

## The impact of management by objectives (MBO) on employee satisfaction and performance appraisal: An analysis using structural equation modeling (SEM)



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### ABSTRACT

**Abstract:** This study explores the impact of the Management by Objectives (MBO) method as a performance appraisal tool on employee satisfaction. By employing Structural Equation Modeling (SEM), we examine the relationships between various components of the MBO approach and their influence on employee satisfaction and effectiveness. The results emphasize the crucial role that different MBO components play in enhancing employee performance and contentment. The study reveals both direct and indirect connections between MBO factors and employee satisfaction and effectiveness. The significance of this research lies in providing valuable insights for organizations aiming to improve performance management practices and foster a more satisfied and productive workforce. It contributes to the existing body of knowledge on performance appraisal and offers practical implications for HR practitioners and organizational leaders. However, the study has limitations, such as its focus on a specific organizational context. Future research could investigate additional factors affecting employee satisfaction and productivity across diverse industries and cultural settings. This study highlights the importance of the MBO method in driving employee satisfaction and productivity and serves as a foundation for future research and organizational development efforts in the dynamic field of performance management.

### 1. Introduction

To enable individuals to reach their full potential, it is imperative to establish high performance standards. Employees must comprehend the rationale behind their inclusion on the payroll, the expectations placed upon them, and the criteria that constitute excellent performance. Contemporary businesses operate in a competitive, unpredictable, and volatile environment; consequently, managers prioritize achieving an organizational advantage through staff development. In the current context, performance assessments are among the most effective tools for fostering growth, motivation, and evaluation of personnel. Organizations implement performance appraisal systems to measure the productivity and effectiveness of their employees, thereby enhancing employee counseling, job performance, communication of expectations, and assessment of employee potential (Aggarwal and Thakur, 2013). Several definitions of performance evaluation have been proposed. "Performance appraisal," a component of the broader performance management process, is defined as "the evaluation of an individual's work performance in order to achieve objective personnel decisions" (Robbins et al., 2000). It is also characterized as the formal assessment and grading of employees by their managers (Armstrong, 2012). Shaout and Yousif (2014) assert that the primary purpose of performance appraisal is to ascertain the current skill level of employees. Researchers examining performance evaluation methodologies have described the Management by Objectives (MBO) approach as a modern or forward-looking strategy. Numerous studies on successful performance appraisal systems have identified the MBO technique as the most effective. Integrating Environmental, Social, and Governance (ESG) principles with the Management by Objectives (MBO) method can enhance organizational sustainability and responsibility. By setting clear, measurable objectives aligned with ESG criteria, companies can systematically track and improve their environmental impact, social contributions, and governance practices. This alignment ensures that corporate goals not only drive performance but also contribute positively to broader societal and environmental outcomes, fostering a more sustainable and ethical business model (Jafari et al., 2009; Shaout and Yousif, 2014; Cetin et al., 2023; Das et al., 2023; Dogru et al., 2019; Işık et al., 2015, 2017, 2018, 2020, 2021, 2022, 2024a; 2024b; 2024c; 2024d; 2024e; 2024f, 2024g, 2024h; Islam et al. 2024a; 2024b; 2021; 2022; 2023; 2020; Hasan et al., 2019; Rahman, 2019; Gazi et al., 2024; Han et al., 2024; Yan et al., 2024a, 2024b).

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According to research by [Jafari et al. \(2009\)](#) and [Shaout and Yousif \(2014\)](#), MBO is the most effective method for ensuring that employees accomplish their tasks efficiently. This study will specifically investigate the MBO approach as a means of employee performance evaluation, based on literature emphasizing the significance of the MBO method in employee development. [Rahman et al. \(2020\)](#) also found that Management by Objectives is a highly effective strategy. The study identified a significant positive correlation between performance appraisal and employee satisfaction, suggesting that employees subjected to evaluations based on MBO principles tend to experience higher satisfaction levels. Additionally, the study revealed that increased employee satisfaction is associated with enhanced labor productivity. These findings indicate that the MBO approach can be an effective strategy for boosting employee happiness and overall organizational success.

