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Moonlighting In It Services-Analysis Through Structural Equation Modeling

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Abstract

Moonlighting employees hold multiple jobs at the same time. Due to the increased financial burdens associated with raising children, buying a house, and Moonlighting denotes to the act of working at an extra job, specifically without notifying the employer It can involve taking on part-time jobs in addition to regular obligations. Moonlighting employees hold multiple jobs at the same time. Due to the increased financial burdens associated with raising children, buying a house, and many other reasons, some employees tend to move onto a second job due to insufficient income or hours from their primary job; married workers are more likely to work multiple jobs. It is also understood that in most cases, unskilled workers will moonlight due to insufficient wages and among professional employees specifically IT services, they tend to moonlighting due to their expertise in a specific domain and prefer to do more than one job to gain income out of their area of expertise. This phenomenon helps employees supplement their income, pursue personal interests, and acquire new skills and expertise; it also poses a significant threat to employers through conflict of interest, client poaching, and reduced employee productivity and with an intention of understanding the employee moonlighting and assessing their perception towards employed workers on the moonlighting. This study is based on both analytical and descriptive research design Convenience sampling has been adopted for collecting the data from Greater Hyderabad (an IT hub) in the state of Telangana, India, developed a structured questionnaire, that included a combination of query types, such as open-ended, long-form, or short-ended questions where in respondents can provide us the data without any difficulty. A total of 591 completed questionnaires were returned, yielding a response from the 630 questionnaires distributed. Statistical analysis were conducted using SPSS 23.0 Structural Equation Modeling (SEM) was applied in order to study the relationships between variables through the use of two main sets of equations. Such as factors influencing moonlighting behaviour of employees.

Main objectives:

To understand the conceptual framework of moonlighting

To identify the factors of primary employment that causes employee moonlighting

Method*s: This research initiative studies the factors of primary employment that causes moonlighting behavior of employees in IT services in Hyderabad.*

Hypothesis

H_0***:*** *There is no significant impact of factors affecting employees' moonlighting behavior*

H_1***:*** *There is a significant impact of factors affecting employees' moonlighting behavior*

This study is based on both analytical and descriptive research design with an intention of understanding the employee moonlighting and assessing their perception towards employed workers on the moonlighting.

The sample: - A Snowball sampling technique will be used to collect data from the target respondents who are working in small companies in Hyderabad of Telangana state.

Sample size: - *Out of 600 respondents administered the questionnaires 9 respondents have not given a complete responses questionnaire, some of them have given with some errors as such the complete filled in questionnaires* ***591*** *respondents who are employees working in IT services Population of moonlight employees is unknown.*

Results: *The results indicate that majority of the respondents ar e male employees and married and among them the most significant factors that are causing employee moonlights had been five factors and are the main reason for bridging the gap of employee moonlighting*

Conclusions*: The study concluded that AI: Additional Income, SE: Skill Enhancement, BLS: Better Life Style, WN: Wide Network, PA: Passion are the highly influential factors for EM: Employee Moonlighting. This study addressed the issue by applying Structural Equation Modeling which provides*

Keywords: *moonlighting behavior, employee, IT services, expertise, earning*

INTRODUCTION

Moonlighting behaviour has become increasingly prevalent among employees in various industries, including the Information Technology (IT) sector. The IT sector, in particular, presents unique challenges and opportunities for individuals who engage in moonlighting activities. There are many motives of moonlighting behaviour among especially in services sector (IT services) employees. It is also to be understood what are primary motivations that employees in this sector are showing interest in moonlighting and the drawbacks of the primary job and also one of the important reason among others apart from varied reasons and it is also learned that most of the employees look for good work life balance, greater employee experience and wellbeing. Moonlighting also likely to result in conflicts of interest and decreased productivity. Many people began working from home after the pandemic for a variety of reasons, including better utilization of skills, financial benefits, and professional and personal growth. Structural Equation Modeling (SEM) is an influential collection of multivariate analysis techniques, which stipulates the associations between variables over the use of two main sets of equations: i.e., Measurement equations and structural equations. Measurement equations examine the accurateness of projected measurements by evaluating relationships between latent variables and their respective indicators. The structural equations drive the valuation of the assumed relationships between the underlying variables, which permit challenging the statistical hypotheses for the study. Furthermore, SEM reflects the modeling of connections, nonlinearities, correlated independents, measurement error, correlated error terms, and multiple latent independents each measured by multiple indicators.

Research Gaps in previous studies

While previous studies have explored moonlighting, there are still gaps in our understanding:

Individual Characteristics: Current research often treats moonlighting as a variable, focusing on its determinants and consequences. However, it neglects the variety of individual characteristics within the group of moonlighters.

Work Engagement: Most studies analyze work engagement from dimensions like vigor, dedication, and absorption. However, this study divides work engagement into job engagement and organizational engagement, considering the dual roles of employees in moonlighting3.

Impact on Performance and Productivity: There's a need to explore how moonlighting affects employee performance and organizational productivity. Understanding the balance between moonlighting and primary job engagement is crucial for managers and organizations4.

Government Regulations and Business Perspectives: Further research should delve into government regulations governing moonlighting in various nations, types of moonlighting, and the advantages and disadvantages associated with it. Additionally, examining businesses' stances on moonlighting could provide valuable insights5.

Job Satisfaction: Investigating the impact of moonlighting on job satisfaction remains an important area of study. Moonlighting is perceived both negatively and positively, and understanding its effects on overall job satisfaction is essential

Problem statement

IT services industry undergone massive changes post Covid-19 and one of such is moonlighting. Most of the employees are unaware or rather in a stat e of confusion regarding the concept of moonlighting as such the focus is on moonlighting of employees and impact on their primary work. This study would provide insights into the theme and identify the appropriate factors influencing moonlighting behavior of employees at IT services.

