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Detecting Workplace Hubris: A Machine Learning Approach to Narcissism Identification. The Case of the Healthcare Industry in the Emerging Markets

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Abstract

Despite the extensive research on narcissism and its origin, the world of health practice, risk factors, as well as the case in a developing country like Morocco, is a new untapped area. This work explores uncharted territory as it attempts to replace the existing social behavior prediction tools with different machine learning models that promise the best approach to narcissist behavior prediction by identifying psychological features characteristic of narcissist personalities. Among different machine learning models used in this study, Support Vector Machine (SVM) shows the highest metrics with an accuracy of 0.910, precision of 0.890, and recall of 0.880. SVM reveals that vanity, self-sufficiency, authority, and exhibitionism are the best predictors of narcissism in organizational settings.

Keywords: Narcissism, Machine Learning, Healthcare, Exhibitionism, Vanity, Authority.

Introduction

In the last decade, ML-based techniques in psychological research have provoked a major change in our view of behavioral research (Henninger et al., 2023; Monga et al., 2022; Jabłońska & Półkowski, 2021; Turgeon & Lanovaz, 2020). The healthcare sector in Morocco should comprehend and deal with the narcissistic behaviors of professionals because it is one of the approaches to developing and ensuring that professional service delivery is inherently collaborative, and patient centered. Narcissism is a problem that affects the health industry a lot, a problem that can be found in several healthcare professionals, including physicians, nurses, and administrators (Durrani, 2023; Jang & Lee, 2022; Mortell, 2022; Mousa et al., 2021; Perego & Di Mattei, A dominating feature of narcissism in modern healthcare results in numerous problems, including poor patient care, low client satisfaction, bitter team relations, and adverse organizational settings (Birkeland et al., 2022; Mortell, 2022; Ali et al., 2021, Magidso, et al., 2012). Hence, this study is indirectly directed towards a mission to identify the demography that is most likely to exhibit narcissistic behavior among healthcare professionals in Morocco

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2678 Detecting Workplace Hubris: A Machine Learning Approach

through the use of machine-learning techniques. This research uses a diverse collection of machines learning techniques, ranging from complicated models such as decision trees, random forests, support vector machines (SVM), neural networks, K-nearest neighbors (KNN), and logistic regression to ensemble models like voting classifiers. Multiple models have been utilized to uncover important nuggets about narcissistic disorders, and their applicability to health professions may be helpful in screening and predicting outcomes. The Decision Trees framework clearly lays out the decision-making process in a narcissistic person, which is interpretable and transparent (Custode & Iacca, 2023; Gilmore et al., 2021). On the other hand, the predictive accuracy of Random Forest will be better if we rely on the outputs provided by multiple decision models because of their regularization methods SVMs have a parameter that prevents overfitting, which means penalizing substantial coefficients. This ability of SVMs to learn data very well is referred to as generalization, thus allowing it to be easily applied to unseen data (Peng et al. (2023), Rocchetta, Petkovic & Gao (2020)).

On the other hand, of the known algorithms that are generally employed towards pattern recognition neural network algorithms have the remarkable ability and exceptional job when it In the fields of Artificial Intelligence, Logistic Regression is used as a way of looking at the connections between predictors and Narcissistic behavior in a probabilistic way (Gonaygunta, 2023; Levy & O'Malley, 2020); while Ensemble model combines the results of many models with the improvement in their overall performance (Zhu, Zhang & Z The prediction performance of these machine learning models will be measured using a set of performance metrics such as accuracy, precision, recall, F1-score, MSE, RMSE, and R2 respectively. Among those tied to the literature review, the given variables will be used to select a list of possible predictors of narcissism within healthcare professionals. In this matter, the variables in question are personality traits that usually involve vanity, entitlement, and exhibitionism and professional characteristics that may be self-satisfaction and authority-seeking (Schneider et al., 2023; Rosenthal et al., 2022; Edershile et al., 2019; Ackerman et al., 2011; Foster et al., 2016; Brown et al., 2009).