## 1.1 Objectives of the Study

The primary aim of this research is to examine the relationship between Management by Objectives (MBO) and its effects on employee performance and satisfaction. Additionally, the study seeks to understand how employee satisfaction influences broader organizational outcomes. By investigating these connections, the researchers hope to gain a thorough understanding of how MBO practices impact employee productivity and contentment, and how employee satisfaction, in turn, affects various facets of organizational success. Through detailed data analysis and empirical evidence, this research intends to provide valuable insights into the intricate dynamics among MBO, employee performance, satisfaction, and overall organizational effectiveness.

## 2. Review of Literature

### 2.1 Management by Objectives

Management by Objectives (MBO) is a performance management approach that seeks to align employee goals with organizational objectives. Introduced by [Peter Drucker](#) in 1954, MBO is based on setting shared goals and providing feedback on their achievement. This approach aims to motivate and empower employees by establishing challenging yet achievable targets, fostering commitment, and encouraging innovative contributions to organizational development. [Koontz and O'Donnell \(1976\)](#) describe MBO as a technique where managers at different levels agree on broad organizational goals, break them down into specific short-term targets, assign individual responsibilities based on desired outcomes, and continuously review progress for assessment and reward purposes.

Research indicates a positive correlation between goal setting and task satisfaction, with studies by [Locke et al. \(1981\)](#) and [Steers and Porter \(1974\)](#) showing that implementing goal-setting techniques can enhance employee performance and satisfaction. Despite its competitive advantages, MBO also presents challenges in practical application. According to [Stewart \(1993\)](#), MBO promotes the achievement of enterprise objectives through participatory means but requires adherence to pre-established standards, which can be a potential drawback.

Overall, MBO offers both benefits and limitations as a performance appraisal method in organizational practice, impacting employee motivation, performance, and satisfaction, while also posing certain implementation challenges.

### 2.2 Performance Appraisal

Performance appraisal is a formal and systematic process where managers and directors assess employees' performance to evaluate their capabilities, support talent development, and contribute to the company's growth ([Walker, Damanpour, and Devece, 2011](#)). According to [Alo \(1999\)](#), performance appraisal involves a deliberate evaluation of an individual or organization's success in completing tasks or meeting goals over a specific period. This process should be purposeful and intentional, highlighting the need for comprehensive monitoring of an individual's task performance. [Bagul \(2014\)](#) notes that performance appraisals are prevalent across societies and can be both formal and informal. Historically, appraisals focused on rating personal traits, but contemporary methods emphasize assessing work results and achievements, leading to more objective and meaningful evaluations. This shift enhances the appraisal process by prioritizing actual performance outcomes over subjective personality assessments.

### 2.3 Employee Satisfaction

According to [Hoffmann-Burdzińska and Flak \(2016\)](#), the Management by Objectives (MBO) method enhances employee motivation through practices such as setting shared goals, granting autonomy, promoting self-regulation, and conducting team evaluations. This approach has been shown to increase staff motivation and commitment to achieving organizational goals ([Bieniok, 2004](#)). Furthermore, [Mulolli, Islami, and Skenderi \(2015\)](#) highlight that employees are more motivated and likely to improve their performance when they receive incentives like bonuses, raises, or derive personal satisfaction from their work ([Dogru et al., 2023, 2024; Karagoz et al., 2021, 2023; Koscak et al, 2023](#)). Overall, organizations with motivated and engaged employees tend to achieve higher levels of performance and success.

