

PROFESSIONAL CHARACTERISTICS AND MANAGERIAL EFFECTIVENESS: TOWARDS HIGH-PERFORMANCE MANAGEMENT ENGINEERING

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Abstract- In our quest for objectivity, we aim to establish. How the professional characteristics: initial training, experience, field, and qualifications of a center director significantly impact the managerial aspects used. By adopting a quantitative methodology. The sample consisted of 100 center directors from the Ile-de-France region. They answered a questionnaire designed to obtain information about socio-professional characteristics and managerial aspects. IBM SPSS 29 software was used to process the results. There was a large and significant effect size between socio-professional characteristics and managerial health aspects. The results show that the variable of the last diploma obtained is significant for all aspects, with the aspect of continuing education having a higher effect size than the other aspects (47%). In the same vein, there are significant relationships between the directors' initial training and all five aspects, with continuing education having a significant effect size of 12.3%. About the experience variable, four significant relationships can be distinguished, with the most intense being that of patient data management, with an effect size of 7.6%. As for the last variable, director qualifications, a significant effect is noted, with 15.7% of the variation explained by the structure and team management aspect variable. In the end, we are faced with the importance of selecting a manager with specified professional characteristics, given their positive impact on health managerial aspects, and above all the aspect of continuous training as a powerful tool enabling health managers to improve their professional practices in the presence of a quality managerial system, which favors the development of these skills for better civic integration aimed at the long term.

Keywords: Management, Professional Characteristics, Correlation, Continuing Education, Managerial Aspects.

1. INTRODUCTION

Managerial engineering involves and facilitates the application of systematic methods and approaches to design, implement and optimize management processes within an organization. The management of a commercial, health, social or other establishment requires

multi-skilling (in management, finance, law). After several years' professional experience, particularly in management, it is possible to move into this position [1]. Managerial engineering is a discipline that applies engineering principles to management processes and systems, with the aim of optimizing organizational efficiency and performance. It aims to design, implement, and improve management structures, processes, and systems within any organization [2].

The managerial performance of a center is linked to the good management of a director (manager), something which is well linked to the latter's professional characteristics [3]. A distinction is made between methods that are used in an integrated way to create a holistic approach to managerial engineering, tailored to the specific needs of an organization in general and a center in particular [4].

- **Project Management:** The project management approach aims to organize, plan and control resources in order to achieve specific objectives. Methodologies such as PERT/CPM (Program Evaluation and Review Technique/Critical Path Method) are often used to manage projects effectively [5].
- **Business Process Management (BPM):** BPM is an approach that aims to improve operational efficiency by identifying, modeling, analyzing, and improving business processes. This can include the use of modeling tools such as BPMN (Business Process Model and Notation) and the implementation of technologies to automate processes [6].
- **Quality Management:** Quality management methods, such as Total Quality Management (TQM) and Six Sigma, aim to improve product or service quality and optimize organizational processes [7].
- **Human Resources Management:** Human resources management techniques, including performance appraisal, talent management and succession planning, are crucial to managerial engineering, as they relate to the management of individuals within the organization [8].
- **Knowledge Management:** Knowledge management involves the capture, storage, sharing and effective use of knowledge within the organization. Methods such as the creation of knowledge databases and the implementation of knowledge management systems are often used [9].

- Risk management: Identifying, assessing, and managing risks is an integral part of management engineering. Methods such as risk analysis and contingency planning are implemented to mitigate potential risks [10].
- Management Dashboards: The use of management dashboards makes it possible to monitor and evaluate organizational performance, using key performance indicators (KPI) to make informed decisions [11-12].

Furthermore, successful center management relies on a set of points that are well linked to the top manager, who is the director. The center director should have the versatility to stand between the lines of all these managerial engineering methods to analyze, design, implement and improve management processes and systems within his organization - something that will guarantee lasting effectiveness. Consequently, the aim of this research is to study the correlation between the director's professional characteristics, which have an impact on managerial aspects, with a view to an effective and relevant managerial engineering intervention in Medico-psych pedagogical centers in Morocco.

