

“EXPLORING JOB SATISFACTION: A COMPARATIVE STUDY OF NURSES AND HEALTHCARE ADMINISTRATIVE PROFESSIONALS ACROSS HIERARCHICAL LEVELS”

Research Paper

Micah Nath, Swiss School of Business and Management, Geneva, micahnath8@gmail.com

“Abstract”

*As much as researchers remain intrigued by the dilemma job satisfaction presents, it is a major concern for employers as well as employees, especially in a healthcare organization, where under one roof, different job profiles operate. Through this research, a parallel was drawn between various factors affecting job satisfaction among nurses and healthcare administrative professionals, especially at various hierarchical levels. **Method:** The study used both quantitative and qualitative methods to draw a parallel between the factors affecting different classes of healthcare employees at various hierarchical levels using a survey questionnaire. **Results:** While both professional and financial growth were important for the two disciplines of healthcare employees, professional growth slightly out-weighed the need for financial growth. However, financial growth surpassed the other factors at junior hierarchies, while, the need for empowerment and work-life balance was more at senior hierarchies.*

Keywords: Job Satisfaction, Healthcare Employees, Hierarchical levels, Transformational Leadership, Employee Empowerment, Professional Growth, Financial Growth, Open-Door policy, Employee Engagement, Freedom to make Independent Decisions.

1 Introduction

In a healthcare setup where employees deal with unforeseen situations every minute, parameters for Job Satisfaction (JS) can vary from employee to employee. The same can be observed within the same class of Healthcare Employees (HCE) at various hierarchical levels. According to Glission and Durick (1998, p. 61-81), JS is lower among healthcare employees than in other organizations. The same can be attributed to the nature of work in a healthcare setup, which may easily lead to physical or emotional burnout, especially among the HCE who deal directly with the patients. Within the constraints of professional demand, an employee usually tend to subdue his need for better provisions necessary for his benefit and ends up being frustrated or morally let down, which is eventually reflected in his performance as well (Syptak et al, 1999, p. 26), thus, resulting in overall inferior performance index for a team, the department, and eventually the organization (Asif et al, 2019, p. 2381; Boamah and Laschinger, 2017, p. 180-189). This not only leads to a bad market reputation for the healthcare setup but also results in overall business loss due to unsatisfied patients. Such employee behaviour and performance may further result in greater turnover ratio and absenteeism with a lower performance index of employees (Nagy, 2022, p. 77-86; Glission and Durick, 1988, p. 61-81).

Healthcare job often lead to mental and physical burnout (Cunningham et al, 2022, p. 534-542; Nemmaniwar and Deshpande, 2016, p. 27-31; Lee and Cummings, 2008, p. 768-83). Leadership plays a very crucial role in defining the organization's work culture. Nagy (2002, p. 77-86), detailed various factors that play a role in defining JS among HCEs. According to Singh et al (2019, p. 3268-3275), leaders who identify gaps and work towards improving and providing a healthy work atmosphere tend to create and lead a team of happy and satisfied employees. Such leaders are the means to curb the

practice of absenteeism, improve the attrition rate, and help deliver better services that are more organization-oriented (Aazami et al, 2015, p. 40-46; Herzberg, 1974, p. 18-29).

1.1 Research problem

Various studies conducted in the past have enlightened us about the need for a satisfactory work profile (Cunningham et al, 2022, p. 534-542; Asif et al, 2019, p. 23-81; Nemmaniwar and Deshpande, 2016, p. 27-31; Lee and Cummings, 2008, p. 768-83). While many organizations take constructive steps towards delivering a healthy work culture, there is still overall dissatisfaction among employees in many organizations. Numerous unanswered questions were addressed in this research. Factors affecting JS were studied intricately within a healthcare setting. This study evaluated the various factors affecting JS among different classes of employees within an organization. The study analyzed the parameters causing dissatisfaction at various hierarchical levels among the same class or different classes of employees. The role of transformational leadership was assessed in creating a healthy work environment.

1.2 Research purpose and questions

The main aim of the research is to explore the factors that define JS among healthcare employees, and to analyse how these factors differ based on different work profiles and in various hierarchies. This shall lead to the following objectives:

1. The development of new knowledge, such as how factors affecting job satisfaction, differs within an organization among multi-disciplinary HCEs.
2. Sharing increased knowledge and learning about individual perceptions of job satisfaction under different circumstances.
3. Analysing how JS differs within a class of employees at various hierarchical levels.
4. Assessing the role of transformational leadership in evaluating the factors affecting JS satisfaction and providing enhanced work experience to the team.

2 Review of Literature

2.1 Introduction: background of job satisfaction

Although JS is one of the immensely researched areas over the past decades, achieving JS remains a dilemma for employers. Today, JS is not limited to better pay benefits and opportunities alone; various other factors, such as professional growth, work and social life balance, etc., comes into play while understanding the modern concept of JS. Not only this, but our intricately socially connected world is challenging employers to excel against their opponents while providing services to their employees. JS is the key to success for any organization (Smith et al, 2020; Bakotić, 2016, p. 118-30). According to Syptak et al (1999, p. 26), employees are responsible for developing the market value for any organization and it is the employees who contribute to achieving the targeted goals. Leadership plays a very crucial role in defining an organization's work culture. Strong leadership curbs abusive and derogatory practices and promotes a healthy and motivating work environment thus, creating a team of happy and satisfied employees (Singh et al, 2019, p. 3268-3275). Leaders who understand their team and work towards empowering them are known as transformational leaders. Transformation leadership works by identifying the individual employee's skill -set, empowering them, intellectually stimulating them, challenging them, and coming up with innovative ideas to accomplish a task (Asif et al, 2019, p. 2381; Curtis and O'Connell, 2011, p. 32-5). Empowering employees works by reinforcing a manager's belief in his employees. These empowered employees deliver services beyond expectation, eventually benefiting the patients (Purwanto and Agus, 2020).

