

Enhancing Educational Competitive in Egyptian Social Work Colleges: A Structural Analysis of Strategic Variables

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Abstract

Foresight studies conducted by the College of Social Work at Assiut University, Egypt, have enabled us to identify key variables that may enhance its strength by 2030. This study presents a conceptual framework based on the methodology and findings of implementing the Matrix of Cross Impacts Multiplication Applied to a Classification (MICMAC) method, aimed at determining significance through degrees of influence and dependence among one another. To attain the objective of this article, Delphi was employed to analyze 42 key variables, which were subsequently organized based on their respective significance. Among the 42 key variables, analysis has been conducted on 17, providing insights into enhancing the competitiveness and prospects of these colleges. The findings have highlighted the noteworthy influence of variables like technology infrastructure, applied projects, and international cooperation on the robust assessment of the competitive landscape of the College of Social Work. The variables ranked second in terms of their significance impact on enhancing the institutional capacity of this college, encompassing strategic orientation, mobility, teacher, educational programs, student, scientific research, and innovation. Finally, this study serves as the initial step toward developing future scenarios aimed at enhancing the institution's competitive position.

Keywords: Competitive, foresight studies, MICMAC, social work college, structural analysis.

Introduction

The rapid changes in job roles and career demands, as dictated by the contemporary labor market, underscore the imperative to intensify research into the requisites of higher education institutions overall, with a specific focus on colleges of social work. These colleges possess pivotal elements that fortify their competitive milieu, enabling them to effectively address the persistent demands of the labor market at local, regional, and global scales (Agrawal,2019).

Therefore, discerning crucial strategic variables shapes the framework of higher education institutions and aids in cultivating their competitive prowess, including aspects like innovation,

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creativity, and digital transformation. This, in turn, reverberates across the quality of their outputs. Moreover, these variables generate additional opportunities that can be utilized to change the institution's environment and amplify its competitiveness at the local, regional, and global levels (Muñoz-Cano et.al., 2012). In the context of higher education, several variables are set under experimentation which they possess capacity to solve problems within universities and surrounding community (Fuente et al., 2022). In the field of social work, the importance of confronting current changes is shown in increasing individuals' professional skills to adeptly navigate shifting demands. These skills are then effectively utilized within both learning and administrative processes (Grant, 2014).

Recent literature has highlighted the crucial role that factors such as quality and competitiveness play in ensuring institutions are qualified to obtain institutional accreditation (Agrawal,2019; Zakeri & Cheikhrouhou, 2022). Furthermore, recent research indicates the feasibility of formulating strategies to steer the trajectory of smaller and mid-sized institutions (Ejdys, 2014). Additionally, certain universities, employing strategic prospectiveness, possess the capacity to create entrepreneurs capable of guiding their institutions toward a more promising future) Kononiuk et al., 2017(. Moreover, the practice of foresight enables the crafting of scenarios for future outlooks (Joanna et al., 2019; Curaj, 2010). It can be easier to foresee the distinguishing academic programs for academic work (Kononiuk et al., 2017); using the objective and methodological analysis upon which foresight is based (Nazarko et al., 2013), and identifying the intended role of the stakeholders, which leads to developing the services done by higher education institutions in the future (Labanauskis & Ginevičius, 2017).

Recently, the composition of social work colleges includes several knowledge objects such as, quality and competencies, financing and financial affairs, student affairs, administrative and technology management, and partnerships. This composition dynamically and systematically addresses societal sectors, introducing new activities that elevate the college's local and regional ranking. The importance of foresight lies in their capacity to address strategic variables within the college, thereby enabling a higher degree of benchmarking against peer institutions. Foresight studies employ techniques encompassing both quantitative and qualitative methods (Rodríguez, 2012). This facilitates the identification of key strategic variables, as conduct is the real outcome.

Research Questions

The study has the following research questions:

Q1: What are the key variables that underlie the educational system in the College of Social Work at Assiut University?

Q2: What are the inter influential and interdependent relationships among the key variables within the College of Social Work at Assiut university?

Q3: Which key variables exert the greatest influence in bolstering the competitiveness of social work colleges in Egypt?

Theoretical Review

Social work is a discipline centered around a working system that emphasizes driving social change, fostering the development of individuals' abilities, and adapting them to societal changes and investing the human capabilities (Rambaree, 2020). It constitutes a significant catalyst for societal transformation. It plays a pivotal role in solving societal problems that jeopardize human society. Therefore, social work colleges should enhance their educational programs and equip teachers with proficient and professional abilities. This empowers them to effectively address these challenges and contribute to strengthening the university's ties with the local community, amplifying its impact (Gray & Coates, 2015).

