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Factors Determining the Personality Traits of Healthcare Professionals

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Abstract - Healthcare workers work in very demanding settings where personality traits have a decisive role in behaviour, decision-making, performance and patient care outcomes. The current research investigates the major personality trait-related variables that determine job satisfaction among the healthcare professionals in Coimbatore City. The data were analyzed using statistical methods; Percentage Analysis and Factor Analysis. Sampling adequacy and applicability to the factor analysis were validated by the Kaiser Meyer Olkin (KMO) = 0.843 and highly significant Bartlett Test (p 0.001). The rotated factor matrix showed that the five important elements on impact job satisfaction and workplace behaviour are workplace management and communication, team support and emotional well-being, professional growth and compensation, work-life integration and job security, and innovation and recognition. The results state that work-life balance, employment security, salary, workload, and organizational culture are significant predictors of worker satisfaction and psychological performance. To develop more resilient and motivated healthcare staff, the study offers supportive supervisory practices, designed communication systems, skill enhancement opportunities, and employee recognition programs. The outcomes of this study can be useful to hospital administrators, policymakers, and teachers who strive to create a productive and emotionally healthy healthcare ecosystem..

Key Words: Personality Traits, Healthcare Professionals, Emotional Well-Being, Work–Life Balance, Organizational Culture, Factor Analysis, Coimbatore.

1. Introduction

Personality traits, behavioral styles, and emotional intelligence have become the key factors in determining professional functioning and well-being in healthcare providers. Empirical studies have in recent years placed more emphasis on non-cognitive qualities, other than academic knowledge and clinical experience, in the development of competencies, interpersonal skills, and workplace flexibility in health-care professionals (Louwen et al., 2023). The personality traits determine the experiences of the individuals in the clinical demands, interpersonal relations with patients and colleagues, stress management, and coping with the harsh conditions. Such traits are thus of critical importance in predicting professional performance, determination of specialization decisions and tailored educational and organizational interventions.

The increasing interest in personality in health-care by scholars is motivated by the acknowledgement that academic performance is insufficient to assure a competent clinical practice. Among key professional behaviors, namely, communication with patients, empathy, ethical decision-making, leadership, and resilience, conscientiousness, extraversion, agreeableness, openness, and emotional stability have been associated with them (Sander and Fuente, 2020a; Sedlar and Gurnakova, 2024). Personality profiling can also help the health-care workers to identify their own behavioral orientations thus enabling them to be self-aware and in continuing their professional development. In addition, the discovery of personality-based subgroups of health-care workers may be relevant to the creation of specific training programs and the support systems implemented in the workplace to enhance the professional performance (Louwen et al., 2023).

Although a large amount of research has been conducted on the correlations between personality traits and professional outcomes (including academic confidence, coping mechanisms, emotional competence, and burnout susceptibility), and also most studies have concentrated on either individual personality constructs or a particular group of health-care workers (Bataweel, 2023; Liu et al., 2022). A gap of an elaborate synthesis that incorporates evidence in the medical field, nursing practice, and allied health professions still exists. This omission restricts a wider perspective of the extent to which personality-based influences are summative to contribute to the professional identity and clinical behavior and patient interaction in health-care environments. Thus, a systematic and holistic review of the literature is needed to harmonize existing knowledge and to find out contextual and personal factors that facilitate personality traits development and expression of the health-care professional.

In line with this, the current research will assess the determinants of personality traits in health-care professionals and generalize the current empirical evidence on the issue, including the effects of personality-based predictors on academic, emotional, and professional success. The findings of this study will likely be instrumental in enhancing the state of health-care education, curriculum, clinical workforce planning, and mental health programs that enhance the making of well-rounded and resilient health-care professionals.

2. Review of Literature

Empirical research on the personality characteristics of health care workers has always evidenced that the noncognitive factors have the strong impact on both academic and clinical performance. A significant portion of the available literature relies on the Big Five personality model that provides the entire picture of the connection

between personal characteristics and educational, emotional, and career performance. Research in academic institutions has shown that all five major characteristics have a positive relationship with academic achievement, learning involvement and confidence in behavior, with openness, conscientiousness, extraversion, and agreeableness, but the neuroticism trait correlates with adverse results (Sander and Fuente, 2020a). These results support the importance of personality as the predictor of cognitive effort, academic motivation, and perseverance in a demanding learning setting.