2. MATERIALS AND METHODS

Our quantitative research was based on six managerial aspects with a multi-level analysis of so-called professional characteristics: the manager's level of education, initial training, qualifications, and years of experience. In this section, we first present the modalities of the correlational study, the participants, the measurement instruments, the design, and the modes of data analysis, before presenting the correlations identified.

2.1. Participants

We selected an exploratory survey of a sample of 100 directors of psycho-pedagogical centers (CMPP) in the Ile de France region. To ensure fair sampling, the directors were informed that their responses would be used solely for academic research purposes, and that their identities would not be revealed. The sample for this study represents an adequate size in relation to the general number of CMPP in the Ile de France region, which is 100, data extracted from the French Social and Medical-Social Register, which guarantees the reliability and significance of the results.

2.2. Instruments

We distributed a self-designed questionnaire through Google Forms. This methodological choice was made in view of the geographical location of our sample and to be able to wait for them. The questionnaire drawn up for the collection of quantitative data is the result of the combination of two questionnaires that have been prepared and standardized internationally: the first is entitled "Elaboration of a questionnaire to evaluate the organizational development of primary care groups: testing the questionnaire in the five health centers of the Association Management of Associative Health Centers (AGECSA)" [13]. In addition, the second is a survey on the activity of medical-psych pedagogical centers (CMPP) in the Centre region in 2008 [14].

This questionnaire has been designed to gather information on the managerial engineering system in relation to the professional characteristics of a manager known as the director of the entire organization. Our questionnaire is composed of 7 dimensions, one of which represents the professional characteristics of facility managers, and 6 dimensions encompass managerial engineering aspects: structure and team management, continuing education, inter-professional cooperation, quality and safety of care, patient data management and accessibility and continuity of care. The questionnaire comprises 64 questions, including 4 on professional characteristics, 48 on managerial aspects and 12 questions to find out more about the center's target audience.

2.3. Conception

This is a nomothetic study aimed at describing, understanding, and explaining the observed health situation. A quantitative approach has been developed: this is an empirical and correlational study designed to analyze the dependence of management aspects on the career characteristics of the manager. It cannot be denied that these results may lead to a different perspective on thinking about effective managerial engineering.

2.4. Data Analysis

Analyses of the relationship between the six aspects of health management and the professional characteristics of the center managers were carried out using the ANOVA statistical test. Significance analyses are presented in ANOVA tables (p , η^2). Significant correlations were used to test dependence between response variables and explanatory variables. They are presented as mean and effect sizes.

- The significance level was set at $p = 0.05$.
- Data were processed using IBM SPSS 29.IC. CHICAGO.

3. RESULTS

3.1. Descriptive Analysis

In this study, we used variables to measure and analyze the data collected.

3.1.1. Dependent Variables

In our research, these dependent variables reflect the professional characteristics of center directors (CMPP). Four variables were chosen because they relate to the selection of specific qualities, skills and attributes needed to succeed in the director's position. The dependent variables in our study represent the professional characteristics of the directors.

1) Diploma Obtained (DO): The final diploma obtained by a CMPP director is a dependent variable and may vary according to other variables. Table 1 below shows the variety of responses from directors according to the diplomas they have obtained.

Table 1. The last diploma obtained by a director in a CMPP

		Frequency	Percent age	Valid percentage
Valid	Bac+3	10	9.8	11.2
	Bac+5	20	19.6	22.5
	Bac+8	59	57.8	66.3
	Total	89	87.3	100.0
Missing	System	13	12.7	
Total		102	100.0	

11.2% of managers have a Bac+3 (LICENCE), while 22.5% have a master's degree (Bac+5), and 66.3% have a bac +8, the equivalent of a doctorate.

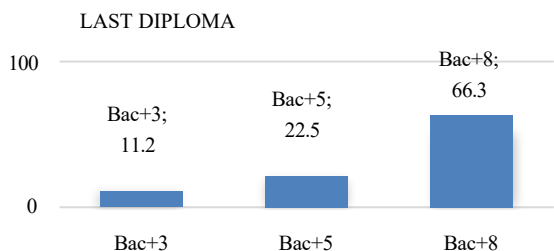


Figure 1. manager's diploma

2) Initial Training (IT): Initial training refers to the body of knowledge and skills a manager receives at the start of his or her career. This is a dependent variable in our study.