To maintain their role in society, colleges must continually confront emerging changes in the technological, social, and economic landscape, which have introduced new challenges in effectively managing social work colleges, as well as in navigating intricate networks of stakeholders (Labanauskis & Ginevičius, 2017).

Structural analysis stands as a tool empowering social work colleges to advance their targeted future strategies. It dissects the educational system within these institutions into distinct variables, systematically arranging them based on their respective priorities. By carefully selecting the most pertinent variables, these colleges can streamline enhancements in the organizational, educational, and operational processes (Kononiuk et al., 2017; Nazarko et al., 2013). Social work colleges are among the distinguished strategic actors of society (Al-Subaie et al., 2021). The utilization of structural analysis tools within these colleges facilitates formulation of enhanced future outlooks (Al-Esmael et al., 2019). These tools play a crucial role in furnishing a pertinent case study for implementing visionary strategies within these institutions. Foresight studies delve into the future

development of human activity and establish strategic orientations to guide future aspirations (Jayant & Singh, 2015; John & Melanie, 2020). Foresight strives to present potential alternatives and offer strategic choices concerning them, employing a methodical process rooted in collaborative participation to shape a future vision n (Khan et al., 2015). Recently, future studies within educational institutions have ranked a high status on both regional and international scales. The term foresight denotes a long-term perspective on the institutional landscape and the formulation of optimal strategies to realize that vision. This involves the scrutiny of pivotal strategic variables and the creation of optimum scenarios and strategies to attain them (Elmsalmi et al., 2021; Georghiou et al., 2011).

This intricate process encompasses numerous steps aimed at discerning the formative factors of the future. These factors serve a purpose, signifying the pursuit of foresight. (Jung et al., 2021). Employing foresight studies alongside structural analysis tools requires identifying key variables and assessing their degrees of influences and interdependencies. This process leads to the identification of strategic variables essential for realizing future competitiveness. To achieve the purpose of this article, two foresight tools were employed: Regnier's abacus' structural analysis method (MICMAC), and Delphi technique.

This study presents a forward-looking perspective on social work colleges in Egypt. Drawing from the attained research outcomes, it highlights the identification of key variables that bolster the educational competitiveness of these institutions, enabling them to attain a leading position within the realm of higher education.

Importance of Structural Analysis

In foresight studies, structural analysis is used to identify the primary variables crucial for shaping the future vision of the institution (Ahmad et al., 2019), and to ascertain which variables wield a more substantial impact in realizing its future foresight (Agrawal, 2019). Experts conduct structural analysis, employing brainstorming to pinpoint variables and their direct relationships. They also identify variables with potential impact, both indirect and indirect, on other elements. This process follows the initial stage of identifying the primary variables (Godet & Durance, 2011). Therefore, structural analysis enhances efficacy of the decision-making process, evaluating alternative scenarios, and determining the impact of strategies.

Method

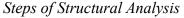
Research Design

The purpose of this study is to enhance the educational competitiveness of social work colleges in Egypt by defining variables within educational system. These variables enable the prediction of a more promising future. The case in this research is the College of Social Work at Assiut University, chosen to exemplify the characteristics of centralized educational systems within Egyptian universities' social work colleges.

The process of implementing structural analysis started with problem identification. Experts employ the Delphi method to ascertain internal and external variables impacting the system. Each variable is assigned a value, and the relationships between them are assigned weighted values based on their degrees of influence and interdependence. This is carried out using MicMac, employing assessments ranging from 0 (ineffective) to 3 (high) and 'p' (probable).

Subsequently, the essential variables are pinpointed and categorized as either direct or indirect, based on their levels of impact and reliance, determined by their placements within the four quadrants (power, autonomous, conflict, and output). This arrangement serves as an indicator of their influence and dependence (Kononiuk et al., 2017). Following this, the process involves evaluating the most influential key variables that enhance educational competitiveness within social work colleges across Egypt.

Figure 1



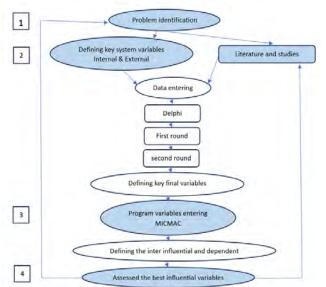


Figure 1 illustrates steps of structural analysis, as presented below:

- 1- Problem identification: The challenge lies in the College of Social Work's limited capacity to attain competitiveness.
- 2- Identification of key variables shaping the educational system within the researched college (utilizing Delphi method):

In this stage, it is essential to gather insights from experts within the College of Social Work and specialists in foresight studies at Assiut University (First round). These insights pertain to the variables that shape the system.

-Identification of principal variables that constitute the system with varying degrees of significance (second round).

