. Characteristics of participants in the study group are presented on Table 3.

Table 3. Participants' demographics

	Variable	N.	%
Gender	Male	175	70.9
	Female	72	29.1
Title	Assistant	98	39.7
	Associate	79	32.0
	Full Professor	70	28.3
Specialization	Humanities	159	64.4
	Science	88	35.6
Experience	Less than 10 years	84	34.0
	More than 10 Years	163	66.0
Total		247	100

4.3. Measuring Instrument

In order to collect data, the University Ranking Challenges Survey (URCS) developed by the researcher was used. Whereas the first part of the survey contained questions regarding the participants' gender, position title, specialization and experience; the second part was based on the items regarding the challenges of university ranking. Purposely, the survey focuses on participants' perceptions of four important aspects of challenges: research challenges (10 items); quality challenges (6 items); faculty member challenges (6 items); and institution challenges (6 items). The survey utilized a five-point Likert scale ranging from 1= strongly disagree (SD) to 5= strongly agree (SA).

4.4. Instrument Validity and Reliability

For the purpose of examining the validity of the instrument (face validity evidence), the instrument was presented to nine professors. They were asked to assess the statements' relevance with the themes that were classified to them in advance; and were asked to assess the scale in terms of face validity, intelligibility and usability. Based on the experts' comments, some revisions regarding to the language were done to the instrument, and the number of statements was reduced to thirty and further modified. Finally, after analysis of potential problems, the URCS survey was finalized with twenty-eight items.

Regarding the reliability of the instrument, the internal consistency of the variables was analyzed using Cronbach's alpha. Table 4 illustrates the results of internal consistency analysis for the University Ranking Challenges Survey (URCS):

Table 4. Cronbach's α and internal consistency analysis for the URCS survey

URC subscales	items	Cronbach's α	1	2	3	4	5
Research Challenges	10	0.78	1				
Quality Challenges	6	0.80	.570**	1			
Faculty Challenges	6	0.75	.475**	.513**	1		
Institution Challenges	6	0.76	.515**	.530**	.596**	1	
URC	28	0.90	.773**	.825**	.823**	.823**	1

** Correlation is significant at the 0.01 level (2-tailed).

The Cronbach's alpha coefficients for each variable were higher than the recommended benchmark of 0.70 [50]. The internal consistency for each item was also checked, results indicated that all items had a strong significant correlate (above .70**) with sub dimensions and with total degree of the URCS. These values were reasonably satisfactory to support the objectives of the current study, and the instrument seemed to be valid and reliable measure for use with the academicians' population.

4.5. Data Collection and Analysis

The research used random distribution of surveys. The surveys were distributed among academicians in eleven Egyptian state universities. A total of 325 surveys were distributed and 265 were returned. The number of valid surveys was 247, yielding the return rate for the survey is 76 percent. Data were collected during the spring semester of the 2019-2020 school years.

The Statistical Package for Social Sciences (SPSS) version (21) was used to analyze the data collected from the surveys. Descriptive statistics providing means and standard deviations were calculated for the first question. The independent samples t-test and one-way analysis of variance (ANOVA) were employed to answer the second question.

In order to understand the results of the current study, it was important to set specific cut points to interpret the

academicians' total scores related to their level of agreement on the challenges of university ranking. The researcher used the response scale of each item ranged from 1 to 5 scores in the determination of these cut points according to the following way: 1- 1.79 = Strongly Disagree (SD), 1.80 - 2.59 = Disagree (D), 2.60 - 3.39 = Neutral (N), 3.40 - 4.19 = Agree (A), and 4.20 - 5 = Strongly Agree (SA).

5. Results

Question 1. How do academicians perceive the challenges of international ranking of Egyptian universities?

The first question sought to find out the academicians' level of agreement on the challenges of international ranking of Egyptian universities. In order to answer this question means and standard deviations were used. Table 5 presents the results.