Table 2. shows the different types of initial training a manager can acquire

		Frequency	Percentage	Valid percentage
Valid	1	47	46.5	52.8
	2	31	30.7	34.8
	3	4	4.0	4.5
	4	7	6.9	7.9
	Total	89	88.1	100.0
Missing	System	12	11.9	
Total		101	100.0	

It's worth noting that 55.8% of directors have received training in organizational management and finance, while 34.8% have chosen training in human resources management and leadership, leaving 4.5% who have been trained in psych pedagogy and special education. Finally, 7.9% of managers have trained in the medical-social field:

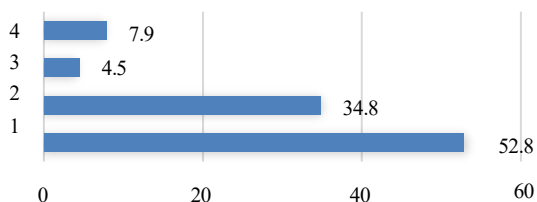


Figure 2. Initial Training (IT)

3) Professional Experience (PE): Professional experience is considered as a dependent variable designated by the number of years of experience the director has exercising the posture of managing a medical-psych pedagogical center. Table 3 below presents the percentages of the directors' years.

Table 3. Number of years of experience of the director

		Frequency	Percentage	Valid percentage
Valid	1 to 5 years	34	33.7	38.2
	6 to 10 years	21	20.8	23.6
	10 or more years	34	33.7	38.2
	Total	89	88.1	100.0
Missing	System	12	11.9	
Total		101	100.0	

We can see that 38.2 managers have 1 to 5 years' professional experience, and 23.6% have 6 to 10 years' experience. Finally, those with 10 or more years' experience represent 38.2%.



Figure 3. Professional experience

4) Director's Qualifications: The director of a center can wear many hats at the same time, which is why we have taken this variable called qualifications in order to reveal the other qualifications required of a director for effective and efficient management of the center, which is basically multidisciplinary. Table 4 shows the variety of qualifications required of a manager to ensure effective management of the center.

Table 4. Qualifications of a medical-social manager

		Frequency	Percentage	Valid percentage
Valid	1	6	5.9	6.7
	2	15	14.9	16.9
	3	40	39.6	44.9
	4	28	27.7	31.5
	Total	89	88.1	100.0
Missing	System	12	11.9	
Total		101	100.0	

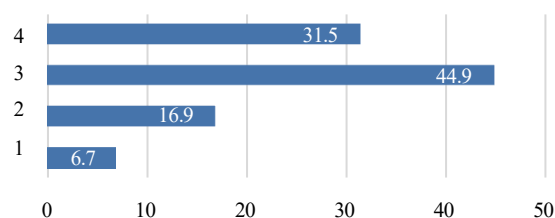


Figure 4. Director's qualifications

In this stage, 44.9% of managers have intense qualifications in the clinical-medical field, then 31.5% are qualified in the pedagogical sector, 16.9% in the psychological sector and finally 6.7% have no qualifications.

3.1.2. Independent Variables

Factors are often examined to determine their influence on other dependent variables. The independent variables in our study raise management questions.

1. Ongoing training: This refers to the process by which directors acquire new skills and knowledge throughout their careers after having completed initial training.

2. Interprofessional cooperation: "A process, professionals Development and reflection in different disciplines of practices that enable us to meet people's needs in a coherent and integrated way people, their loved ones and their communities."

3. Quality and safety: Quality of care refers to the extent to which health care provided to a population achieves its intended outcomes and is consistent with the latest scientific evidence. Patient safety aims to reduce the risk of avoidable harm Patient suffering.

4. Accessibility and continuity: Continuity of care is defined as "the ability of an organization to provide care to a specific patient without interruption, either in time or between participants, and throughout the course of the disease". Access to care can be defined as the ability of people to receive care when and where it is needed (WHO).