2.2 Significance of studying employee satisfaction in a healthcare system

Healthcare setups have obligations to both their employees and patients. A job satisfied employee will be able to exceed expectations in delivering patient care thus enhancing a patient's hospital experience and thereby the market value of the healthcare setup (Smith et al, 2020; Bakotić, 2016, p. 118-30). Practicing transformative leadership and open-door policies helps build a healthy work culture. This makes the employee feel appreciated and empowered, thus, reducing the chances of absenteeism and low attrition rate. This eventually reduces the organization's expenses in training new employees as well as helps achieve the targets (Syptak et al, 1999; p. 26). Happy and motivated employees tend to communicate with their patients and thus, create an atmosphere of trust between the patient and the service provider (Asif et al, 2019, p. 2381; Boamah and Laschinger, 2017, p. 180-189).

Nemmaniwar and Deshpande (2016, p. 27-31), explain that in a healthcare setup, a patient's experience is defined by the JS level of an employee. Elements defining JS for a nurse may differ from those for a clinician or an administrative professional or support service staff (Cunningham et al, 2022, p. 534-542; Nemmaniwar and Deshpande, 2016, p. 27-31; Lee and Cummings, 2008, p. 768-83). Together, these employees deliver services that define a patient's overall hospital experience (Nemmaniwar and Deshpande, 2016, p. 27-31). Since, healthcare providers responsibility is not limited to the welfare of their employees alone, but also the patients, it is therefore, important that the leaders identify the needs of the team and the patients, and work towards the common goal of excellence in services.

2.3 Factors affecting job satisfaction

Ting (1996, p. 439-452), grouped factors affecting JS into three categories, namely, professional factors, organizational factors, and, personal factors. Spector (1997, p. 1173-1193), identified these factors and categorized them into two groups: personal and environmental factors. However, leadership is an important aspect in defining and checking job satisfaction. The eventual onus of a team and its performance lies on the shoulders of its team leaders (Bass and Avolio, 1994, p. 112-121; Rosenberg and Hovland, 1960; Vroom, 1964, p. 99). Pandey and Asthana (2017, p. 96-105), further advocated the factors affecting JS, as described by Ting (1996, p. 439-452), and classified them into three major categories, namely, individual factors, organizational factors and, leadership factors.

2.4 Measuring job satisfaction

An organization's performance depends on its employee's performance, which is affected by their satisfaction level (Syptak et al, 1999, p. 26). Thus, it is of essence for an organization to keep a check on the dissatisfaction level of its employees. Job satisfaction is usually measured through survey analysis, namely Job Satisfaction Survey (JSS), as introduced by Spector (1985, p. 693-713), which involves data collection in the form of questionnaires including yes-or-no questions, True? False Questions, Aggreability scale, multi-choice questions, point systems, and short-answer questions. Another method to analyse JS is through Job Descriptive Index (JDI), developed by Smith et al, (1969). It evaluates the various factors affecting employees of different classes and hierarchies. The results are subsequently analysed for a specific employee category.

2.5 Transformational leadership, organization work-environment and job satisfaction

It is indisputable that TL, organization work culture and an employee's JS level are interrelated. An employee represents his team, an organization and its values. Thus, an employee's attitude defines the organization's environment and eventually the job satisfaction level among its employees and vice-versa (Smith et al, 2020; Bakotić, 2016, p. 118-30; Tsai, 2011, p. 98; Bass and Avolio, 1993, p. 112-121). It is especially of major significance in a healthcare setup where, an employee's satisfaction level is low owing to the nature of their job and reflects on their work practices, which further define the patient's experience with the organization (Smith et al, 2020; Bakotić, 2016, p. 118-30; Higgins, 2015).

3 Methodology

3.1 Research design

Over the decades, JS has been immensely studied by the researchers, yet, there remains unanswered questions. This research focused on problem how job satisfaction varies among multi-disciplines and within the same and different hierarchies. This study used both qualitative and quantitative research approach to achieve a better understanding of the topic. Silverman (2016), defined qualitative research as a method to understand the “what and why” of the problem. It focuses on observations, open-ended questions, and behaviour analysis of the focused group. It is used to understand the different perceptions of different individuals about a particular situation (Fossey et al, 2002, p. 717-732). The data collection method, in the form of numbers and analysing it using statistics, (Creswell, 1994), falls under quantitative research method. It is used to study the behaviour, attitudes, and opinions of a population about a certain problem or theory. The research was conducted using survey questionnaire. Bhandari (2023), described the questionnaire as a tool or instrument to collect data. The survey questionnaire used in the present study comprised open-ended and closed-ended questions, including multiple choice questions, and Likert and Scaling questions (Likert, 1932, p. 5-53), to achieve the desired results (Roopa and Rani, 2012, p. 273-277). The Likert scale employs psychometric behaviour studies, capturing responses based on the individual’s attitude towards an issue.

The study used the correlation and regression method to validate the credibility of the research. Correlation can be explained as the association between the two components (Asuero et al, 2006, p. 41-59). Regression can be defined as the association between an independent factor and a dependent variable(s) (Asuero et al, 2006, p. 41-59). Tsang et al (2017, p. 80-89), described questionnaire reliability as the survey results consistency irrespective of the changes in respondents, measurement errors in content sampling, or difference across raters. The current study used both internal consistency and inter-rater reliability to evaluate the data collected. Internal consistency is a measure of the extent to which the questions related to the focused problem are interrelated and the extent to which they deliver a consistent response to a similar problem. It is measured using Cronbach’s alpha (Cronbach, 1951, p. 297-334). Inter-rater reliability refers to the consistency obtained in the responses of multiple respondents to the set of observations they make across the same group of problems. This is estimated using kappa statistics (K), introduced by Cohen (Cohen, 1960, p. 37-46). According to Tsang et al (2017, p. 80-89). the validity of a questionnaire is the measure of the conclusion and inference drawn based on the responses collected. The current study used both content validity and construct validity. Content validity is the validity of the construct regarding the theory or idea behind the research (Schultz and Whitney, 2005). Cronbach and Meehl (1955, p. 281-302), defined construct validity as a measure of the construct based on the analysis of behaviour, attitude, perception, and idea, that cannot be observed or inferred directly.