-coming down to a list of main variables in a complete way.

3- Identification of the interrelations among the principal variables (utilizing MicMac): defining the inter influential and interdependent relationships among primary variables based on experts' opinions.

Assessing the most influential primary variables involves identifying the variables that exert the greatest influence on other elements, thereby paving the way for achieving heightened competitiveness for the college. The preceding table illustrates the application of structural analysis across four stages: The preceding table illustrates the application of structural analysis across four stages: 1) Problem identification and design; 2) Identification of main variables shaping the educational system within the researched college (utilizing Delphi method); 3) Identification of the interrelations among the principal variables (principal MicMac); 4) Assessing the best influential key variables.

Study Sample

The study sample consisted of 11 participants, consisting of experts in the realm of social work at Assiut University and specialists in various foresight studies. The selection was conducted randomly, adhering to the following criteria:

-The participants consist of members from College of Social Work at Assiut University.

-Participants possessing over 10 years of experience in the field of work

-Participants from College of Education at Assiut University, possessing expertise in the field of educational planning and foresight studies (discipline or research action).

To comprehend the characteristics of the sample, the subsequent table has been formulated:

Table 1

Characteristics of Participants

No	Characteristics	Number
1	Professor at the College of Social Work	6
2	Professor specializing in educational planning and foresight studies	5
Total		11

The Validity and Reliability of The Study Instrument

The content validity of the study instrument was verified by applying it to a group of 9 arbitrators in the field of social work and the field of educational planning. The instrument's reliability was verified using Cronbach's alpha. The test showed that the total Cronbach's alpha coefficient value for the study instrument was 0.89.

Research Tools

The present research employed two tools collect and consolidate data: Delphi and MicMac. The first tool is represented in an open questionnaire with Delphi method regarding the variables which shape the educational' system within the College of Social Work. The Delphi method was employed to determine the drivers of developmental variables within social work colleges. Using questionnaire findings, an open-ended questionnaire was formulated and distributed among a panel of experts (n=11).

Those experts were senior professionals from educational planning and social work disciplines. Second, the experts analyzed and selected the variables.

In the second round, a questionnaire employing a three-point Likert scale was administered to experts. Subsequently, the final version, encompassing 42 variables, was distributed. Thereafter, the data were analyzed, resulting in the identification of driving forces (n=17 variables).

The second tool entailed the utilization of MicMac program to identify the interrelations among variables from influence and dependence. This approach is in harmony with the structural analysis method used to examine the intricacies of the social work college system and the underlying elements, thereby preserving their interconnectedness (Attri et al., 2013; Godet & Durance, 2011).

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Data Collection

Data collection involved employing a Delphi questionnaire and utilizing the MicMac program. This was accomplished by seeking insights from a group of experts in the social work field and specialists in foresight studies(n=11).

The first tool involves the Delphi questionnaire, through which data pertaining to the key variables shaping College of Social Work's system was gathered. In the first round, 42 variables were identified and subsequently and subsequently ranked according to their degree of significance.

Out of the forty-two variables, a list of main variables (n=17) have identified, signifying their crucial role within the college's educational system play a vital role in the educational system of college. Then, to define the influence of these key variables on other variables, a MicMac program was used, in which data were entered, as the direct, indirect, and potential influences of these variables have been extracted. Hence, the assessment of the most influential variables crucial to the college's future has been accomplished, contributing to its enhanced competitiveness down the line.

Table 2

No	Data collection method	Data gathered
1.	Delphi	Defining variables from experts' opinions in two
_		stages separated by one month
2.	MICMAC	Defining the inter influential and inter dependent relations among variables. Assessing the most influential main variables in
		increasing competitiveness of the college of social work in the future.

Information on the Data Collection Method and the Data Obtained from Participants

Data Analysis

The most influential variables on the educational system of the College of Social Work, which enhance its future competitiveness and elevate it to a prestigious rank among higher education institutions, have been identified.

Findings

Q1: What are the key variables underlying the educational system at the College of Social Work at Assiut University?

Through literary and theoretical exploration of social work programs within Assiut University, 42 variables were identified in the first round of the Delphi technique. The ensuing content pertains to the findings derived from expert opinions in the first round, assessed using SPSS V.20, where values were assigned as follows: 3 = High importance, 2 = Moderate importance, and 1 = Important.