5. Data management: Data management, also known as clinical data management and health information management, refers to the management of medical data stored in a digital format under the name of electronic medical records (EHR/EMR).

6. Structure and team management: A manager's ability to organize and coordinate his or her team around a common goal is essential for effective team management. Talented managers foster team collaboration and cultivate a sense of unity.

3.2. Inferential Analysis

Given that we had categorical professional characteristics and wished to compare means on aspects of management from different centers, the choice of ANOVA was necessary. This will help determine whether the difference observed is statistically significant. The significance of this difference can be quantified by calculating the eta-squared index (η_2). Around 0.01: small effect size Around 0.06: medium size effect Around 0.14 and over: large size effect.

3.2.1. The Choice of Analysis of Variance (ANOVA)

This relationship may have a significant impact on functioning and performance. The null hypothesis of the ANOVA is that the variance of the dependent variable (response variable) of the professional parameter does not change in the educational management variable (explanatory variable). The significance of this difference can be quantified by calculating the eta squared index (η_2), in Tables 6, 8, 9 and 11.

3.2.2. The Relationship between Socio-Personal Characteristics and Aspects of Medical-Social Management

1) Diploma Obtained (DO): Table 6 below presents the results obtained from the ANOVA statistical test. When correlating the level of qualifications obtained by managers with managerial aspects, we find ($p < 0.001$) similar significance with the following three aspects: quality and safety of care, accessibility and continuity of care, and continuing education. The correlation effect sizes are 16.5%, 32.2% and 47%, respectively, showing that the effect is highly significant, as Table 5.

Table 5. Effect size between degree obtained and managerial aspects

		Estimated points	95% Confidence interval	
			Inf	Sup
Structure management and the team	Square Eta	0.117	0.013	0.238
Quality and Safety Care	Square Eta	0.165	0.038	0.293
Patient data management	Square Eta	0.095	0.004	0.211
Interprofessional cooperation	Square Eta	0.085	0.001	0.198
Accessibility and Continuity of care	Square Eta	0.322	0.158	0.447
Ongoing training	Square Eta	0.470	0.308	0.577

We found a dependency between the dependent variable of diploma obtained and the independent variables, particularly about continuing training, which affects a large effect size percentage. This suggests that the more continuing education an employee receives, the higher the degree obtained by his or her supervisor.

Table 6. Results of the ANOVA Statistical Test between the variables Diploma obtained (DO) and managerial aspects

		Sum of squares	Df	Medium square	F	Sig.
Structure management and the team	Entre-gr	0.226	2	0.113	5.689	0.005
	Intra-gr	1.708	86	0.020		
	Total	1.934	88			
Quality and Safety Care	Entre-gr	852	2	0.426	8.510	<0.001
	Intra-gr	4.307	86	0.050		
	Total	5.159	88			
Patient data management	Entre-gr	0.281	2	0.140	4.523	0.014
	Intra-gr	2.671	86	0.031		
	Total	2.952	88			
Interprofessional cooperation	Entre-gr	0.448	2	0.224	3.977	0.022
	Intra-gr	4.845	86	0.056		
	Total	5.293	88			
Accessibility and Continuity of care	Entre-gr	0.340	2	0.170	20.395	<0.001
	Intra-gr	0.716	86	0.008		
	Total	1.056	88			
Ongoing training	Entre-gr	0.139	2	0.069	38.169	<0.001
	Intra-gr	156	86	0.002		
	Total	0.295	88			

We also distinguished a significant relationship between degrees obtained and structure and team management ($p < 0.005$) with an effect size of 11.7%, i.e. a medium effect size. Patient data management and interprofessional cooperation ($p < 0.014$) were mentioned in the data ($p < 0.022$), with effect sizes of 9.5% and 8.5%, respectively (Table 6). Variation in DO variables

can be explained by structure and team management variables. We can see that management of the structure and the team is a primordial point for administrators to obtain academic degrees.

