Evaluation of the Validity and Reliability of Organizational Performance Measurement Techniques in Moroccan Public Academic Institutions: Effects of Collaboration and Resources

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Abstract

This article aims to reassess the reliability and validity of measurement methods, as well as the impact of partnership and resources on the organizational performance of public universities in Morocco. Data were collected from a survey of 155 managers (Presidents, Deans and General Secretaries), and the analysis focused on the 71 questionnaires collected. The methodology adopted follows the guidelines of Churchill's paradigm (1979). Our contribution focuses on the exploratory phase of the development of a scale aimed at establishing a theoretical factor structure of organizational performance. After presenting the conceptualization of this scale, the article details the procedures used to develop a multi-item scale for measuring organizational performance. The results reveal a factor structure of organizational performance, assessed through the prism of partnership and resources, which explains 63.27% of the total variance. Reliability analysis of the principal component scales shows correlation and consistency between the different items in each scale, with a reliability index (Cronbach's alpha) of 86.9%. In addition, goodness of fit is considered satisfactory, with an R^2 of 50.7%.

Key words: University; Performance; Morocco; Partnership and resources; Staff involvement.

Résumé

Cet article vise à réévaluer la fiabilité et la validité des méthodes de mesure, ainsi que l'impact du partenariat et des ressources sur la performance organisationnelle des établissements universitaires publics au Maroc. Les données ont été recueillies à partir d'une enquête auprès de 155 gestionnaires (Présidents, Doyens et Secrétaires Généraux), et l'analyse a porté sur les 71 questionnaires collectés. La méthodologie adoptée suit les directives du paradigme de Churchill (1979). Notre contribution se focalise sur la phase exploratoire du développement d'une échelle visant à établir une structure factorielle théorique de la performance organisationnelle. Après avoir présenté la conceptualisation de cette échelle, l'article détaille les procédures utilisées pour élaborer une échelle de mesure multi-items de la performance organisationnelle. Les résultats révèlent une structure factorielle de la performance organisationnelle, évaluée à travers le prisme du partenariat et des ressources, qui explique 63,27 % de la variance totale. L'analyse de la fiabilité des échelles des composantes principales montre une corrélation et une cohérence entre les différents éléments de chaque échelle, avec un indice de fiabilité (alpha de Cronbach) de 86,9 %. De plus, la qualité d'ajustement est considérée comme satisfaisante, avec un R^2 de 50,7 %.

Mots-clés : Université ; Performance ; Maroc ; Partenariat et ressources ; Implication du personnel

1. Introduction

In Morocco's ever-changing academic landscape, the organizational performance of public universities plays a crucial role in their ability to meet contemporary challenges and fulfill their educational, research, and social service missions. However, assessing this performance reliably and validly, while understanding the impact of partnerships and resources, remains a major challenge for managers and researchers alike.

This article sets out to address this issue by conducting an in-depth reassessment of organizational performance measurement methods in public academic institutions in Morocco. To this end, we undertook a survey of 155 managers, including Presidents, Deans,and General Secretaries, and meticulously analyzed the 71 questionnaires collected (Najim 2019).

Following the methodological framework established by Churchill (1979), our approach aims to make a significant contribution to the exploratory phase of the development of a robust measurement scale, aimed at establishing a theoretical factor structure of organizational performance. This contribution is all the more valuable in a context where a fine-tuned understanding of the determinants of university performance is becoming increasingly important (Desgourdes 2019).

After outlining the conceptualization of our scale, this article details the rigorous procedureswe followed to develop a multi-item measurement scale for organizational performance, taking into account key dimensions such as partnership and resources (Wang 2010).

The results we present shed new light on the structure of organizational performance in the specific context of Moroccan universities. Indeed, our analysis reveals a factorial structureof organizational performance that explains a significant part of the total variance, while highlighting the correlation and consistency of the different elements of each scale. These results are supported by a solid reliability index (Cronbach's alpha), as well as satisfactory goodness of fit (R).[2]

This reassessment of the methods used to measure organizational performance in Morocco's public universities is of the utmost importance for the continuous improvement of these institutions. The conclusions we draw from this study can serve as a sound basis for guiding policies and practices aimed at strengthening the performance and effectiveness of academic institutions in the country.