3.2 Participant selection

Ponto (2015, p. 168-171), described the challenges faced in sample collection and, thus, the need to identify the sample population meticulously for the survey. He also emphasized on the need to focus on a large population sample to obtain maximum response, which helps understand the frame of mind of the population in general. In the current study, of the 910 employees, including physicians, nurses, technicians, administrative staff and support service staff, 410 employees were selected through purposive sampling (Martinez-Mesa et al, 2016, p. 326-330). Purposive sampling involves a large participant population that holds expertise in or has good knowledge of the topic of research (Martinez-Mesa et al, 2016, p. 326-330). Of these 410 employees, 57.3% (235) were registered nurses, and the other 42.7% (175) were comprised of healthcare administrative professionals (Figure 1). It was ensured that the selected target population fit the idea behind the research and had adequate knowledge of the research problem. A survey questionnaire comprising of 16 questions was formed and distributed online among the selected sample population.

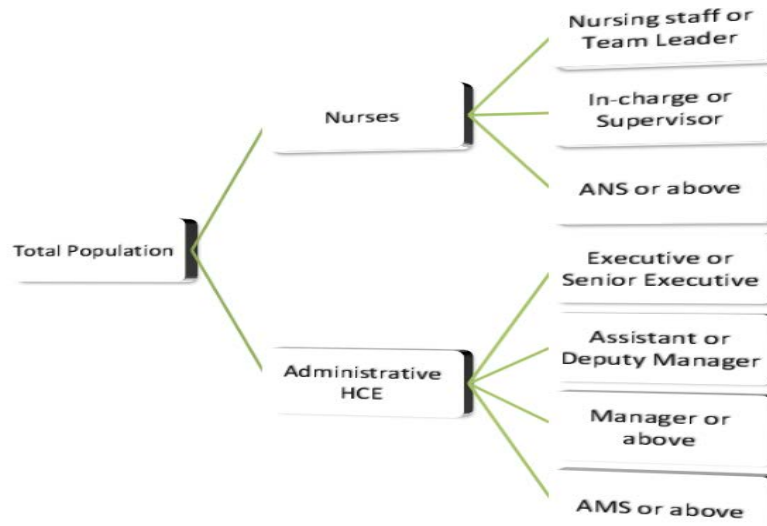


Figure 1. Sample population of healthcare organization. HCE: Healthcare Employees; ANS: Assistant Nursing Superintendent; AMS: Assistant Medical Superintendent (Source: Micah Nath).

4 Results

As discussed in the literature review, factors defining JS can be an individual’s perception of his current circumstances, including financial and social status, emotional and mental health, his job profile, his level of empowerment and recognition, opportunities for future prospects, etc. This study not only analysed the factors defining JS among HCEs in general, but also focused on their variability, like their job profiles and their hierarchies. A total of seven parameters were considered, while conducting the study to analyse JS among the HCEs (Figure 2).

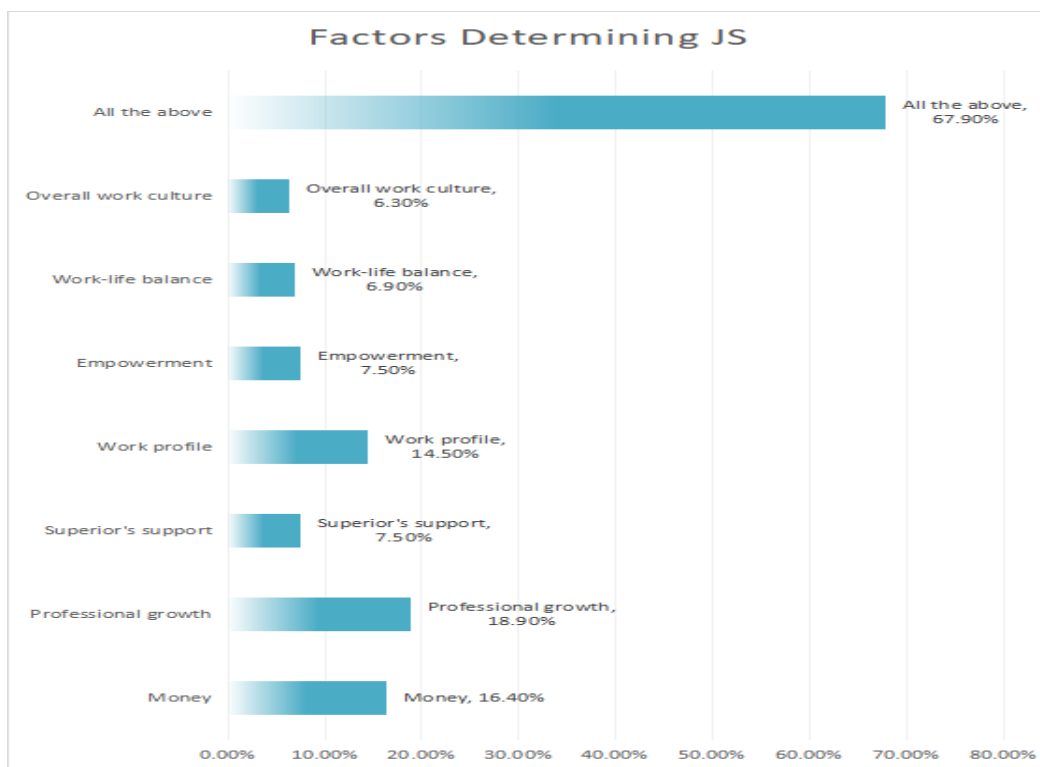


Figure 2. Graph representing the factors determining JS among HCEs.

Overall, 67.9% of HCEs believed that all seven factors contributed to their job satisfaction. However, professional growth slightly superseded the need for financial growth with a response rate of 18.9% and 16.4% respectively. While, work profile accounted for 14.5% of total response, both superior’s support and empowerment contributed to 7.5% of the response rate. Work-life balance and work culture contributed to 6.9% and 6.3% of the responses, respectively (Figure 2). Thus, it can be inferred that for a general HCE population, while all seven parameters mapped defined JS, professional growth outranked other factors. This suggests that, while an employee may seek empowerment and financial and non-financial perks, he understands the need to grow professionally, which in retrospect, helps boost his financial and social status and thus, recognition as well.