2) Initial Training (IT): Table 8 highlights five significant relationships between initial training and aspects of management: structure and team management, quality and safety, data management, accessibility and continuity, and continuous training, with effect sizes alternating between 9.7%, 11.5%, 9.2%, 9.7% and 12.3%, Table 7. This suggests a dependency between the five variable aspects related to initial training. More precisely, we can say that continuing training can influence initial training by complementing or updating it.

Table 7. Effect size between initial training (IF) and managerial aspects

		Estimated points	95% Confidence interval	
			Inf	Sup
Structure management and the team	Square Eta	0.097	0.000	0.203
Quality and Safety Care	Square Eta	0.115	0.005	0.226
Patient data management	Square Eta	0.092	0.000	0.197
Interprofessional cooperation	Square Eta	0.066	0.000	0.161
Accessibility and Continuity of care	Square Eta	0.097	0.000	0.203
Ongoing training	Square Eta	0.123	0.008	0.236

We determined the significance ($p=0.033<0.05$) between the initial training variable and structure and team management, showing that there is a marked dependency with size close to 10%. We also found a significant effect size ($p=0.015<0.05$) of 11.5% between initial training and quality and safety of care. We are faced with huge impacts. Table 8 Shows the correlation between the IF response variable and the explanatory variables, there is a high level of quality within the center, which explains why initial training is based on a quality service and can adopt ISO standards.

Table 8. Results of the ANOVA statistical test between the Initial Training (IT) variables and health management aspects

		Sum of squares	Df	Medium square	F	Sig.
Structure management and the team	Entre-groups	0.187	3	0.062	3.042	0.033
	Intra-groups	1.746	85	0.021		
	Total	1.934	88			
Quality and Safety Care	Entre-groups	0.595	3	0.198	3.694	0.015
	Intra-groups	4.564	85	0.054		
	Total	5.159	88			
Patient data management	Entre-groups	0.273	3	0.091	2.886	0.040
	Intra-groups	2.679	85	0.032		
	Total	2.952	88			
Inter-professional cooperation	Entre-groups	0.350	3	0.117	2.009	0.119
	Intra-groups	4.943	85	0.058		
	Total	5.293	88			
Accessibility and Continuity of care	Entre-groups	0.102	3	0.034	3.040	0.033
	Intra-groups	0.954	85	0.011		
	Total	1.056	88			
Ongoing training	Entre-groups	0.036	3	0.012	3.977	0.011
	Intra-groups	0.259	85	0.003		
	Total	0.295	88			

There was also a significant relationship between the director's initial training and the aspect entitled patient data management ($p=0.040<0.05$), with an effect size of 9.2%. There was a significant relationship between the director's initial training and the aspect of accessibility and continuity of care ($p=0.033<0.05$), with an effect size of almost 10%. This shows the dependency between initial training and accessibility and continuity of care within the center. The center offers greater accessibility and continuity of care, demonstrating that the director has specialized training in effective management. Finally, a striking dependency was noted between the director's initial training and continuing education, with a high significance index and effect size ($p=0.011<0.05$) and 12.3%. This supports the importance of ongoing training for center managers.

Table 9. Results of the ANOVA Statistical Test between the Professional Experience (PE) variables and managerial aspects

		Sum of squares	Df	Medium square	F	Sig.
Structure management and the team	Entre-gr	0.141	2	0.071	3.384	0.039
	Intra-gr	1.793	86	0.021		
	Total	1.934	88			
Quality and Safety Care	Entre-gr	0.359	2	0.179	3.214	0.045
	Intra-gr	4.800	86	0.056		
	Total	5.159	88			
Patient data management	Entre-gr	0.225	2	0.112	3.544	0.033
	Intra-gr	2.727	86	0.032		
	Total	2.952	88			
Interprofessional cooperation	Entre-gr	0.363	2	0.182	3.170	0.047
	Intra-gr	4.930	86	0.057		
	Total	5.293	88			
Accessibility and Continuity of care	Entre-gr	0.033	2	0.017	1.405	0.251
	Intra-gr	1.023	86	0.012		
	Total	1.056	88			
Ongoing training	Entre-gr	0.004	2	0.002	0.562	0.572
	Intra-gr	0.291	86	0.003		
	Total	0.295	88			

3) Professional Experience (PE): Table 9 shows that there are four significances between the professional experience variable and managerial aspects: structure and team management, quality and safety of care, patient data management and interprofessional cooperation with sig respectively ($p=0.039<0.05$), ($p=0.045<0.05$) ($p=0.033<0.05$) ($p=0.047<0.05$) and effect sizes of 7.3%, 7%, 7, 6% and 6.9%, Table 9.