Review of Literature

Moonlighting or working secondary jobs has become a common trend in IT services sector as a result of remote work and personal requirements.

Dickey, H., Watson, V., Zangelidis,A.[1] 'To "moonlight" is to work at many different things at once. Employees often take up side gigs in order to supplement their income, obtain expertise in a new industry, pursue a passion, or fill a need for their own well-being that they may not be able to find in their primary position. Wisniewski, R., Kleine,P.[2] Male employees are more likely to engage in moonlighting, according to a study of a sample of school teachers. Banerjee,S.[3] It has been found that men and women approach moonlighting very differently. Depending on the nature of their primary professions, more and more workers

in business organizations are partaking in such activities, which aid workers in developing new abilities. Betts [4] divides them up into monetary strategies and character-based strategies. Moonlighting is primarily seen as a revenue source from an economic perspective. Dispositional theories argue that extra work is more likely than the need for it. The idea of deprivation was the first dispositional framework. The economic and social status of moonlighters is stigmatized. Aspiration theory is the second dispositional framework. People who work a second job are seen as exceptional because they have loftier goals and more determination. Paxson, C. H., and N. Sicherman [5] that people who work two jobs spend an extra 11 to 12 hours per week doing so, compared to people who just work one (usually, the second job takes up about 13 to 14 hours per week). Even if the average number of hours worked has decreased marginally for those with multiple jobs in the United States and the European Union as a result of the current economic slump, more than a quarter of all working hours in the EU and the United States are spent at a second job. Smith et al., [6.7] Working several jobs may raise the likelihood of being hurt for a number of reasons. For one, it might be difficult to get adequate rest when you're trying to keep up with all your obligations. Basner et al. [8] using information from the American Time Use Survey (ATUS), researchers discovered that those who worked many jobs had to put in more hours at each job and get less sleep than those who worked just one to make the same amount of money. Sarma,J.S.V.G. [9] The likelihood that an employee may quit an organization is influenced by a number of factors, including their level of devotion to the company and their career advancement opportunities inside it. Without proper A Study of Organizational Commitment and Moonlighting Practices of SME 537 motivation, the employees of SMEs progressively lose interest in their work and their performance suffers. Staff in this situation have a hard time making ends meet without access to robust human resources programs, and as a result, they resort to increasingly inefficient methods of obtaining basic necessities. Sabron & Hassim [10] concluded that public sector employees had high rates of moonlighting engagement. They examined the employee‘s perception on moonlighting practices in for Malaysian public sector hospitals. The study was conducted to determine the environment, personal and behavioural factors that are related to the employees practicing moonlighting. The findings obtained that personal factor and environment factor had a positive and significant relationship towards employee‘s engagement in moonlighting and concluded that it is complex to implement moonlighting in an organization for employers and it is also time consuming. The results also state that environment factor and personal factor influences employee more to be engaged in moonlighting and recommended that government should offer part time basis admin job also so employees can learn new things. Lilja [11] is the first to explicitly explore both motives for moonlighting and to implement the resulting different functions, correcting for the simultaneity bias committed when one includes hours worked on the primary job as a determinant. Ara and Akbar [12] explained the effect of moonlighting practices on job satisfaction of public universities teachers in Pakistan. They identified four factors that are skill diversity, blocked promotion, job autonomy, and additional income responsible for moonlighting among university teachers. They explicated that there is a substantial impact of moonlighting on job satisfaction. KaukabAra and Aisha Akbar.[13] ,in this Study the author has examined that moonlighting have an impact on satisfaction of job where it comes from pay scale; appraisal/promotions, skills, all are tested in this study. The study concludes that because of lack of pay scale, skills, promotions, appraisal which lead to reduced level of satisfaction in job. Shweta [14] studied the different aspects of moonlighting of employees. She analyzed various issues related to moonlighting and explained the need to understand why employees moonlight. According to Byrne, Gabriel Montes-Rojas Sarmistha Pal[15]Public Pain and Private Gain: An Analysis of Moonlighting by Public Health Professionals, the study found that public health professionals frequently hold different roles to gain position and monetary benefits. The reasons such as additional source of income, moonlighting allows employee to make more, which shrinkages the pressure on the employer to increase the wages. Therefore it decreases the financial burden on the organization, broad exposure and opportunity to work in different roles and projects, opportunity to grow skill set, widened professional network, having enough money to weather financial turbulence like layoffs, to progress the living standard, to fight with monotony, to follow passion, moonlighting for Startup. Most employees moonlight in their free time after their first job to supplement their income Ashwini et al.,[19] it is also understood that many individuals may be unable to make ends meet with their full-time job alone and may turn to a second job to supplement their income Rispel et al., [20], moreover some individuals may commit to career advancement to gain additional skills or experience that can help them advance their

primary career George and George[21], and in today's economy, many people face job insecurity, moonlighting can provide an additional source of income, and a safety net in the case of job loss and lack of job security may be one of the reasons for employee intentions toward moonlighting Kisumano and Wa-Mbaleka, [22],flexibility is another reason for moonlighting, as some individuals who have job flexibility may moonlight for additional income Kimmel,[23] moonlighting can also create conflicts of interest, mainly if the second job is in a similar area to the primary job. Additionally, it can also lead to time management and work-life balance issues (Baldwin Jr. and Daugherty [24]moonlighting can be a valuable opportunity for individuals to gain additional skills and income, but it is crucial to consider the potential implications and manage time and responsibilities effectively Sussman[25]. Research reported that the relationship between employee job satisfaction and moonlighting intentions, with organizational commitment serving as a mediator. While job satisfaction has a very strong positive impact on organizational commitment, job satisfaction also has a mediating effect on the relationship between job satisfaction and intentions to moonlight. Seema et al. [26]