Table 3

Descriptive Statistics of Primary Variables, The 3-Point Likert Scale Questionnaire Data

Variable	N	Mean	Std. Deviation
	IN	wicali	Std. Deviation
Restriction	11	2.2727	.78625
Transparency	11	2.2727	.78625
Accountability	11	2.0909	.83121
Finance and growth	11	2.8182	.60302
Inappropriate access to the university	11	2.0000	.77460
Projects	11	2.8182	.60302
Assessment methods	11	2.0909	.83121
Mobility	11	2.8182	.60302
International cooperation	11	2.7273	.64667
Rigidity of training programs	11	2.0909	.83121
Graduates	11	2.8182	.40452
Infrastructure and technology	11	2.7273	.46710
Research	11	2.8182	.40452
Prizes	11	2.0000	.77460
Reputation	11	2.1818	.75076
Industry	11	2.0909	.70065
University values	11	2.8182	.40452
Global ranking	11	2.0000	.77460

Variable	N	Mean	Std. Deviation
Academic freedom	11	2.0909	.70065
Strategic orientation	11	2.9091	.30151
Initiatives	11	2.3636	.80904
Innovation and creation	11	2.7273	.64667
Moral incentives	11	2.0000	.77460
Low salaries	11	2.1818	.75076
Heavy teaching schedules	11	1.6364	.67420
Lack of participation in decision-making	11	1.7273	.78625
Equipment and learning materials	11	1.8182	.75076
Libraries	11	1.3636	.67420
Student	11	3.0000	.00000
Teacher	11	3.0000	.00000
Programs and courses	11	2.9091	.30151
Relationship to the labor market	11	2.0909	.83121
Economic and social development	11	2.0909	.70065
Research ability	11	2.1818	.75076
Partners	11	2.8182	.40452
Governance	11	2.8182	.40452
Autonomy	11	2.0909	.83121
Private sector	11	2.0909	.70065
International students	11	2.2727	.64667
Hybrid	11	2.8182	.40452
Virtuality	11	2.7273	.46710
Academic production	11	2.2727	.64667
Valid N (listwise)	11	,	

The preceding table suggests that experts reached a consensus on the significance of specific crucial variables, particularly those with a mean exceeding 2.33. This underscores their pronounced importance based on the opinions of the sampled individuals.

Therefore, these variables have been chosen for their priority in influencing other aspects of the educational system at College of Social Work in Assiut University. Hence, the selected strategic variables (n=17) offer a potential avenue to confront future challenges and improve regional and international competitiveness for the college, as illustrated below:

Table 4

Final Variables

No	Variable	No	Variable		
1	Student	10	University values		
2	Teacher	11	Partners		
3	Programs and courses	12	Graduates		
4	Finance and growth	13	Research		
5	Strategic orientation	14	Governance		
6	Projects	15	Hybrid		
7	Mobility	16	Virtuality		
8	Innovation and creation	17			
9	International cooperation	17	Infrastructure and technology		

Hence, the delineation of these variables allows us to differentiate and recognize their significance. These identified variables stand as critical factors in establishing a competitive environment for the College of Social Work at Assiut University.

Q2: What are the inter influential and interdependent relations among the key variables at the College of Social Work in Assiut University?

Q3: What are the most influential key variables in enhancing the competitiveness of social work colleges in Egypt?

To explore the inter influential and interdependent relationships among key variables identified in the previous stage, and to identify the most influential key variables shaping the educational system of social work colleges in Egypt, the Micmac program was employed. The results, presented in Table 5, reveal the key variables with significant predictive potential for the future enhancement of these colleges.

Table 5

v	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	0	3	3	1	3	2	3	2	3	2	2	3	3	2	1	1	3
2	3	0	3	3	3	3	2	3	2	2	2	2	1	2	1	2	3
3	3	2	0	2	3	3	3	2	2	2	3	3	2	1	2	1	3
4	3	3	3	0	2	3	2	3	2	2	3	3	3	1	1	1	3
5	3	2	2	1	0	2	2	3	2	2	3	3	2	2	2	1	3
6	3	3	3	3	3	0	2	3	3	3	3	3	3	1	1	2	3
7	3	3	3	2	3	2	0	3	3	2	3	3	3	1	1	1	3
8	2	1	2	1	2	2	1	0	1	1	3	1	1	1	1	1	1
9	3	2	2	2	2	2	3	2	0	2	2	2	1	2	1	3	1
10	3	3	2	2	3	2	2	2	2	0	2	3	2	2	2	1	1
11	3	3	3	2	3	3	3	2	2	3	0	3	2	1	2	1	1
12	3	3	2	2	2	2	2	2	2	2	2	0	2	1	1	1	1
13	2	1	1	1	1	1	1	1	1	2	1	1	0	1	1	2	1
14	2	2	3	2	2	2	2	1	1	2	2	2	2	0	1	2	3
15	3	3	1	1	1	1	1	2	2	2	1	1	2	1	0	1	1
16	2	2	2	2	2	2	1	0	2	1	1	0	1	2	1	0	1
17	1	1	1	2	3	1	2	1	1	1	1	2	2	2	2	1	0

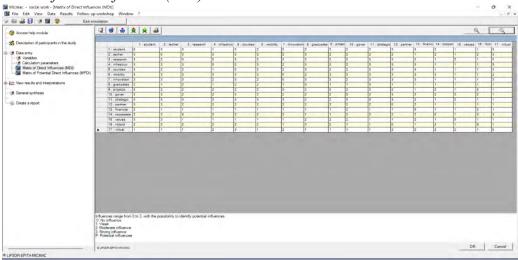
Estimated Proportions for Strategic Variables.

