



A STUDY ON APPLICATION OF SDT MODEL WITH SPECIAL REFERENCE TO IT SECTOR EMPLOYEES

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Abstract

This research article paper has explored the relationship between the employee motivation, job satisfaction, employee engagement, and performance among IT sector employees, with a specific focus on the impact of Self-Determination Theory. It aims to investigate the significance of SDT in fostering intrinsic motivation and well-being in a fast-paced and dynamic work environment like the IT sector. research adopts an exploratory approach with quantitative research methods. A questionnaire with predetermined answers was used to collect primary data from 219 IT sector employees in Delhi, India. Correlation regression and ANOVA is used for data analysis, and secondary data from various literature sources were gathered for the literature review. The findings highlight the importance of SDT in nurturing intrinsic motivation by fulfilling psychological needs of autonomy, competence, and relatedness. Creating autonomy-supportive environments, promoting competence development, and fostering positive relationships emerged as crucial factors for enhancing job satisfaction and overall well-being among IT professionals.

Keywords: *Self-Determination Theory (SDT); IT sector; employee motivation; job satisfaction; employee engagement; performance.*

1. Introduction

1.1 Background

The Information Technology (IT) sector plays a important role in the global economy, driving innovation, productivity, and digital transformation across various industries. However, the nature of work in the IT sector can present unique challenges to employee motivation, job satisfaction, and overall well-being. Understanding and addressing these challenges is crucial for organizations to attract and retain talented IT professionals in an increasingly competitive market.

The Information of Technology in (IT) sector has been significant transformation and growth in the recent years, becoming a crucial component of modern economies worldwide. Organizations in the IT sector operate in a dynamic and rapidly evolving environment, where technological advancements, changing consumer demands, and intense competition drive the

need for skilled IT professionals. However, this industry's unique characteristics, such as high workload, tight deadlines, and continuous learning requirements, present both opportunities and challenges for the employee motivation and job satisfaction.

Motivating IT sector employees is critical for organizational success. Motivated the employees are more potential to increase high levels of productivity, engagement, and innovation, leading to improved performance and competitiveness. In the other hand, demotivated employees may experience reduced job satisfaction, decreased commitment, and increased turnover intentions, which can negatively impact organizational effectiveness and stability.

Traditional approaches to employee motivation, such as extrinsic rewards and punishment-based systems, have shown limitations in the IT sector. Intrinsic motivation, driven by internal factors such as autonomy, competence, and relatedness, has emerged as a significant factor for fostering long-term motivation and job satisfaction. The Self-Determination Theory (SDT) provides a valuable framework for understanding and enhancing intrinsic motivation within organizations.

SDT has three psychological needs: autonomy, competence, and relatedness. Autonomy refers to the need for self-determination and the ability to make choices independently with personal values and interests. Competence entails the need to develop and demonstrate skills and capabilities relevant to the job. Relatedness represents the need for social connections, positive relationships, and a sense of belonging within the workplace. When these needs are fulfilled, individuals have experience in a greater intrinsic motivation, job satisfaction, and overall well-being.

While SDT has been extensively studied in various contexts, its application within the IT sector remains relatively underexplored. As IT professionals navigate complex technical tasks, collaborate with multidisciplinary teams, and adapt to rapidly changing technologies, to understanding the factors of that influence their motivation and job satisfaction becomes crucial for organizations seeking to attract, retain, and nurture talented employees.

By examining the application of the SDT model within the IT sector, this study is aims to bridge this research gap and provide valuable insights into the motivational factors specific to IT employees. The findings of this study will not only contribute to the existing body of knowledge on employee motivation and job satisfaction but also offer practical recommendations for IT organizations to create an environment that supports the intrinsic motivation and well-being of their employees.

The primary objective of this study is to examine the application of the Self-Determination Theory (SDT) model in the context of IT sector employees. SDT developed by Deci and Ryan (1985), focuses on intrinsic motivation and the fulfillment of psychological needs, including autonomy, competence, and relatedness. By investigating the relationship between SDT principles and employee motivation, job satisfaction, and well-being, this study aims to provide insights and recommendations for IT organizations to create supportive work environments that foster employee flourishing.

