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A Study on the Rationale of Moonlighting among Health Care Professionals in Chennai City

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Abstract—The health care industry is a colloquium of sectors that provides enormous and extended services to keep people hale and healthy. The health care professionals take extreme care in achieving the objective they are vested with. Life in the present scenario pushes both the spouses to work and also instigates one or both to do moonlighting. What is moonlighting - it is doing a second job in one's regular employment without the knowledge of the employer. This moonlighting is found in the private sector that the public sector. When we talk about health care professionals, they work in a hospital and have their clinics near their residence and at times multiple as well. This is not only for doctors but for everyone in the health care industry. This paper focuses on the reasons for moonlighting by health care professionals in Chennai city with a sample of 197. A structured questionnaire was circulated among health care professionals and the same was statistically tested. The findings of the study revealed that the basic reason behind moonlighting was the job demands and competition in the industry that forces professions to opt for moonlighting

Keywords- health care professionals, moonlighting

I. INTRODUCTION

Hiring and firing have become common in all industries and the health care industry is no exception in this. In the race towards managing both ends meet employees have an option of secondary source of income which is moonlighting. After the normal working hours, the effectiveness of the people involved in moonlighting is a big question mark. The point to be noted here is not all health care professionals involve in moonlighting but few for whom money is an important criterion to fulfill their requirements. Adding to this if there is a provision for extra income in 24 hours why leave it.

With the drastic changes in the economy and the range of new work expands, there is a phenomenon to focus on the importance of attracting and retaining qualified staff. The benefits provided in the organization are a topic of discussion for both the employers and employees where employers take measures to retain top talent and try to meet their demands. Employees on the other hand (actually not satisfied with compensation) to earn more money and become financially strong look for moonlighting.

If a question is raised on the ethical values of moonlighting the answer is no. But in the present scenario it is unavoidable and in recent years moonlighting is increasing in all sectors and the health care industry is no such exception.

1.1 Objectives And Need For The Study

- ✓ To study the reasons for moonlighting by health care professionals in Chennai city.
- To understand the justification of going for moonlighting by health care professionals



II. REVIEW OF LITERATURE

Eggleston and Bir (2006) defines dual job holding as the holding of more than one job (Gonzalez, 2004; Rickman and McGuire, 1999; Roenen, 1997). But this practice of dual job or moonlighting is seen more in Lower middle-income countries(LMIC)where the practice includes health professionals working within their domains.

Garcia-Prado and Gonzalez (2007) revealed that in the current crisis relating to global human resources for health the impact of the dual practice on the quality of health services in the public sector in terms of compromising equity and efficiency has been documented thereby making it an important issue of concern. The authors in their non-systematic review attempted to study the various methods adopted by governments to address moonlighting.

Complete prohibition - Moonlighting is banned in Canada

Restrictions on private sector earnings- In UK & France, senior specialists appointed on a full-time basis are permitted to earn up to 10 percent of their gross income but there are no restrictions on part-time contractors.

Providing incentives for exclusive public service: In India, Italy, Portugal, Spain, and Thailand exclusive contracts are offered to public health sector workers in addition to salary supplements and promotions to stop moonlighting.

Raising health worker salaries: Doctors in Bangladesh reported that if their salaries are high they would give up dual jobs.

Allowing private practice in public facilities: In Austria, England, Ireland, Italy, and Germany this system is practiced to discourage the external private practice.

Self-regulation: In this approach, the regulation of medical staff is conducted by professional organizations the result of which revealed that if the undesirable practice is stopped it will enhance the professional performance and quality of care.

Ranson MK et.al (2010) states that health care professional's dual practice has been identified as one of the priority research areas in the human resources for the health domain.

McPake B (2016) &Sousa A (2013) have given their serious concern on the attainment of Universal Health Coverage (UHC) goals due to the practice of moonlighting. The authors expressed that continuous involvement in dual activities will dilute the quality of service in the public sector thereby diverting the patients to costlier private care.

Berman P, Cuizon D (2004) attempted to give a broader definition on Dual practice in the health sector as the engagement in both public and private sector activities with a major proportion of working hours to the public sector.

The survey by **WHO** (2015) stated that the world's largest group of health professionals comprise of Nurses and midwives representing 48% of the global health workforce, and their role is widely considered critical for the delivery of UHC goals in high- as well as low-income countries as moonlighting is unavoidable in their profession as they consider themselves as a low earning community. Added to this, their job is on shifts and avenues are more for moonlighting.