Moreover, they offer a robust framework for future research aimed at deepening our understanding of the complex organizational dynamicsdriving the higher education sector in

Morocco (Baki 2019).

2. Literature review

2.1. Genesis of the concept : Performance

The etymology of the term "performance" has its roots in the Latin "perfecter", meaning "to accomplish completely, to complete". In modern French, it derives from the verb "parfait" and was incorporated into the French lexicon in 1839, borrowed from the English "performance", derived from "to perform", which itself derives from the Old French "performer" (Domin and Nieddu 2013).

In Old French, "performer" meant "to accomplish, to execute". In English, "to perform" encompasses a broader notion than its French translation, including not only accomplishment or execution but also the results of these actions. Consequently, performance encompasses achievements and feats linked to previously defined and formalized objectives.

A return to the word's original usage reveals its use in sports in the 19th century, initially to describe the results and actions of a racehorse, as well as the success achieved in competition. In the 20th century, the term was extended to designate the performance of athletes and teams, often in the plural, about the exceptional output of a machine. It gradually enteredeveryday language to describe how something is achieved.

In management science, the performance approach dates back to the 1960s (Hairout 2021)but its frequency in research has increased since the 1980s(Lebas and Euske 2007). Domin and Nieddu (2012) also highlight its association with a management ideology developed since the 80s.

The concept of organizational performance in management science has given rise to a variety of definitions, prompting debate about its determinants and scope. These divergences stem from the variety of perceptions of the organization and its functioning. According to (Bourechache, Bennamane, et al. 2015) performance is defined as the achievement of organizational objectives, which can be varied and subjective, depending on the referents chosen. He stresses the multidimensional nature of performance, in line with organizational objectives.

(Bourguignon, De Melo et al. 1995) views performance as a happy, positive event, emphasizing the creation of value through the mobilization of human, financial, and information resources to meet customer needs. Performance is thus assessed by the ratio between the cost of the resources committed and the value of the services created.

Currently, the use of the term is confusing (Dominique Bessire, 1999), with its multiple

dimensions and diverse interpretations. Some authors suggest replacing it with other notions such as organizational effectiveness (Bouquin, 2004; Salgado, 2013). Researchers are now focusing on delineating the contours and cross-cutting dimensions of this multidimensional notion (Bouquin, 2004).

The literature offers several definitions of organizational performance, associating it with the results obtained by an organization and the processes that lead to them. Khemakhem (1993) describes it as the relevant achievement of set objectives, while Albanes (1978) defines it as the raison d'être of managerial positions, including both efficiency and effectiveness. Lebas (1995) stresses that performance is not just about achieving a goal, but also about the path needed to get there, requiring careful attention to the determining factors. Machesnay (1991) sees performance as the degree to which the desired goal is achieved, measured by effectiveness, efficiency, and efficacy.

These perspectives converge on the idea that performance is a combination of effectiveness and efficiency. It translates into the achievement of organizational objectives, with an emphasis on how they are reached, integrating the goals defined, the results obtained, and the means employed to achieve them.

Some authors examine the internal and external determinants of performance, about organizational processes and the environment. According to Chandler and Jansen (1992), performance encompasses both strategic and functional effectiveness, involving market position, product improvement, production processes, marketing and human relations.

Lebas (1995) proposes an approach in which performance is measured not only in terms of the comparison between objectives set and results achieved but also about competitors. A successful company excels in all the parameters that define performance.

Villarmois (1998) distinguishes two dimensions of performance: an objective dimension linked to financial aspects, and a subjective dimension linked to social and societal aspects. These dimensions are independent, and the objective dimension is considered to be a limited view of organizational performance.

Since the 1980s, with changes in the business environment and intensified competition, a new perspective on performance has emerged, focusing on the value-cost combination. According to Lorino (1997), performance involves improving the value-cost combination, thus contributing to net value creation. He stresses that the performance of an activity results from its contribution to value-producing chains and that performance management requires the coordination of various processes and activities. Consequently, performance can only be

achieved when both objectives - increasing product/service value and reducing cost - are achieved simultaneously.