Conscientiousness is one of the five dimensions of the Big Five, and it has been proven in numerous studies as the most valid predictor of both academic and clinical success among medical trainees. High conscientiousness is linked to enhance study behavior and goal orientation, self-discipline, and ultimate success (Jaber et al., 2022). It has a higher predictive value than undergraduate performance, but it is still relevant in clinical training and practice (Schrempft et al., 2021). These findings support the fact that there is a correlation between conscientiousness and the ability to engage in the unending learning process and the strong coping mechanisms that are critical in the challenging nursing and medical training environment (Eley et al., 2016).

Personality traits and emotional regulation are also interrelated as it is highlighted in the literature. Protectors of psychological well-being are known to be conscientiousness and extraversion, and maladaptive reactions to stress, anxiety, and emotional exhaustion have been associated with neuroticism (Fuente et al., 2024). The patterns are especially consequential since healthcare professions are associated with strong emotional and cognitive requirements. People with increased neuroticism tend to experience burnout and loss of self-efficacy and therefore should be provided with supportive interventions to improve resilience and emotional stability (Liu et al., 2022).

Medical and nursing training also considered in the formation of personality traits during the course of training. A longitudinal research shows that empathy, conscientiousness and emotional stability are more likely to be enhanced in the course of clinical exposure, especially through the process of reflective learning and patient-centered practice (Lievens et al., 2002). Nevertheless, agreeableness can be slowed down by competitive academic conditions, workload, and performance pressure as well as boost stress-related characters like neuroticism (McManus et al., 2004). These trends demonstrate the dualism of professional education as the facilitator and stressor of the trait development.

Work settings are also a serious aspect of personal life in which professional settings play a major role in personality expression. Given the consistent experience of critical care and emergencies, as well as emotionally demanding cases, this kind of practice may contribute to resilience, perseverance and confidence, but it can also initiate emotional detachment and burnout in the long term practice (Tyssen et al., 2007). Traits of coping that are more task-focused tend to develop among healthcare providers who work in high-intensity environments like emergency units or intensive care units, traits that are adaptative survival strategies in a high-risk workplace.

It is indicated that healthcare specialties draw and reaffirm specific personality styles. Surgeons usually have more conscientiousness and extraversion because they are matched with the demands of the fast-paced and leadership-oriented surgical setting. Psychiatrists and general practitioners, in contrast, tend to be higher on openness and agreeableness, which is the interpersonal and reflective nature of their specialties (Tyssen et al., 2007). The implications of these specialty based variations are that it has a two-way effect between personality and work.

Emotional intelligence and empathy are always found to be the crucial personality dimensions that are critical to healthcare effectiveness. An increased degree of emotional intelligence leads to better teamwork, connection with patients, and communication, whereas empathy brings satisfaction of patients, trust-formation, and care. The traits are also protective factors against burnout as they aid in the emotional resilience (Hojat et al., 2005). In turn, the emotional intelligence is a component of personality as well as a psychological buffer within the clinical practice.

Cultural norms, gender as well as personal life experiences influence personality development as well. Interpersonal sensitivity, empathy, and agreeableness are the values that are frequently supported by collectivist cultures, and assertiveness and autonomy are the values that individualistic cultures can enforce (Kumar et al., 2016). Also, emotional stability and coping behaviors, which are determined by personal experiences, including family background, socioeconomic environment, and past exposure to adversity, are also transferred to professional identity formation.

All these literary works show that personality traits of healthcare professionals are not formed in vacuums, but they are a product of dynamic interactions among individual disposition, training experiences, workplace conditions, and sociocultural factors. However, the majority of the available research is likely to explore single dimensions of these factors instead of using an integrative perspective that would establish their interdependency (Louwen et al., 2023). This gap supports the necessity of the multilevel synthesis of the determinants of personality traits to inform further research and assist with the targeted support strategies of the existing and future medical personnel.