Table 5. Means and standard deviations related to the academicians' level of agreement

URC subscales	Mean	SD	Level	Rank
Faculty Challenges	4.04	0.713	high	1
Research Challenges	4.01	0.612	high	2
Institution Challenges	3.87	0.739	high	3
Quality Challenges	3.71	0.803	high	4

Table 5 presents means and standard deviations for each dimension ordered by the highest mean value. Higher mean values indicate a higher level of agreement on the challenges of international ranking of Egyptian universities whereas lower mean values indicate a lower level of agreement. As shown in the above table, the mean of the 'Faculty Challenges' dimension is higher than all other means ($\bar{x} = 4.04$), followed by 'Research Challenges' ($\bar{x} = 4.01$), followed by 'Institution Challenges' ($\bar{x} = 3.87$), and followed by 'Quality Challenges' ($\bar{x} = 3.71$), all of these responses were in high level.

Table 6. Means and standard deviations related to the academicians' level of agreement on faculty challenges

No.	Items	Mean	SD
1	Faculty's heavy teaching schedules	3.76	1.174
2	Low socioeconomic status of faculty members	4.53	.868
3	Migration of university professors to other countries	4.45	.986
4	Limited English proficiency among faculty members	3.86	1.077
5	Lack of international publishing skills	3.85	1.077
6	Weak global competitiveness of faculty members	3.83	1.167

Regarding the Faculty Challenges in Table 6, three particular challenges were of concern. Academicians indicated concerns with 'Low socioeconomic status of faculty members' (M= 4.53), 'Migration of university professors to other countries' (M = 4.45), and 'Limited English proficiency among faculty members' (M = 3.86).

Table 7. Means and standard deviations related to the academicians' level of agreement on research challenges

No.	Items	Mean	SD
7	Lack of sufficient research resources	4.40	.914
8	Decreased spending on scientific research	4.56	.808
9	Lack of appropriate research infrastructure	4.29	.871
10	Hesitation of private sector to invest in scientific research	4.27	.964
11	Private sector does not have much trust in scientific research	3.96	1.076
12	Lack of research cooperation with world-class universities	4.07	.981
13	Few publications in high-impact journals	3.68	1.150
14	Lack of awards and incentives for publishing in high-impact journals	4.38	.988
15	Inability of faculty to publish in science and nature journals	3.21	1.333
16	Shortage of research publications in English	3.28	1.324

Regarding the Research Challenges in Table 7, three particular challenges were of concern. Academicians indicated concerns with 'Decreased spending on scientific research' (M = 4.56), 'Lack of sufficient research resources' (M = 4.40), and 'Lack of awards and incentives for publishing in high-impact journals' (M = 4.38).

Table 8. Means and standard deviations related to the academicians' level of agreement on institution challenges

No.	Items	Mean	SD
17	Universities' lack of independence	3.96	1.064
18	The absence of academic freedom	3.73	1.217
19	University-Industry weak cooperation	4.21	.864
20	The absence of international faculty members	3.89	1.095
21	Decreased proportion of international students	3.78	1.116
22	Poor quality of university website on the internet	3.70	1.126

Regarding the Institution Challenges shown in Table 8, three particular challenges were of concern. Academicians indicated concerns with 'University-Industry weak cooperation' (M = 4.21), 'Universities' lack of independence' (M = 3.96), and 'The absence of international faculty members' (M = 3.89).

Table 9. Means and standard deviations related to the academicians' level of agreement on quality challenges

No.	Items	Mean	SD
23	Poor level of university graduates	3.50	1.229
24	Low employability of university graduates	4.08	1.062
25	Mismatch between market needs and university output	4.00	1.050
26	The decrease in the quality of university education	3.84	1.061
27	Low academic reputation of the university	3.40	1.192
28	A low faculty/student ratio	3.47	1.209

Regarding the quality challenges shown in Table 9, three particular challenges were of concern. Academicians indicated concerns with 'Low employability of university

graduates' ($M = 4.08$), 'Mismatch between market needs and university output' ($M = 4.00$), and 'The decrease in the quality of university education' ($M = 3.84$).