Literature Review

Machine learning models have been empathetic to the different situations where they have been used to diagnose narcissistic traits. Zhang et al. (2022) designed a model to observe the linguistic characteristics of verbal interaction in all-day-long sessions and carefully determine the level of narcissism in the elderly. The researchers discovered that word count, nominated convey, swear words, and assent are the most powerful. Another study explored the associations between narcissism and language use in older adults' daily social interactions (Zhang et al., 2023). They found that first-person plural pronouns, words related to achievement, work, strong desired for success were strongly associated with narcissism. Haz et al. (2022) used machine learning models to classify comments on social media as having narcissistic or non-narcissistic traits. They conducted research detecting personality traits specifically focusing on narcissism. They used two machine Learning models (Support Vector Machine and Naïve Bayes) to examine how individuals behave on social media platforms. Gruda et al. (2023) used a machine learning approach to predict the personality traits of leaders, including narcissism, and examined the interaction between leader narcissism and follower traits. The study examines the interaction between leader narcissism and follower personality traits on follower engagement in an online context. The researchers used a machine learning approach and multiverse analysis to predict the personality traits of leaders and engaged followers across 18 created multiverses. The results Journal of Posthumanism

show that the interaction between leader narcissism and follower agreeableness and follower neuroticism positively predicts follower engagement.

On the other hand, the interaction between leader narcissism and follower openness negatively predicts follower engagement. The study also finds that leader gender plays a moderating role in these interactions. The findings highlight the importance of considering the relational dynamics between leaders and followers when studying leader narcissism and its impact on follower engagement.

Narcissism is also associated with a higher recall of positive-agentic traits in the self-reference condition. Self-esteem predicted higher recall for positive-communal traits but lower recall for negative-communal traits (Jones & Brunell, 2014). The results supported the agency model of narcissism, suggesting that narcissists rate themselves more highly on positive-agentic traits and negative-communal traits (Finch et al., 2024; Mielke et al., 2021; Jones et al. 2017).

Ab Saleh and Awada (2016) proposed a logical model for the specification of feelings, emotions, and behaviors related to narcissistic personality disorder (NPD). he targeted feelings studied in the paper are Grandiosity, Truly/Wrongly Better Feeling, and Wrongly Right/Wrong Feeling. The emotions examined in the paper are Envy and Admiration. The unique narcissistic behavior studied in the paper is exploitativeness. They stated first that once a narcissistic person has made up their mind about what they want to believe, they tend to accept any evidence that supports that belief, no matter if they are right or wrong, coupled with the sentiment of grandiosity, and second that these symptoms are correlated to exploitativeness. On the other hand, Glover and al. (2012) found a significant correlation between narcissistic personality characteristics and temperament, including all four dimensions, namely novelty seeking (NS), harm avoidance (HA), reward dependence (RD), and persistence (PS) (NS) and two dimensions of character, namely cooperativeness (CO), and self-transcendence (ST). Additionally, Martínez-López et al. (2019) studied the differences, in personality traits between individuals with psychopathy those with comorbid narcissistic tendencies and a control group to see what sets them apart. By using assessment tools like the Psychopathy Checklist Reviewed and the Temperament and Character Inventory Revised, they found that certain traits like Reward Dependence and Self Directedness were more prevalent in individuals with narcissistic traits while Novelty Seeking and Self Transcendence were more common in those, with antisocial tendencies. The Figure 1 shows the characteristics of narcissistic temperament.



* TCI-R dimensions that discriminate between the three groups of analysis.

Function	Eigenvalue	Canonical Correlation	Wilk's Lambda	Chi square	Df	р
1	0.58	0.60	0.55	91.4	8	< 0.001
2	0.13	0.34	0.88	19.6	3	< 0.001

Fig. 1. Narcissistic Character Dimensions (Martínez-López Et Al., 2019)

Narcissism is a multifaceted trait encompassing arrogance, assertiveness, entitlement, and selfabsorption. The origins of narcissism are rooted in physical characteristics that shape psychological development. Holtzman, N. S., & Donnellan, M. B. (2015) defined narcissism as complex combination of gene and environment interactions. They stated that narcissism is related to numerous genes with minor effects that have undergone selection pressures throughout human evolutionary history. They presented their theory for narcissism as an outcome of selection at the evolutionary stage by emphasizing the features that governed dominance and short-term pair bonding, reproductive performance, and survival.