3. Research Gap

Although research findings have shown that personality characteristics have a significant impact on professional performance of health care workers, the literature on personality and its impact on professional performance has been mainly focused on single personality traits or work outcomes. There are minimal studies that determine the collective influence of personal, organizational, and socio-cultural factors on the personality of medical

professionals, and the studies that are related to the situation in developing countries and to the context of private healthcare are rare. Thus, there is a gap in the understanding of multifactorial determinants of personality characteristics in healthcare professionals who work in a variety of healthcare settings.

4. Scope of the Study

This research is limited geographically to Coimbatore District of Tamil Nadu, which focuses on the health workers working in the state and in the private sector. The sample will include physicians, nurses, pharmacists, laboratory technicians, and other allied health staff that are working in hospitals, clinics, and diagnostic centers. The main aim is to review the intrinsic and extrinsic influences on personality traits as including workplace culture, leadership skill, work pressure, interpersonal interaction, training and development initiatives, demographical factors and socio-psychological factors. The sample size is restricted to the currently working professionals who have at least one year of working experience, thus having enough exposure to organisational dynamics. The collection of data is limited to Coimbatore and not to other neighbouring districts and other states, considering the fact that there may be regional differences in the institutional culture and professional behaviour. The results are likely to contribute to the literature of the effect of personality traits on the performance of the professionals, teamwork, patient satisfaction, and the overall healthcare outcomes in the Coimbatore health-care sector.

5. Objectives of the study

To know the socio-economic profile of the Healthcare Professionals

To identify the Factors determining to Personality Traits of Healthcare Professionals

6. Research Methodology

6.1 Data

The main part of the work stated in this paper is based on the primary data gathered with healthcare workers who worked at the hospitals and clinics located in Coimbatore city. The questionnaires and surveys were structured to investigate the aspects that define the personality of the healthcare professionals. In line with this, data were compiled. Published research articles were used in the collection of secondary data.

6.2 Sampling

The sampling method was judgmental in the selection of a cohort of medical practitioners of different specialties such as physicians, nurses and allied health staffs. To ensure that the representations in all levels and professional classes are captured, 352 participants provided various answers.

6.3 Framework of Analysis

Collected data have been analyzed by the simple percentage and factor analysis.

6.4 Significance of the Study

The current study is relevant because it outlines the internal and external factors that influence the personality of medical workers, which directly affects patients, interpersonal interaction, collaboration, and stress management. The results provide practical data to hospitals and human resources agencies, which serve as the basis of developing specific training interventions, supportive leadership systems, and stress-reduction programs that would help improve the level of occupational satisfaction and prevent burnout among healthcare professionals. The focus on Coimbatore makes the investigation fill the significant gap in the existing literature on healthcare services in India by providing details relevant to the country, which can be used to educate policymakers and healthcare organizations in developing a more resilient, empathetic, and effective workforce.

7. Analysis and Interpretation

Particulars	Category	Frequency (n = 352)	Percentage (%)
Gender	Male	150	42.6
	Female	202	57.4
	Total	**352**	**100**
Age	Up to 30 Years	82	23.3
	31 – 40 Years	158	44.9
	Above 40 Years	112	31.8
	Total	**352**	**100**
Designation	Doctor	132	37.5
	Nurse	148	42.0
	Allied Health Professional	72	20.5
	Total	**352**	**100**
Marital Status	Married	260	73.9
	Unmarried	92	26.1
	Total	**352**	**100**
Educational Qualification	Diploma	68	19.3
	Bachelor's Degree	134	38.1
	Master's Degree	102	29.0
	Professional Degree (MBBS / MD / MDS / etc.)	48	13.6
	Total	**352**	**100**
Total Service Experience	Less than 3 Years	72	20.5
	3 – 5 Years	92	26.1
	6 – 8 Years	98	27.8
	More than 8 Years	90	25.6
	Total	**352**	**100**