Baru and Nandi (2008) in their paper research attempted to trace the evolution, structure, and characteristics of public-private partnerships in healthcare over the last six decades. The study revealed that the fragmentation of role and authority has serious consequences for comprehensiveness, governance, and accountability of health services.

Stechmiller JK et al (1992) in their research on job satisfaction among critical care nurses developed a conceptual path model to explain the effects of a set of personal and work-related independent variables and the dependent variables of situational stress, job stress and job motivation on job satisfaction among critical care nurses. The results of this study showed that job stress, job motivation, job expectations, meaningful work, knowledge of work results, commitment to career, health difficulties, task identity, and supervision, dealing with others at work, an opportunity for advancement, pay and job security had a significant effect on job satisfaction.

III. RESEARCH METHODOLOGY

The present study was undertaken among health care professions in Chennai City through a structured questionnaire. The respondents were selected based on random sampling and were distributed through Google Forms based on random sampling. The collected data was tested using SPSS and the results were discussed.

3.1 Methodology

The exploratory research design was adopted for the study and the data from 185 employees was collected using convenience and snowball techniques. A total of 197 responses were received and only the responses of those who had filled in the questionnaire fully were taken-up for analysis. The questionnaires were circulated online through Google forms.

3.2 Sampling Method

Snowball sampling – a non-probability sampling method. The respondents were kind enough to circulate with their known sources and helped in the collection of data.

The questionnaires were constructed using a five-point Likert scale and were closed-ended.

The questionnaire was circulated through Google forms and had three sections

- a) Demographic details containing 10 items.
- a) **Moonlighting.** This section had 15 questions. The questionnaire attempted to capture the respondent's mood on their present employment, the need to augment additional earning, and to explore the options for second income through moonlighting.

Statistical Techniques

The data was suitably tabulated after due cleansing and was explained using SPSS 20 software.

IV. ANALYSIS & INTERPRETATION

Descriptive Statistics. Descriptive statistics are used for describing the basic features of a sample data. It provides simple summaries about the data.

Mea Std. Deviation n 1 I feel insecure about my position in my current job. 2.70 1.209 2 I feel that the overall scenario in my field is not good. 2.45 1.083 3 I fear I may be sacked anytime 2.56 1.117 4 Organizational changes are drastic 2.41 1.148 5 Value of my job is declining 3.40 1.069

Table 1. Descriptive Statistics

	6	I'm unnecessarily warned/penalized in my job	3.49	1.123
	7	I have more competition for my job	3.86	1.099
	8	The income I earn is not enough to meet the needs	2.09	1.145
	9	My organization knows that I am moonlighting	3.79	1.195
	1	I am the single earning member of my family	2.46	1.298
0				
	1	I strongly believe in plan B of career.	4.17	1.039
1				
	1	The requirements in the society are more than my earnings	2.14	1.332
2				
	1	In the present scenario one, it is difficult to survive with	2.47	1.356
3		one income		
	1	At times I feel that I deviate work ethics	3.85	1.188
4				
	1	I take my job for granted and do a moonlight	3.74	1.228
5				

From the table1, the statement "I strongly believe in plan B of career" has the highest mean of 4.17. This is an indication that the respondents are keen to have an alternate career and not relying totally on their present employment.

Exploratory Factor Analysis

Factor analysis is used to analyze variables and to find the number of factors influencing the variables. KMO and Bartlett's test is used to measure the appropriateness and suitability of data for factor analysis.

Identification of Factors for Moonlighting

Based on the literature review and expert guidance the variables are identified for moonlighting. Exploratory Factor Analysis (EFA) used in this study, identifies the important factors that influence the individuals towards moonlighting. The variables for the analysis consisted of 15 statements.

Testing of Adequacy

Kaiser-Meyer-Olkin (KMO) Test is a measure of sampling adequacy. The KMO measure indicated sample adequacy of **0.851** which is meritorious. Bartlett's test confirms the normality of the samples as supported by a statistically significant Chi-square value .000.

Factors of Moonlighting

An Exploratory factor analysis using SPSS 20 is performed on 15 statements of moonlighting using Principal component analysis and Varimax rotation.