The cross-tab evaluation between the factors determining JS among HCEs and their job profile was done. The data collected showed that for both nursing and administrative HCEs, professional growth surpassed other factors, accounting for a response rate of 15% and 10.10% respectively. Among the nursing HCEs, financial benefits accounted for 12.9% of the response rate, shortly followed by work profile with a response rate of 12.10%. Thus, emphasizing the need for better opportunities for professional growth and the need for a job profile, that gives the nursing HCEs a sense of self-importance. On the same note, among the administrative HCEs monetary benefits accounted for 9% of their response rate, followed by the need for better work profile and superior support, both accounting for 6.7% of their response rate. However, nursing HCEs emphasized more empowerment with a response rate of 5.7% than superior support with a response rate of 4.3%. While, for administrative HCEs, empowerment accounted for 4.5% of the total response rate, along with other factors like work-life balance and overall work culture. However, 5% of nursing HCEs emphasized the importance of work-life balance as the deciding factor in enhancing their JS (Figure 3). Thus, this cross-tab evaluation emphasized the notion that nursing HCEs are more prone to burnout and frustration owing to the nature of their job.

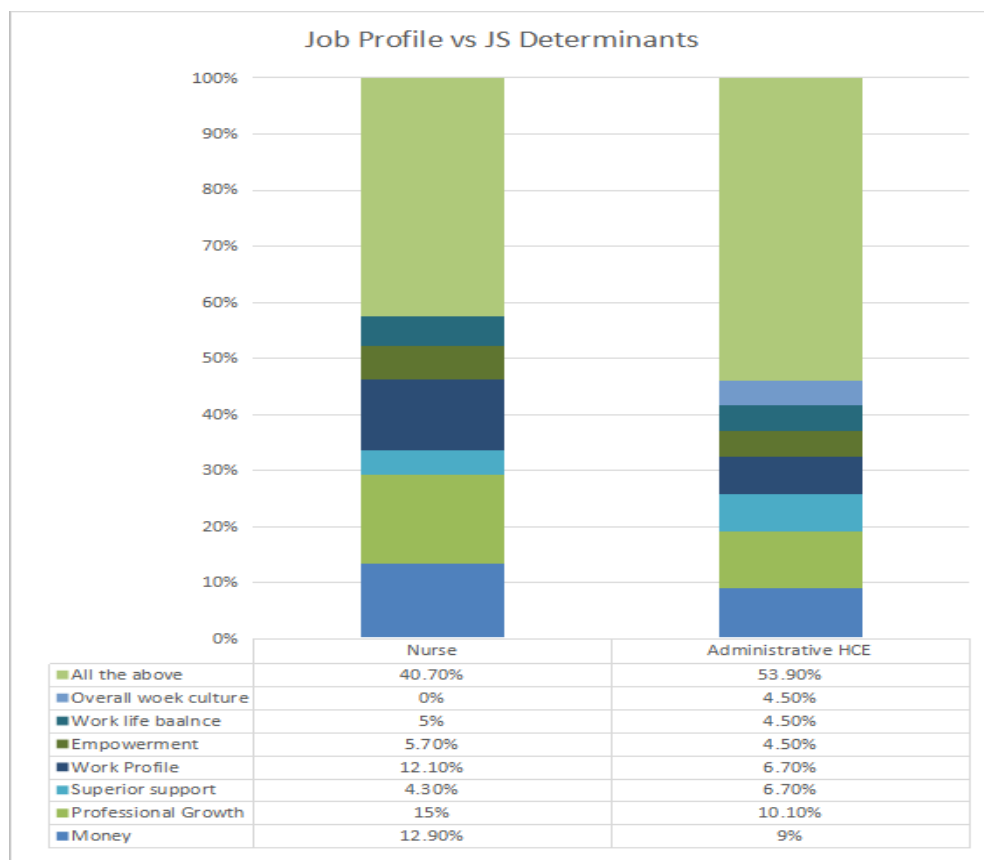


Figure 3. Graph representing job profile vs. factors determining JS among HCEs.

To determine how these seven parameters, affect JS among HCEs at various hierarchical levels within the same class and among different classes of employees, the researcher further correlated job profile at various hierarchies against the seven parameters (Figure 4). On cross-tab evaluation it was found that among both the junior nursing and administrative hierarchies, professional growth needs surpassed the financial benefits with a response rate of 16.5% and 10.4% respectively, among the nursing HCEs, against 14.2% and 9% response rate respectively, among administrative HCEs. This was followed by the need for better work profile with a response rate of 11% and 7.5% for nursing and administrative HCEs respectively. At middle hierarchy, among the nursing HCEs, work-profile and empowerment were the JS determining factors with a response rate of 9.10% each. However, among the administrative HCEs, both financial and professional growth opportunities were the major JS determinants with a response rate of 10.40% each followed by the need for better work-profile and superior support with a response rate of 6.25% and 4.15% respectively. Among the senior nursing hierarchies, work-profile was the major JS determinant with a response rate of 66.70%. However, among administrative senior hierarchies all the seven parameters were responsible for enhancing their JS. This analysis shows that, while professional growth surpasses the other factors determining JS in the lower hierarchy, the need for a better work profile is a prevalent factor in determining JS among the middle and senior nursing hierarchy while middle administrative hierarchy prioritizes both financial and professional growth above the other factors.

