## The Mediating Role of Work Engagement between Happiness at Work and Employee Performance: Smart PLS Approach

## Komal Nagar<sup>1</sup>, Dr. Surekha Rana<sup>2</sup>, Anurag Kasana<sup>3</sup>

<sup>1</sup>Department of Management Studies, Gurukula Kangri (Deemed to be University), Haridwar, Uttarakhand, India. <sup>2</sup>Department of Management Studies, Gurukula Kangri (Deemed to be University), Haridwar, Uttarakhand, India. <sup>3</sup>Department of Computer Science, Hochschule Hof, University of Applied Sciences, Bavaria, Germany.

#### Abstract

This study aimed to determine the role of work engagement as a mediator in the relationship between employee happiness at work and employee performance. The research was carried out on people who were employed in the IT sector in the cities of Noida and Gurugram located in the NCR region. A structured adapted questionnaire was used. The statistical software Smart PLS 4 was used to analyze the gathered data. The analysis focused on the measurement model, structural model, and then the model's out of sample prediction. Findings shows that happiness at work affects the job engagement. Job engagement affects employee performance. Happiness at work also affects the employee performance. Job engagement partially mediates the relationship between happiness at work and employee performance. Additionally, model has a considerable amount of prediction power that is find out on the model's out of sample prediction power. This model can be utilized in subsequent research endeavors. The utilization of job engagement for the first time as a mediator between happiness and performance is a significant contribution to the originality of this study.

Keywords: Happiness at work, work engagement, employee performance, Smart PLS 4, IT employees

## **1. INTRODUCTION**

In today's competitive business landscape, organizations are increasingly recognizing the significance of employee performance as a critical driver of productivity, innovation, and overall organizational success. While various factors contribute to employee performance, the role of happiness at work has garnered significant attention in recent years. As individuals, we spend a significant portion of our lives in the workplace, dedicating countless hours and resources to our careers. However, amidst the hustle and bustle of professional life, we often find ourselves questioning if we can truly find happiness within our jobs. The notion of happiness at work goes beyond mere job satisfaction or financial success. It encompasses a holistic approach that considers the overall well-being and fulfillment we experience in our professional lives. It involves feeling engaged, motivated, and connected to our work and colleagues, while also maintaining a sense of purpose and personal growth (Warr, 2019). Happiness at work refers to a positive emotional state and a sense of satisfaction and fulfillment experienced by employees in their professional roles (Diener et al., 2018). Happiness at workplace is not only beneficial for employees but also fruitful for the organization as well (Achor, 2011; Ravina-Ripoll et al., 2019). However, as our understanding of happiness evolves, so does the need for new perspectives and approaches to fostering happiness in the workplace. The traditional model of viewing work as solely a means to an end is giving way to a more enlightened view that emphasizes the importance of work as a source of personal fulfillment and growth (Ryan & Deci, 2017).

Over the years, research has shed light on the profound impact that happiness at work can have, not only on individuals but also on organizations as a whole. Studies consistently show that happy employees are more productive, creative, and innovative. They are more likely to stay committed to their organizations, contribute to a positive work environment, and achieve better outcomes (Lyubomirsky et al., 2005; Spreitzer, 2018). Oswald et al. (2015) conducted a study and discovered that happier workers were 12% more productive compared to their unhappy counterparts. Extensive research has highlighted the significant impact of happiness at work on employee performance. Studies consistently demonstrate that happier employees are more engaged, productive, and committed to their organizations (Lyubomirsky et al., 2005). They exhibit higher levels of creativity, problem-solving ability, and willingness to contribute discretionary effort (Bakker & Demerouti, 2017). In essence, happiness at work acts as a catalyst for fostering a positive work environment and driving organizational success. Therefore, one of the purposes of this study is to find out the impact of happiness at work on the performance of employees working in IT sector. In the context of the IT industry, where employees often face unique challenges and demands, understanding the factors that contribute to IT employees' happiness at work is vital for organizations aiming to optimize their workforce's performance.