Source, The Institut d'Innovation Informatique pour l'Entreprise, has developed MicMac program,

http://en.laprospective.fr/methods-of-prospective/softwares/59-micmac.html

Figure 2

Matrix of Direct Influences (MDI).



The 17 variables explained in detail are as follows:

V1 Students: Student course registration, student affairs operations, student academic support, student education quality.

V2 Teacher: Teaching and learning methods, communication processes, educational measurement, and evaluation methods.

V3 Research: Processes of developing research knowledge, managing research procedures, marketing and attracting research projects.

V4 Infrastructure and Technology: The institution's logistical capacities and the technological capabilities that support the educational process.

V5 Programs and Courses: Course design process, course development and quality, program integration, interdisciplinary programs.

V6 Mobility: Teacher, student, graduate, and administrative employees can engage with other social work colleges at the regional and global levels.

V7 Innovation and Creation: Creativity and innovation methods used in the educational process and the provision of community activities.

V8 Graduates: Communication channels with graduates and their monitoring, recruitment platforms, inservice and post-service training, and workplace evaluation techniques.

V9 Projects: Offering updated courses, organizing international forums and conferences, attracting support from relevant bodies and institutions.

V10 Governance: Laws, policies and regulations governing the future of social work colleges.

V11 Strategic Orientation: The institution's strategic plan, alternatives scenarios, policies, institutional and academic accreditation.

V12 Partnership: Collaboratively designing programs for the college in conjunction with regional and global colleges and organizations.

V13 Finance: Offering services aimed at generating income.

V14 International Cooperation: Engaging and collaborating with other social work colleges at both national and international levels.

V15 University Values: Ethical practices and standards governing educational, administrative, and technical processes.

V16 Hybrid: Pertains to a blend of web-based and face to face learning activities implemented by the college to complement individual self-education.

V17 Virtuality: Educational activities utilizing virtual media.

Table 6

Types of Quadrants

Situation	Quadrant	Name	Description			
Autonomous status	Lower Left	Excluded) non-significant)	Variables or factors that have no influence on other variables and non-dependence.			
) non significant)				
Power status	Upper Left	Input	Variables or factors that have a high influence on			
		(significant)	other variables and low dependence.			
Conflict status	Upper right	Liaison (moderate	They have high influence and high dependence.			
		significant)				
Output or Result	Lower right	Output	Variables or factors that have a weak influence and			
status		(Little significant)	greater dependence.			

Source: Adapted from (Godet & Durance, 2011).

The quadrants are depicted in Figure 3 below.

• Lower left; "autonomous" represents the hybrid factor and its corresponding values.

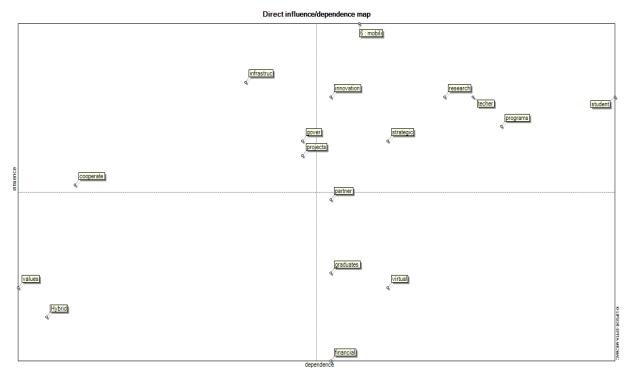
• Upper left; "Power" factors of infrastructure and technology, projects, international cooperation, and governance. These variables are important for the findings obtained from the foresight of the colleges' future, as any changes within them occurs within them can cascade effects across the entire system.

• Upper right; "conflict:" Strategic orientation factors, teacher, student, research, programs, mobility, and innovation. These variables assume immense significance and influence, yet they also display high vulnerability, as any alteration in these variables results in corresponding changes in the remaining variables and subsequent findings.

• Lower right; "Result" variables of finance, graduates, and partnership.

Figure 3

Map of Direct Influence



It can be inferred from Figure 3 that variables placed in the Quadrant "Power" have a high influence on future of social work colleges, as they possess great power to orientate future system scope, so they have a low dependence on other variables.