Table 2. Component Factor Analysis

	Component				
		1	2	3	4
Self-	I strongly believe in plan B of career. 0.				
Reliance	822				
	My organization knows that I am	0.			
	moonlighting	820			

	I have more competition for my job	0.			
		790			
	At times I feel that I deviate work ethics	0.			
		742			
	I take my job for granted and do a	0.			
	moonlight	688			
Necessity	The income I earn is not enough to meet the		0.		
	needs		794		
	In the present scenario one, it is difficult to		0.		
	survive with one income		783		
	The requirements in the society are more		0.		
	than my earnings		781		
	I am the single earning member of my		0.		
	family		693		
Organizatio	I feel that the overall scenario in my field is			0.	
nal Climate	not good.			857	
	I fear I may be sacked anytime			0.	
				829	
	I feel insecure about my position in my			0.	
	current job.			809	
	Organizational changes are drastic			0.	
				753	
Work	Value of my job is declining				0.
Scenario					865
	I'm unnecessarily warned/penalized in my				0.
	job				815

The loading factor "Self-Reliance" has five variables with the loading factor from 0.688 to 0.822. This represents the understanding of the individual of the present situation at work.

The loading factor "Necessity" has four variables with the loading factor from 0.693 to 0.794. The needs of the individual for additional income are represented here.

The loading factor "Organisational Climate" has four variables with the loading factor from 0.753 to 0.857. This reflects the current scenario at the workplace and the climate is not conducive or positive.

The loading factor "Work Scenario" has two variables. They state the current state of an individual situation in the workplace and have a loading factor from 0.815 to 0.865.

Reliability of moonlighting

Reliability values for the extracted variables obtained from the output of factor analysis. The reliability value for the six factors of personal lifestyle is presented in Table 3.

Table 3 Reliability Statistics – Moonlighting

Factors	Numbe r of items	Cronbach's Alpha value
Self-Reliance	05	0.897
Necessity	04	0.870

Organizational Climate	04	0.843
Work Scenario	02	0.709

All the reliability values of each factor are above the suggested threshold value of 0.7. Hence, the reliability test found to be satisfactory and the study can be taken up further to the next level.

Correlation between the factors of moonlighting

Null Hypothesis: There is no significant difference between the factors of moonlighting.

Table 4. Correlation between the factors of moonlighting

Dimension	Self-	Necessi	Organization	Work
	Reliance	ty	al Climate	Scenario
Self-Reliance	1	- 0.6	- 0.174	- 0.40
Sen-Renance	1	53		4
Necessity	1	1	0.312	0.377
Organizational	1	1	1	0.183
Climate	1	1		
Work Scenario	1	1	1	1

Note: ** denotes significant at 1 percent level.

Pearson Correlation is applied to find out the relationship between the factors of moonlighting. There is a positive correlation between necessity and organizational climate, necessity and work scenario, and between organizational climate and work scenario (Table 4). There is a negative correlation between self-reliance and necessity, necessity, and organizational climate and self-reliance and work scenario, indicating that these two variables travel on the same side. The Null Hypothesis is rejected for necessity and organizational climate, necessity and work scenario, and between organizational climate and work scenario and failed to reject for self-reliance and necessity, necessity and organizational climate and self-reliance and work scenario and α is statistically proven at a 1 % level of significance.

Anova

ANOVA test is applied to the factors of moonlighting with the age group of the respondents. The age groups are classified into less than thirty years thirty to forty years, forty to fifty years, and above fifty years.

Null Hypothesis: There is statistically no significant difference among age groups of respondents concerning moonlighting.

Table 5. Age Group and moonlighting - ANOVA Test

ANOVA						
		Sum of	df	Mean	F	Sig.
		Squares		Square		
	Between	75.071	3	25.024	1.06	.365
Self-Reliance	Groups	73.071	3	25.024	6	.303
	Within Groups	4249.708	181	23.479		
	Total	4324.778	184			
Nagassity	Between	118.815	3	20.605	2.12	.099
Necessity	Groups	110.813	3	39.605	0	.099

	Within Groups	3380.990	181	18.680		
	Total	3499.805	184			
Organizational	Between	53.235	3	17.745	1.26	.290
Climate	Groups	33.233	3	17.743	0	.290
Cilliate	Within Groups	2548.603	181	14.081		
	Total	2601.838	184			
	Between	5.945	3	1.982	.528	.664
Work Culture	Groups	J.7 4 J	3	1.902	.520	.004
WOIK CUITUIE	Within Groups	679.893	181	3.756		
	Total	685.838	184			

Table 4 provides the P-Values for all factors of moonlighting. Since the P-value are not less than 0.05 for the factors of moonlighting, the null hypothesis is failed to reject at a 1 % level of significance for the concerning factors of moonlighting.