However, this research works on the relationship between happiness at work and employee performance is not a direct one. The novelty of the research is that Work engagement has been identified as a key mediating factor in this relationship (Schaufeli et al., 2002). Work engagement refers to a positive, fulfilling, and energized state of mind characterized by a deep connection and involvement with one's work tasks, colleagues, and the organization as a whole (Schaufeli et al., 2017). Research has consistently demonstrated the far-reaching impact of work engagement on both individuals and organizations. Previous studies demonstrate that engaged employees are more likely to experience higher levels of job satisfaction, well-being, and psychological health (Bakker & Bal, 2010; Kahn, 2017). In today's dynamic and competitive business environment, organizations face various challenges, including increasing workloads, rapid technological advancements, and evolving employee expectations (Bakker & Albrecht, 2018). Consequently, it has become imperative for organizations and leaders to prioritize strategies that promote and sustain work engagement. Engaged employees are deeply connected to their work, experience a sense of energy and enthusiasm, and are willing to invest effort to accomplish their tasks effectively. Extensive literature has demonstrate higher levels of task performance, creativity, job satisfaction, and organizational citizenship behavior.

While extensive research has been conducted on the relationship between happiness at work & employee performance, happiness at work & employee engagement and employee engagement & employee performance, there are still several research gaps that warrant further investigation. One of them is Mediating Mechanisms. The role of work engagement as a potential mediator between happiness at work and employee performance has received limited attention. Previous researches conducted with motivation, leadership and organization culture as a mediator between happiness and performance. Exploring the mediating factor, employee engagement would provide valuable insights into the mechanisms that link happiness at work to performance through engagement. By addressing this research gaps, we can gain a deeper understanding of the complex relationship between happiness at work, employee performance, and employee engagement, ultimately leading to the development of effective strategies and interventions for enhancing workplace well-being and organizational outcomes.

## 2. REVIEW OF LITERATURE

## 2.1. Happiness at Work

Happiness is a complete state of well-being that goes beyond earning wealth, honors, or sensual pleasure (Gavin & Mason, 2004) Happiness has two perspectives namely the Hedonic (subjective) and Eudaimonic (psychological) approaches. "Subjective well-being relates to how individuals evaluate their lives and matters of importance; this includes life satisfaction. This is the presence of positive affect and low incidence of negative affect" (Diener, E., & Biswas-Diener, 2008; Deci & Ryan, 2008). Psychological well-being relates to living a life with deep satisfaction and caring out work impressively (Deci & Ryan, 2008). Happiness at work of the employees relates to psychological well-being. As long as the employee is happy, they will continue contributing to productivity. Everyone wants to be happy, and in most nations, attaining happiness is the most valued goal (Diener, 2000). Every typology of 'fundamental' human emotions includes Happiness in the form of joy. Happiness has received increasing attention from philosophers (McMahon, 2006) however, it has recently become the focus of psychological research. In a study by Seligman & Csikszentmihaly, (2000), the growth of inspiring psychology has given happiness legitimacy. According to Maenapothi (2007), workplace happiness refers to the condition in which employees are happy to work and do not feel like they are performing, are efficient, and achieve specified goals at both the personnel and organizational levels. Researchers indicated that Happiness can be divided up into three targets, including work, contextual aspects, and the organization as a whole (Hoboubi et al., 2017). This study focuses on the happiness related to the job, work environment, and relation with peers, superiors, and management.

## 2.2. Work Engagement

Engagement of employees refers to the level of involvement, commitment, and enthusiasm that employees have towards to their work and to their organization. Work engagement/involvement is defined as "A positive, enriching state of mind, which includes the characteristics of vigor, dedication, and absorption" (Schaufeli et al., 2002). Work engagement is a well-being indicator that is related to pleasant working conditions. It gives satisfaction and affective motivation, which can be applied to estimate or detect employee fatigue by utilizing the traits of excitement, devotion, and absorption (Bakker et al., 2008). Work engagement has also been defined as a multidimensional motivational concept by researchers. This idea depicts an individual's continual investment of physical, intellectual, and mental energy in active, full-time work performance (Kahn, 1990). Workers who are physically connected, cognitively and emotionally attached, and have a high level of participation in their tasks and improved engagement with their work (Simbula & Guglielmi, 2013). According to Federman (2009), Work engagement are to the extent to which the employee is able to commit to the goals of an employer; the outcomes of that commitment are

measured by the person's performance and the amount of time they spend on the job. The term "work engagement" can also be viewed as a motivating concept that symbolizes the energy that is channelled into the task that is encountered by each employee. Individuals will enhance their employment participation based on their perceptions of purpose, security, and accessibility (Cook, 2008). Furthermore, engaged employees are more likely to be satisfied with their jobs, which can lead to improved mental and physical well-being, and ultimately have a positive impact on the employee's overall quality of life. work engagement is important for organizations because it is linked to improved productivity, innovation, employee retention, and overall job satisfaction. It can also lead to cost savings for the organization by reducing the need for additional hiring and training.