RESEARCH METHODOLOGY:

Research involves methods of exploring phenomena; including (a) interviewing study participants, (b) collecting other data, (c) analyzing data, and (d) establishing valid conclusions (Bak, 2011; Frels & Onwuegbuzie, 2013; Hanson, Balmer, & Giardino, 2011). Within each of these phases are procedures that assist in conducting research. The research method and design are the two important parts that are crucial in conducting research (Bernard, 2002; Sergi & Hallin, 2011; Wahyuni, 2012; Yin, 2012). The different characteristics of qualitative, quantitative, and mixed methods offer researchers numerous techniques (Cakiroglu, 2012). It is imperative to understand that the appropriate choice of each research method will depend on the nature of the study (Kourula, 2010). In this sense, selecting the right research design will provide the appropriate strategies for implementation of the research method. The research design is the road map to achieve the goals and objectives of the study. Overall, selecting the appropriate and compatible research method and design is essential to the success of a study (Butt, 2010).

SOURCES OF DATA: -

- The primary data has been collected through a sample survey method by administering a well-structured questionnaire to the employees working in small companies in Hyderabad
- The questionnaire has been reviewed by professionals and updated to reflect their feedback. The Cronbach Alpha reliability coefficient for the same was determined to be.83. The tools employed in primary research have a reliability of.70 or higher, as stated by Nunnally (1978, p. 245).
- The secondary data has been collected from following sources such as books, journals, trade journals, publications, syndicated services, newspapers, online sources, articles, manuals etc.
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Theories of Employee Moonlighting at IT sector

Moonlighting, which refers to employees taking on part-time jobs in addition to their regular obligations, has been studied from various perspectives. Here are some theories and findings related to moonlighting:

1. **Boundary less Career Perspective**:

- In an era of increased longevity and a globalized economy, organizational boundaries have become more ambiguous. Traditional organizational careers are less desirable, leading to the emergence of a notion called a "boundary less career."
- Employees in boundary less careers may engage in moonlighting to gain additional experiences, motivation, and meaningfulness beyond their primary jobs.
- Research has shown that boundary less career orientations are positively related to job engagement (the way organization members combine self and work roles) via the mediating effects of role conflicts. However, they are negatively related to organizational engagement through the mediating effects of relational psychological contracts[1].

2. **Work Engagement Theory**:

1. Work engagement refers to the level of energy, dedication, and involvement an employee brings to their job.
2. Kahn (1990) defined work engagement as the way organization members control themselves to combine self and work roles. It includes three dimensions: cognitive engagement, psychological engagement, and emotional engagement.

3. **Financial Motivation Theory**:
1. Moonlighting is often driven by financial reasons. Employees take on additional jobs to supplement their income.
2. Financial motivation theory suggests that employees engage in moonlighting to improve their financial well-being.

4. **Intellectual and Social Motivation Theory**:
1. Some employees moonlight for intellectual or social reasons.
2. Intellectual motivation theory posits that moonlighting provides employees with diverse experiences and learning opportunities.
3. Social motivation theory suggests that moonlighting allows employees to expand their social networks and build relationships outside their primary workplace.

5. **Hour-Constraint Obligation Theory**:
1. Many studies have found evidence that hour-constraint obligations (allowing workers to moonlight) play a role in moonlighting behavior.
2. Employees who face time constraints in their primary job may seek additional employment to meet their financial needs.

6. **Organizational Climate and Policies**:
- Organizational climate for openness can moderate the relationship between boundary less career orientations and role conflicts.
- Organizations need to articulate their position on moonlighting and create effective policies to address this practice[2].

Moonlighting can have both positive and negative effects, and organizations should carefully consider their approach to managing moonlighting employees. As long as employees deliver productivity and maintain commitment to their primary work, moonlighting can be accepted positively

Moonlighting behaviourat IT sector

Certainly! Moonlighting, which refers to holding down a full-time job while simultaneously working another job or pursuing side hustles, is a phenomenon that exists in various industries, including the IT sector. Let's explore some theories and perspectives related to moonlighting among IT employees:

- **Motivation and Supplemental Income:**

Many IT professionals engage in moonlighting to supplement their basic income. They take on additional work to earn extra money beyond their primary job.

The intent behind moonlighting is often financial, especially when employees want to increase their revenue stream or save up for specific goals12.

- **Skill Enhancement and Diversification:**

Some IT workers take on side projects or part-time opportunities to hone their skills or explore different areas of expertise.

Moonlighting allows them to gain practical experience beyond their regular job, contributing to their professional growth and versatility.

- **Lack of Job Satisfaction:**

Dissatisfaction with the primary job can lead employees to seek alternative work arrangements.

If an IT professional feels unfulfilled or undervalued in their main role, they may turn to moonlighting as a way to find more satisfying work elsewhere.

- **Flexible Work Hours and Remote Work:**

The rise of remote work and flexible schedules has made it easier for employees to manage multiple jobs.

With reduced employer supervision and increased time and bandwidth, IT workers can take up additional work without conflicting with their primary job1.

- **Family Background and Social Factors:**

Some studies suggest that family background plays a significant role in moonlighting behavior.
Cultural norms, financial responsibilities, and family expectations may influence an employee's decision to take on extra work.

- **Controversy and Employer Perspectives:**

Moonlighting remains a contentious issue in the tech industry, especially in India.
While some business leaders argue that young workers are merely trying to get ahead, others view it as cheating or a breach of loyalty.

- Companies are grappling with how to address moonlighting, balancing employee freedom with organizational interests1.