A research investigation discovered that the primary abilities of time and patience were significant factors in narcissism, with time capacity raising the probability of narcissist personality traits and low patience capacity lessening the chances of narcissism (Kiliç & Eryilmaz, 2019). Among the predictors of narcissistic personality traits were the secondary traits of politeness, faithfulness, cleanliness, and honesty. Politeness has a negative predictive value, while faithfulness, cleanliness, and honesty display positive relationships with dominance in a given personality pattern. These facts support the assumption that the primary and secondary capabilities, which are supposedly personality traits in Positive Psychotherapy, are in charge of the emergence of the narcissistic personality trait. The study administered a questionnaire using the Narcissistic Personality Inventory (NPI).

Detecting Narcissism: Narcissistic Personality Inventory

The Narcissistic Personality Inventory (NPI) by Raskin and Terry (1988), as well as its variant NPI-13 by Gentile et al. (2013) and NPI-16 by Ames et al. (2006), have been widely used to measure In two studies by Brailovskaia et al. (2019), Gentile et al. (2013), Koterba et al. (2021), and Yu & Chen (2020), aside from convergent and discriminant validity, there was adequate overall reliability for the NPI-13 and NPI-16. Firstly, with the NPI-13, you can isolate three subscales (Leadership/Authority, Dynasty/Exhibition, Entitlement /Manipulation), which may be a significant advantage over the NPI-16 single index type. No malfunctions of the subscales were found on the NPI-13 and NPI-40, except those on the Entitlement/Exploitativeness subscale in the NPI-13. An initial test of five models comprising the basis of the structure of the NPI-13 and NPI-16 was performed with confirmatory factor analysis. It gives the results of the studies in the results, which is in the supplementary material.

Narcissism in the Healthcare Industry

Narcissism is a significant issue in healthcare management. Research shows that a considerable number of healthcare leaders exhibit narcissistic behavior, with about 58% of executives in Finnish healthcare for instance displaying narcissistic features in their leadership behavior (Ollila & Kujala, 2018). Erkutlu and Chafra (2017) provided insights into the relationship between leaders' narcissism, employees' psychological strain, and organizational cynicism in healthcare organizations. The findings highlight the importance of considering psychological capital as a buffer in reducing cynicism and improving employee attitudes.

Cramer and Davidhizar (2000) claimed in their research in healthcare industry that the presence of employees with narcissistic personality disorder or traits exhibit a pattern of ingrained, inflexible, maladaptive responses to anxiety. The paper highlights that these individuals can cause havoc in the workplace, but with specific management techniques, they can be productive and an asset in the work setting. More recent research made by Mortell (2022) suggests that narcissistic personality disorder and subclinical narcissism may be increasing in the US healthcare industry. Nursing administrators are likely to encounter narcissistic behavior among their staff and supervisors.

The presence of narcissistic leaders can have negative consequences, such as increased organizational cynicism among employees. Narcissism is negatively correlated with empathy in healthcare professionals, which is crucial for building relationships with patients in Jordan for instance (Alsawalqa, 2020). Furthermore, narcissism and identification with the organization are related to higher managerial attitude among physician-managers in the Italian National Health Service (Leonelli & Primavera, 2022). Addressing narcissism in healthcare management is crucial for creating a positive work environment and improving patient care.

Effects of Narcissism

O'Reilly et al. (2014) found that more narcissistic CEOs with their firm longer receive more direct compensation, have more money in their total shareholdings, and have more significant discrepancies between their compensation and the other team members. The results of the untruncated model also showed a significant main effect of tenure and a highly significant interaction between total shareholdings and tenure.