Table 10. Effect size between Professional Experience (PE) and managerial aspects

		Estimated points	95% Confidence interval	
			Inf.	Sup.
Structure Management and team	Square Eta	0.073	0.00	0.275
Quality and Safety Care	Square Eta	0.070	0.00	0.177
Patient data management	Square Eta	0.076	0.00	0.186
Interprofessional cooperation	Square Eta	0.069	0.00	0.176
Accessibility and Continuity of care	Square Eta	0.032	0.00	0.117
Ongoing training	Square Eta	0.013	0.00	0.077

This shows that the four aspects above depend on the professional experience of the directors of a medical-psych pedagogical center. In short, a center that encourages inter-professional cooperation, efficiently manages teams and patient data, and meets quality and care safety standards, indicates that the director has extensive professional experience.

4) Director's qualifications: Table 11 illustrates some of the significant correlations obtained from the ANOVA statistical test. When center director qualifications were correlated with management aspects, we found significant ($p=0.004<0.05$) for interprofessional cooperation, with an effect size of 5.4%, indicating a weak effect. Certainly, the effect sizes of the correlations were 12.6% and 8.9% respectively for quality and safety of care ($p=0.009<0.05$) and continuing education ($p=0.047<0.05$), indicating that the effects were significant in Table 12.

Significance is present with the aspect of structure and team management ($p=0.002<0.05$), with a significant effect size of 15.7%, which explains the total dependence between the director's qualifications and center management. A qualified manager plays a very important role in the center's management system, which implies that he or she relies on managerial engineering methods efficiently.

Table 11. Effect size between qualifications and managerial aspects

	Estimated points	95% Confidence interval	
		Inf	Sup
Structure management and the team	Square Eta 0.157	0,025	0.275
Quality and Safety Care	Square Eta 0.126	0.009	0.239
Patient data management	Square Eta 0.146	0.019	0.262
Interprofessional cooperation	Square Eta 0.054	0.000	0.143
Accessibility and Continuity of care	Square Eta 0.084	0.000	0.186
Ongoing training	Square Eta 0.089	0.000	0.192

Analyzing and comparing the above results, we can clearly see the following advantages and disadvantages. It's essential to take stock of the benefits of management engineering, depending on the professional characteristics, managerial engineering can help identify the key skills of the manager. It is about making a better part of its strengths and at the same time highlighting its capabilities. Of course, managerial engineering can help to align the organization's goals with the leader's skills and aspirations, promoting more coherent leadership. In addition, it can be used to create vocational training programs specific to the needs of managers. This helps to develop managerial skills tailored to the organizational context.

Moreover, it offers an additional advantage. Management engineering contributes to more informed and aligned decision-making with the leader's personality, values, and skills by integrating the manager's professional characteristics into decision making processes. Finally, by considering the professional

characteristics of the manager, managerial engineering can help develop an inspiring leadership style. This can increase the motivation of the team. While the relationship between managerial engineering and the professional characteristics of the manager may have advantages, it may also have disadvantages. Here are some key points to consider:

Table 12. Results of the ANOVA statistical test between qualifications variables and managerial aspects