Most research on the notion of performance converges on some of its characteristics (Tahon, 2003; Cambon, 2007; Lachtar, D., 2012):

- It depends on a referent: the objective to be achieved. As Lorino puts it, "anything, andonly anything, that contributes to achieving objectives is effective" (Lorino, 2003);

- It is subjective since it depends on the perception of the person who defines it;

- It refers to a concept inferred at a high level of abstraction, making it difficult to observeand measure directly. It can be considered as a construct, observable and representableusing several indicators (Saulquin et al., 2005);

In the strict or Latin sense, it is the result and effect of action. In this context, the term can be used to designate the results obtained by the company, for example in terms of safety;

In the broadest sense, in an approach that considers the result to be nothing in itself, apart from the product, the concretization of the activities that underpin it, it can be considered as the accomplishment, the realization of a set of activities, of elementary logical stages of action. In this way, it comes close to the notion of a process.

From another angle, other authors emphasize the relationship between organizational performance and corporate strategy, as mentioned by Quach T-K-O in 2006. He explains that the perception of performance and its interpretation depend on strategic choices made deliberately and not by chance, as well as on the managerial context.

Considering all these definitions, we can conclude that performance can refer to the result of an action (Bouquin, 2004), to the success of this action, defined as the "level of achievement of objectives" (Bourgignon, 1995). It can also be subjective, as Lebas (1995) points out:

"Performance calls for judgment and interpretation". Consequently, the perception of an organization's performance depends on the observer-evaluator. What's more, managers may adopt a variety of judgment criteria based on different causal models, making this notion complex and difficult to measure.

2.2. Partnership and resources

The partnerships and resources criterion highlights the importance of organizations effectively planning both internal and external management of partnerships, resources, and suppliers. This isbased on a well-defined policy, strategy, and processes. This criterion is broken down into five sub-criteria:

- Managing internal and external partnerships.
- Use of financial resources.
- Infrastructure operation.
- Making technology available.
- Taking information and Knowle
- dge into account.

In the scientific literature on quality management, the importance of partnerships with suppliers and the management of tangible and intangible resources is often emphasized. However, in the field of higher education, this aspect is usually dealt with superficially. Universities, like all other organizations, face resource-related challenges - be they financial, technological, IT, or infrastructure-related - and must implement appropriate control and management measures to address them.

3. Research methodology

The methodology adopted in this study is based on rigorous principles designed to ensure the reliability and validity of the results obtained. Our methodological approach is structured around several key stages, in line with the guidelines established by Churchill (1979), and adapted to the specific context of our research into the organizational performance of public universities in Morocco.

❖ **Survey design :** We developed a comprehensive questionnaire covering the essential dimensions of organizational performance, with particular emphasis on partnership and resource-related aspects. The questionnaire was designed to ensure adequate coverage of the various facets of organizational performance while ensuring the clarity and relevance of the items.

❖ **Data collection :** The survey was conducted among 155 managers of public academic institutions in Morocco, including Presidents, Deans, and General Secretaries. We ensured that the selection of respondents was representative and diversified in order toguarantee the validity and generalizability of the results.

❖ **Data analysis:** The data collected from the questionnaires were subjected to in-depth analysis, using advanced statistical techniques to explore the structure of organizationalperformance and assess the impact of partnership and resources. In particular, we performed factor analyses to determine the underlying structure of the variables and calculated reliability indices (Cronbach's alpha) to assess the internal consistency of themeasurement scales.

❖ **Development of the measurement scale:** Based on the results of the data analysis, we proceeded to develop a multi-item measurement scale for organizational performance. This

stage involved careful attention to item selection and formulation, as well as validation of the resulting factor structure.

❖ **Scale validation :** The resulting measurement scale underwent rigorous validation to ensure its reliability and validity. In particular, we assessed its ability to explain total variance in organizational performance, as well as its internal consistency, using appropriate statistical analyses.