2. Literature Review

This study paper's later sections will go into great detail about the Self-Determination Theory's applicability to the IT industry. After that, the research design, data gathering strategies, and data analysis methodologies will be described in the research methodology section. The

conclusions drawn from the examination of both quantitative and qualitative data will be shown in the results section. The results will then be interpreted in the discussion section, which will also emphasize the implications for SDT in the IT industry and provide useful suggestions for businesses. Ultimately, the study's main conclusions, constraints, and prospective directions for further investigation will be outlined in the conclusion.

2.1 Self-Determination Theory

The SDT (Deci E. L., 1985) provides valuable insights into the intrinsic motivation and the fulfillment of psychological needs. Three fundamental psychological demands are proposed by SDT for each individual. Three fundamental psychological demands are proposed by SDT for each individual needs: autonomy, competence, and relatedness (Ryan, 2000). When these needs are satisfied, individuals experience enhanced motivation, job satisfaction, and overall well-being.

Autonomy refers to the need for self-determination and the ability to make choices aligned with personal values and interests (Deci E. L., 1985). Recent research has highlighted the importance of autonomy-supportive environments in various contexts. For example, the studies have shown that providing employees with autonomy in decision-making processes leads to higher job satisfaction and improved performance (Deci E. L., 2012).

Competence entails the need to develop and demonstrate skills and capabilities relevant to the job (Adams, 2017) (Deci E. L.). In recent years, research has emphasized the role of competence in motivation and job satisfaction. For instance, studies have been found that providing employees with opportunities for skill development, training, and feedback enhances their sense of competence, leading to higher levels of motivation and job satisfaction (Gagne, 2005).

Relatedness always represents the need for a social connections as well as positive relationships, and a sense of belonging within the workplace (Salikhova, 2020). Recent literature has highlighted the impact of social support and positive relationships on motivation and well-being. Research has shown that fostering a sense of relatedness among employees through teamwork, collaboration, and supportive work environments leads to higher job satisfaction and well-being (Ahn, 2019) (van Schie, 2019).

The application of SDT within the IT sector is gaining attention as organizations recognize the importance of motivation and job satisfaction for IT professionals. Recent studies have explored the unique challenges and opportunities for applying SDT principles in the IT sector. For example, the research has been examined the role of autonomy, competence, and relatedness in enhancing motivation, job satisfaction, and well-being among IT employees (Camilleri, 2021).

This study has been plan to add to the body of knowledge by explore the relationship between SDT principles and worker motivation, job satisfaction, and well-being in the IT industry. It will also offer insightful information to companies looking to establish encouraging work environments that promote worker flourishing.

2.2 Challenges in Motivating IT Employees

The Information Technology (IT) sector is dynamic and continually evolving, making it particularly challenging to motivate IT professionals. Comprehending these obstacles is

imperative for establishments aiming to improve IT experts' motivation, job contentment, and general welfare.

High workload and pressure: The IT sector often involves demanding workloads and tight deadlines. IT employees may face intense pressure to deliver results promptly, leading to stress and reduced motivation (Lazenby, 2008). Research has been proven that excessive workload can be negatively impact job satisfaction and well-being among IT professionals (Daniel Couger, 1989)

Skill gaps and continuous learning: IT employees need to constantly update their skills and knowledge to keep up with technological advancements. The need for continuous learning and development can be challenging and demanding, leading to motivational issues if adequate support and resources are lacking (Salas-Vallina, 2021). Providing training opportunities and facilitating skill development can address this challenge and enhance motivation (Popovici, 2020).

Lack of recognition and career advancement: IT employees frequently look to be acknowledged for their skills and experience. Employee motivation and job satisfaction in the IT industry can be negatively impacted by a lack of possibilities for professional growth and recognition. To overcome this issue, organizations should put in place efficient performance recognition programs and offer distinct professional advancement pathways. (Petronio, 2008).

Work-life imbalance: Extended work hours and the possibility of a work-life imbalance are well-known in the IT industry. The motivation and general wellbeing of IT workers may be impacted by the blurring of work and personal life borders. (Hämmig, 2009). To address this issue, organizations could encourage work-life balance programs, flexible work schedules, and encouraging policies.(Makabe, 2015).