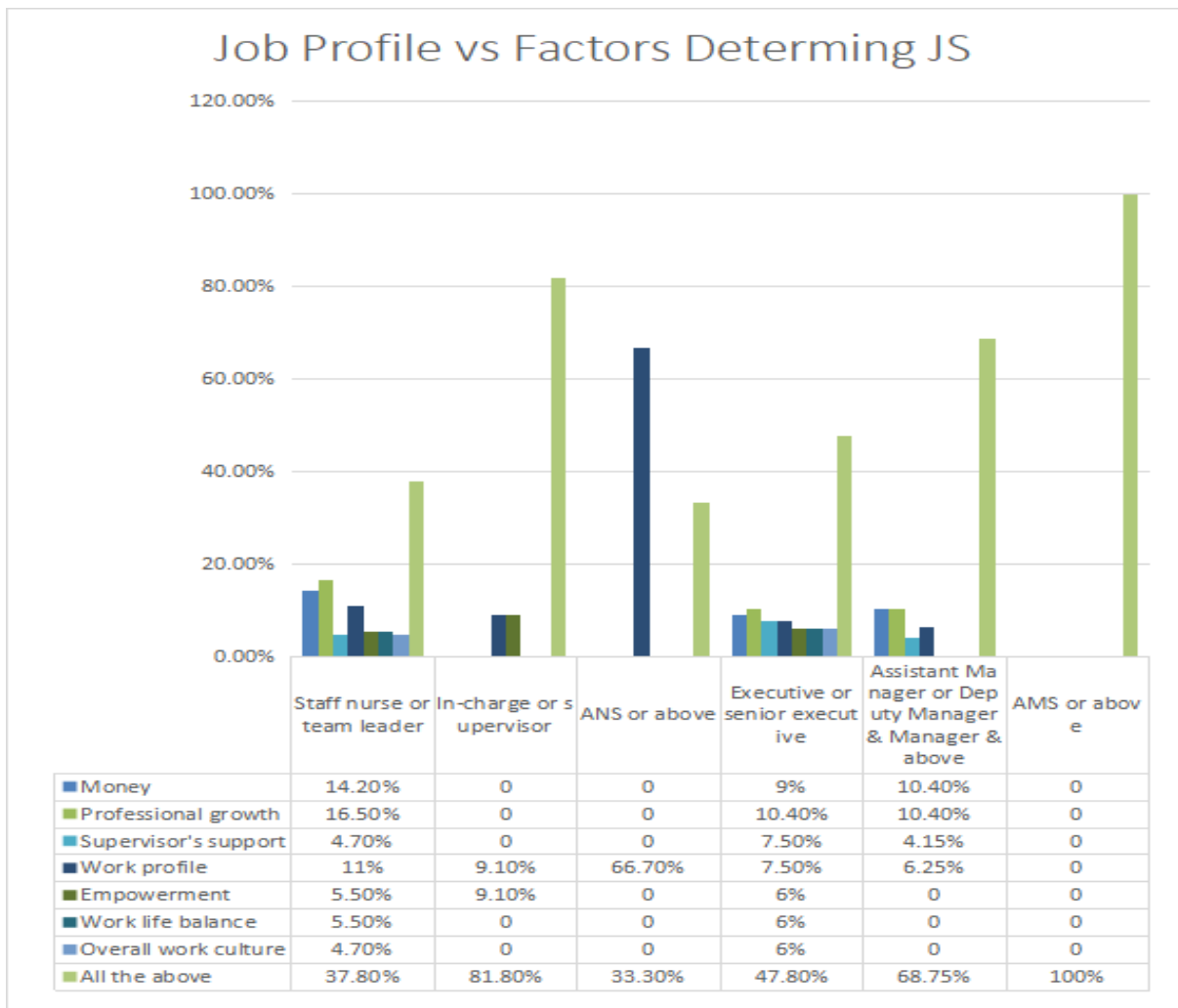


Figure 4. Graph representing job profile vs. factors determining JS among HCEs at hierarchical levels.

Furthermore, the seven parameters were closely analysed to evaluate their significance in defining JS among the multi-disciplinary HCEs, especially at various hierarchical levels (Table 1). The analysis clearly indicated the dissatisfaction among middle administrative hierarchy with respect to their pay scale and good communication with their supervisors, clearly indicating the need to revise the organization's pay benefit policy according to the hierarchy and work profile. However, junior nursing hierarchy showed dissatisfaction with their pay benefits as well as burn-out they faced at the work place indicating the need to compensate them accordingly as well as redefine the work policy with respect to man-power utilisation. However, the senior administrative hierarchy clearly indicated the need for better empowerment, better communication, work-life balance and recognition while the senior nursing hierarchy emphasized on the need for better empowerment as well as less burn-out indicating the toll their job profile takes on them.

S.No.	Parameter	Satisfaction Level	Response Rate (in %)					
			Junior Hierarchy HCE		Middle Hierarchy HCE		Senior Hierarchy HCE	
			Nurse	Administrative Professional	Nurse	Administrative Professional	Nurse	Administrative Professional
1	Pay Benefits	Satisfied	37.3%	52.8%	54.5%	30%	100%	100%
2	Leave Benefits	Likely	55.4%	61.1%	54.5%	60%	100%	0%
3	Empowerment	Satisfied	54.5%	52.8%	45.5%	75%	33.3%	0%
4	Skill Utilisation	Yes	84.3%	88.9%	81.8%	95%	100%	100%
5	Open-Door Policy	Very Good	41%	27.8%	45.5%	20%	100%	0%
6	Rewards and Recognition	Yes	75.9%	63.9%	72.7%	85%	100%	0%
7	Burn-Out	Yes	67.5%	33.3%	45.5%	20%	100%	0%
8	Organization as Good Workplace	Likely	62.7%	72.2%	63.6%	55%	66.7%	100%

Table 1. Table representing the significance of the various JS determinants in defining JS among multi-disciplinary HCEs at various hierarchical levels.