By following this robust methodology, our study aims to provide valuable insights into the organizational performance of public academic institutions in Morocco, while contributing to the development of reliable and valid measurement tools in this field. These results are essential to inform strategic decisions and policies aimed at improving the quality and efficiency of higher education in the country.

4. Analysis and discussion

4.1. Assessing the reliability of the "Organizational performance" dependent variable.

- **Statistical test**

To verify these findings, we can statistically mobilize two coefficients: the Kaiser-Meyer-Olkin test and Bartlett's specificity test.

Table 1: KMO index and Bartlett test

Kaiser-Meyer-Olkin index for measuring sampling quality.		**0,699**
Bartlett's sphericity test	Chi-square approx.	342,284
	Ddl	28
	Meaning	0,000

Source : Authors

The result of Bartlett's sphericity test is statistically significant at the α risk level of 5%, being well below 0.05. This allows us to reject without doubt the null hypothesis H0, which postulatesthat the correlation matrix is an identity matrix for all correlation coefficients. Thus, an exploratory principal component factor analysis is justified and necessary. The value of the KMO index obtained is 0.699, considered mediocre but adequate (>0.5) for exploratory factorial analysis. This value agrees with the previous Bartlett test result, confirming that the correlation matrix differs statistically from an identity matrix, thus justifying the use of factor analysis.

- **Dimensionality**

The table below shows the results of the principal component analysis, with the initial eigenvalues, the sums extracted from the loadings squared, and the rotation sums of the loadings squared. These values allow us to assess the total variance explained by each component.

The first column shows the components, ranging from 1 to 8. Initial eigenvalues measure the total variance explained by each component before any axis rotation. Extracted sums of loadings squared represent the variance explained by each component after extraction, while rotation sums of loadings squared reflect the variance explained by each component after axis rotation.

The percentages of variance explained are presented in three columns: the percentage of variance explained for each component, the cumulative percentage of variance explained up to that component, and the total cumulative percentage of variance explained for all components. For example, the first component explains 51.936% of the total variance, while the first two components together explain 68.012% of the total variance. Ultimately, all components explain 100% of the total variance, in keeping with the nature of principal component analysis.

These results make it possible to assess the effectiveness of data representation by extracting principal components, by measuring the proportion of total variance explained by each component.

Table 2 : Total variance explained

Component	Initial eigenvalues			racted from loadsquares			n sums of loadsquares		
	Total	% of Variance	umulative	Total	% of Variance	mulativeve	Total	% of Variance	umulative
1	4,15	51,936	51,936	4,15	51,936	51,936	3,97	49,706	49,706
2	1,28	16,076	68,012	1,28	16,076	68,012	1,46	18,306	**68,012**
3	0,93	11,719	79,732						
4	0,68	8,501	88,232						
5	0,37	4,636	92,869						

6	0,30	3,861	96,730						
7	0,17	2,223	98,953						
8	0,08	1,047	100,000						

Extraction method: Principal component analysis.

Source : Authors

Factor analysis enabled us to extract two components explaining 49.706% and 18.306% of the variance.

Table -3 : Reliability statistics

Cronbach's Alpha	Cronbach's Alpha based on standardized items	Number of elements
0,845	**0,845**	8

Source : Authors

Cronbach's alpha coefficient, evaluated at 0.845, indicates a level of satisfaction and demonstrates good internal consistency of the scale. What's more, the scale's alpha remains higher than Cronbach's alpha even when an item is deleted, meaning that no item deletion is necessary. All five items included in our scale contribute positively to its reliability.