Service in Present Hospital	Less than 2 Years	102	29.0
	3 – 4 Years	84	23.9
	5 – 6 Years	76	21.6
	More than 6 Years	90	25.6
	Total	**352**	**100**
Monthly Income (Rs.)	Up to 30,000	62	17.6
	30,001 – 50,000	146	41.5
	50,001 – 70,000	88	25.0
	Above 70,000	56	15.9
	Total	**352**	**100**
Family Type	Joint Family	120	34.1
	Nuclear Family	232	65.9
	Total	**352**	**100**
Area of Residence	Urban	118	33.5
	Semi-Urban	134	38.1
	Rural	100	28.4
	Total	**352**	**100**

There were dominant social family structures with a significant percentage of people being married (73.9%), and living in nuclear families (65.9%). Academically, 38.1% had bachelor degrees, 29.0% had master degrees and 13.6% had professional degrees which is a high educational preparedness. The data on work experience showed that 27.8% had 68 years total service, 26.1% had 35 years total service, which indicates that there were moderately and well-experienced professionals.

In terms of job tenure, 29.0% worked in their present hospital less than two years, and 25.6% were employed more than six years, which represents both new workers and long-term workers. Distribution of monthly income revealed that majority of the income earned was between 30 001 and 50 000 (41.5%), and only 15.9% earned more than 70 000.

The residence profile showed that 38.1 and 33.5 percent of the respondents lived in semi-urban and urban areas respectively, with 28.4 percent of the respondents in the rural areas.

8. Factor analysis

To identify the Factors determining to Personality Traits of Healthcare Professionals factor analysis is employed.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.843
Bartlett's Test of Sphericity	Approx. Chi-Square	3228.582
	df	190
	Sig.	.000

The KaiserMeyerOlkin measure of adequacy of the sample was 0.843, which implied that the sample size is very sufficient in terms of factor analysis. The test of sphericity by Bartlett was not insignificant (2 = 3228.582, p = 0.000), which ensured that there was an adequate correlation between the variables. As a result, the information is very appropriate to carry out factor analysis.

Rotated Component Matrix[a]					
	Component				
	1	2	3	4	5
Workload	.831				
Communication Effectiveness	.759				
Organizational Culture	.666				
Technology Support	.630				
Grievance Redressal System	.547				
Team Coordination		.744			
Work Satisfaction		.660			
Infrastructure & Facilities		.637			
Emotional Well-Being		.621			
Employee Participation in Decision Making		.558			
Training & Skill Development		.556			
Workplace Safety			.742		
Supervisor Support			.670		
Job Autonomy			.590		
Salary & Compensation			.589		
Career Growth Opportunities			.578		
Work–Life Balance				.820	
Job Security				.739	
Innovation Encouragement					.700
Recognition & Rewards					.697
Eigenvalues	6.925	1.926	1.646	1.198	1.155
% of Variance	34.623	9.632	8.229	5.992	5.775
Cumulative %	34.623	44.254	52.483	58.475	64.250

The rotated component matrix showed that there were five strong factors that together explained 64.25 per cent of all the variance hence indicating a strong representation of the latent constructs that informed the experiences of healthcare professionals. The former, which is named as Work Environment and Operational Demand, includes workload, effectiveness of communication, organizational culture, technological support, and grievance-redressal mechanisms, thus highlighting the critical role of organisational processes and the flow of communication in the creation of everyday realities in employees.

The second factor, Interpersonal Relations and Participation, includes team coordination, work satisfaction, infrastructure and facilities, emotional well-being, employee involvement in decision-making, and training and skill development and the hypotheses that collaboration, affective climate, contributory opportunities, and resource availability all work together to increase job satisfaction is put forward.