Burnout and turnover intentions: The fast-paced and high-pressure nature of the IT sector can contribute to burnout and increase the turnover intentions among IT professionals. Burnout unfavorably affects motivation and job satisfaction, leading to decreased performance and organizational stability (Salama, 2022). Implementing strategies to prevent burnout such as fostering a supportive work environment and promoting work-life balance, is important in addressing this challenge (Santhanam, 2019).

Understanding these obstacles is necessary for establishments to develop methods that increase incentive and fulfillment in the workplace for information technology personnel. Organizations can foster a stimulating and encouraging work environment for IT professionals by addressing workload concerns, offering chances for learning and development, praising accomplishments, encouraging work-life balance, and avoiding burnout.

2.3 Impact of Self-Determination Theory on employees

Self-Determination Theory (SDT) provides a good framework for understanding the impact of intrinsic motivation, psychological needs, and well-being among employees in various industries. Research has given that the application of SDT principles has a positive influence on employees' motivation, job satisfaction, and overall well-being.

Autonomy and motivation: SDT explains the importance of autonomy in fostering intrinsic motivation. When employees have the own freedom to make choices aligned with their values and interests, they were experience a sense of ownership as well as a motivation in their work (Deci E. L.). Studies have found that autonomy-supportive leadership practices promote autonomous motivation and engagement among employees (Hardré, 2008).Autonomy-

supportive work environments enable employees to feel empowered, leading to increased job satisfaction and performance (L, 1995).

Competence and engagement: SDT emphasizes how important it is for workers to grow as competent professionals. Employees are more likely to be motivated as well as engaged when they believe they can complete their duties with competence. Employees' sense of competence and intrinsic motivation are increased when they are given opportunities for skill development and improvement, according to research. Furthermore, encouraging a positive work atmosphere that respects and honors workers' knowledge increases engagement and job happiness. (Heslina, 2021) (Rilo, 2020).

Relatedness and well-being: SDT explains the importance of the social connections and positive relationships into the workplace. When employees experience a sense of belonging and connectedness, their overall well-being is enhanced. Research has been found that supportive relationships with supervisors and coworkers contribute to employees' psychological well-being and job satisfaction (Parfyonova, 2009). Building a culture of collaboration, teamwork, and positive social interactions promotes a sense of relatedness and fosters employee well-being (Reis, 2000).

The role of intrinsic motivation: The satisfaction of autonomy, competence, and relatedness—intrinsic motivation—is linked to positive outcomes for workers. Research has been shown that workers who are intrinsically motivated demonstrate increased job satisfaction, increased commitment, and enhanced performance. (Bhuvanaiah, 2015). Intrinsic motivation also contributes to employees' overall well-being and reduces the likelihood of burnout.

Applying the principles of SDT in the organization has significant implications for the employee motivation, job satisfaction, and well-being. By encouraging autonomy-supportive leadership, providing the opportunities for skill development, promoting positive relationships, and nurturing intrinsic motivation, to enhance employees' overall experience and outcomes organization can create a positive environment

Research Questions

The mentioned objectives, and this study addresses to achieve the following research questions:

- 1) What influences the IT employees' motivation?
- 2) What influences the IT employees' job satisfaction?
- 3) What influences the IT employees' employee engagement?
- 4) What influences the IT employees' performance?

2.4 Objectives

1. To discover the relationship between the overall employee motivation, job satisfaction, employee engagement and performance of the IT sector employees.
2. To find out the impact of SDT on the employee motivation, job satisfaction, employee engagement and performance of the IT sector employees.

2.5 Hypotheses

Based on the research model, following are the hypotheses:

H1: There is a significant relationship between the employee motivation, job satisfaction, employee engagement and performance of the IT sector employees.

H0: There is no significant relationship between the employee motivation, job satisfaction, employee engagement and performance of the IT sector employees.

H2: There is significant impact of SDT on the employee motivation, job satisfaction, employee engagement and performance of the IT sector employees.

2.6 Research Methodology

The nature of the research article might be described as exploratory. In method to accomplish the goals of the study, “quantitative” research approaches are utilized. A questionnaire with predetermined answers was always used to collect the primary data for this study. The area of the research is referred to as “Delhi.” A sample size of 219 workers (from which 169 are males and 50 are females) from the IT companies of Delhi has been chosen randomly for the study. However, it would take 300 persons to complete the questionnaire. Methods such as correlation regression and ANOVA were utilized in the study in order to do data analysis. In addition, we read other pieces of literature, such as articles, and periodicals, in order to collect secondary data for literature review.