In order to further understand the factors affecting JS among the multi-disciplinary HCEs at various hierarchical levels, the researcher further correlated the steps to enhance JS against the job profile at various hierarchies (Figure 5). Among the junior nursing hierarchy, financial growth held the most importance with a response rate of 22.6% shortly followed by professional growth opportunities with a response rate of 21.7%. This was followed by the need for better superior support and the need for

better empowerment with a response rate of 7% and 6.1% respectively. However, among the junior administrative hierarchy, the need for professional growth superseded the need for financial growth with a response rate of 18.8% and 12.5% respectively, followed by the need for better superior support with a response rate of 8.3%. At the middle hierarchies, among the nursing HCEs, while the need for both financial and professional growth held equal importance with a response rate of 8.3% each, among the administrative HCEs, the need for financial growth surpassed the need for professional growth with a response rate of 16.25% and 11.7% respectively. While middle hierarchy nursing preferred better superior support with 8.3% response rate, the administrative hierarchy preferred better work-life balance with 7.15% response rate. Among the senior nursing hierarchy, all the seven parameters were equally important in enhancing their JS. However, among the administrative senior hierarchy, both empowerment and better work-life balance held importance with a response rate of 50% each.

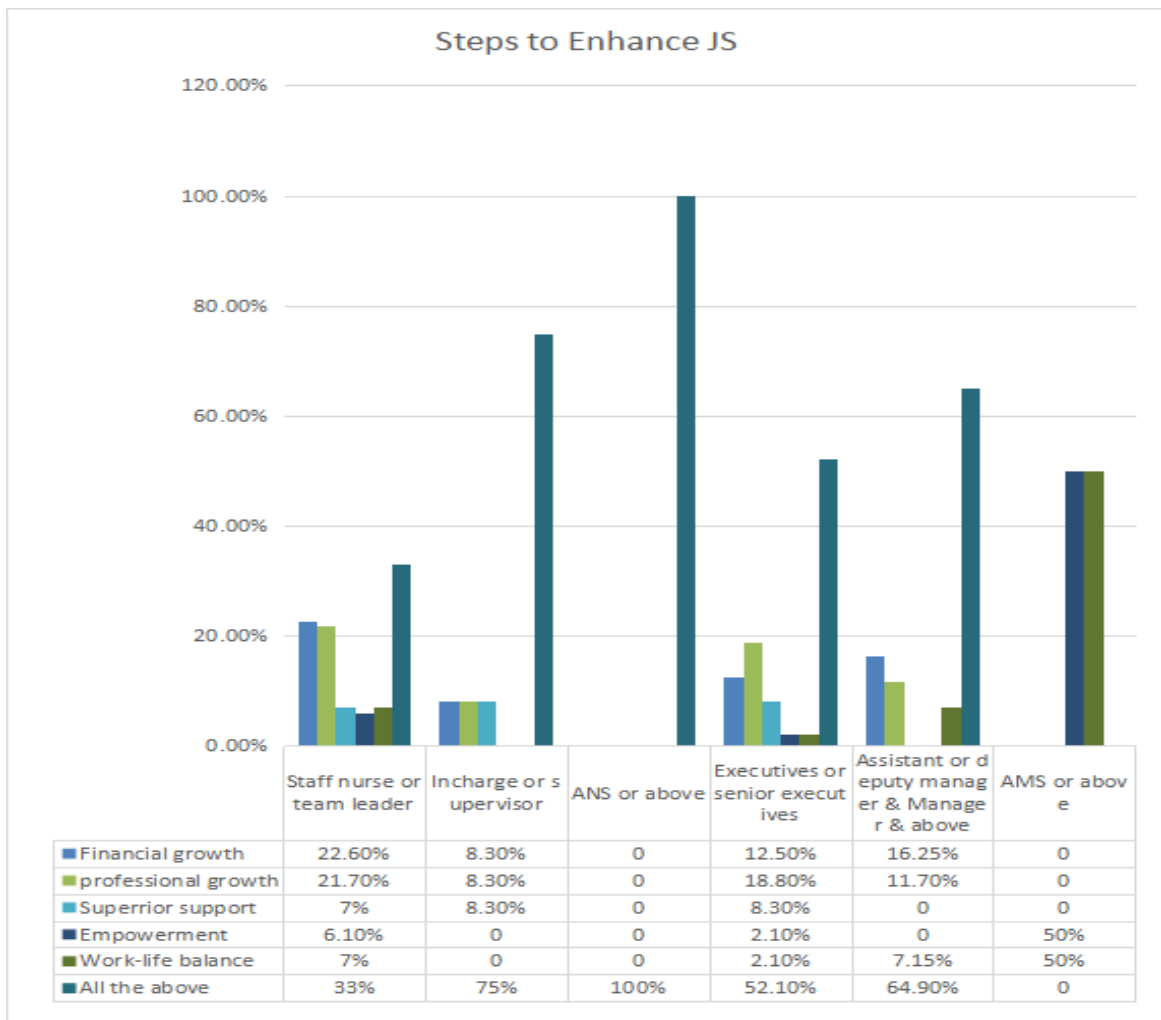


Figure 5. Graph representing steps to enhance JS vs. factors determining JS among HCEs at hierarchical levels.

This analysis highlights the importance of maintaining a balance between various attributes contributing to JS among various classes of HCEs. It is necessary to check the factors leading to the evident burn-out among the HCEs in the current organization, as well as revise their reward and recognition policies. This evaluation indicated that financial growth is important at both the lower and middle hierarchies. However, professional growth closely follows the pursuit at both the hierarchical levels. Thus, indicating the need for the management to revise its pay benefits policies according to the

work profiles and work-load. While the junior hierarchy of HCEs may not feel empowered enough owing to their lack of professional experience, the burden of running daily nuances of a healthcare setup, especially in the case of nurses, lies on their shoulders. Thus, emphasizing the need to train them and empower them. Similarly, while the senior hierarchy of HCEs will be satisfied with their pay benefits and professional growth opportunities, the same might not be true for the junior hierarchy of HCEs. Not, only this, factors affecting JS within the same hierarchy may be different among multi-disciplinary HCEs. While, senior hierarchy of administrative HCEs felt the need for better empowerment and work-life balance the same was not true for the nursing senior hierarchy. This can be attributed to the fact that the administrative senior professionals are burdened with the responsibility of the entire healthcare setup including the nursing team. Thus, giving them less scope for maintaining a better work-life balance and also, if not given enough freedom, forcing them to look unto the management for making decisions both in the favour of employees and the organization, thus, making them feel less empowered.