2682 Detecting Workplace Hubris: A Machine Learning Approach Research Methodology

Machine learning models, including decision trees, random forests, SVM, logistic regression, KNN, and ensemble methods like the voting classifier, are utilized to assess narcissism among healthcare professionals. Each model is evaluated against appropriate metrics. Table 1 summarizes the metrics used to assess the accuracy of each model.

Metric	Description	Formula	
Precision	Proportion of true positive	TP/(TP + FP)	
	predictions among all positive	TP: True Positives,	
	predictions	FP: False Positives	
Recall	Proportion of true positive	TP/(TP + FN)	
	predictions among all actual	TN: True Negatives	
	positives	FN: False Negatives	
F1 Score	The harmonic mean of precision and	2 * (Precision * Recall)/(Precison	
	recall	+ Recall)	
Accuracy	Proportion of correctly classified	TP + TN	
	instances	$Accuracy = \frac{11}{TD + TN + DD + DN}$	
		IP + IN + FP + FN	
RMSE	Root Mean Squared Error	$\sum_{n=1}^{n} (\alpha - \hat{\alpha})^2$	
		$RMSE = \left \frac{\sum_{i=1}^{i} (y_i - y_i)}{\sum_{i=1}^{i} (y_i - y_i)} \right $	
		\sqrt{n}	
R2	Coefficient of Determination	$\sum_{i=1}^{n} (y_i - \hat{y}_i)^2$	
		$R^{2} = 1 - \frac{2(10 t^{-1} t^{-1})}{\sum_{n=1}^{n} (n - n)^{2}}$	
		$\sum_{i=1}^{N} (y_i - y_i)$	
MSE	Mean Squared Error	$\sum_{i=1}^{n} (y_i - \hat{y}_i)^2$	
		$MSE = \frac{n}{n}$	
		y _i : Actual value	
		\hat{y}_i : Actual value	
		\overline{y} : Actual value	
		n: Actual value	

Table 1: Machine Learning Models Metrics

The model that exhibits the highest metrics, such as accuracy, precision, recall, or F1-score, is typically used to extract feature importance. This choice is made because higher-performing models are generally better at capturing the underlying relationships between features and the target variable. The feature importance quantifies how input variables affect the models' output, helping to pinpoint factors that influence predictions. It reveals the importance of each variable in detecting narcissism and interpreting results. Higher feature importance suggests significance in predicting outcomes.

Variables Definition

The variables influencing narcissism, drawn from literature are listed in Table 2. The variables investigated in this study are drawn from the widely used Narcissistic Personality Inventory-16 (NPI-16) scale. These dimensions of the evaluation of narcissism in the healthcare context give a vivid image of narcissistic behaviours throughout different settings.

				Alami et al. 2683
Variable	Item 1	Coding	Item 2	Coding
Authority	"If I ruled the	Authority_1	"I like to be	Authority_2
	world, it		the center of	
	would be a		attention."	
	much better			
	place."			
Grandiosity	"I can live my	Grandiosity_1	"I like to be	Grandiosity_2
	life any way I		complimented	
	want to."		."	
Exhibitionism	"I find it easy	Exhibitionism_1	"I like to show	Exhibitionism_2
	to manipulate		off my body."	
	people."			
Exploitativene	"I insist upon	Exploitativeness	"I will never	Exploitativeness
SS	getting the	_1	be satisfied	_2
	respect that is		until I get all I	
	due me."		deserve."	
Self-	"I insist upon	Self-	"I can live my	Self-
sufficiency	getting the	sufficiency_1	life any way I	sufficiency_2
	respect that is		want to."	
	due me."			
Superiority	"I like to be	Superiority_1	"I will never	Superiority_2
	complimented		be satisfied	
	."		until I get all I	
			deserve."	
Vanity	"I am more	Vanity_1	"I like to show	Vanity_2
	capable than		off my body."	
	other people."			
Entitlement	"I expect a	Entitlement_1	"I feel entitled	Entitlement_2
	great deal		to more	
	from other		respect than	
	people."		the average	
			person."	