2.6.1 Research Model

The research model illustrates the relationships between the key variables of interest in the study based on the principles of (SDT). The model explores how the fulfillment of the SDT influences employee motivation, job satisfaction, employee engagement, performance in the IT sector.

2.6.2 Variables:

Independent Variables:

SDT Model: Self-Determination Theory (SDT) is the psychological framework and motivational theory that state on human motivation and the factors that influence individuals' behaviors and choices. Developed by psychologists Edward L. Deci and Richard M. Ryan in the 1980s, SDT proposes that people have innate psychological needs for autonomy, competence, and relatedness, and when these needs are satisfied, they are more likely to experience greater intrinsic motivation and well-being as well.

Mediating Variables:

Motivation: Level of intrinsic motivation experienced by IT employees, driven by the fulfillment of autonomy, competence, and relatedness needs.

Dependent Variables:

Job Satisfaction: IT employees' overall satisfaction and contentment with their job, including aspects such as work environment, tasks, and opportunities for growth.

Well-being: The general state of physical, mental, and emotional well-being experienced by IT employees.

Employee engagement: It shown to the emotional and psychological commitment that employees have towards their working place and their organization as well. It is a measure of how invested, motivated, and enthusiastic employees are about their job and the overall mission and goals of the company.

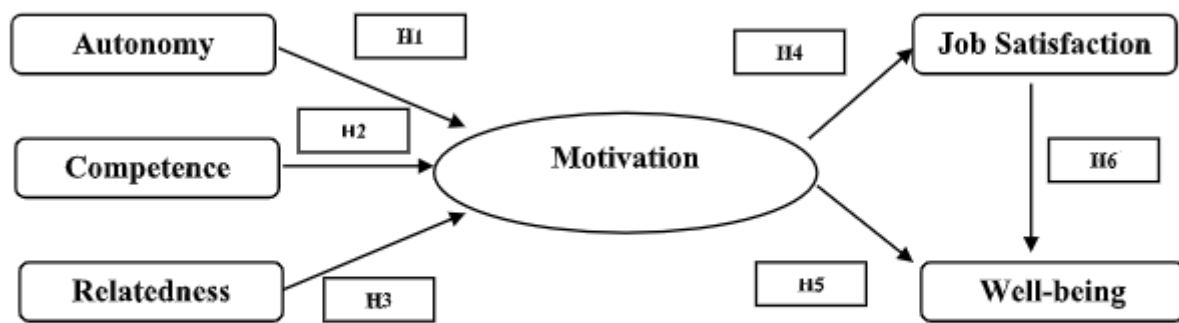


Figure 1: Research Model

2.7 Result Analysis

Table 1: Correlations

Correlations		Employee motivation	Job Satisfaction	Employee engagement	Performance
Employee motivation	Pearson Correlation	1	.073	.030	.045
	Sig. (2-tailed)		.284	.663	.509
	N	219	219	219	219
Job Satisfaction	Pearson Correlation	.073	1	.609**	.816**
	Sig. (2-tailed)	.284		.000	.000
	N	219	219	219	219
Employee engagement	Pearson Correlation	.030	.609**	1	.780**
	Sig. (2-tailed)	.663	.000		.000
	N	219	219	219	219
Performance	Pearson Correlation	.045	.816**	.780**	1
	Sig. (2-tailed)	.509	.000	.000	
	N	219	219	219	219

** . Correlation is significant at the 0.01 level (2-tailed).

The table 1 presents correlations between four variables: Employee motivation, Job Satisfaction, Employee engagement, and Performance. The correlations are measured using Pearson correlation coefficients, and the significance levels (p-values) are also provided to determine whether the correlations are statistically significant.

Employee Motivation:

- “Employee motivation has a positive correlation with Job Satisfaction ($r = 0.073$) and Performance ($r = 0.045$), but the relationships are weak.

- The correlation between Employee motivation and Employee engagement is negligible ($r = 0.030$), indicating a lack of strong association between these two variables.
- None of the correlations for Employee Motivation are statistically significant at the conventional 0.05 level, as all p-values are greater than 0.05.”