It can be said that these variables shape the future of faculties and influence other institutions in their future orientation. The first variable, "infrastructure and technology" (Zhong et al, 2017), is regarded as the basis for implementing and supporting educational processes within social work colleges and activating student activities.

Changes occurring near the borders between the "Strength" and "Independence" quadrants necessitate enhanced management to enhance their future operations and strengthen their alignment with social work colleges.

In the quarter" power", international cooperation has a great influence on the effectiveness of other variables and plays a pivotal role in the development of the educational, research and community processes within social work colleges.

This quarter also indicates the presence of the "projects" variable, which wields substantial influence over other variables by embracing novel concepts. This influence is evident in the revitalization of academic

curricula and student initiatives, as well as fostering community engagement via hosting international conferences and forums stemming from regionally and globally executed projects.

Fourth, in quadrant "power," governance holds particular importance in higher education due to the intricate nature of university processes, which surpass those of institutions beyond the university sector. Governance in higher education needs to provide a framework that accommodates a diverse array of stakeholders.

In the "conflict "quarter, the variable of mobility" stands out with a notable impact on other variables, contributing significantly to enhancing the future reputation of social work colleges.

Mobility allows both teachers and students to acquire distinct competencies, enabling them to engage effectively in social work colleges across different universities. This proficiency ensures consistent levels of efficiency and effectiveness on both regional and global scales.

The variable of "creativity and innovation" holds an equivalent degree of importance and influence on other variables within the institutional framework. It plays a pivotal role in enhancing the introduction of exceptional programs to social work faculties, and its impact extends to delivering services to students in a creative and innovative manner. Moreover, this variable enhances the potential for social work faculties to attain a prominent position in the future. The strategic orientation observed in this quarter underscores the institution's remarkable success, evident through its embrace of diverse and impactful strategic directions and alternatives.

This capacity enables it to effectively confront forthcoming challenges, shaping its developmental strategies in a manner that permeates its policies and programs, consequently enhancing its future competitiveness.

Within the same quarter, two variables are closely intertwined and wield substantial influence over other variables, as well as mutual dependency. This is exemplified by the presence of a teacher who employs modern teaching methods, possesses exceptional teaching competencies, effectively imparts innovative knowledge, and demonstrates creativity in transmitting knowledge to learners.

Consequently, this results in the cultivation of learners equipped with the requisite skills for the contemporary labor market in the digital age. Subsequently, social work colleges can attain competitiveness opposite other institutions in the future and establish an enhanced cognitive presence at both regional and international levels.

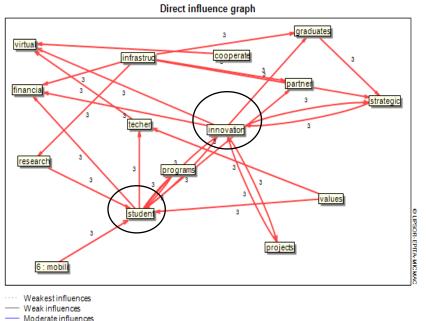
The variable "academic programs" also holds significant importance and exerts influence over other variables within this quadrant. It stands as the third cornerstone, following the teacher and learner, in impacting the institution's status and role in knowledge transfer, dissemination, and promotion.

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These academic programs encompass innovative scientific content, encompassing contemporary information marked by intellectual originality, and the capacity to apply it in the tangible realities of social work colleges. This foresight envisions a more promising future for the field.

Figure 4

Direct Influences



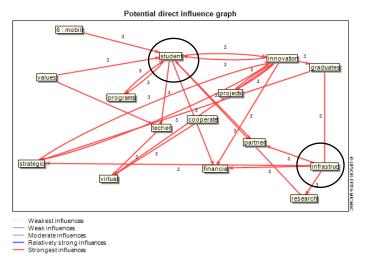
- Relatively strong influences

Strongest influences

Figure 4 illustrates that the variables with more stronger influences compared to subordinate variables (innovation and creation), thus impacting the future projection of programs, strategic orientation, leading to financial generation, virtuality, and ultimately influencing students' aspects. Also, it can be noticed that students have a direct influence on teachers, graduates, research, and partners.

Figure 5

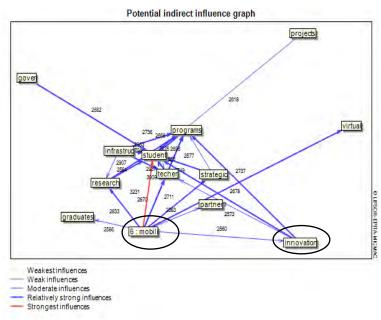
Potential Direct Influences



As illustrated in Figure 5, it becomes apparent that the future impact of the infrastructure and technology variable will be particularly robust on partnership and introduction of new providers, graduates, strategic direction, and research. This, in turn, facilitates the generation of finance and attraction of new students. As presented in Figure 5 (above), the variable of innovation has a significant degree in relation to both programs and students. Students contribute to program development through innovation, and conversely, programs influence students to foster innovation.