In summary, moonlighting among IT employees can be motivated by financial reasons, skill development, and dissatisfaction with the primary job. As technology continues to evolve, companies will need to find a balance that aligns with both employee aspirations and organizational goals

Data Analysis and Interpretation

Demographic Profile of Respondents

Tab-1Age (in years)

Age range in years	Frequency	Percentage
30-35 Years	87	15
36-40 Years	96	16
41-45 Years	90	15
46-50 Years	72	12
51-55 Years	72	12
55 Years/Above	78	13
Total	591	**100%**

Source: primary data

Analysis: Based on the data in Tab-1, we know that of the 591 respondents, 16% are between the ages of 30 and 35, 15% are between the ages of 36 and 40, 15% are between the ages of 41 and 45, 12% are between the ages of 46 and 50, 12% are between the ages of 51 and 55, and the remaining 13% are 55 and older in age.

Tab-2 Gender

Gender	Frequency	Percentage
Male	356	60
Female	235	40
Total	591	**100%**

Source: Primary Data

Analysis: From the above table it has been found that out of 591 respondents 60 percent respondents are male respondents and remaining 40 percent respondents are Male respondents of the study sample.

Tab-3 Qualification

Educational qualification	Frequency	Percentage
SSC	97	16
Inter	118	20
UG	178	30
PG	78	13
Diploma	102	17
Ph.D.	18	3
Total	591	**100%**

Source: Primary Data

Analysis: From the Tab-3 it is depicted that Out of 591 respondents 17 percent have studied their SSC, 20 percent respondents have studied Intermediate, 30 percent respondents have done under-graduation, 13 percent respondents have studied PG course, 17 percent respondents have studied Diploma course and remaining 3 percent respondents have done their Ph.Ds.

Tab-4 Marital status

Marital status	**Frequency**	**Percentage**
Married	378	64
Single	213	36
Total	591	**100%**

Source: Primary Data

Analysis: From the Tab-4 it is depicted that Out of 591 respondents 64 percent respondents are married and remaining 36 percent respondents are not married.

Tab-5 Nature of employment

Nature of employment	**Frequency**	**Percentage**
IT Job	248	42
Education	129	22
Business	123	21
Medicine	91	15
Total	591	**100%**

Source: Primary Data

Analysis: From the Tab-5 it is depicted that Out of 591 respondents 42 percent are working in IT companies, 22 percent respondents are working in educational institutes, 21 percent respondents are in business studies, and remaining 15 percent respondents are in medical field of the survey sample

Factor Analysis

KMO Statistics

- Marvelous: .90s
- Meritorious: .80s
- Middling: .70s
- Mediocre: .60s
- Miserable: .50s
- Unacceptable: <.50

Bartlett's Test of Sphericity

Tests hypothesis that correlation matrix is an identity matrix.

- Diagonals are ones
- Off-diagonals are zeros

In this case, a significant result indicates that matrix is not an identity matrix; that is, the variables are related enough to run an EFA that is meaningful.)

Tab-6 KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.896
Bartlett's Test of Sphericity	Approx. Chi-Square	12580.523
	df	435
	Sig.	.000

Analysis:

When anything has a high degree of communality, it corresponds with everything else. Greater community levels are preferable. Some variables may have trouble influencing any factors if their social characteristics are

low (between 0.0 and 0.4). Check for "Extraction" column numbers below that seem insufficient. After reviewing the pattern matrix, candidates with low values should be considered for deletion.

Tab-7 Communalities

	Initial	Extraction
AI1	.421	.435
AI2	.669	.773
AI3	.567	.617
AI4	.554	.600
AI5	.585	.625
SE1	.621	.646
SE2	.690	.715
SE3	.757	.815
SE4	.737	.779
SE5	.717	.752
BLS1	.672	.632
BLS2	.771	.773
BLS3	.823	.862
BLS4	.847	.890
BLS5	.667	.669
WN1	.545	.551
WN2	.718	.769
WN3	.687	.727
WN4	.730	.805
WN5	.582	.600
PA1	.565	.614
PA2	.553	.601
PA3	.530	.595
PA4	.510	.556
PA5	.387	.353
EM1	.547	.522
EM2	.690	.733
EM3	.744	.840
EM4	.564	.543
EM5	.628	.610

Extraction Method: Maximum Likelihood.

Total, 6 factors were extracted, and 66.68% of the independent variables could explain the dependent variables).

Tab-8 Total Variance Explained

	Initial Eigenvalues			Squared Loadings Extraction Sums			A Rotation Sum of Squared Loadings[a]
Factor	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	7.971	26.572	26.572	7.312	24.372	24.372	5.259
2	4.181	13.938	40.510	3.862	12.872	37.244	4.129
3	2.954	9.845	50.355	2.725	9.084	46.328	4.716
4	2.602	8.672	59.027	2.355	7.849	54.177	4.705
5	2.343	7.810	66.837	2.153	7.178	61.355	3.927

6	1.893	6.309	73.146	1.597	5.324	66.680	4.727
7	.756	2.521	75.667				
8	.590	1.967	77.634				
9	.529	1.763	79.397				
10	.494	1.646	81.043				
11	.477	1.590	82.633				
12	.440	1.466	84.099				
13	.433	1.443	85.541				
14	.391	1.303	86.845				
15	.366	1.218	88.063				
16	.349	1.164	89.227				
17	.333	1.111	90.338				
18	.321	1.069	91.408				
19	.308	1.028	92.436				
20	.288	.960	93.396				
21	.272	.908	94.303				
22	.262	.874	95.177				
23	.231	.769	95.945				
24	.220	.732	96.678				
25	.204	.679	97.357				
26	.194	.648	98.005				
27	.184	.614	98.620				
28	.162	.540	99.160				
29	.154	.513	99.672				
30	.098	.328	100.000				

Extraction Method: Maximum Likelihood.

a. When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.