## 2.3. Employee Performance

Employee performance refers to the level of productivity and effectiveness of an individual employee in the workplace. It can be evaluated and measured through a variety of methods, such as performance evaluations, productivity metrics, and feedback from supervisors and colleagues. Factors that can impact employee performance include happiness, work engagement, motivation, skill level, work-life balance, and job satisfaction. The amount of dedication and effort spent by individuals for the organization is their performance (Robbins & Judge, 2012). There are several factors that contribute to employee performance, such as the amount of work performed (quantity), the standard of work finished (quality), the schedule of work completed (timeliness), and attendance on the job (efficiency). According to Byars and Rue, (2011) Performance is a person's inclination to take over her/his responsibility to achieve the organizational goal. To measure the performance of an individual there are two dimensions, task performance, and contextual performance (Aguinis, 2009). Task performance includes the skills and abilities of any individual in a group and also includes the quality, quantity, and time of work implementation. On the other hand, the contextual performance includes the behavior of an individual in the organization. It is about the personality of employees to handle compliance, and activities and to regulate all with integrity. Employee performance is important for a variety of reasons. It directly impacts the overall productivity and effectiveness of an organization, and can have a significant impact on the bottom line. High-performing employees are often more engaged, motivated, and committed to their work, which can lead to improved job satisfaction and employee retention. Additionally, organizations with high-performing employees are often better equipped to adapt to changes in the market and stay competitive. Therefore, it's crucial for organizations to effectively manage and measure employee performance in order to identify areas for improvement and to create a positive and productive work environment.

## 3. THEROITICAL BACKGROUND AND HYPOTHESIS DEVELOPMENT

The theoretical perspective is a foundation for understanding the relationship between happiness at work, work engagement, and employee performance. The relevance of happiness at work has been recognized by organizations that leads employees to work effectively. The main concern of this study is that with the happiness employees have to engage in the work. Hence, by examining the mechanisms through which happiness at work influences work engagement and subsequently affects employee performance, organizations can design interventions and strategies that promote positive work experiences, enhance engagement, and ultimately optimize employee performance levels. This notion is demonstrated with the help of Job Demands-Resources Model and Social Exchange Theory.

## Job Demands-Resources Model and Social Exchange Theory

One theory that relates to happiness at work, work engagement, and employee performance is the Job Demands-Resources (JD-R) model. The Job Demands-Resources (JD-R) Model posits that work characteristics can be classified as job demands or job resources. Job demands refer to aspects of work that require sustained effort and may lead to physical or psychological costs (Demerouti et al., 2001). These demands include workload, time pressure, role ambiguity, and emotional demands. On the other hand, job resources refer to aspects that facilitate goal achievement, reduce job demands, and stimulate personal growth (Bakker & Demerouti, 2014). These resources include social support, autonomy, feedback, and opportunities for growth and development. In the context of happiness at work, job resources play a crucial role. When employees perceive a positive work environment characterized by supportive relationships, autonomy, and opportunities for growth, they experience higher levels of happiness and well-being (Bakker & Demerouti, 2017). Happiness at work can be considered a personal resource that contributes to positive work experiences, increased self-efficacy, and reduced job stress. Work engagement acts as a mediator in the relationship between happiness at work and employee performance within the JD-R Model. Work engagement refers to a positive, fulfilling, and motivational state characterized by vigor, dedication, and absorption in one's work (Schaufeli et al., 2006). Engaged employees invest themselves physically, cognitively, and emotionally in their work tasks, leading to improved performance outcomes. When employees experience happiness at work, they are more likely to perceive their work environment as supportive and conducive to growth (Schaufeli & Bakker, 2004). This positive perception influences their level

of work engagement, as they feel more energized, dedicated, and absorbed in their tasks. Work engagement, in turn, enhances employee performance by positively influencing job performance, creativity, and organizational citizenship behaviors (Bakker & Bal, 2010).