		Sum of squares	Df	Medium square	F	Sig.
Structure management and the team	Entre-groups	0.304	3	0.101	5.279	0.002
	Intra-groups	1.630	85	0.019		
	Total	1.934	88			
Quality and Safety Care Patient data management	Entre-groups	0.650	3	0.217	4.084	0.009
	Intra-groups	4.509	85	0.053		
	Total	4.159	88			
Interprofessional cooperation Accessibility And Continuity of Care	Entre-groups	0.430	3	0.143	4.831	0.004
	Intra-groups	2.679	85	0.032		
	Total	2.952	88			
Ongoing training	Entre-groups	0.288	3	0.096	1.630	0.188
	Intra-groups	5.005	85	0.059		
	Total	5.293	88			
Structure management and the team	Entre-groups	0.089	3	0.030	2.599	0.058
	Intra-groups	0.967	85	0.011		
	Total	1.056	88			
Ongoing training	Entre-groups	0.026	3	0.009	2.762	0.047
	Intra-groups	0.269	85	0.003		
	Total	0.295	88			

The rigidity of the application of managerial engineering according to the professional characteristics of the manager may limit the flexibility needed to adapt to changing contexts or new opportunities. However, in the event of the director's departure, an excessive dependence on the manager's characteristics can lead to difficulties, highlighting the need for effective transition and succession planning. Moreover, managerial engineering can encourage some conformism within the team if the manager's personal characteristics are too heavily influenced, limiting the diversity of ideas and perspectives. If the manager is strongly rooted in traditional approaches, the adoption of new methodologies introduced by managerial engineering can be difficult, hindering the progress of the organization. Finally, the way a manager responds to change can be influenced by his/her professional characteristics. The leader's resistance to change can pose problems when introducing new management practices.

4. DISCUSSION

Our first results show that there is a significant relationship between the professional characteristic of the degree obtained and the six managerial aspects studied, which first shows that there is total dependence. ($P=<0.005$; <0.001 ; 0.014; 0.022; <0.001 ; <0.001), The correlation effect sizes are 16.5%, 32.2% and 47% respectively, showing that the effect is highly significant. A significant relationship between the professional characteristic of the degree obtained and the managerial aspect known as structure and team management is first presented. This shows that there is a dependency between

the two variables, which is explained by the positive influence of structure and team management on the improvement of support and the development of social skills.

Although the impact of structure and team management is indirect, it can have an impact on health performance and the overall success of the center. The development of accompaniment implies managerial management of the structure and the team [15]. The results show that there is also a correlation between the diploma of the director of a CMPP and the quality and safety of care, interprofessional cooperation and data management. This means that all three factors have an impact on the diploma obtained. The better the data management, the better the quality and safety of care, the more positive the professional climate, the more likely we are to find a director who has received outstanding training [16-18]. In relation to this significant relationship, one study defines continuing education as essential to the development of leadership skills and the updating of trends in healthcare management. It has a positive impact on service quality and management within the facility, including adaptation to change and effective management for the benefit of staff [19].

Furthermore, the results show that there is a significant correlation between the second professional characteristic, which is the director's initial training, and the aspect of structure and team management. This shows that an effective manager has been trained with a solid and rich foundation in social leadership. Active listening, interpersonal communication or even writing and public speaking are all part of structure and team management [20]. A center director should generally have a positive influence on his or her team and inspire confidence to establish collaborative relationships, all through effective communication.

However, there is a significant relationship between the criterion of the director's initial training and the other four factors: quality and safety of care, data management, accessibility and continuity of care, and continuing education. This demonstrates that a director with a solid foundation in initial and ongoing training runs a center that meets quality of care standards, manages patients, efficiently manages the flow of care, and organizes ongoing training for his or her multidisciplinary team. However, it is important to note that continuing education, personal development, and professional experience often complement initial training. This capacity can be enhanced over time. As a result, while initial training can provide the basics, other factors usually fill in the training to make a school principal an effective communicator [21].

According to the results, when the third parameter, the director's professional experience, is mentioned, there is a significant relationship between this parameter and the two aspects: quality and safety of care and management of the structure and team, which can be explained by a dependency relationship. Although the quality and safety of a manager's care is remarkable, his

or her professional experience also seems important. There are many factors that influence the impact of professional experience on the quality of service provided within the center, but there are important general trends, such as the accumulation of knowledge.