Tab-9 Goodness-of-fit Test

Chi-Square	df	Sig.
633.112	270	.000

Analysis:

In the above scenario, "factor structure" means the relationships between the variables under investigation in the EFA. We can observe that variables cluster into factors by looking at the pattern matrix below; these variables "load" onto factors. The example below shows a highly clean factor structure with high loadings inside factors, and no big cross-loadings across factors (i.e., a primary loading should be at least 0.200 larger than secondary loading). This indicates convergent and discriminant validity.

Tab-10 Pattern Matrix[a]

	1	2	3	4	5	6
AI1					.637	
AI2					.894	
AI3					.787	
AI4					.757	
AI5					.793	
SE1		.788				
SE2		.848				
SE3		.900				
SE4		.885				
SE5		.869				

BLS1	.782					
BLS2	.850					
BLS3	.940					
BLS4	.960					
BLS5	.809					
WN1			.702			
WN2			.881			
WN3			.854			
WN4			.912			
WN5			.766			
PA1						.801
PA2						.780
PA3						.774
PA4						.717
PA5						.548
EM1				.626		
EM2				.869		
EM3				.949		
EM4				.737		
EM5				.754		

Extraction Method: Maximum Likelihood.
Rotation Method: Promax with Kaiser Normalization
a. Rotation converged in 6 iterations

Analysis:

(As a second option, you can check out the factor correlation matrix, as depicted below. Factor correlations should be kept below 0.7. If the correlation between the two variables is higher than 0.7, then nearly half of the variance will be shared (0.7 * 0.7 = 49%).

Tab-11 Factor Correlation Matrix

Factor	1	2	3	4	5	6
1	1.000	.124	.331	.386	.159	.391
2	.124	1.000	.082	.070	.286	.148
3	.331	.082	1.000	.266	.247	.381
4	.386	.070	.266	1.000	.182	.439
5	.159	.286	.247	.182	1.000	.229
6	.391	.148	.381	.439	.229	1.000

Extraction Method: Maximum Likelihood.
Rotation Method: Promax with Kaiser Normalization

Analysis:

CFA Model

To confirm the factor structure of your dataset, you can use confirmatory factor analysis (CFA), which follows exploratory factor analysis. The exploratory factor analysis (EFA) looks at the factor structure whereas the confirmatory factor analysis (CFA) verifies the factor structure that was derived in the EFA.

Confirmatory Factor Analysis (CFA) The primary purpose of a Confirmatory Factor Analysis (CFA) is to evaluate the suggested measurement model's construct validity (Hair et al., 2014). The CFA's assessment of construct validity included looking at both convergent and discriminant validity.

Convergent Validity: Table 4 displays the study's measuring model. Individual item reliabilities, convergent validity, and discriminant validity are the three elements on which Hulland's (1999) evaluation of the measurement model rests. Items with the loadings below 0.50 are not suggested for inclusion in the study (Hair et al., 2014; Hulland, 1999) for calculating item reliabilities, which are dependent on item loadings.

The term "convergent validity" is used to describe the degree to which one measure of a latent concept correlates with other measures of the same construct (Hair et al., 2014).

Discriminant Validity: When the extracted AVE is higher than its correlations with all the other constructs, the discriminating validity has been proven (Fornell & Larcker, 1981). This is done by comparing the square root of the AVE to the correlations of the other constructs. According to Duarte and Raposo (2010), the discriminant validity construct stands out from the crowd. Discriminant validity is shown by the fact that the square roots of all AVEs (diagonal cells) are greater than the correlations between constructs.

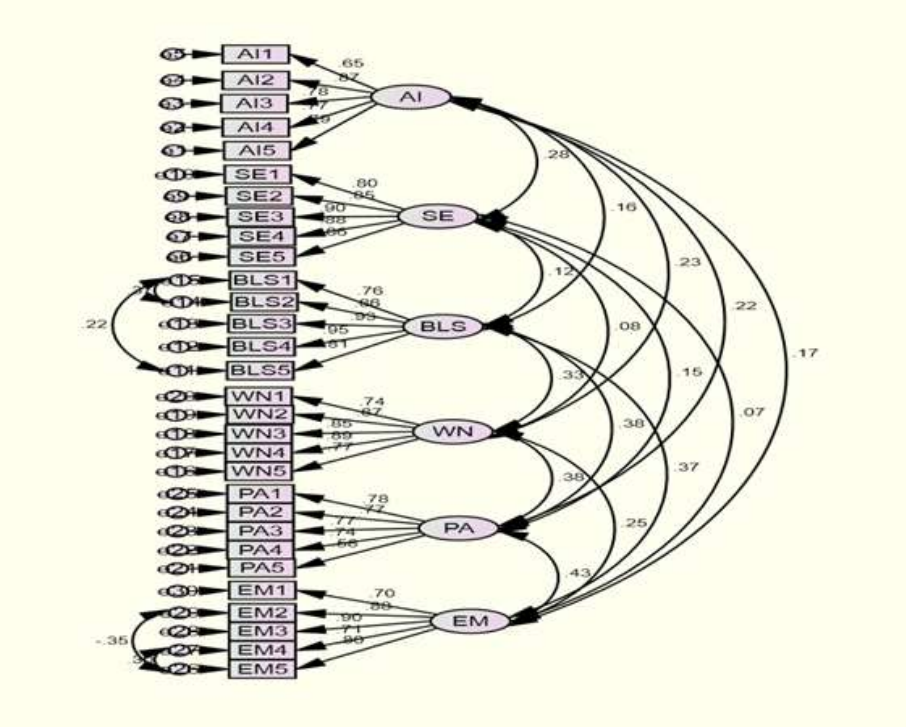
Testing of the Hypothesis of the Structural Model Hypothesized associations between constructs or latent variables form the basis of the structural model. Variance of endogenous constructs and significance of all path estimates are used to determine the quality of the theoretical model. (Chin, 2010).