Table 2: Variable Definitions

The NPI-16 score is obtained through a method that consists of adding the ratings of all 16 items. In this computation, code 0 indicates a response that has nothing to do with narcissism, and code 1 denotes a response that lies within the narcissist spectrum. Subjecting their case to total score analysis, the machine learning model will try to learn which variables can better predict narcissistic behavior in the healthcare industry.

The machine learning models could better predict narcissism using a broader range of variables and more sophisticated algorithms than the NPI-16. The following is how artificial intelligence models enhance classification compared to NPI-16. Machine learning models, as shown in Table 3, have many advantages compared to the other conventional methods.

2684 Detecting Workplace Hubris: A Machine Learning Approach

Feature Selection	Automatically pick out the features from a larger set of variables potentially uncovering subtle patterns and relationships that may not be contured by the fixed items in the NPI 16			
Commlay	The children by the fixed items in the NPI 10.			
Complex	The ability to identify connections between predictors and narcissism			
Relationships	that may not be apparent in the linear scoring of the NPI 16.			
Data Integration	Combine data sources beyond self-reported surveys like social media			
_	activity, language patterns, and behavioral data offering insight into			
	an individual's personality traits.			
Predictive	Enhance performance by training and possibly surpassing the NPI 16			
Performance	in terms of accuracy, sensitivity, and specificity.			
Personalized	Provide predictions by considering differences and situational			
Predictions	factors, giving more customized insights into narcissistic tendencies.			
Ongoing Learning	rning Continuous updates and refinements can be applied to machin			
	learning models, with data allowing them to adjust to shifting trends			
	and evolving insights on narcissism as time progresses.			

Table 3: Machine Learning features over NPI 16

"Narcissism_score" is the dependent variable and will be used in the analysis. The NPI-16 test is selected, and the participants' scores will be rated based on a 0 and 1 scoring system. Items held a binary code, 0 or 1, denoting the underachievement or presence of narcissistic characteristics and their sum mean narcissism score.

Sampling

Among a sample of 2657 participants from a diverse range of healthcare facilities spanning various cities, only 1389 answers were valid and treated. Authors could reach these healthcare systems components, such as hospitals, clinics, and health centers because one of the authors was HD, a psychologist who had worked in many institutions before. Participants explained the research topic and made it transparent about the research process so that the participants would consent. Another essential element of ethical research is obtaining informed consent from participants. Importantly, participants were free to withdraw from the study at any point, ensuring ethical integrity and respect for individual autonomy. This technique ensured a diversified representation of the participants from several healthcare settings and ethical principles such as informed consent and participant autonomy.

RESULTS

Statistical analysis shows that the average score of the NIP 16 test for the dependent variable "narcissism_score" is 8.718, with a standard deviation of 2.682. This suggests that, on average, individuals scored 8.718 on the Narcissistic Personality Inventory (NPI) 16 test for the dependent variable "narcissism_score" (Table 4).

	Ν	Minimum	Maximum	Mean	Std. Deviation
Narcissism Score	1389	1	14	8.718	2.682
Valid N (listwise)	1389				

Table 4: Narcissism Variable Descriptive Statistics

This indicates a moderate level of narcissistic personality traits within the sample. Additionally, the standard deviation of 2.682 suggests variability in scores around this average, highlighting **Journal of Posthumanism**

differences in narcissistic traits among participants. Based on this result, it is possible to state that scores above the sum of the mean and the standard deviation of 11.4 (round down to 11) are likely to have narcissistic traits. As a result, the dependent variable is converted in 0 (Low narcissistic traits) if the score is below 11 and 1 (High narcissistic traits) if the score is equal to or higher than 11. Table 5 shows the results.