Another theory is Social Exchange theory that was developed by Homans (1958) and Blau (1968). According to this theory individuals engage in reciprocal relationships where they provide resources, such as effort, time, and commitment, in exchange for rewards and benefits from their organization (Blau, 1964). These exchanges are driven by the expectation of receiving positive outcomes, such as recognition, support, and opportunities for growth. In the context of happiness at work, employees who experience positive emotions and well-being are more likely to engage in positive social exchanges with their organization. They may willingly invest their resources, such as discretionary effort and organizational citizenship behaviors, to contribute to the success and well-being of the organization (Eisenberger et al., 2010). This positive exchange relationship leads to increased work engagement, as employees feel valued and supported in their work environment. Work engagement, as a result of positive social exchanges, can have a significant impact on employee performance. Engaged employees are more likely to exhibit higher levels of task performance, creativity, and commitment to organizational goals (Bakker & Demerouti, 2008). They are also more likely to engage in behaviors that go beyond their formal job requirements, such as assisting colleagues and engaging in proactive problem-solving, which ultimately contribute to overall organizational performance (Cropanzano et al., 2017).

By understanding the JD-R Model and Social Exchange Theory researchers understand the relationship of happiness at work, work engagement, and employee performance that helps organizations to enhance their employee's performance.

## 3.1. Happiness at work and Employee Performance

It's natural to feel happy in positive psychological conditions, which is featured by high life satisfaction, and low negative affect. A high level of life satisfaction and good effect leads to a favorable attitude about one's work and performance (Carr et al., 2003). Many studies have found that happy employees are more engaged in their jobs and have a higher level of job satisfaction. Happy employees were more productive and gave higher performance compared to less happy employees (Oswald et al., 2015). Happy employees work hard and are more committed to their organization (Rego & Pina E Cunha, 2008; Alaaraj et al., 2018). In a study by Boehm and Lyubomirsky, (2008) stated that Happiness promoted career development and improved the performance of the employee. Proctor (2014) Employee happiness was discovered to have a considerable impact on job performance. Another study by Bataineh (2019) found that happiness of employee at work positively affected the performance. As a result, the first hypothesis of the proposed investigation is:

H1: Happiness at work has a significant and positive impact on employee performance.

## 3.2. Happiness at work and Employee Engagement

Work engagement is a mindset in which a person works with vigor, concentration, and a sense of commitment. (Schaufeli & Bakker, 2002; Çankır, 2016). The indicators of work engagement are individuals feeling of being happy, healthy, peaceful at work (Poon, 2013). According to research conducted on happiness and engagement at work, indices of happiness include work-related factors such as burnout, workaholism, and job satisfaction (Barker & Oerlemans, 2010; Mäkikangas et al., 2015). In a study on psychological well-being and work engagement carried out by Brunetto et al., (2012) Psychological well-being was revealed to have a large and favorable effect on work engagement. In another study, Shimazu and Schaufeli, (2009) found a significant and positive correlation between Happiness and work engagement. Çankır, et al., (2018) also observed a significant relationship between both variables. As a result, the second hypothesis of the proposed investigation is:

H2: Happiness at work has a significant and positive impact on work engagement.

## 3.3. Employee Engagement and Employee Performance

Employees feels satisfied and happy when they are engaged in the work. Engaged employees enjoy their work and they work with dedication that improves the performance of individual. Numerous studies have been done on the connection between employee performance and work engagement. A study conducted by Bakker (2011) revealed that work engagement was positively and significantly correlated with employee performance. In one more study that was conducted in Turkey, it was found that work engagement and performance were significantly and positively correlated (Caymaz, et al., 2013). Since it was associated with beneficial outcomes like employee effectiveness, initiative-taking, and corporate citizenship behavior, employee engagement was a predictor of performance (Otieno et al., 2015). As a result, the third working hypothesis of the study is:

H3: Employee Engagement has a significant and positive impact on Employee Performance.

## 3.4. Employee Engagement as a mediator

It is assumed that when workers are happy at their work, they are more invested in what they're doing, which in turn leads to higher productivity and that affects the performance. As per the authors knowledge and on the bases of review of literature, till now there is not any study on the mediating role of work engagement in the relationship of happiness at work and employee performance. There is one study that examines the connection between an employee's mental health and their productivity on the job, and they concluded that work engagement plays a mediating function between psychological well-being and employee performance (Şahin & Çankir, 2018). On the basis of this study, it was discovered that there is a substantial association between these three constructs. Accordingly, the study's fourth hypothesis is as follows:

H4: Work Engagement has a mediator role in the relationship between Happiness at work and employee performance.