The output of the structural model in SPSS: The Structural Model Hypothesis: Tested Results Path t-value and p-value Relationship Results Four DV Path H1 AI--> EM This lends support to Hypothesis.

Structural Model

The next step is to evaluate a structural model if a good fit has been found for the measurements. The purpose of the structural model is to identify which factors have an effect on each other. Thus, the structural model's objective is to put to the test the underlying premise, which is provided in three causal channels to establish connections between the variables. According to these findings, H1 is an important hypothesis. As a result, this theory is plausible. Since this is the case, a strong correlation in the anticipated path has been established. The positive value of the regression coefficient indicating a positive relationship between AI and EM suggests that AI aids in the development of EM.

Fig-1 Structural Model



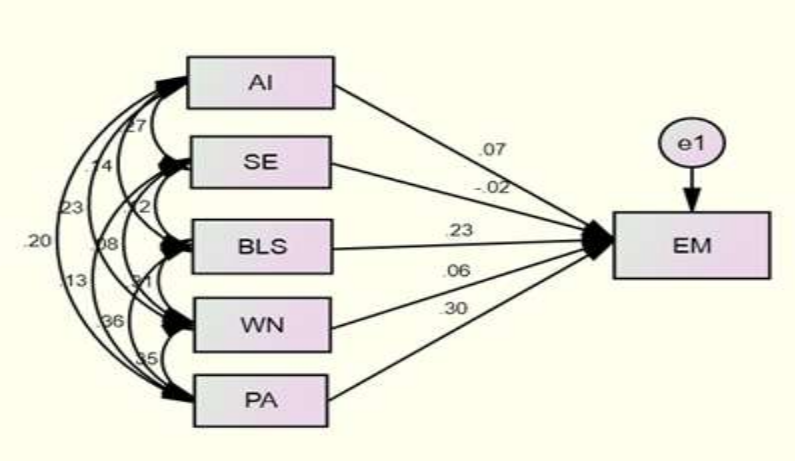
AI: Additional Income
SE: Skill Enhancement
BLS: Better Life Style
WN: Wide Network
PA: Passion
EM: Employee Moonlighting

Notes for Model (Default model)

Tab-12 Computation of degrees of freedom (Default model)

Number of distinct sample moments:	465
Number of distinct parameters to be estimated:	79
Degrees of freedom (465 – 79):	386

Result (Default model)
Minimum was achieved
Chi-square = 658.596
Degrees of freedom = 386
Probability level = .000
Figure-2 Final SEM Model



Tab-13 Regression Weights: (Group number 1 - Default model)

Employee Moonlighting(EM)	Estimate	S.E.	C.R.	P Label
Additional Income (AI)	.060	.033	1.849	.035
Skill Enhancement (SE)	-.018	.029	-.610	.021
Better Life Style (BLS)	.224	.039	5.753	***
Wide Network (WN)	.049	.032	1.527	.127
Passion (P)	.357	.047	7.554	***

Estimates (Group number 1 - Default model)
Scalar Estimates (Group number 1 - Default model)
Maximum Likelihood Estimates

H_1: Additional Income has significant impact on employee moonlighting job (@ 5% Level of Significance (.035) Accepted))
H_2: Skill Enhancement has significant impact on employee moonlighting job (@ 5% Level of Significance (.021) Accepted))
H_3: Better Life Style has significant impact on employee moonlighting job (@ 1% Level of Significance (.000) Accepted))
H_4: Wide network has significant impact on employee moonlighting job (@ 5 % Level of Significance (.127) Rejected))
H_5: Passion has significant impact on employee moonlighting job (@ 1% Level of Significance (.000) Accepted)).

Tab-14 Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
AI5	<---	AI	1.000				
AI4	<---	AI	.942	.048	19.810	***	
AI3	<---	AI	.922	.046	20.256	***	
AI2	<---	AI	1.049	.046	22.932	***	
AI1	<---	AI	.735	.045	16.246	***	
SE5	<---	SE	1.000				
SE4	<---	SE	1.091	.037	29.155	***	
SE3	<---	SE	.993	.033	30.472	***	
SE2	<---	SE	1.101	.041	26.945	***	
SE1	<---	SE	1.019	.041	24.605	***	
BLS5	<---	BLS	1.000				
BLS4	<---	BLS	1.159	.040	29.131	***	
BLS3	<---	BLS	1.164	.041	28.268	***	
BLS2	<---	BLS	1.065	.042	25.132	***	
BLS1	<---	BLS	.937	.040	23.632	***	
WN5	<---	WN	1.000				
WN4	<---	WN	1.028	.044	23.529	***	
WN3	<---	WN	1.078	.048	22.304	***	
WN2	<---	WN	1.134	.049	22.916	***	
WN1	<---	WN	.962	.051	18.897	***	
PA5	<---	PA	1.000				
PA4	<---	PA	1.169	.087	13.390	***	
PA3	<---	PA	1.041	.076	13.630	***	
PA2	<---	PA	1.158	.085	13.702	***	
PA1	<---	PA	1.138	.082	13.797	***	
EM5	<---	EM	1.000				
EM4	<---	EM	.963	.045	21.469	***	
EM3	<---	EM	1.175	.051	23.123	***	
EM2	<---	EM	1.142	.055	20.924	***	
EM1	<---	EM	.924	.053	17.597	***	

Tab-15 Standardized Regression Weights: (Group number 1 - Default model)