Figure 6

Potential Indirect Influence



In the context of potential indirect analysis (refer to Figure 6), the mobility variable exhibits the most substantial potential influence on students, thereby significantly the future projection of programs, teacher, and research. Furthermore, its influence on innovation, partnerships, and graduates is of a moderate degree.

Discussion

The findings have unveiled that social work colleges in Egypt are currently confronting numerous social and economic challenges. These challenges necessitate heightened efforts in reshaping their educational policies and developmental strategies to enhance their performance and elevate their competitiveness. This endeavor is essential for upholding their academic standing within the university community. Therefore, it becomes imperative for university leaderships within the social work faculties in Egypt to prioritize the variables of visions and strategic directions, thus ensuring adaption to forthcoming changes.

Also, it is imperative to emphasize the importance of innovation variable within both the educational or administrative processes. This emphasis is vital for the institution to attain educational leadership in its programs and among its teaching staff.

The results showed that the infrastructure and technology hold significant importance in achieving organizational excellence and ensuring the sustainability of its operations. This is essential for effective engagement with the global community, which is increasingly characterized by digital dynamics.

Furthermore, these variables serve as a means for social work colleges to enhance their competitiveness and facilitate mobility for both students and teachers. They have evolved into a tangible reflection of the digital reality that encompasses the environment of these colleges.

At present time, the educational system within colleges is geared toward fostering excellence in both administrative and educational strategies. This includes enhancing creativity and cultivating a competitive environment, both within the colleges and beyond their borders. Numerous studies have highlighted the importance foresight of higher education institutions, involving the analysis of variables and factors that could shape their future. These studies underscore the value of employing structural analysis to enhance the efficacy of administrative and educational processes within the institution, thus bolstering its competitive standing among higher education establishments (Ejdys, 2019; Zahraei, 2020). Other studies have employed structural analysis to identify the variables that make up their educational system and determine the best variables to predict future in a better way (katherine, 2020; Ejdys, 2014).

Higher education institutions, especially social work colleges, , are confronted with swift transformations in their administrative and academic frameworks. This necessitates strategic deliberation to cultivate

developmental strategies, anticipate future trends, leverage strategic directions, and devise reform scenarios aimed at enhancing their competitiveness (Prince, 2020; Rambaree, 2020).

Utilizing structural analysis to forecast the future of these colleges' aids in discerning between the familiar and or not familiar, enabling them to effectively adapt to emerging circumstances (Prince, 2020).

The study's findings revealed the importance of the student variable, as a strategic variable, as students possess the capacity to attain foresight-driven educational and technical competencies. These skills can be harnessed to enable students to make a positive impact within the labor market, thereby fostering a favorable reputation for their institutions in the times ahead (Jafari-Sadeghi, 2020).

The study's findings underscored the importance of the mobility variable as a significant variable in increasing the competitiveness of the institution and providing best educational practices from its joints, whether students, teachers, or administrators (Napathorn,2022. Furthermore, the institution's well-defined strategic direction helps in comprehending surrounding environment and empowers it to formulate several scenarios that can lead its future better (Klakurka, 2020).

The results showed that innovation has emerged a pivotal variable amplifying motivation within the educational process and fostering the cultivation of critical thinking skills among both students and teachers within the institution (Khan, 2015). The results of this research are consistent with the result of Jałocha (2022) study, which indicated the importance of collaboration between the university with other relevant institutions. Such cooperation aims to improve the institution's outputs to stay aligned with the demands of labor market and to amplify the ways of cooperation and effective partnerships through a range of developmental projects.

This aligns with the by Deng (2022), which highlighted a major impact of the infrastructure and technology in shaping the experiences of students and teachers, facilitating digital interactions with their respective institutions.

The importance highlighted by this research is clearly manifested in the imperative for social work colleges to increase their educational competitiveness. This can be achieved by harnessing the potential of foresight analysis for shaping their future. Employing structural analysis as an advisory approach directs the colleges' strategies towards bolstering their competitive edge both at regional and global levels.

Based on the insights of experts, to bolster the future competitiveness of social work colleges, notable focus should be directed towards pivotal variables: technological infrastructure, applied projects, and international cooperation. These elements are emphasized in a substantial manner.

They incorporate into their competitive strategies the importance of strategic orientation, mobility, teachers, academic programs, students, scientific research, along with innovation as the shared foundation and primary driving force in all administrative and educational endeavors.