The third component, Leadership and Professional Support, is comprised of safety at work, supervisory support, work autonomy, salary and compensation, and career-growth opportunities, thus showing that leadership practices and career-growth channels are strong motivational forces. Work-Life Integration, and Job Security is the fourth factor that combines work-life balance and job security and reflects the importance of consistency and congruency between personal and professional spheres of employee well-being. The fifth one is Innovation and Recognition Culture that integrates the encouragement of innovation, recognition and rewarding, and thus, stresses the fact that recognition and encouragement of creativity promotes a positive work culture. Together, these five aspects provide a holistic model of determining the factors of personality-based job satisfaction among medical workers in Coimbatore.

9. Suggestions

- Embrace schedule of duties which are empirically based and planning of shifts to curb occupational fatigue.
- Enhance internal communication networks by use of digital medium and systematic briefing machines.
- Encourage open, respectful, and team oriented organizational culture.
- Modernize technology systems at the hospital and provide uninterrupted technical support to the employees.
- Do team building regularly to improve interpersonal relations and teamwork.
- Promotion of involvement of employees in decision making by use of committees and formalized suggestion systems.
- Provide counselling services, stress-management programmes, and wellness programs to help in the emotional well being.
- Check signs of burnout on a regular basis and offer prompt solutions to ensure that the work atmosphere remains healthy.
- Offer well-organized training sessions, seminars, and ongoing training of skills.
- Provide time off to study and work on career growth without pushing up the work load.
- Provide workplace safety through suitable equipments, instructions and risk-management rules.
- Enhance supervisory support by leadership training and development of conflict-management.
- Give employees more job autonomy and decision-making power in their respective fields of specialization.
- Introduce professional growth, schemes of transparency of career progression and mentor schemes.
- Review salary levels and benefits periodically to be in line with industry standard and cost of living.
- Implement performance-based rewards, recognition and appreciation strategies to motivate the employees.
- Provide work-life balance through flexible working hours, weekly leave days, and leave.
- Offer job security by having good policies about the services and express employment contracts.
- Establish organized innovation platforms, sharing of ideas and knowledge amongst employees.
- Recognize novel procedures and innovative contributions that enhance care delivery to patients or efficiency of the hospital.

10. Conclusion

The current research has explored the most important variables that determine the job satisfaction and personality of the healthcare workers in Coimbatore. The results indicate that there are several organizational, interpersonal, and psychological aspects that act together in influencing the work attitudes and behavioural reaction of healthcare workers. Factor analysis of the study revealed five strong components, including work environment and operational demand, interpersonal relations and participation, leadership and professional support, worklife integration with job security, and innovation and recognition culture, that make up a significant proportion of the variance. These findings point to the fact that the job satisfaction in the healthcare sector might not be measured by one variable, but it is rather a multidimensional model which comprises of workload management, effectiveness of communication, teamwork, emotional well-being, safety, career-growth, financial assurance, and performance recognition.

The research points out that the reinforcement of these determinants can have a tremendous effect on professional motivation, stress and burnout, and lead to a more efficient and empathetic workforce. By focusing on supportive leadership, a continuous development of skills, empowerment of employees, and a balanced personal-professional life, hospitals and clinics are bound to raise more confident, empathetic, and resilient healthcare professionals.

In general, the study supports the significance of establishing a healthy and sustainable working environment that will encourage employee satisfaction in the long-term and enhance patient care rates in the healthcare industry of Coimbatore.

11. Scope for Further Research

The current research is informative about the factors that have an impact on job satisfaction and personality traits of healthcare professionals in Coimbatore; nevertheless, there are still some research opportunities that can be explored further. Further studies can widen the sample to a number of districts or states to be able to compare the results in different healthcare ecosystems. Longitudinal study design could also be embraced to study the place of personality traits and job satisfaction in time with respect to the changing demands of the work place and the career

advancement. More studies can be conducted with references to the discrepancies between the public and the private healthcare facilities or to different specialties to determine the precise determinants related to the profession. Qualitative designs/ approaches (focus group discussions and in depth interviews) can offer deeper information regarding emotional, cultural, and psychosocial factors that can be not well represented by quantitative measures. It should also be noted that in the future, organizational commitment, burnout levels, emotional intelligence, and patient satisfaction could be incorporated with the variables to create a more comprehensive framework of how workforce dynamics in the healthcare industry work.

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