Structured Equation Modelling

Composite Reliability

Table 6. Factor Loading and Reliability of Indicators for moonlighting

Latent Variable	AVE
Self-reliance	0.89
Necessity	0.87
Organizational	0.84
climate	0.04
Work scenario	0.73

From the above table (Table 6), the Composite reliability score has to be higher than 0.7 and the values are 0.89, 0.87, 0.84, and 0.73 respectively for Self-Reliance, Necessity, Organisational Climate, and Work Scenario. It can be concluded that there is a high internal consistency between the latent variables.

Convergent Validity refers to the degree to which two measures of constructs that theoretically should be related, are in fact, related. Only those variables with convergent validity should form part of the study. The Average Variance Extracted (AVE) for each latent variable has to be higher than the tolerable threshold of 0.5. Based on the concept of the validity the threshold value (.05) is being taken to compare the other parametric variables and in this context, all the latent variables are higher than the threshold value.

Table 7. Convergent Validity

Latent Variable	AVE
Self-reliance	0.789
Necessity	0.79525
Organizational climate	0.7605
Work scenario	0.755

From the above table (Table 7), the AVE values for Self-Reliance, Necessity, Organisational Climate, and Work Scenario are 0.789, 0.795, 0.760, and 0.755 respectively. The values for all the latent variables are higher than the threshold of 0.5.

Discriminant Validity demonstrates the evidence that measures of constructs that theoretically should not be highly related to each other are, in fact, not found to be highly correlated to each other.

Self-Work Neces Organizatio AVE^2 reliance nal climate scenario sity Self-0.888256 1 -0.742-0.214 0.482 reliance 72 0.891767 0.485 1 1 0.381 Necessity 907 Organizatio 0.872066 0.244 1 1 1 nal climate 511 Work 0.868907 1 1 1 1 36 scenario

Table 8. Square Correlation between constructs

Concerning necessity, organizational climate, and work scenarios are positively correlated. Similarly, organizational climate and work scenarios are positively correlated. Predictive and corrective measures have to be taken for maintaining the relationship between the construct and based on the AVE square value, the highest dominating factor is a necessity.

MAJOR FINDINGS OF THE STUDY V.

- There is a positive correlation between necessity and organizational climate, necessity and work scenario, and between organizational climate and work scenario.
 - There is no significant difference among age groups concerning moonlighting.
- The Cronbach's alpha value of the scale items is greater than 0.7 this establishes high internal 3. consistency and reliability between the latent variables.
- The average variance extracted (AVE) of each variable is checked for convergent validity and the values are higher than the threshold of 0.5 for all the latent variables.

VI. SUGGESTIONS

Though there is a positive correlation between necessity and organizational climate, necessity and work scenario, and between organizational climate and work scenario. Efforts must be made by employers to improve the economic status of the employees as there is a negative correlation between self-reliance and necessity, necessity, and organizational climate and self-reliance and work scenario. This will have a direct bearing on performance and morale.

It is difficult to have harmony at home if the work atmosphere is not conducive. Workplace scenario has to be improved so that the employees feel valued and also not micromanaged by their supervisors.

Though money is not the root cause of happiness, it is relevant to mental health, general happiness, professional achievement, and social interaction. There can be no happiness at home and productivity at work if an individual is not paid well.

Employers can provide soft loans, meal vouchers, or food at a subsidized cost, allowances based on output, travel arrangements, and healthcare facilities. This will reduce the amount spent from the pocket and the amount available at the hands of employees will increase.

Employers shall not embark on hire and fire mode. They have to take the employees along in this situation where there is a loss of business and sustenance. Thinks will improve for good and the same 💢



employee may not be available tomorrow or in the employment market, will reflect badly on the employer. They need to take the employees into confidence and communicate them the reality. Nothing works better than an open communication from the management.

Employees must always, have to continuously upskill themselves to stay relevant. Learning has become an individual-centric and continuous process. Updated employees are always in demand and the management will be willing to invest in them.

Better pay with better working conditions get the employer better employees and better results and performance.

VII. CONCLUSION

This study has attempted to understand the need for moonlighting in the current scenario. Though second employment has been an option previously, primary employment itself has become a situation of survival.

The questionnaire has to be attempted when the situation post lockdown has increased considerably to have a measure of the employees. Some problems are outside the purview of this questionnaire.

This study has covered that employment in Chennai and can be expanded to include other professions and in other geographical domains. Also, the sample size must be expanded to include a larger set of audience.

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