5 Discussion

The first conclusion that can be drawn from the present study is that the factor affecting JS invariably differs among different classes of HCEs, especially at various hierarchical levels. Secondly, it is to be noted that all the seven parameters covered in the study are inter-related in defining JS among the employees. While financial growth cannot be achieved without professional growth opportunities, it is to be kept in mind that the same is achievable with training which is again dependent on the leadership and empowerment extended to the employee. Thus, the healthcare setups should revise their organizational strategies in favour of not only the patients and the organization itself but also for the benefit of the employee. Finally, the research found that offering professional growth was imperative, followed by providing means for financial benefits, leadership played a crucial role in identifying the potential of employees and offering them chance to grow through proper empowerment and training. It is thus, no doubt that all the JS determinants are inter-related (Figure 6) and are imperative in determining the eventual JS level of an employee and thus, the market value of an organization. In order to enhance JS among HCEs, the healthcare setups should implement certain strategies such as:

- Strategy 1: Offer professional growth opportunities
- Strategy 2: Offer both financial and non-financial benefits
- Strategy 3: Offer supportive leadership
- Strategy 4: Training
- Strategy 5: Take measures to curb burn-out
- Strategy 6: Incorporate open-door policy

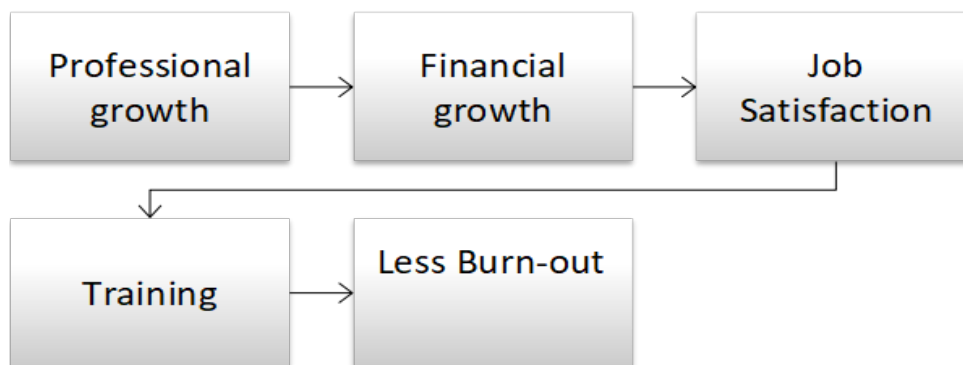


Figure 6. Linking the strategies, correlations, and literature discussions (Source: Micah Nath).

6 Limitations of the Study

The study has limitations of its own. Firstly, the respondent population accounts for only 36.83%, which is very low. Although, the study highlighted a good insight into the various factors affecting JS among multi-disciplinary HCEs, at different hierarchical levels, the idea of generalizing the study concept to the population at large is questionable with such a low response rate. The study mainly focused on nursing and administrative HCE, excluding clinical and paramedical staff, which is another gap in the research. Thirdly, the study used both mixed method of survey analysis but focused on a single healthcare unit, which limits the data justification. In order to achieve a better idea about the research topic, cross-sectional studies between various healthcare setups will be helpful. Lastly, to the knowledge of the researcher, this is the first study analysing the effect of JS on multi-disciplinary HCEs at various hierarchical levels. Thus, further research needs to be conducted to validate the present study results.

7 Conclusion

While further work needs to be done to identify various factors which affect JS among multi-disciplinary HCE, within different hierarchical levels, the study gives an insight into the concept and provides a step towards understanding the JS determinants at different hierarchical levels. The researcher concluded that, while a majority of HCE were overall satisfied with their job and would recommend their organization as a good-work-place, prospects of offering the HCEs professional growth was imperative to enhance their JS. This was shortly followed by the need for financial benefits. Leadership played a crucial role in identifying the potential of employees and defining their JS through empowerment and practicing open-door policy.

The current study results show that offering professional growth opportunities, providing financial benefits and improving superior support will largely influence JS among the multi-disciplinary HCE.

References

- Aazami, S., Shamsuddin, K., Akmal, S. and Azami, G. (2015) 'The relationship between job satisfaction and psychological/physical health among Malaysian working women', *Malays J Med Sci.* 2015; 22:40-6.
- Asif, M., Jameel, A., Hussain, A., Hwang, J. and Sahito, N. (2019) 'Linking Transformational Leadership with Nurse-Assessed Adverse Patient Outcomes and the Quality of Care: Assessing the Role of Job Satisfaction and Structural Empowerment', *Int. J. Environ. Res. Public Health*, 16, 2381.
- Asuero, A.G., Sayago, A. and González, A.G. (2006) 'The Correlation Coefficient: AN Overview', *Critical Reviews in Analytical Chemistry*, 36(1), 41-59. doi:10.1080/10408340500526766
- Bakotić, D. (2016) 'Relationship between job satisfaction and organizational performance', *Econ Res Istraživanja*. 29:118-30.
- Bass, B. M. and Avolio, B. J. (1993) 'Transformational leadership and organizational culture', *Public Administration Quarterly*, 17(1),112-121.
- Bhandari, P. (2023, June 22) 'Questionnaire Design | Methods, Question Types & Examples', *Scribbr*
- Boamah, S.A., Laschinger, S., Heather, K., Wong, C. and Clarke, S. (2017) 'Effects of transformational leadership on job satisfaction and patient safety outcomes', *Nursing Outlook*, (), S0029655417302749-. doi:10.1016/j.outlook.2017.10.004
- Cohen, J. (1960) 'A coefficient of agreement for nominal scales', *Educ Psychol Meas.* 1960;20:37-46.
- Creswell, J.W. (1994) 'Research Design: Qualitative & Quantitative Approaches', *London: SAGE Publications*
- Cronbach, L. and Meehl, P. (1955) 'Construct validity in psychological tests', *Psychol Bull.* 1955;52:281-302.