Job Satisfaction:

- “Job Satisfaction shows a positive correlation with Employee motivation ($r = 0.073$), Employee engagement ($r = 0.609$), and Performance ($r = 0.816$). The strongest correlation is observed with Performance.
- All correlations involving Job Satisfaction are statistically significant at the 0.01 level ($p < 0.01$), indicating a highly reliable relationship.”

Employee Engagement:

- “Employee engagement demonstrates a weak positive correlation with Employee motivation ($r = 0.030$) and a strong positive correlation with Job Satisfaction ($r = 0.609$) and Performance ($r = 0.780$).
- Like Job Satisfaction, all correlations involving Employee engagement are statistically significant at the 0.01 level ($p < 0.01$).”

Performance:

- “Performance exhibits a weak positive correlation with Employee motivation ($r = 0.045$) and a strong positive correlation with both Job Satisfaction ($r = 0.816$) and Employee engagement ($r = 0.780$).
- Similar to Job Satisfaction and Employee engagement, all correlations involving Performance are statistically significant at the 0.01 level ($p < 0.01$).”

In summary, the results suggest that Job Satisfaction and Employee engagement are strongly correlated with Performance, indicating that employees who are more satisfied and engaged tend to perform better. However, Employee motivation seems to have a weaker association with Performance. It is important to note that while some of the correlations are statistically significant, the strength of the relationships may still be considered relatively weak, warranting further investigation and consideration of other variables that might influence employee performance.

Table 2: Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.962 ^a	.926	.925	1.06813
a. Predictors: (Constant), Performance, Employee motivation, Employee engagement, Job Satisfaction				

The table 2 provides an overview of the model's performance and goodness-of-fit statistics. The model appears to be assessing the relationship between several predictor variables (Performance, Employee motivation, Employee engagement, Job Satisfaction) and a dependent variable

Coefficient of Determination (R Square):

- “The R Square value represents the proportion of variance in the dependent variable that can be explained by the independent variables included in the model.
- In this case, the R Square is 0.926, indicating that approximately 92.6% of the variance in the dependent variable is accounted for by the combination of the predictor variables (Performance, Employee motivation, Employee engagement, Job Satisfaction).”

Adjusted R Square:

- “The Adjusted R Square is a modification of the R Square that takes into account the number of independent variables in the model and adjusts the value accordingly.
- In this model, the Adjusted R Square is 0.925, which is slightly lower than the R Square. This suggests that the predictor variables are collectively good at explaining the variance in the dependent variable, and the model is not significantly improved by adding more predictors.”

Coefficient of Multiple Determination (R):

- “The R value (also called the multiple correlation coefficients) represents the correlation between the predicted values and the observed values of the dependent variable.
- In this case, the R value is 0.962, indicating a strong positive correlation between the predicted values and the actual values of the dependent variable.”

Standard Error of the Estimate:

- “The Standard Error of the Estimate (SEE) is a measure of the average absolute difference between the observed values of the dependent variable and the predicted values from the regression model.
- In this model, the SEE is 1.06813, which represents the average amount of error in predicting the dependent variable.”

Overall, the model appears to have a strong fit, with a high R Square value indicating that a significant portion of the variance in the dependent variable can be explained by the predictor variables. However, it is crucial to keep in mind that the specific dependent variable and the nature of the data might influence the significance and applicability of the model's results. Additional statistical tests and validation procedures are typically necessary to ensure the robustness and generalizability of the model's findings.

Table 3: ANOVA

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3072.093	4	768.023	673.172	.000 ^b
	Residual	244.153	214	1.141		
	Total	3316.247	218			
a. Dependent Variable: Self-Determination Theory						
b. Predictors: (Constant), Performance, Employee motivation, Employee engagement, Job Satisfaction						

The table 3 presents the results of an analysis of variance (ANOVA) for a regression model with the dependent variable “Self-Determination Theory” and four predictor variables: Performance, Employee motivation, Employee engagement, and Job Satisfaction.

Regression:

- “The “Regression” row provides information about the variance explained by the predictor variables in the model.
- Sum of Squares: 3072.093 - This represents the total variability in the dependent variable that can be explained by the predictor variables in the model.
- Degrees of Freedom (df): 4 - The number of predictor variables in the model.
- Mean Square: 768.023 - This is the variance explained by each predictor variable in the model, on average.
- F-statistic: 673.172 - The F-statistic is used to test the overall significance of the regression model. It compares the variance explained by the predictors to the residual variance (unexplained variability).
- Significance (Sig.): .000 - The p-value associated with the F-statistic. In this case, it is less than 0.001, indicating that the regression model is statistically significant.”