Figure 1. Research Framework

Source: Author

## 4. METHODOLOGY

## 4.1. Research method and population

The research framework depicted in (**Error! Reference source not found.**) was developed on the basis of previous findings. A quantitative study method was utilised to investigate the association between employee happiness at work, engagement, and performance among employees operating in the information technology sector in India. The quantitative method is the one that is best suited for putting hypotheses and goals regarding the connections between different factors to the test (Creswell, 2013). The study's demographic consists of employees working in the IT industry in the Delhi NCR cities of Noida and Gurugram. The national capital region of New Delhi is surrounded by numerous districts from the states of Haryana, Uttar Pradesh, and Rajasthan. Noida and Gurugram are prominent cities in these areas, and hence served as the foundation for picking IT industries in the region. Delhi NCR has become one of India's fastest-growing regions, contributing to 7-8% of the country's overall GDP. Because of its accessibility to government institutions, the prevalence of a business-friendly environment, and a growing entrepreneurial culture, the city has emerged as a visible IT hub.

## 4.2. Sample, data collection, and measure

The data was gathered from respondents using simple random sampling. The Directorate of Industries/District Industry Centre provided a list of industries. The HR Department of the respective industry provided a list of personnel. Primary data was gathered through an online survey form that was distributed via email to IT staff. A total of 284 questionnaire replies were obtained. The questionnaire was divided in four sections in the first section demographic information was collected and the remaining three section was related to three variables i.e., Happiness at work, work engagement, and employee performance

respectively. The scale of Happiness at work was adopted from Salas-Vallina and Alegre (2018) using 7 items. Happiness at work emerges through job satisfaction, tenure, employee belongingness, promotion avenues, nature of work, employee enthusiasm for the job, and energetic endowment. The measure of work engagement was adopted from Schaufeli et al. (2006) using 6 items and it measures the belongingness, inspiration, pride, and concentration of employees at work. The measure of employee performance was adopted from Tabouli et al. (2016) using 7 items, they were based on dedication, seriousness, planning, ability, uniqueness, and motivation of employees. All items were scored on a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). After getting the responses from the participants the data was coded in excel sheet and later transferred to smart PLS 4. The data was analyzed using structural equation modeling (SEM) through the statistical tools Smart PLS 4.

## 5. RESULTS

## 5.1. Descriptive statistics

The age, gender and educational qualification of the respondent was collected in the first section of the questionnaire. The descriptive analyses were conducted through MS excel. The results of age depicted in (*Table 1*). There was 62 percent of respondents who were between the ages of 20 and 29, making up the largest demographic. The results of gender shown in (*Table 1*). The proportion of male respondents was 54 percent, while the proportion of female respondents was 45 percent. The analysis of education of the participants presented in (*Table 1*). The respondents with a graduate degree made up 46 percent of the total respondents and the respondents with postgraduate degree made up 44 percent and the other respondents held diplomas or other certificates courses were 10 percent.

Characteristics	Frequency	Percentage
Age		
20-29	176	61.8
30-39	46	16.1
40-49	40	14.0
50-59	18	6.3
60 & above	4	1.4
Total	285	100.0
Gender		
Male	154	54.0
Female	128	44.9
Prefer not to say	2	0.7
Total	285	100.0
Education		
Gradate	130	45.6
Post-Graduate	124	43.5
Diploma	2	10.5
Total	285	100.0

 Table 1. Demographic Profile

## 5.2. Model's Reflective Measurement Evaluation

The measurement model (**Figure 2**) is the constructs' outer model. In order to assess how reliable a reflective measurement model is, four criteria are more important namely Indicator loading, internal consistency and reliability, discriminant validity, and convergent validity. Initially, the indicator loading was analyzed, and the recommended loading was found to be above 0.708. This is because values over this threshold suggest that the construct accounts for more than half of the indicator's variance (Hair et al., 2018). The results can be shown in (Error! Reference source not found.). All of the items have factor loadings that f all between 0.706 and 0.885, and items 1 and 6 from employee performance, as well as items 1 and 2 from happiness at work, were eliminated due to their lower loadings. Following factor loading, the internal consistency and reliability was measured through Cronbach's alpha and Composite reliability. However, Cronbach's alpha it is less accurate measure. The composite reliability is more reliable indicator of internal reliability and validity (Jöreskog, 1971). The value of composite reliability between 0.70 and 0.90 is "satisfactory to good" but it should not be above 0.95 which is problematic. More value of the construct reduces the validity of the construct and assumed an undesirable response pattern (Hair et al., 2018). In this study the value of