			Frequency	Percent	Valid	Cumulative
					Percent	Percent
Valid	Low	Narcissistic	996	71.7	71.7	71.7
	Traits					
	High	Narcissistic	393	28.3	28.3	100.0
	Traits					
	Total		1389	100.0	100.0	

Table 5: Narcissistic Traits Frequencies

Machine Learning Models

The study of relationships between independent variables and the dependent variable was processed through machine learning. This alternative method makes it possible to pinpoint the essential elements contributing most to silent quitting. To predict quiet quitting based on pertinent variables, a variety of machine learning techniques were used, including Decision Trees, Random Forest, Support Vector Machine (SVM), K-Nearest Neighbors (KNN), Logistic Regression, Ensemble Models (Voting Classifier), and Neural Networks. Each algorithm was applied to examine the dataset and find trends that support quiet quitting behavior. By taking a comprehensive approach, bias or subjective interpretation could be minimized by thoroughly exploring potential predictors. Table 6 shows the comparison between different metrics.

Metric	Decision Trees	SVM	Random Forest	KNN	Logistic Regression	Ensemble Models	Neural Network
Precision	0.684	0.890	0.845	0.801	0.871	0.858	0.751
Recall	0.65	0.880	0.778	0.763	0.858	0.861	0.747
F1-score	0.667	0.885	0.810	0.782	0.864	0.859	0.749
Accuracy	0.733	0.910	0.862	0.834	0.889	0.888	0.86
RMSE	0.515	0.299	0.371	0.407	0.334	0.333	0.369
MSE	0.266	0.089	0.137	0.165	0.112	0.111	0.136
R2	-0.245	0.547	0.326	0.167	0.467	0.438	0.312

Table 6: Comparison of Machine Learning Metrics

Table 6 reveals that the SVM model (Support Vector Machine) shows the highest metrics: precision = 0.890, recall = 0.880, f1-score = 0.885, accuracy = 0.910, and R2 = 0.547. SMV performs consistently well across multiple metrics and could be a suitable prediction model. Table 7 displays the coefficients representing the importance of each feature in predicting narcissism using Support Vector Machine (SVM) analysis. Features with higher coefficients are considered more influential in predicting narcissism.

Feature	Coefficient			
Vanity_2	0.7172			
Selfsufficiency_1	0.6791			
Authority_1	0.6719			
Exhibitionism_1	0.6619			
Exploitativeness_1	0.6495			
Entitlement_1	0.6263			
Authority_2	0.6181			
Selfsufficiency_2	0.6078			
Entitlement_2	0.5965			
Grandiosity_2	0.5731			
Superiority_1	0.5164			
Exploitativeness_2	0.5145			
Superiority_2	0.4973			
Grandiosity_1	0.4709			
Exhibitionism_2	0.4292			
Vanity_1	0.4065			
Education	0.2822			
Age	0.0190			
Gender	0.0085			

2686 Detecting Workplace Hubris: A Machine Learning Approach

Table 6: SVM Features Importance Classification

The coefficients show that Vanity_2, Self-sufficiency_1, and Authority_1 are the top three influential features in predicting narcissism, with coefficients of 0.717, 0.679, and 0.672 respectively. Exhibitionism_1, Exploitativeness_1, and Entitlement_1 also have relatively high coefficients, suggesting they are significant predictors of narcissism. On the other hand, the established link between Cynicism and Narcissism means that the coefficients are substantial (0.019 and 0.008, respectively) in the narcissism prediction model proposed here.

Discussion

The study produced data that teaches about traits that influence considering narcissism in healthcare professionals. First, it is essential to explore the importance of these features, which may consequently affect patients and workers within the healthcare industry. 'Vanity' is the first and foremost theme with a hidden meaning that correlates with narcissism in healthcare professionals. Narcissistic perception of being better than others is one of the predictors of narcissism in healthcare justice trials. The person with that trait might express it in an attitude such as the feeling of the exceptional care provided to them, the sense of self-worth higher than others, which can create difficulties in their workplace relations, challenging them to provide proper care to the patients. Pride that, is excessive appearance, skills, and gains, overrides vanity. In Medicare, this could perhaps be validated by the belief that one is more efficient than others. Narcissistic or self-absorbed health professionals who constantly crave everything related to their appearance may prefer to dress better than to serve patients or contribute to teamwork.