### 2.4 Management by Objectives and Performance Appraisal

According to [Atiomo \(2000\)](#) and [Fajana \(1997\)](#), performance appraisal enables firms to assess employees' current performance levels and identify opportunities for growth, thereby optimizing human resources. [Rao \(1984\)](#) underscores that performance appraisal involves evaluating an organization's employees, including their strengths, weaknesses, skills, interests, and potential for development. This information

serves as a crucial database for individual growth and should be shared with subordinates. Over time, performance appraisal has become a cornerstone of organizational practices. Among the various methodologies employed, Management by Objectives (MBO) stands out as one of the most widely utilized approaches, alongside grading scales, checklists, and 360-degree appraisal.

Employee satisfaction refers to the extent to which individuals' needs, wants, and desires are fulfilled, as emphasized by Moser (1997). Surveys on employee satisfaction commonly include inquiries about compensation, workload, managerial perception, flexibility, teamwork, and available resources. A well-structured reward system can enhance individual productivity, foster trust in the organization, and offer economic and social incentives to employees (Miles, 2012). Successful performance boosts staff motivation and productivity, leading to satisfaction and a sense of achievement (Armstrong and Taylor, 2014). The human relations movement, pioneered by Mayo (1933) and advocated by Roethlisberger and Dickson (1939), highlighted the notion that increased job satisfaction leads to higher productivity. Individuals are motivated and content when they achieve their goals through improved performance (Armstrong and Taylor, 2014). Employee satisfaction plays a pivotal role in organizational effectiveness, and cultivating a culture that prioritizes employee satisfaction contributes to the success of efficient organizations (Bhatti and Qureshi, 2007). However, a study conducted by Mura et al. (2021) found that 20% of companies do not utilize any motivational tools to enhance knowledge among their employees.

## 2.5 Hypothesis

- Hypothesis 1 (H1): There exists a notable correlation between Employee Satisfaction and its Consequences.
- Hypothesis 2 (H2): Management by Objectives demonstrates a significant correlation with the Consequences of Employee Satisfaction.
- Hypothesis 3 (H3): A substantial association exists between Management by Objectives (MBO) and Employee Satisfaction.
- Hypothesis 4 (H4): Management by Objectives (MBO) exhibits a significant relationship with Performance Appraisal.
- Hypothesis 5 (H5): Performance Appraisal shows a noteworthy association with the Consequences of Employee Satisfaction.
- Hypothesis 6 (H6): There is a significant relationship between Performance Appraisal and Employee Satisfaction.

## 3. Methods

### 3.1 Context of the Study

This study focuses on examining the relationship between Management by Objectives (MBO), Performance Appraisal (PA), and their impact on employee satisfaction. MBO involves setting clear and measurable goals for employees, aligning individual objectives with organizational goals. PA, on the other hand, evaluates employee performance against these objectives and provides feedback. The study aims to explore how these practices influence employee satisfaction and their consequences on employee. The study collected data from a diverse sample of bank employees, ranging from lower-level staff to top-level executives, across 33 banks of Bangladesh. In addition to on-site data collection, a structured web survey was distributed through social media platforms like email to gather information from a wider range of participants. The survey was designed to ensure no personal data was collected, thereby rendering ethical and data protection approvals unnecessary.

The demographic characteristics of the respondents are presented in Table 1. The study collected data from a sample of 60 bank employees in Bangladesh, representing various factors. The majority of respondents were male (90%), while females constituted a smaller percentage (10%). In terms of education level, most participants held a master's degree (80%), with smaller proportions having a bachelor's degree (10%), and some holding higher degrees or completing their HSC (5% each). Regarding gross salary, a significant portion of participants earned between 40,000 to 70,000 Tk. (40%), followed by those earning below 40,000 Tk. (20%), and an equal percentage earning above 70,000 Tk. (40%). In terms of age distribution, the largest group fell within the 30-45 age range (60%), followed by those below 30 (25%) and above 45 (15%). Regarding banking experience, 40% had 10-20 years of experience, while 35% had less than 10 years, and 25% had over 20 years. In the current job level, non-managerial employees constituted 40%, followed by mid-level (30%), lower level (25%), and top-level (5%) employees. The study's diverse sample provides valuable insights into the factors influencing employee satisfaction and performance in the banking sector in Bangladesh (See Table 1).