Figure 1: Eigenvalue graph for the computerization variable
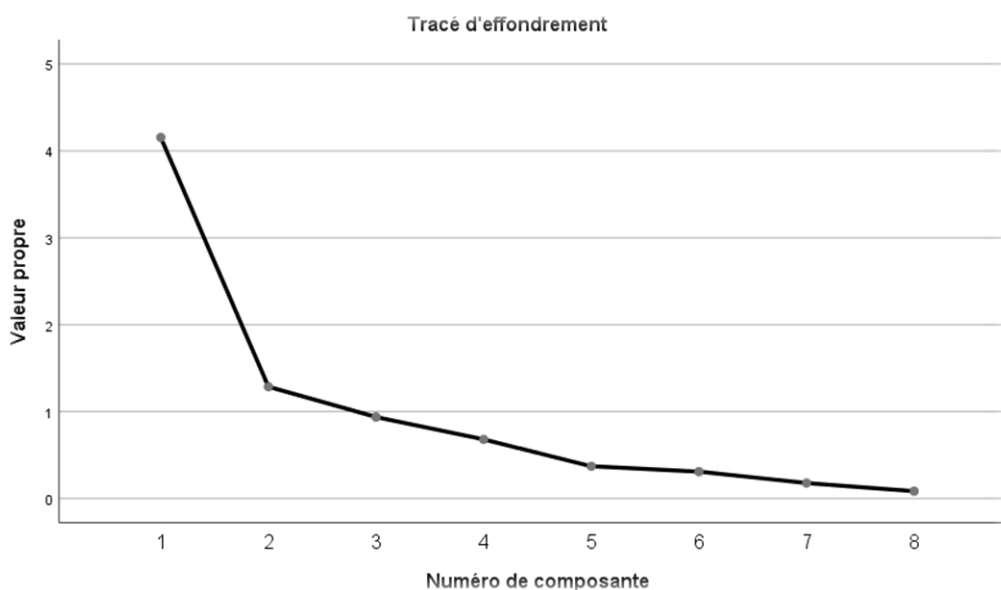
Source : Authors

The five-equation model was tested using the mean-path analysis method in SPSS 26.0. The results of the simultaneous analysis of the model equations linking TQM practices and organizational performance.

To sum up, we can say that there is a direct link between most of the TQM practices in our model, on the one hand, and between TQM practices and organizational performance, on the other. The table below summarizes the network between the different variables.

4.2. Quality assessment of the "Partnership and resources" independent variable measurement scale

Code	Item	1	2	3	4
PR1	Are partnership relations developed through a proactive, structured approach? Do these partnerships help to identify and implement new projects at the facilitylevel?	3	5	16	47
PR2	Does your organization ensure that all relevant information, particularly data on process performance (student satisfaction), and benchmarks, is reliable, up-to-date, quickly accessible and easily exploited by staff?	3	4	15	49
PR3	Does your organization have an approach for ensuring that the allocation and use of financial resources reflect and support its strategic vision, objectives and values, while guaranteeing the organization's sustainable success?	1	3	12	55
PR4	Is there a systematic method for identifying and implementing new or alternative technologies, and optimizing knowledge for service benefits?	1	10	20	40

Source : Authors

4.2.1. Factorability

❖ **Statistical test**

To guarantee these findings statistically, two essential coefficients can be used: the Kaiser-Meyer-Olkin (KMO) test and Bartlett's specificity test.

The Kaiser-Meyer-Olkin test assesses the suitability of data for factor analysis. It measures the proportion of variance among observed variables that is common, i.e. likely to be explained by latent variables. A high KMO score, ideally above 0.5, indicates strong data suitability for factor analysis.

On the other hand, Bartlett's specificity test examines whether correlations between observed

variables are significantly different from zero. A p-value below a predefined threshold (usually 0.05) indicates that correlations between variables are significant enough to warrant factor analysis.

By combining these two tests, researchers can determine whether their data are suitable for factor analysis and whether the variables are sufficiently correlated to extract significant factors. In this way, these two coefficients provide an essential statistical basis for ensuring the robustness of the results obtained during data analysis.

Table 4: KMO index and Bartlett test

Kaiser-Meyer-Olkin index for measuring sampling quality.		**0,639**
Bartlett's sphericity test	Chi-square approx.	49,573
	Ddl	6
	Meaning	,000

Source : Authors

The KMO test value of 0.639 indicates a satisfactory result. The correlation between the scale items is therefore validated.

Bartlett's sphericity test is highly significant, allowing us to reject the null hypothesis (p = 0.000). Consequently, the correlation matrix is different from the identity matrix. Hence, the application of a factorial analysis is justified.