Residual:

- “The “Residual” row represents the unexplained variance in the dependent variable, also investigated as the error or residual sum of squares.
- Sum of Squares: 244.153 - The total unexplained variability in the dependent variable.
- Degrees of Freedom (df): 214 - The degrees of freedom associated with the residual sum of squares.
- Mean Square: 1.141 - The average unexplained variance.”

Total:

- “The “Total” row represents the overall variability in the dependent variable.
- Sum of Squares: 3316.247 - The total variance in the dependent variable, which is the sum of the variance explained by the predictors and the unexplained variance.”

Interpretation:

- “The ANOVA results suggest that the regression model, which includes the predictor variables Performance, Employee motivation, Employee engagement, and Job Satisfaction, is highly significant in explaining the variance in the dependent variable “Self-Determination Theory.”
- The F-statistic (673.172) is much larger than 1, indicating a substantial amount of variance in the dependent variable is explained by the predictors, and the model is a good fit for the data.
- The p-value (Sig. = .000) is less than the conventional significance level of 0.05, providing strong evidence to reject the null hypothesis that the regression model has no predictive power.”

In summary, the regression model with the specified predictor variables shows a strong statistical significance in predicting the “Self-Determination Theory” variable. However, further analysis and interpretation of the model's coefficients are necessary to understand the individual contributions of each predictor variable to the dependent variable.

Table 4: Coefficient

Coefficients^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.013	.497		2.038	.043
	Employee motivation	-.002	.020	-.002	-.110	.912
	Job Satisfaction	.063	.033	.061	1.879	.062
	Employee engagement	.563	.033	.508	17.073	.000
	Performance	.508	.045	.463	11.336	.000
a. Dependent Variable: Self-Determination Theory						

The table presents the coefficients of the predictors in a regression model with the dependent variable “Self-Determination Theory.” Each coefficient represents the strength and direction of the relationship between the predictor variables (Employee motivation, Job Satisfaction, Employee engagement, Performance) and the dependent variable. The table also includes additional information about the standard errors, standardized coefficients, t-values, and p-values (Sig.).

Constant:

- “The constant term in the regression model is represented by the row “Constant.”
- Unstandardized Coefficient (B): 1.013 - This is the intercept of the regression line, representing the expected value of the dependent variable when all predictor variables are set to zero.
- Standard Error: 0.497 - It shows the accuracy of the estimate for the intercept.
- t-value: 2.038 - The t-value measures the significance of the constant term.
- Significance (Sig.): 0.043 - The p-value associated with the t-value. In this case, the constant term is marginally significant ($p < 0.05$), suggesting that the intercept may be different from zero.”

Employee motivation:

- “Unstandardized Coefficient (B): -0.002 - This coefficient represents the change in the dependent variable for a one-unit change in the Employee motivation predictor, holding all other predictors constant.
- Standard Error: 0.020 - It indicates the accuracy of the estimate for the coefficient.
- Standardized Coefficient (Beta): -0.002 - The standardized coefficient shows the change in the dependent variable in standard deviation units for a one-standard deviation change in the predictor.
- t-value: -0.110 - The t-value tests the significance of the Employee motivation coefficient.
- Significance (Sig.): 0.912 - The p-value for Employee motivation is not significant ($p > 0.05$), indicating that there is no strong evidence to suggest that Employee motivation significantly affects the dependent variable.”

Job Satisfaction:

- “Unstandardized Coefficient (B): 0.063 - This coefficient represents the change in the dependent variable for a one-unit change in the Job Satisfaction predictor, holding all other predictors constant.
- Standard Error: 0.033 - It shows the accuracy of the estimate for the coefficient.
- Standardized Coefficient (Beta): 0.061 - The standardized coefficient indicates the change in the dependent variable in standard deviation units for a one-standard deviation change in Job Satisfaction.
- t-value: 1.879 - The t-value tests the significance of the Job Satisfaction coefficient.
- Significance (Sig.): 0.062 - The p-value for Job Satisfaction is marginally significant ($p < 0.10$), suggesting that it may have a modest impact on the dependent variable.”