Cronbach's alpha is above 0.70 which is acceptable. In (**Error! Reference source not found.**) in order to be considered a cceptable, CR and CA values are between 0.70 and 0.95 of all three constructs. After internal consistency reliability, validity was checked. There are two measures of validity convergent validity and discriminate validity. Firstly, Convergent validity was measured and it measures how well a construct explains the variance of its items. The average variance extracted (AVE) used to measure it. In order for an AVE to be considered acceptable, it must be at least 0.50, which indicates that all of the components together explain at least fifty percent of the construct. In (**Error! Reference source not found.**), the value of AVE of all constructs is above 0.50 which is acceptable. Later, the discriminant validity was measured for validating the measurement model. This step refers to the extent to which one construct in the model is empirically distinct from another construct in the model. There are two methods to measure it, namely Fornell & Larcker's criteria and Heterotrait-Monotrait Ratio. Fornell & Larcker's criteria which were proposed by Fornell & Larcker, (1981), have become the traditional way of measuring it. They proposed that model constructs' shared variances shouldn't exceed AVEs. Heterotrait-Monotrait (HTMT) ratio of correlation replaced the previous one and it was proposed by (Henseler et al., 2015). The HTMT ratio cut-off value for measuring discriminant validity is 0.90. All the values in (**Error! Reference source not found.**) are less than 0.90, which is acceptable for the model. Hence, the reliability and validity of measurement model is good. Now, we move to next step that is structural model.



Figure 2. Measurement Model

## Table 2. Factor loading

Constructs	Items	Loadings
Employee Performance		
	EP 1	Deleted
	EP 2	0.799
	EP 3	0.809
	EP 4	0.773
	EP 5	0.751
	EP 6	Deleted
	EP 7	0.780
Happiness at Work		

	HAW 1	Deleted
	HAW 2	Deleted
		0.850
		0.830
	HAW 4	0.822
	HAW 5	0.871
	HAW 6	0.885
	HAW 7	0.831
Work Engagement		
	WE 1	0.858
	WE 2	0.706
	WE 3	0.881
	WE 4	0.768
	WE 5	0.794
	WE 6	0.761

Table 3. Alpha, composite reliability and convergent validity of the constructs

Construst	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
EP	0.842	0.849	0.888	0.613
HAW	0.906	0.908	0.930	0.726
WE	0.884	0.895	0.912	0.635

Table 4. Discriminant validity of the constructs based on HTMT<sub>0.90</sub> and HTMT inference</sub> Criteria

Constructs	EP	HAW	WE	
EP				
HAW	0.791			
WE	0.856	0.872		

## 5.3. Structural Model Evaluation

The examination of the outcomes of the relationship among the latent variables or constructs constitutes the structural model. The model was analyzed according to the guidelines that were suggested by (Hair et al., 2018). This structural model is assessed when the measurement model is satisfying and all the criteria were fulfilled. The criteria to analyze the structure of the model include the assessment of the collinearity, coefficient of determination ( $\mathbb{R}^2$ ), blindfolding-based cross-validated redundancy measure ( $\mathbb{Q}^2$ ), and out-of-sample predictive power by using the PLS predict procedure.

Before evaluating the nature of the relationship between constructs found through the iterative process of the regression equation, collinearity was analyzed in the structural model. The VIF value of the exogenous variables was less than 3 as indicated in (**Error! Reference source not found.**) which is good (Mason & Perreault, 1991). Later the path coefficient of all t he relationships was checked. The rule of thumb for the significance of the relationship is that the t values must be 1.96 or greater (Hair et al., 2018). Table 6 shows that employee performance is significantly impacted by happiness at work (Beta = 0.301, t = 3.962, P < 0.000). In a similar vein, the findings presented in (**Error! Reference source not found.**) demonstrated t hat Employee Engagement is significantly impacted by Happiness at Work (Beta = 0.790, t = 33.294, P < 0.000), and there is also a considerable correlation between the employee engagement and employee performance (Beta = 0.53, t = 7.172, P < 0.000). There was a statistically significant link between employee happiness at work and employee performance, which was mediated by employee engagement. (Beta = 0.405, t = 6.870, P < 0.000) indicated in (**Error! Reference source not found.**). T he VAF was calculated according to (Hair et al., 2013). The VAF is used to determine the indirect effect compared to the total

effect of the variables. The findings show that the VAF is 57% showed that there was some sort of mediating impact on the relation between Happiness at Work and Employee Performance, which is calculated below