Table 5: Representation qualities

Items	Initials	Extraction
Are partnership relations developed through a proactive, structured approach? Do these partnerships help to identify and implement new projects at facility level?	1,000	0,330
Does your organization ensure that all relevant information, particularly data on process performance (student satisfaction) and benchmarks, is reliable, up-to-date, quickly accessible and easily exploited by staff?	1,000	0,577
Does your organization have an approach for ensuring that the allocation and use of financial resources reflect and support its strategic vision, objectives and values, while guaranteeing the organization's sustainable success?	1,000	0,704
Is there a systematic method for identifying and implementing new or alternative technologies, and optimizing knowledge for service benefits?	1,000	0,593

Extraction method: Principal component analysis.

Source : Authors

From the analysis of the item representation quality table, we noticed that item n°1 had a representation quality of less than 0.50. We therefore eliminated it. We therefore eliminated it. We then noted that the variance explained had increased to **61.374%**. We deduced that all the

remaining items had good representational quality.

❖ **Dimensionality**

Table 6: Total variance explained

Component	Initial eigenvalues			Sums extracted from load squares		
	Total	% of variance	Cumulative	Total	% of variance	Cumulative
1	2,103	52,579	52,579	2,103	52,579	**52,579**
2	,806	20,147	72,725			
3	,662	16,538	89,263			
4	,429	10,737	100,000			

Extraction method: Principal component analysis.

Source : Authors

Table 7 : Component matrix[a]

Items	Component 1
Are partnership relations developed through a proactive, structured approach? Do these partnerships help to identify and implement new projects at the facility level?	0,574
Does your organization ensure that all relevant information, particularly data on process performance (student satisfaction) and benchmarks, is reliable, up-to-date, quickly accessible, and easily exploited by staff?	0,759
Does your organization have an approach for ensuring that the allocation and use of financial resources reflect and support its strategic vision, objectives,and values, while guaranteeing eeing the organization's sustainable success?	0,839
Is there a systematic method for identifying and implementing new or alternative technologies, and optimizing knowledge for service benefits?	0,702

Extraction method: Principal component analysis.

Source : Authors

4.2.2 After elimination of Item 1

Factorability

❖ **Statistical test**

To verify these findings, we can statistically mobilize two coefficients: the Kaiser-Meyer-Olkin test and Bartlett's specificity test.

Table 8: KMO index and Bartlett test

Kaiser-Meyer-Olkin index for measuring sampling quality.		**0,702**
Bartlett's sphericity test	Chi-square approx.	49,573
	Ddl	3
	Meaning	0,000

Source : Authors

The KMO test value of 0.702 indicates a satisfactory result. The correlation between the scale items is therefore validated.

Bartlett's sphericity test is highly significant, allowing us to reject the null hypothesis (p = 0.000). Consequently, the correlation matrix is different from the identity matrix. Hence, the application of a factorial analysis is justified.

Table 9: Representation qualities

Items	Initials	Extraction
Does your organization ensure that all relevant information, particularly data on process performance (student satisfaction) and benchmarks, is reliable, up-to-date, quickly accessible and easily exploited by staff?	1,000	0,618
Does your organization have an approach for ensuring that the allocation and use of financial resources reflect and support its strategic vision, objectives, and values while guaranteeing the organization's sustainable success?	1,000	0,730
Is there a systematic method for identifying and implementing new or alternative technologies, and optimizing knowledge for service benefits?	1,000	0,550

Extraction method: Principal component analysis.

Source : Authors

❖ **Dimensionality**

Table 10: Total variance explained

| Component	Initial eigenvalues			Sums extracted from load squares		
	Total	% of variance	cumulative	Total	% of variance	Cumulative
1	1,898	63,272	63,272	1,898	63,272	63,272
2	,668	22,254	85,526			
3	,434	14,474	100,000			

Extraction method: Principal component analysis.

Source : Authors

We can see that all loadings saturate well on the factor since all factor contributions are above 0.5 following the recommendations of Hair et al. (2014). This means that the items concerned

contribute well to the significance of the factor selected. This is a good sign for the measurement scale.