A manager with several years' experiences automatically has an in-depth knowledge of the healthcare system, the challenges faced by managers and the needs of patients. Change management skills are also enhanced by experience, which also facilitates the effective adoption of new practices. In addition, another important relationship is observed ($P=0.039$; 0.045 ; 0.033 ; 0.047) between the professional experience factor and the aspect of data management and interprofessional cooperation, which is to be expected as an experienced manager generally has an extensive professional network, enabling him or her to foster interprofessional cooperation between department managers and integrate new, innovative practices into the data management process and effect sizes of 7.3%, 7%, 7%, 6% and 6.9% [22]. In relation to the last criterion, which focuses on the manager's qualifications, we note a significant relationship between the latter and four managerial aspects: structure and team management, quality and safety of care, data management and continuing education. ($P=0.002$; 0.009 ; 0.004 ; 0.047) and the correlation effect sizes demonstrate how significant the effect is: 5.4%, 12.6%, 8.9% and 15.7%, respectively.

Certainly, previous findings have defined continuous staff training as the set of experiences that follow initial training and help healthcare personnel maintain the skills needed to deliver or acquire healthcare [23-24]. According to these writers, a continuing training system must be a tool that organizes an intersectoral and multidisciplinary approach [25-26]. In sum, the results showed that there was a significant influence between the majority of managerial aspects and the professional characteristics of center directors, proving that these characteristics play an important role in the effective management of a center.

The combination of managerial engineering methods, leadership, knowledge of this French sector and our vision of the center in Morocco will have a positive and much more profitable effect on the managerial practices and policies adopted by Moroccan centers. Integrating managerial engineering with the professional characteristics of the manager can make a significant contribution to the effective management of an organization. Here are how these two elements can work together to promote effective management: Management engineering can be used to analyze the special skills of the manager based on his/her professional characteristics. This facilitates the optimum use of the leader's skills by identifying his/her strengths and weaknesses. Of course, it can create customized training programs to strengthen the skills of the director. This allows the leader to stay up to date with the latest management practices and acquire new skills as their role evolves.

Moreover, Management Engineering can help to adapt management methods to the manager's leadership style, skills, and personality by understanding the director's professional characteristics. This contributes to a more appropriate and effective approach. By integrating the professional characteristics of the manager into the management engineering processes, the manager's individual objectives can be more effectively aligned with the overall goals of the organization. This promotes a common direction and vision. Secondly, the director's response to change may be influenced by his/her professional characteristics. and in this sense, managerial engineering can facilitate change management by creating approaches that consider the potential support or resistance of the leader.

In short, the harmonization of managerial engineering with the professional characteristics of the manager creates an environment conducive to effective management, personalized and tailored to the unique needs of the organization.

5. CONCLUSION

This survey revealed that the managerial system based on solid, high-quality professional characteristics helps the director to be effective and a leader in the management of the medical-psych pedagogical center. To crown it all, management and leadership are comparable to sporting competition: it's not easy to recover from a bad start. However, the management posture cannot be invented [27-28]. Being a good specialist doesn't necessarily make you a good manager. Management is a learned discipline, not an innate one! It requires new skills such as human resources management (working conditions, recruitment, assessment, developing potential, etc.), team management and cohesion (organizing work, mobilizing around quality, conflicts, etc.), economics and finance. Managing a service or department (operating budget, payroll, etc.). If the priority of doctors, nurses and pharmacists is the patient (bringing the right treatment to the right patient at the right time), then the manager's priority is team health care. [29-30].

Management engineering can have a significant impact on a manager's sound management by introducing methods, tools and structured approaches aimed at optimizing processes and strengthening managerial skills. Here are some of the positive impacts of managerial engineering on a manager's management.

- Human Resources Management: Process optimization and service quality Enhanced customer orientation Improved operational efficiency.

Cooperation and Facility for Change Management Development of managerial skills by integrating these aspects, managerial engineering can provide the manager with the tools to lead effectively, optimize organizational performance, and the strategic goals of the company.

ACKNOWLEDGEMENTS

The authors thank the directors and all other people who contributed to the success of this research.

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