Journal of Posthumanism

Their behavior can be characterized as being proud or full of themselves, and they may see their colleagues whom they consider less competent as inferior or without intelligence or value. The crowds easily find themselves forgotten and ignored by the physicians focused exclusively on maintaining the latter's persona and prestige. This could engender patients' mistrust of the healthcare system and disagreement with healthcare quality.

The word follows the other one: Self-sufficiency. Here, self-reliance is the currency that lets students feel free to live their lives by their own standards, even without the need to ask for aid or support from others. In health services, narcissistic health professionals can display a lack of ability to work with peers or subordinates or even accept feedback from other professionals, which may affect teamwork and even the results. Self-sufficiency is the conviction of the individual's personality to lead a life of its own without the help of other people. Conceit or a craving for proficiency on the part of healthcare workers, much as doctors, can make them fail to collaborate with others, a task that may lead to communication barriers and eventual poor patient care. In addition, they may feel less willing to seek help or admit wrongdoings, which will harm patients' safety. Communication issues might occur when doctors incorporate individualistic features of their decision-making side by side with collaborative thinking. It likely leads to late diagnosis, inaccurate treatment care courses, or missed complaints from the patient's side of the patient's sectarianism, and an exhibition in terms of the nature is the same. These traits show up as a look for power and dictatorial leadership styles, a need for instant acknowledgment, and a tendency of the person to force his/their words and ideas on people. The type of behavior wanting to be in control or become the master of others is the authoritative behavior. In the case of a narcissistic individual in the healthcare profession, who looks for authorization, this individual could appear to behave as an authoritarian leader, looking toxic in the workplace where there will be micromanagement, fear, and zero freedom for subordinates. Patients might be left feeling disempowered or intimidated regarding their physicians, whom they may perceive to be the guarantors of their excellent health. The patients might consequently lower their comprehension of the commands, skip medication, or even avoid attending their health checks for fear of being taunted or undermined. Exhibitionism is the feeling of an individual seeking the attention or admiration of others who can do it openly in public places. Narcissistic care providers who display exhibitionist traits often fall into self-promoting behavior while disregarding the patient's needs and indulging in the egotistical. This lack of compassion and humility shows in interactions with medical professionals or patients. Patients often tend to sense being objectified or commercialized by healthcare providers who get pleasure from the attention or are ready to give the validation of others. There is a tendency to mistrust and break rapport, which impedes working communication and the relationship with the patientprovider.

Discriminatory practices and exploitation of resources that include discrimination against racial, ethnic, and social groups and exploitation of resources have contributed to the start of systemic inequality challenges. These aspects outline the indicators of egocentrism, such as inclinations towards individual benefit, deserving privileges, and obsession for the domination of others. In contrast, characteristics through which show self-importance, for example, age, education, and gender, effectively, if not perfectly, predict how narcissism can be found in the healthcare industry. Armed with narcissism and exploitation, such healthcare professionals can cross ethical boundaries by billing excessively, upcoding, or playing doctor favorites, which could result in neglect of the sicker patients over the wealthy patients. With this action, they might be tarnishing professionalism and wasting employees' trust. The patients become susceptible to uncalled-for

2688 Detecting Workplace Hubris: A Machine Learning Approach

diagnostic examinations and treatments, financial abuse, or data leakage by some healthcare professionals for profit rather than immutable ethics. This could produce reduced financial availability, a higher degree of emotional distress, as well as non-optimal patient outcomes. The acquisition of an entitlement is a thought process of superiority and the expectation of special treatment or privileges. Healthcare professionals can also manifest narcissism with the feeling of expectation, and thus, as a result, they can ask for favoritism, recognition, or rewards without measuring performance. This can bring about disunity, disagreements, and teamwork distrust amongst coworkers, becoming an obstacle to teamwork and lowering morale. The patients can get the second rate of treatment or discrimination if providers of healthcare give more focus on the needs and preferences of privileged coworkers rather than those of their patients. This can lead to differences in access to healthcare and treatment levels depending on socioeconomic status, race, and gender, which may ignite social inequalities.