Figure 2: Eigenvalue graph of the strategy variable
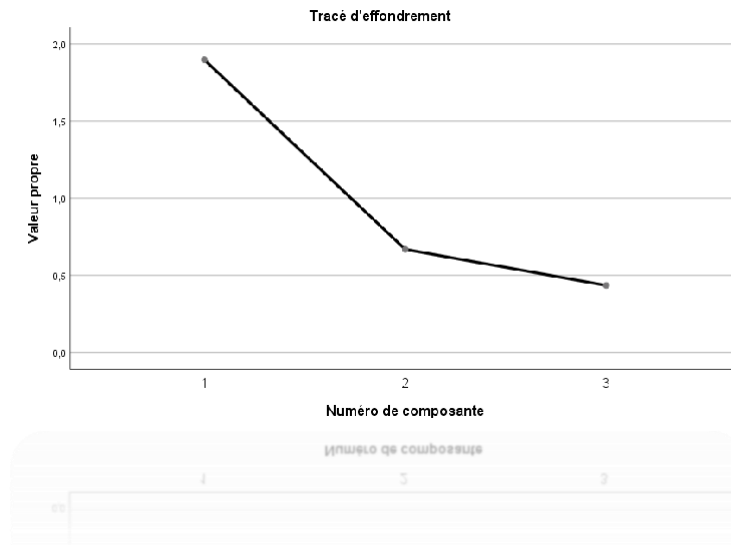
Source : Authors

The unidimensional factor structure of the strategy factor measurement scale was also confirmed by the eigenvalue graph. Kaiser (1960) (quoted by Igalens & Roussel, 1998) recommends retaining factors with eigenvalues greater than or equal to 1.00 if the PCA is performed based on the correlation matrix. Following this graph of eigenvalues, we can see that only one factor has a value greater than 1.00, while the other factors have lower values.

Having analyzed dimensionality, we now turn to examining the reliability of the measurement scale by assessing the value of Cronbach's alpha.

Table 11: Reliability statistics

Cronbach's Alpha	bach's Alpha based on standardized items	Number of elements
0,871	0,869	3

Source : Authors

Cronbach's alpha for the organizational performance concept measurement scale was 0.869. This is a very good score. Hence, the internal consistency of the scale is well verified.

Table 12: Summary of models

Model	R	R-two	R-two adjusted	Standard errorof the estimate	Durbin-Watson
1	0,712ᵃ	0,507	0,500	0 ,62368	0 ,674

a. Predictors: (Constant), PS
b. Dependent variable: PERFORMANCE

Source : Authors

The results of the regression model indicate that the independent variables included in the model significantly explain around 50.7% of the variance in organizational performance, with a coefficient of determination (R) of 0.507. The adjusted coefficient of determination (adjusted R-two) is 0.500, confirming an adequate fit of the model given the number of predictors and the sample size. The standard error of the estimate, which measures the dispersion of observed values around the regression line, is 0.62368. However, the Durbin-Watson test reveals a value of 0.674, suggesting possible weak or moderate positive autocorrelation in the residuals, which may need to be taken into account when interpreting the results. In sum, although the regression model is overall significant in explaining organizational performance, the potential impact of autocorrelation on the validity of the conclusions drawn needs to be carefully considered.

Table 13: ANOVAᵃ

Model		Sum of squares	Ddl	Medium square	F	Sig.
1	Regression	27,580	1	27,580	70,903	,000ᵇ
	by Student	26,839	69	,389		
	Total	54,419	70			

a. Dependent variable : PERFORMANCE
b. Predictors: (Constant), PS

Source : Authors

The ANOVA table shows that the regression model is significant in explaining organizational performance, with a sum of squares of 27.580 and an F-test of 70.903, giving a p-value of 0.000, indicating statistical significance. This means that the variance explained by the regression model is significantly different from the residual variance. In addition, the regression model appears to be a good approximation of the data, with a mean square of 27.580. In conclusion, these results suggest that the regression model is appropriate for analyzing the relationship between predictors (constant and PS) and organizational performance.