### 3.2 Operationalization of Latent Variables

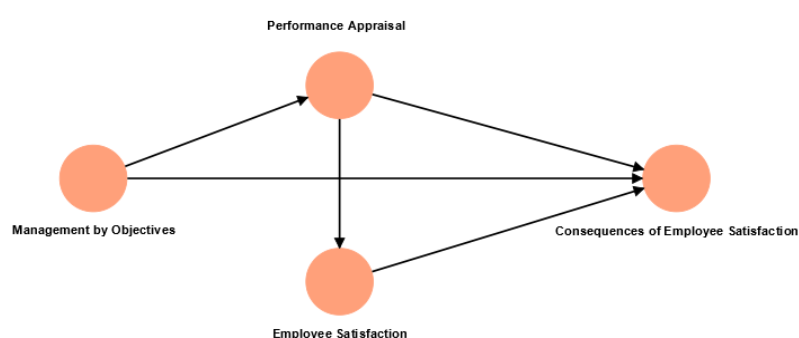


Figure 1. Conceptual Model

Figure 1 presents the conceptual model, which consists of four latent variables, each with multiple facets that cannot be adequately measured through a single observed variable. Consequently, to assess each latent variable in the conceptual model, multiple observed items were employed. The reliability of these measurement items can be found in Table 2.

Table 1: Demographic Profile

Particulars	Factors	No of Respondent (n=60)	Percentage
Gender	Male	54	90.0%
	Female	6	10.0%
Education Level	HSC	3	5.0%
	Bachelor	6	10.0%
	Masters	48	80.0%
	Above Masters	3	5.0%
Gross Salary (In Tk.)	Below 40000	12	20.0%
	40000-70000	24	40.0%
	Above 70000	24	40.0%
Age	Below-30	15	25.0%
	30-45	36	60.0%
	Above 45	9	15.0%
Banking Experience	Below 10	21	35.0%
	10-20	24	40.0%
	Above 20	15	25.0%
Current Job Level	Non managerial	24	40.0%
	Lower-level	15	25.0%
	Mid-level	18	30.0%
	Top-level	3	5.0%

Table 2. Measurement Items and Their Reliability

Construct	Item Code	Item Loading	Composite Reliability (CR)	Average Variance Extracted	Cronbach's Alpha
Management By Objectives (MBO)	MBO1	0.704	0.930	0.545	0.876
	MBO2	0.830			
	MBO 3	0.840			
	MBO 4	0.781			
	MBO 5	0.828			
	MBO 6	0.736			
	MBO 7	0.524			
	MBO8	0.601			
Performance Appraisal (PA)	PA1	0.739	0.941	0.727	0.924
	PA 2	0.898			
	PA 3	0.861			
	PA 4	0.874			
	PA 5	0.892			
	PA 6	0.842			
Employee Satisfaction	ES1	0.806	0.884	0.656	0.825
	ES2	0.805			
	ES3	0.786			
	ES4	0.842			
Consequence of Employee Satisfaction (CES)	CES1	0.911	0.930	0.816	0.888
	CES2	0.899			
	CES3	0.901			

### 3.3 Measurement Model

The first stage of structural equation modeling (SEM) focuses on creating a reliable and valid measurement model, connecting measurement items to their underlying latent variables. This part will present an overview of the theoretical framework and statistical methods essential to verify the measurement model's validity and consistency. For data analysis, the SmartPLS package in STATA will be utilized.

Model-fit:  $r^2$  of CES, ES, PA = (0.728, 0.358, 0.347) and adjusted  $r^2$  of CES, ES, PA = (0.719, 0.351, 0.340), NFI = 0.597, SRMR = 0.148;  $d_{ULS}$  = 5,062,  $d_G$  = 1.936, Chi-square = 828.634. Alpha represents the value of Cronbach's Alpha, and CR represents Composite Reliability.