The issue of narcissism among healthcare workers in emerging economies is closely connected to such factors as possession of vanity, a self-sufficient attitude, almost complete reliance on authority, and a desire to show it to others. In such conditions, self-centeredness can be confirmed by other people's behavior due to diseases, manners, and tastes, increasing the sense of privilege and superiority among healthcare workers. Of course, this phenomenon is strongly associated with showing status and external beauty. Inhabitants of these types of societies may be incredibly narcissistic since the principle of social hierarchy is well-redefined, and this often leads to egoistic behavior and focus on personal sense of appearance as opposed to care for the patient. While self-reliance, which is prized in such contexts, experiencing available resources may be exaggerated to the point of isolation and being unwilling to participate, this may not be in favor of helping the team deliver quality services in the long run. Such authority-seeking behavior may be strengthened by hierarchical organizational structures in the healthcare system where the doctor holds the title of leader, and the nurse is subordinate. The concept of exhibitionism may often act as a means to propel the self-promoting aspect of a career. It may disqualify the altruistic motives that are fundamental to the profession. These features are critical in healthcare as they may come up with improper collaborations, endanger patient care, and subvert trust in the medical system.

Hofstede's Cultural Dimensions Theory is the basis for understanding the role of cultural values in the context of societal norms and behaviors. We can view the situation in Morocco through several dimensions, like the cultural context that could be connected to narcissism and its male workers. Moroccans display a comparatively high-power distance, which suggests a rigid social system wherein people are supposed to accept and listen to the higher-ups. This cultural component may raise the authority-seeking behavior in healthcare professionals, which, with those with power, may develop narcissism expressed by their demand to be obeyed and treated deferentially by their subordinates. Morocco, however, tends to stick to masculinity in its cultural approaches and is highly oriented towards power, social dominance, and prestige. Through a superficial appreciation of achievements and competition, the healthcare sector may sometimes increase the narcissistic characteristic of exhibitionism, where medical professionals only seek recognition and a positive evaluation of what they have done. Morocco tends to be more collectivistic, meaning people's concern is the pleasing of the group, not personal interests. Despite this, some strongholds of individualism could remain, probably among those in urban and career areas, where personal achievement and status are taken with high respect. The existence of this mixture of collectivism and individualism may shape the deep intricacies of narcissistic tendencies in healthcare providers by causing some to rank personal achievement over collaborative teamwork and patients' advantage.

Along with the cultural traits, the primary roles of vanity might be influenced by societal standards such as appearance and financial status, where some can aspire to look superior within the hierarchical aspects of society. The sense of self-reliance may be additionally emphasized by culturally induced concepts of personal responsibility and independence, which may create an aversion to seeking professional help and foster cooperation with colleagues. People may submit to authority once they internalize the prevailing power hierarchy. On the other hand, being seen as young and selfless may become a source of extra attention, thus motivating exhibitionism.

Conclusion

The findings on the significant narcissistic personality conditioning factors within healthcare leaders might be a big help in improving not only employees' job satisfaction but also patient experience within the industry. The most influential trait in the scene is vanity. The individuals are highly goal-oriented and self-centered, which may lead to entitlement and selfishness. It may also cause them to ignore others in order to succeed. The other contributing variables, viz. self-centeredness, authoritative behavior, and exhibitionistic characters, are the issue's key predictors, each representing its challenges in healthcare settings. The research outcomes demonstrate the need to tackle narcissism among healthcare professionals because it can seriously damage the effectiveness and performance of any teamwork, and this means that the whole process will be affected in different aspects, including quality of care and even patient outcomes. In addition, the cultural background of emerging countries like Morocco becomes the moderator of these behaviors, trends in society, and people's value orientation determine how narcissistic Qatar is realized among health care professionals.

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Journal of Posthumanism

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