			Estimate
AI5	<---	AI	.792
AI4	<---	AI	.770
AI3	<---	AI	.784
AI2	<---	AI	.874
AI1	<---	AI	.652
SE5	<---	SE	.865
SE4	<---	SE	.882
SE3	<---	SE	.903
SE2	<---	SE	.845
SE1	<---	SE	.802
BLS5	<---	BLS	.807
BLS4	<---	BLS	.951

			Estimate
BLS3	<---	BLS	.931
BLS2	<---	BLS	.862
BLS1	<---	BLS	.760
WN5	<---	WN	.770
WN4	<---	WN	.891
WN3	<---	WN	.852
WN2	<---	WN	.871
WN1	<---	WN	.742
PA5	<---	PA	.582
PA4	<---	PA	.744
PA3	<---	PA	.767
PA2	<---	PA	.774
PA1	<---	PA	.784
EM5	<---	EM	.795
EM4	<---	EM	.711
EM3	<---	EM	.898
EM2	<---	EM	.884
EM1	<---	EM	.698

Tab-16 Covariance: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
AI	<-->	SE	.160	.027	5.929	***	
AI	<-->	BLS	.067	.019	3.450	***	
AI	<-->	WN	.124	.025	4.933	***	
AI	<-->	PA	.074	.017	4.444	***	
AI	<-->	EM	.073	.020	3.675	***	
SE	<-->	BLS	.052	.019	2.718	.007	
SE	<-->	WN	.041	.024	1.701	.089	
SE	<-->	PA	.050	.016	3.133	.002	
SE	<-->	EM	.030	.019	1.562	.118	
BLS	<-->	WN	.133	.019	6.818	***	
BLS	<-->	PA	.098	.014	7.057	***	
BLS	<-->	EM	.122	.016	7.615	***	
WN	<-->	PA	.121	.018	6.889	***	
WN	<-->	EM	.102	.019	5.375	***	
PA	<-->	EM	.109	.015	7.458	***	
e14	<-->	e15	.061	.008	7.720	***	
e26	<-->	e27	.070	.014	5.173	***	
e11	<-->	e15	.042	.008	5.166	***	
e26	<-->	e29	-.052	.009	-5.771	***	

Tab-17 Correlations: (Group number 1 - Default model)

			Estimate
AI	<-->	SE	.282

			Estimate
AI	<-->	BLS	.157
AI	<-->	WN	.234
AI	<-->	PA	.222
AI	<-->	EM	.170
SE	<-->	BLS	.120
SE	<-->	WN	.076
SE	<-->	PA	.148
SE	<-->	EM	.069
BLS	<-->	WN	.328
BLS	<-->	PA	.385
BLS	<-->	EM	.375
WN	<-->	PA	.381
WN	<-->	EM	.253
PA	<-->	EM	.426
e14	<-->	e15	.375
e26	<-->	e27	.297
e11	<-->	e15	.217
e26	<-->	e29	-.345

Tab-18 Variances: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
AI	.561	.050	11.122	***	
SE	.574	.044	13.026	***	
BLS	.327	.028	11.759	***	
WN	.501	.046	10.849	***	
PA	.200	.028	7.279	***	
EM	.326	.030	10.986	***	
e1	.333	.024	13.781	***	
e2	.341	.024	14.252	***	
e3	.298	.021	13.956	***	
e4	.190	.018	10.643	***	
e5	.410	.026	15.719	***	
e6	.194	.014	13.729	***	
e7	.196	.015	13.098	***	
e8	.129	.011	12.047	***	
e9	.279	.020	14.286	***	
e10	.330	.022	15.103	***	
e11	.175	.011	15.610	***	
e12	.046	.005	8.701	***	
e13	.068	.006	11.061	***	
e14	.128	.009	14.686	***	
e15	.210	.013	16.085	***	

	Estimate	S.E.	C.R.	P	Label
e16	.344	.023	15.145	***	
e17	.137	.012	11.687	***	
e18	.220	.016	13.423	***	
e19	.204	.016	12.684	***	
e20	.378	.024	15.472	***	
e21	.391	.025	15.844	***	
e22	.220	.016	13.899	***	
e23	.152	.011	13.397	***	
e24	.180	.014	13.220	***	
e25	.163	.013	12.964	***	
e26	.189	.015	12.475	***	
e27	.296	.019	15.366	***	
e28	.108	.011	9.926	***	
e29	.119	.012	10.228	***	
e30	.293	.018	15.896	***	

Model Fit Summary

A model that adequately accounts for the correlations between variables in the dataset (here, the factor structure model) is said to fit the data. In the case of poor model fit, there is a large discrepancy between hypothesized correlations and observed correlations, whereas a good fit indicates that we have taken into account the important correlations in the dataset (based on the variables in our model). The correlations in the dataset are inconsistent with the model we suggest, so our model does not "fit" the data.

Metrics

Goodness of fit can be calculated using a number of different metrics. Below, we've described the reportable metrics, along with the associated thresholds. Both the size of the sample and the number of model variables negatively affect the goodness of fit. The following ranges are meant only as suggestions.