VAF = 0.790×0.513 / 0.7 90×0.513 + 0.301 = 0.5738 or 57%

#### 5.4. Model Explanatory Power

Explanatory power refers to the ability of a model to explain the variation in the data it is trying to explain. It is a measure of the model's ability to make accurate predictions about the outcome of interest. A model with high explanatory power is able to capture a significant portion of the variation in the data and can make accurate predictions about the outcome of interest. On the other hand, a model with low explanatory power is not able to capture much of the variation in the data, and may not make accurate predictions. There are several ways to measure the explanatory power of a model, such as R-squared, Adjusted R-squared, Root Mean Squared Error (RMSE), Mean Absolute Error (MAE), Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC)

An exogenous variable's ability to explain variance in an endogenous variable is measured by a statistic called R-squared. The R-squared is a measure of the model's explanatory power and represents the amount of variance that can be attributed to each of the model's endogenous factors (Shmueli & Koppius, 2011), also referred to as in-sample predictive power (Rigdon, 2012). The R-squared number can be between 0 and 1, with higher values suggesting more able to explain the data. An R-squared of 1.0 indicates that the model explains all of the variations in the outcome variable, while an R-squared of 0.0 indicates that the model explains in the outcome variable. (Error! Reference source not found.) shows that the model's in-sample predictive power is quite high, with an R-squared value of endogenous variables above 0.26. (Cohen, 1988).

It is possible to obtain a more accurate estimation of the explanatory value of each exogenous variable in the model by calculating the change in R-squared that would occur if the particular exogenous variable in question were removed from the analysis. The term "effect size" (f2) refers to this particular metric. The magnitude of the influence exerted by each independent variable on the outcome of the study is referred to as the effect size. The impact size of the model illustrates the extent to which an exogenous variable contributes to the R-squared value of an endogenous variable. If the f-ratio (f2) is 0.35, the predictor variable has a significant effect on the underlying structure; if it's 0.15, the effect is moderate; and if it's 0.02, the effect is negligible. (Cohen, 1988). The strength of an association between latent variables is measured by its effect size. The findings are summarized in (**Error! Reference source not found.**) which displays an F2 effect size of 0.085 for the impact of e mployee's happiness at work on their performance, 0.247 for the impact of employees' work engagement on their performance, and 1.660 for the impact of employee's happiness at work on their greater than 0 as shown in (**Error! Reference source not found.**). Q2 v alues above 0 indicate low predictive accuracy, Q2 values between 0.25 and 0.50 indicate moderate accuracy, and Q2 values above 0.50 indicate excellent predictive accuracy in the PLS path model. The Q2 values displayed in (**Error! Reference source n ot found.**) for this model are 0.493 and 0.619 for employee performance and job engagement, respectively. These values represent the medium to the large predictive accuracy of the model.

Construct	VIF	
Happiness at work	2.660	
Work Engagement	2.660	

Paths	Beta	Standard deviation	T Values	P Values	2.50%	97.50%
H1: HAW -> EP	0.301	0.076	3.962	0.000	0.148	0.452

H2: HAW -> WE	0.790	0.024	33.294	0.000	0.738	0.831
H3: WE -> EP	0.513	0.072	7.172	0.000	0.373	0.653
H4: HAW -> WE -> EP	0.405	0.059	6.870	0.000	0.294	0.522

Table 6. Final path coefficient

Table 7. The effect size of the exogenous constructs on the model's predictive accuracy and relevance

Exogenous constructs	F <sup>2</sup>	Endogenous constructs	Q2
HAW -> EP	0.085	Employee performance	0.493
WE -> EP	0.247		
HAW -> WE	1.660	Work Engagement	0.619

Table 8. Model out-of-sample predictive power

	R2	PLS-SEM_MAE	Q <sup>2</sup> predict	LM_MAE	PLS-LM
EP	0.599				
EP 2		0.579	0.301	0.583	0.004
EP 3		0.583	0.337	0.588	0.005
EP 4		0.632	0.174	0.63	-0.002
EP 5		0.682	0.199	0.693	0.011
EP 7		0.617	0.445	0.589	-0.028
WE	0.634				
WE 1		0.584	0.492	0.555	-0.029
WE 2		0.797	0.286	0.800	0.003
WE 3		0.496	0.575	0.478	-0.018
WE 4		0.539	0.393	0.516	-0.023
WE 5		0.716	0.302	0.734	0.018
WE 6		0.602	0.274	0.617	0.015