Based on the discussion, this research holds numerous implications. First it highlights the utilization of the Foresight curriculum by educators through structural analysis in university settings. This approach proves advantageous for enhancing social work colleges, especially, as well as higher education institutions overall.

The findings could be valuable in modifying strategic directions of these institutions. Therefore, social work colleges can better prepare for future challenges and envision the future by leveraging key variables that profoundly affect their institutional system.

The novelty of this research becomes apparent through the application of the foresight method to social work colleges via structural analysis, employing the Delphi and MicMac methods. This is distinct from prior studies that have primarily applied these methods in industrial contexts. By utilizing these approaches, social work colleges can elevate their competitive educational capacities.

Conclusions

The foresight study underscores the importance of envisioning future strategic alternatives as a means to construct an improved development strategy for the institution. Foreseeing the future of Egyptian social work colleges leads to an analysis of the strategic variables affecting their educational systems. It highlights success factors aiding operational strategy implementation and embraces top global trends in advancing higher education systems such as internationalization, competitiveness, creativity, and interdisciplinary approaches.

This increases its competitive position making it more appealing to new talents from teachers and learners. The study further validates, through the analysis of the strategic variables, that creativity and innovation have evolved into crucial assets for addressing the challenges of the current century. This calls for designing programs and courses encompassing innovative scientific knowledge aligned with the latest developments applied in most regional and international universities. This also simplifies collaboration with these institutions through twinning programs.

In addition, the integration of various courses within these colleges serves to fulfill the demands of the present job market and engage stakeholders, ensuring the sustainability strategy of the university for social work colleges in upholding societal responsibility.

The strategic variables (infrastructure and technology - strategic direction) have been identified, playing a major role in building human capacities within social work faculties and identifying an effective position for them among their peers at the regional and global levels.

These strategic variables influence the decisions made over the short, medium, or long term, ultimately forming a development strategy for the policies of these colleges. Analyzing the strategic variables resulted in a secondary level of importance that greatly influences the formation of the picture of the future of these faculties. This is shaped by the variables of international cooperation and projects.

These variables refer to the ability of social work colleges in Egypt collaborate effectively with their peer colleges across various dimensions.

This signifies academic integration, whether within their strategic vision or in fulfilling their mission. Additionally, it ensures the preservation of their competitive stance and collaborative partnerships.

The analysis also indicated that the presence of a teacher; possessing proficiency in modern technological tools and adeptness in both administrative and educational communication, will serve as a model for learners in their thinking, interpersonal interactions, and adaptation of essential soft skills demanded by this era. This stands as a future goal aimed at enhancing the performance of social work colleges in accordance with the latest developments.

The concept of structural analysis was embodied in employing the MICMAC method to uncover factors directly, indirectly, or potentially impacting the education system in social work colleges. This method facilitates grasping the reciprocal influence and interdependencies among these factors and identifying optimal strategic variables to streamline the complexity of the educational system within these colleges. Also, it may be useful to estimate the strategic perspectives of the institutions to develop their work mechanisms and improve operational processes within the surrounding educational and community environment.

Incorporating the MicMac method within this foresight study proves valuable for pinpointing optimal strategic variables. This enables efficient curriculum program guidance, attainment of educational wellbeing for learners, incorporation of innovative systems within educational, research, and community endeavors, and reinforcement of social work colleges' connections with competencies and skills essential for the job market. Consequently, this enhances the future resilience of social work colleges.

It is supposed to enhance the strategic direction of social work colleges, enabling them to embrace adaptable models founded on the integration of diverse knowledge networks and effectively responding to ongoing changes. These colleges are also expected to prioritize outcomes-based education quality and guide its orientation towards practical applications, with an emphasis on digital transformation across management, education, research, and community service domains.

In conclusion, in order to outline a competitive future portrayal of social work colleges in Egypt, with specific focus on Assiut University, these institutions should take into account the following aspects when formulating their developmental policies:

First, student mobility relies primarily on innovative skillsets, educational program development, and adopting innovative projects. This enhances their capacity to produce job-ready graduates for the labor market. Consequently, this is manifested in the creation of sustainable professional development methodologies for educators and ensuring an overarching value framework for both teacher and student performance.

Second, higher education institutions in general and social work colleges specifically should give precedence to the vitality of infrastructure and technological frameworks due to their critical impact on attracting new providers for educational services and achieving the requirements of strategic orientation. This, in turn, aids in achieving the institutions' goals and objectives. Accordingly, the quality of infrastructure and technological framework could play a role in achieving students' intended learning outcomes. This may result in attracting more learning partners and increasing opportunities to promote scientific research within Egypt's social work colleges.

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