Table 14 Coefficients[a]

Model		Non-standardized coefficients		Standardized coefficients	t	Sig.
		B	tandarderror	Beta		
1	(Constant)	0,715	0,376		1,899	,062
	PS	0,731	0,087	0,712	8,420	,000

a. Dependent variable: PERFORMANCE

Source : Authors

The coefficient table presents estimates of the effects of the independent variables on the dependent variable in the regression model. The results indicate that the variable PS (Partnership and Resources) has an unstandardized coefficient of 0.731, with a standard error of 0.087. This coefficient suggests that for each unit increase in the PS variable, organizational performance increases by an average of 0.731 units. The standardized coefficient, represented by the Beta coefficient, is 0.712, indicating that the PS variable contributes significantly and positively to organizational performance. The t-test associated with the PS variable is 8.420, with a p-value of 0.000, confirming the statistical significance of this relationship. On the other hand, the constant is not significant at the 95% confidence level, with a t-test of 1.899 and a p-value of 0.062. In conclusion, these results support the idea that partnership and resources have a significant impact on the organizational performance of public universities in Morocco.

Conclusion

The present study explored in depth the organizational performance of public academic institutions in Morocco, focusing on the impact of partnership and resources. Through a rigorous methodology and in-depth data analysis, we were able to identify significant trends and provide valuable insights for improving the governance and effectiveness of these institutions.

The results of our research have highlighted the vital importance of partnerships and resources in promoting the organizational performance of academic institutions. Indeed, our analysis revealed that these two factors play a significant role in improving the overall performance of academic institutions, enhancing their ability to respond to society's changing needs and meet the complex challenges of the contemporary world.

Specifically, our study showed that academic institutions that invest in strategic partnerships with other institutions, businesses, and government agencies, as well as in the judicious

allocation of resources, are more likely to experience enhanced organizational performance. This finding underlines the importance of a holistic approach to resource management and strategic alliances to promote academic and institutional excellence.

Furthermore, our findings highlight the need for policy-makers, administrators, and managers of academic institutions to recognize and value the central role of partnership and resources in fostering a culture of innovation, adaptability, and collaboration. By taking steps to foster an environment conducive to collaboration and the efficient use of resources, academic institutions can strengthen their position and influence in Morocco's academic and socio-economic landscape.

Finally, this study highlights the continuing importance of empirical research and data analysis to inform strategic decisions and policies aimed at improving the organizational performance of academic institutions. By continuing to deepen our understanding of the determinants of organizational performance and developing innovative strategies to promote academic excellence, Morocco can strengthen its position as a major player in higher education at regional and international levels.

This research represents a significant contribution both academically and practically, shedding light on the determinants of the organizational performance of public universities in Morocco. Highlighting the positive impact of partnership and resources on this performance, opensup new avenues for interdisciplinary research and provides valuable strategic guidance for policy-makers and university managers. By capitalizing on these results, Morocco can strengthen its position in higher education and make a significant contribution to the country's socio-economic development, by fostering a culture of innovation, collaboration, and institutional excellence.

References :

Baki, B. T. (2019). Ecoles bilingues en contexte plurilingue burkinabé et recherche terminologique en mathématiques français/langues nationales: perspectives pédagogique et lexicographique, Normandie Université.

Bourechache, F., et al. (2015). Socio-economic management control and corporate performance.

Bourguignon, F., et al. (1995). "Devaluation and competitiveness in Côte-d'Ivoire." Revue économique: 739-749.

Desgourdes, C. (2019). The influence of frontline managers on their employees' attitudes toward organizational change, University of Tours.

Domin, J.-P. and M. Nieddu (2013). "The plurality of approaches in terms of performance." Economics and Institutions (18-19).

Haircut, W. (2021). "Organizational performance measurement systems as a lever for performance in Moroccan public institutions." International Journal of Accounting, Finance, Auditing, Management and Economics **2**(5): 552-566.

Lebas, M. and K. Euske (2007). 2007. A conceptual and operational delineation of performance, Business performance measurement: theory and practice. Cambridge University.

Najim, H. (2019). "The effectiveness of human resource management in developing countries: an empirical study."

Wang, Y. (2010). L'évolution de l'intention et le développement de l'esprit d'entreprendre des élèves ingénieurs d'une école française : une étude longitudinale, Ecole Centrale de Lille.