#### 6. CONCLUSION AND DISCUSSION

According to the findings of previous studies, a significant relationship between happiness at work and employee performance was predicted. The finding of H1 showed that the prediction is true, employee happiness at work affects the performance of the employees the results of the previous studies (Rego & Pina E Cunha, 2008; Bataineh, 2019) supported. The second hypothesis was designed in order to investigate the influence that one's level of happiness at work has on their level of involvement in their profession. The result of H2 showed that there is a positive relationship between Happiness at work and the work engagement of employees. The results of the second hypothesis were supported by previous studies (Claypool, 2017; Brunetto et al., 2012). The third hypothesis was created in order to investigate the influence that employee involvement in their work has on their performance. The findings show a significant and positive impact of work engagement on employee performance and the results supported the previous findings (Rich, 2010; Christian et. al. 2011; Şahin & Çankir, 2018; Abdullahi et al., 2021). The primary purpose of this research was to determine whether or not work engagement plays a mediating role, and the findings indicate that it does. Furthermore, the findings indicate that there is a significant and positive relationship between all three constructs, which demonstrates a complementary partial mediation (Cepeda-Carrion et al., 2019). This demonstrates that

Happiness at Work is not the only factor influencing employee performance, as Work Engagement also influences employee performance.

In today's, competitive working conditions, organizations have to maintain the Happiness of their employees at work and keep them engaged in the work by making a healthy environment. In order to come over the race of winning, it's not enough to hire only highly qualified employees. On the other hand, it is also important to check that the right person is assigned with the right skills so that they can grab the opportunities for the organization and also will be engaged in the work happily. The decision-makers need to increase the Happiness and engagement of employees which will improve their employee's performance. Due to the fact that engagement at work produces a happy state of being, it serves as a crucial construct in this research. A feeling of positivity like this has an effect on a person's quality of life, as well as their abilities and skills, which in turn has an effect on the organization. The level of interest shown by workers in their jobs has an impact, not only on their own performance but also on the performance of their organization.

## 7. IMPLEMENTATION AND LIMITATION

In this study happiness at work used as a predictor of employee performance and it played a significant role as a predictor suggested the importance of employee well-being in achieving better performance outcomes and supporting the notion that positive affect can positively influence cognitive, emotional, and motivational processes, thereby enhancing overall work performance. The study also identifies work engagement as a potential mediator between happiness at work and employee performance. This finding aligns with theories such as the job demands-resources model, which propose that positive psychological states like work engagement can mediate the relationship between job-related factors and outcomes.

The study contributes to the field of positive organizational psychology by emphasizing the role of happiness and work engagement in enhancing employee performance. It supports the idea that organizations should create positive work environments that foster happiness and engagement among employees to improve overall performance and productivity. The study also highlights the importance of employee well-being, specifically happiness, in relation to performance outcomes. It suggests that organizations should prioritize strategies and interventions aimed at promoting happiness at work to enhance employee performance. This aligns with the emerging trend of focusing on employee well-being as a means to achieve organizational goals.

The study provides practical implications for organizations seeking to improve employee performance. By understanding the impact of happiness at work and its mediation through work engagement, organizations can implement initiatives to foster positive emotions, job satisfaction, and engagement. This may involve creating supportive work environments, promoting work-life balance, recognizing and rewarding employees, and providing opportunities for growth and development. Here are a few ways that organizations can implement these strategies:

Create a positive and the supportive work environment: This can be achieved by fostering an open communication, promoting teamwork, and the recognizing and rewarding employees for their contributions.

Provide opportunities for personal and professional growth: This can include offering training and development programs, mentoring, and encouraging employees to take on new challenges and responsibilities.

Encourage open communication and feedback: This can be done through regular one-on-one meetings, employee surveys, and suggestion boxes

Provide fair compensation and benefits: This can include offering competitive salaries, health benefits, and other incentives that show employees that they are valued.

Give employees autonomy and control over their work: This can be done by allowing employees to set their own goals and targets, and giving them the freedom to make decisions about how to achieve them.

Promote Work life balance: This can be achieved by offering the flexible work arrangements, such as telecommuting and flexitime, and encouraging employees to take time off when needed.

Provide a sense of purpose and meaning in their work: This can be achieved by making sure that employees understand how their work contributes to the organization's overall mission and goals.

It's worth noting that it's essential to tailor the strategy to the specific organization and its culture, and regularly evaluate and adjust the strategy as needed.

There are a few limitations of this study related to sample size and time-bound. This study is limited to IT employees of two cities in the NCR region only. Further studies can be conducted on the other areas. Another limitation is that data collected through surveys may be influenced by social desirability, leading to inflated or inaccurate responses. To mitigate these limitations, future research could employ objective measures of performance and include diverse populations to enhance the external validity of the findings.

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