Employee engagement:

- “Unstandardized Coefficient (B): 0.563 - This coefficient represents the change in the dependent variable for a one-unit change in the Employee engagement predictor has been holding all other predictors constant.
- Standard Error: 0.033 - It shows the accuracy of the estimate for the coefficient.
- Standardized Coefficient (Beta): 0.508 - The standardized coefficient indicates the change in the dependent variable in standard deviation units for a one-standard deviation change in Employee engagement.
- t-value: 17.073 - The t-value tests the significance of the Employee engagement coefficient.
- Significance (Sig.): 0.000 - The p-value for Employee engagement is highly significant ($p < 0.001$), indicating that it has a strong positive impact on the dependent variable.”

Performance:

- “Unstandardized Coefficient (B): 0.508 - This coefficient represents the change in the dependent variable for a one-unit change in the Performance predictor, holding all other predictors constant.
- Standard Error: 0.045 - It shows the accuracy of the estimate for the coefficient.
- Standardized Coefficient (Beta): 0.463 - The standardized coefficient indicates the change in the dependent variable in standard deviation units for a one-standard deviation change in Performance.
- t-value: 11.336 - The t-value tests the significance of the Performance coefficient.
- Significance (Sig.): 0.000 - The p-value for Performance is highly significant ($p < 0.001$), indicating that it has a strong positive impact on the dependent variable.”

Interpretation:

- “Employee motivation does not appear to have a significant impact on the dependent variable “Self-Determination Theory” ($p > 0.05$).
- Job Satisfaction may have a modest impact on the dependent variable, but its significance is only marginally significant ($p < 0.10$).
- Employee engagement and Performance, on the other hand, both have strong positive impacts on the dependent variable, with highly significant p-values ($p < 0.001$).”

In summary, according to this regression model, Employee engagement and Performance seem to be the most influential predictors of “Self-Determination Theory,” while Employee motivation and Job Satisfaction do not show strong evidence of being significant

predictors. However, as with any statistical analysis, it's essential to consider the context, potential limitations, and theoretical implications when interpreting the results.

2.8 Conclusion

This Article paper explored the application of Self-Determination Theory (SDT) in the context of IT sector employees, focusing on employee motivation, job satisfaction, employee engagement, and performance. The IT sector is known for its fast-paced and dynamic nature, presenting unique challenges and opportunities for employee motivation and well-being. Understanding and addressing these factors is crucial for organizations seeking to attract, retain, and nurture talented IT professionals in an increasingly competitive market. The research review emphasized the role that SDT plays in promoting intrinsic motivation by meeting the psychological demands of relatedness, competence, and autonomy. In order to improve workers' job happiness and general well-being, it also underlined the significance of developing workplaces that encourage autonomy, encouraging competence growth, and cultivating healthy relationships. The study examined the connections between job happiness, employee engagement, employee motivation, and performance in the IT industry based on the research questions and objectives. Strong positive relationships between job happiness, employee engagement, and performance were found in the data, indicating that engaged and happy workers typically perform better. Employee motivation, however, had less of a correlation with these factors. Additionally, the regression study showed that job satisfaction and performance among employees were the most significant predictors of self-determination, while employee motivation and job satisfaction

The results highlight how crucial it is to support performance-related aspects and encourage employee engagement in the IT industry in order to ensure employee autonomy and wellbeing. To improve intrinsic motivation and job satisfaction among IT workers, organizations should place a high priority on fostering pleasant social interactions, offering opportunities for skill development, and developing work environments that enable autonomy. Even though this study provided insightful information, there are some important limitations to be aware of. The study only looked at a small sample of workers in the IT industry, thus its conclusions might not apply to other IT companies. Furthermore, the cross-sectional design makes it more difficult to determine temporal correlations and causality. To better understand the intricate dynamics of SDT in the IT industry, future studies may use longitudinal designs and a more varied and representative sample.

In conclusion, by analyzing the application of self-determination theory, this study adds to the expanding collection of information on employee motivation and well-being within the IT sector. Organizations can develop work cultures that enhance intrinsic motivation, job satisfaction, and general well-being of their IT staff by comprehending and putting SDT's concepts into practice. This will increase performance and pave the way for long-term success in the rapidly changing technology sector.

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