Tab-19 Metrics

Measure	Threshold
Chi-square/df (cmin/df)	< 3 good; < 5 sometimes permissible
p-value for the model	> .05
CFI	> .95 great; > .90 traditional; > .80 sometimes permissible
GFI	> .95
AGFI	> .80
SRMR	< .09
RMSEA	< .05 good; .05 - .10 moderate; > .10 bad
PCLOSE	> .05

Tab-20 CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	79	658.596	386	.000	1.706
Saturated model	465	.000	0		
Independence model	30	12815.842	435	.000	29.462

Tab-21 RMR, Goodness of Fit Index **(GFI)**

Model	RMR	GFI	AGFI	PGFI
Default model	.023	.931	.916	.772
Saturated model	.000	1.000		
Independence model	.193	.276	.226	.258

Tab-22 Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.949	.942	.978	.975	.978
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Tab-23 Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	.887	.842	.868
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

Tab-NCP 24

Model	NCP	LO 90	HI 90
Default model	272.596	205.516	347.549
Saturated model	.000	.000	.000
Independence model	12380.842	12014.781	12753.254

Tab-25 FMIN

Model	FMIN	F0	LO 90	HI 90
Default model	1.116	.462	.348	.589
Saturated model	.000	.000	.000	.000
Independence model	21.722	20.984	20.364	21.616

Tab-26 RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.035	.030	.039	1.000
Independence model	.220	.216	.223	.000

Tab-27 AIC

Model	AIC	BCC	BIC	CAIC
Default model	816.596	825.358	1162.759	1241.759
Saturated model	930.000	981.574	2967.544	3432.544
Independence model	12875.842	12879.169	13007.296	13037.296

Tab-28 ECVI

Model	ECVI	LO 90	HI 90	MECVI
Default model	1.384	1.270	1.511	1.399
Saturated model	1.576	1.576	1.576	1.664
Independence model	21.823	21.203	22.455	21.829

Tab-29 HOELTER

Model	HOELTER .05	HOELTER .01
Default model	388	407
Independence model	23	24

When conducting a CFA, it is crucial to establish validity (both convergent and discriminant) and reliability. Garbage in, garbage out; there's no point in testing a causal model if your factors haven't been shown to be valid and reliable. A few indicators are helpful in determining

validity and reliability: Reliability Composite (CR), Average Variance Extracted (AVE), Maximum Shared Variance (MSV), and Average Shared Variance (ASV). The video tutorial will show you how to calculate these values. Below are the thresholds for these values:

Reliability

- CR > 0.7

Convergent Validity

- AVE > 0.5

Discriminant Validity

- MSV < AVE
- Square root of AVE greater than inter-construct correlations

If the variables do not correlate well inside their parent factor, then your convergent validity suffers, and the observable variables do not provide a satisfactory explanation for the latent component. In the case of discriminant validity problems, the latent factor is better explained by some other variables (from a different factor) than by its own observed variables, and the variables within the factor have a lower correlation with those outside the factor.

Tab-30 Validity and Reliability

	CR	AVE	MSV	MaxR(H)	PA	AI	SE	BLS	WN	EM
PA	0.853	0.539	0.181	0.862	**0.734**					
AI	0.884	0.605	0.080	0.897	0.222	**0.778**				
SE	0.934	0.740	0.080	0.938	0.148	0.282	**0.860**			
BLS	0.937	0.749	0.148	0.957	0.385	0.157	0.120	**0.865**		
WN	0.915	0.684	0.145	0.925	0.381	0.234	0.076	0.328	**0.827**	
EM	0.899	0.643	0.181	0.920	0.426	0.170	0.069	0.375	0.253	**0.802**

Tab-31 Model fit summary of Structural Equation Model

Indices	Value	Suggested value
Chi-square value	658.596	
P value	0.000	>0.05 (Hair et al., 1998)
GFI	.931	>0.90 (Hu and Bentler, 1999)
AGFI	.916	>0.90 (Hair et al. 2006)
CFI	.978	> 0.90 (Daire et al., 2008)
RMR	.023	< 0.08 (Hair et al. 2006)
RMSEA	.035	< 0.08 (Hair et al. 2006)

Analysis: It is clear from the data in the table that there is a perfect fit, since the computed P value is 0.000, which is higher than 0.05. In this case, a Goodness of Fit Index (GFI) score of .931 and an Adjusted Goodness of Fit Index (AGFI) value higher than .916 indicate a satisfactory fit. The computed CFI (Comparative match Index) value of .978 indicates a perfect match, as do the RMR (Root Mean Square Residuals) value of .023 and the RMSEA (Root Mean Square Error of Approximation) value of .035, all of which are less than 0.08, further confirming a perfect fit.

CONCLUSION

1. It is concluded that majority of respondents i.e., 30 percent respondents have done their under-graduation courses followed by intermediate and diploma courses. It indicates that most of the graduates prefer moonlighting.
2. It is concluded that majority of respondents are who are married are moonlighting
3. Majority of the respondents are in the age group of 36-40 years, followed by other age groups of the study sample who are preferring to moonlighting
4. Majority of respondents are male respondents who are moonlighting due to requirement from family or follow the passion.
5. It is concluded that maximum number of respondents are pursuing IT jobs are willing to moonlighting; it can be because of their potential to explore with their capabilities.
6. Six factors have been extracted through factor analysis where the underlying factors have been put under these six major factors influencing moonlighting.
7. H_1: Additional Income has significant impact on employee moonlighting job (@ 5% Level of Significance (.035) Accepted))
8. H_2: Skill Enhancement has significant impact on employee moonlighting job (@ 5% Level of Significance (.021) Accepted))
9. H_3: Better Life Style has significant impact on employee moonlighting job (@ 1% Level of Significance (.000) Accepted))
10. H_4: Wide network has significant impact on employee moonlighting job (@ 5 % Level of Significance (.127) Rejected))
11. H_5: Passion has significant impact on employee moonlighting job(@ 1% Level of Significance (.000) Accepted).
12. To analyze the relationship between employee performance and employee productivity, Structural Equation Modeling (SEM) was used. Based on the data presented by the conceptual model, we may deduce that the following are true: Chi-square = 658.596, p =.000, GFI =.931, AGFI =.916, CFI = .978 and RMSEA = 0.045. Goodness of fit index values indicates that all requirements for a moderately well-fitting model have been satisfied.

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