- Cronbach, L.J. (1951) 'Coefficient alpha and the internal structure of test', *Psychometrika*. 1951;16:297-334.
- Cunningham, R., Westover, J. and Harvey, J. (2023) 'Drivers of job satisfaction among healthcare professionals: a quantitative review', *International Journal of Healthcare Management*, 16:4, 534542.
- Curtis, E. and O'Connell, R. (2011) 'Essential leadership skills for motivating and developing staff', *Nurs Manag (Harrow)*. 2011 Sep;18(5):32-5. doi:10.7748/nm2011.18.5.32.c8672. PMID: 21977896
- Fossey, E., Harvey, C., Mcdermott, F., and Davidson, L. (2002) 'Understanding and Evaluating Qualitative Research', *Australian & New Zealand Journal of Psychiatry*, 36(6), 717-732. doi:10.1046/j.1440-1614.2002.01100.x
- Glisson, C. and Durick, M. (1988) 'Predictors of job satisfaction and organizational commitment in human service organizations', *Administrative Science Quarterly* 33, 61–81.
- Herzberg, F. (1974) 'Motivation-hygiene profiles: Pinpointing what ails the organization', *Organ Dyn*. 1974;3:18–29.
- Higgins, E.A. (2015) 'The influence of nurse manager transformational leadership on nurse and patient outcomes: Mediating effects of supportive practice environments, organizational citizenship behaviours, patient safety culture and nurse job satisfaction', *ProQuest published doctoral dissertation*,. London, Ontario, Canada: Western University
- Lee, H. and Cummings, G.G. (2008) 'Factors influencing job satisfaction of front line nurse managers: a systematic review', *J Nurs Manag*. 2008 Oct;16(7):768-83. doi: 10.1111/j.1365-2834.2008.00879.x. PMID: 19017239
- Likert, R. (1932) 'A technique for the measurement of attitudes', *Arch. Psychol*. 140, 5-53.
- Martinez-Mesa, J., González-Chica, D.A., Duquia, R.P., Bonamigo, R.R., and Bastos, J.L. (2016) 'Sampling: how to select participants in my research study?', *Anais Brasileiros de Dermatologia*, 91(3), 326–330. doi:10.1590/abd1806-4841.20165254
- Nagy, M.S. (2002) 'Using a single-item approach to measure facet job satisfaction', *Journal of Occupational and Organizational Psychology* 75, 77–86.
- Nemmaniwar, Archana, G., Madhuri, S. and Deshpande (2016) 'Job Satisfaction among Hospital Employees : A Review of Literature', *IOSR-JBM*. Vol. 18 (Issue 6). pp.27-31.
- Pandey, P. and Asthana, P.K. (2017) 'An Empirical Study of Factors Influencing Job Satisfaction', *Indian Journal of Commerce and Management Studies*, 8(3), pp. 96–105.
- Ponto, J. (2015) 'Understanding and Evaluating Survey Research', *J Adv Pract Oncol*. 2015;6(2):168-171.
- Purwanto and Agus (2020) 'The Role of Job Satisfaction in the Relationship between Transformational Leadership, Knowledge Management, Work Environment and Performance (December 16, 2021)', *Solid State Technology*, 2020
- Roopa, S. and Rani, M.S. (2012) 'Questionnaire Designing for a Survey', *J Ind Orthod Soc* 2012;46(4): 273-277.
- Rosenberg, M.J. and Hovland, C.I. (1960) 'Cognitive, affective and behavioural components of attitude', *New Haven: Yale University Press*.
- Schultz, K.S. and Whitney, D.J. (2005) 'Measurement Theory in Action: Case Studies and Exercises', *Thousand Oaks, CA: Sage*
- Silverman, D. (ED.). (2016) 'Qualitative research', *Thousand Oaks, CA: Sage*
- Singh, T., Kaur, M., Verma, M. and Kumar, R. (2019) 'Job satisfaction among health care providers: A cross-sectional study in public health facilities of Punjab, India', *J Family Med Prim Care*. 2019 Oct 31;8(10):3268-3275. doi: 10.4103/jfmpc.jfmpc_600_19. PMID: 31742154; PMCID: PMC6857391
- Smith, K., Davis, M., Malone, C.F., and Owens-Jackson, L.A. (2020) 'Faculty That Look Like Me: An Examination of HBCU Accounting Faculty Motivation and Job Satisfaction (August 19, 2021)', *Issues in Accounting Education* <https://doi.org/10.2308/ISSUES-2020-090>
- Smith, P.C., Kendall, L. M., and Hulin, C.L. (1969) 'Job Descriptive Index [Database record]', *APA Psyc Tests*. <https://doi.org/10.1037/t08233-000>

- Spector, P. E. (1985) 'Measurement of human service staff satisfaction: Development of the Job Satisfaction Survey', *American Journal of Community Psychology*, 13(6), 693–713.
- Spector, P.E. (1997) 'Job satisfaction: Application, assessment, causes and Stewart Collins, Statutory Social Workers: Stress, Job Satisfaction, Coping, Social Support and Individual Difference', *The British Journal of Social Work*, Volume 38, Issue 6, September 2008, Pages 1173-1193, <https://doi.org/10.1093/bjsw/bcm047>
- Syptak, J.L., Marsland D.W. and Ulmer, D. (1999) 'Job satisfaction putting theory into practice', *Family Practice Management*, 6,26.
- Ting, Y. (1996) 'Analysis of Job Satisfaction of the Federal White Collar Work Force: Findings from the Survey of Federal Employees', *American Review of Public Administration*, 26(4), 439-452.
- Tsai, Y. (2011) 'Relationship between Organizational Culture, Leadership Behavior and Job Satisfaction', *BMC Health Serv Res* 11, 98. <https://doi.org/10.1186/1472-6963-11-98>
- Tsang, S., Royse, C. F., and Terkawi, A. S. (2017) 'Guidelines for developing, translating, and validating a questionnaire in perioperative and pain medicine', *Saudi journal of anaesthesia*, 11(Suppl 1), S80–S89.
- Vroom, V.H. (1964) 'Work and motivation', *John Wiley and Sons, New York*, p.99.