Question 2. Are there significant differences by gender, position title, specialization, and experience in the level of academicians' agreement on the challenges of international ranking of Egyptian universities?

Independent samples t-test was performed to determine whether or not the academicians' perceptions regarding the challenges of international ranking of Egyptian universities vary in terms of gender, specialization and experience. The results are listed in Table 10.

Table 10. t-test results for the gender, specialization, and experience variables

Variable	N	Mean	Std. Deviation	Std. Error Mean	t	p
Male	175	3.91	.614	.046	.031	.329
Female	72	3.91	.486	.057		
Humanities	159	3.96	.590	.046	1.726	.651
Science	88	3.82	.551	.058		
Less than 10 years	84	3.97	.494	.054	1.112	.176
More than 10 years	163	3.88	.617	.048		

According to the results shown in Table 10, the academicians' views regarding the challenges of international ranking of Egyptian universities did not show any significant differences in terms of the gender variable [$t = .031$; $p > 0.05$], the specialization variable [$t = 1.726$; $p > 0.05$], and the experience variable [$t = 1.112$; $p > 0.05$]. These results reflect the similarities among the academicians' perceptions regarding the challenges of international ranking of Egyptian universities.

One-way analysis of variance (ANOVA) was used to determine whether or not the academicians' perceptions regarding the challenges of international ranking of Egyptian universities vary in terms of the position variable. The results of analysis are presented in Table 11.

Table 11. One-way analysis of variance results in terms of position title

	Source of Variance	Sum of Square	df	Mean Square	F	Sig.
URCS	Between Groups	.136	2	.068	.201	.818
	Within Groups	82.385	244	.338		
	Total	82.521	246			

As shown in Table 11, there were no significant differences among the Egyptian academicians in their views regarding the challenges of university ranking in terms of the position variable [$F = 0.201$; $p > 0.05$]. This result implies that all academicians (Assistants, Associates, and even Full Professors) in Egyptian universities have the same perspective regarding the challenges stand against the international recognition of Egyptian universities.

6. Discussion

Global university rankings have become more important; scholars viewed global rankings as crucial to

universities in determining their self-image and position in the world [12]. The discussion section of this paper addresses the above-mentioned issues that Egyptian universities confront in their quest to be recognized as globally relevant institutions. Universities in Egypt are at a distinct disadvantage when it comes to global competition and rankings among universities.

Given a low ranking of Egyptian universities, the purpose of this investigation was to survey a sample of academicians in Egyptian universities on the challenges that contribute to poor performance in global competition and subsequent university rankings. The results of this study may be understood in internationally level, not in national level. The results revealed that the 'Faculty Challenges' dimension is higher than all other dimensions, followed by 'Research Challenges', followed by 'Institution Challenges', and followed by 'Quality Challenges'. All dimensions were in 'high levels' degree. In addition, the results revealed that gender, specialization, experience, and position variables had no significant differences on the combined dependent variable of the academicians' views regarding the challenges of international ranking of Egyptian universities.

When addressing the international ranking of Egyptian universities top challenges, results of study revealed that the overall top dimension is 'Faculty Challenges'. All of six items in this dimension were as high levels include: 'low socioeconomic status of faculty members', 'migration of university professors to other countries', and 'limited English proficiency among faculty members'. These results agree with Almansour and Kempner [51] which considered faculty's socioeconomic status an important factor affecting research output and consequently university global ranking. And agree with Goff, Zarin and Goodman [52], and Aladwan [36] which indicated that the Arab Spring and the political instability have triggered the brain drain from Egypt. And agree with Al-Kabi [5], and Hanafi [21] which considered the lag of Arabic universities behind world class universities resulting from publishing in Arabic language and faculty's inability to publish in international journals and in languages other than Arabic. According to Almansour [12] publishing in Arabic is not measured in the competitive rankings and, therefore, is not considered.

The second highest dimension mean total is 'Research Challenges', the ten items in this dimension were as high levels include: 'decreased spending on scientific research', 'lack of sufficient research resources', and 'lack of awards and incentives for publishing in high-impact journals'. These results agree with Naifah [28] which indicated that the frustration of faculty members in Arab universities resulting from lack of research funding and scientific publication incentives. Also agree with Almansour [12] which noted most Arab universities were in critical need of funding. Lack of funding and sufficient research resources have been identified in studies [34,35] as serious challenges faced by faculty members in most Arab universities.

The third highest dimension mean total is 'Institution Challenges'. All of six items in this dimension were high levels that include: 'University-Industry weak cooperation', 'universities' lack of independence', and 'the absence of international faculty members'. These results agree with Anderson [37] which indicated that universities in the

Arab world have not been places of innovation or inventions due to lack of independence and academic freedom. And agree with Naifah [28] which argued that scientific research in Arab universities is detached from the business and market realities and conducted merely for faculty promotion. Not only could the Egyptian universities attract international faculty members, but they also couldn't keep the distinguished local faculty who are poorly paid. According to Altbach [41] faculty's salaries in Egyptian public universities are around \$260 per month.

The fourth dimension is 'Quality Challenges', with six items were in high levels, include: 'low employability of university graduates', 'mismatch between market needs and university output', and 'the decrease in the quality of university education'. These results agree with Hanafi [21], Djeflat [22] which argued that Arab universities produce low-caliber graduates who cannot compete in the global market. Also agree with Naifah [28], Adams and Winthrop [20] which referred to the mismatch of skills learned in most Arab universities versus the skills needed in the workforce. In addition, these results agree with the Arab Human Development Report of (2003) which indicated that the most important challenge in the field of education lies in the deterioration of the quality of education in most Arab countries.

7. Conclusion and Implications

This is a preliminary study which aims at identifying the main challenges facing Higher Education Institutions in Egypt to build world-class universities. This study intended to investigate the insights of a sample of academicians in Egyptian state universities about their perspectives on the challenges of international ranking of Egyptian universities. This investigation is to understand further the factors impacting the global rankings of Egyptian universities. Surveying a sample of academicians in Egyptian state universities further illuminated our understanding of the challenges causing Egyptian universities lag behind the global rankings.

For every university, the quest for higher rankings has become an indicator of national pride. Unfortunately, very few Egyptian universities are able to achieve world-class rankings. In addition to the above mentioned challenges (faculty challenges, research challenges, institution challenges, and quality challenges), the Arab spring revolutions in Egypt and some Arab countries have only served to increase the challenges confronting higher education institutions. Egyptian universities need to function as academic research institutions to get their personal and global respect and recognition as world-class universities. The foremost concern for universities is to provide financial and moral support for faculty members. Unless professors feel sufficient to support their families, they won't be motivated to conduct good research. Research is highly improbable under such hard socioeconomic conditions, and the migration of distinguished professors, in the "brain drain", will probably continue. Therefore, a research infrastructure should be developed that values faculty members, offers recognition, and supports research through grant funding, training, as well as publication assistance.

In reference to the implications of this study, it recommends that higher education policymakers in Egypt should support universities' efforts on their way of international rankings. While this study will add to the existing literature on university global rankings, it is hoped that higher education authorities in Egypt, university presidents, and stakeholders are to be provided with insights into factors challenging the global ranking of Egyptian universities. Based on that, the following recommendations made based on the findings, and observations made by the researcher: Additional studies should undertake on larger population across Egyptian universities to further validate the outcomes. Further studies across different universities (state and private universities) are required to gain an insight into more challenges impacting the international ranking of Egyptian universities. Further qualitative research can be conducted to find out: Why gender, position, specialization, and experience variables had no significant differences on academicians' perceptions regarding the challenges of international ranking of Egyptian universities. A longitudinal study can be conducted to find any trends or changes in academicians' perspective regarding the challenges impacting the global ranking of Egyptian universities.

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No potential conflict of interest was reported by the author.

Notes on Contributor

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