### 3.4 Normality Check

Table 3. Skewness/Kurtosis Tests for Normality

Variable	Skewness	Kurtosis	adj_chi <sup>2</sup> (2)	Prob>chi <sup>2</sup>
MBO	0.102	0.824	2.860	0.239
PA	0.704	0.057	3.960	0.138
ES	0.029	0.937	4.770	0.092
CES	0.001	0.273	10.190	0.006

The Skewness/Kurtosis tests for normality were conducted on four variables: MBO, PA, ES, and CES, each with 60 observations. For the MBO variable, both the skewness (p-value = 0.102) and kurtosis (p-value = 0.824) tests showed no significant deviation from normality. Similarly, for the PA variable, there was no significant deviation in skewness (p-value = 0.704) but a marginally significant deviation in kurtosis (p-value = 0.057). The ES variable exhibited a significant deviation in skewness (p-value = 0.029) but not in kurtosis (p-value = 0.937). However, the CES variable showed significant deviations in both skewness (p-value = 0.001) and kurtosis (p-value = 0.273). The joint chi-square test (adj\_chi<sup>2</sup>) also supported these findings, with probabilities greater than 0.05 for MBO, PA, and ES, but less than 0.05 for CES, indicating that only CES significantly departs from a normal distribution based on both skewness and kurtosis.

### 3.5 Reliability and Validity

In this study, data was collected using a self-administered questionnaire with a 5-point Likert scale. Exploratory factor analysis revealed a 4-factor structure for the 21 items, and the standardized factor loadings were all significant, indicating that the items accurately represented their intended constructs. The measurement model demonstrated high reliability, as evidenced by Cronbach's alpha and composite reliability values exceeding the recommended threshold of 0.70 for each factor. These results suggest that the questionnaire is a valid and reliable tool for measuring the intended constructs. To assess divergent or discriminant validity, a matrix of squared correlations between all latent variables was created and compared to the average variance extracted (AVE), as shown in Table 4. This step helps verify that constructs expected to be unrelated indeed exhibit low correlations, supporting the questionnaire's ability to differentiate between distinct constructs.

Table 4. Divergent or Discriminant Validity (DV)

	CES	ES	MBO	PA
CES				
ES	0.923			
MBO	0.721	0.738		
PA	0.364	0.683	0.651	

Table 4 presents the results of assessing divergent or discriminant validity (DV) among the latent variables. Divergent or discriminant validity is assessed through correlations between constructs, where higher correlations suggest less distinctiveness between constructs. In this analysis, correlations were examined among Consequences of Employee Satisfaction (CES), Employee Satisfaction (ES), and Management by Objectives (MBO), and Performance Appraisal (PA). A notably high correlation of 0.923 was found between CES and ES, indicating a strong association between customer and employee satisfaction. Moderate correlations were observed between CES and MBO (0.721) as well as between ES and MBO (0.738), suggesting links between customer and employee satisfaction with management by objectives. Furthermore, ES showed a high correlation with PA (0.683), indicating a strong relationship between employee satisfaction and performance appraisal. While correlations between CES and PA (0.364) and between MBO and PA (0.651) were relatively weaker, they still indicate some level of association. These findings provide insights into the distinctiveness of the constructs, emphasizing the importance of considering their unique contributions in organizational contexts.

Table 5 presents the descriptive statistics and correlation coefficients for four variables: "MBO" (Management by Objectives), "PA" (Performance Appraisal), "ES" (Employee Satisfaction), and "CES" (Consequences of Employee Satisfaction). Descriptive statistics and correlation analysis were conducted to examine the relationships between Management by Objectives (MBO), Performance Appraisal (PA),

Employee Satisfaction (ES), and Consequences of Employee Satisfaction (CES). The mean and standard deviation for each variable were calculated. The mean score for MBO was 3.3229 with a standard deviation of 1.01819, while for PA, the mean was 2.9472 with a standard deviation of 1.18309. For ES, the mean was 3.3792 with a standard deviation of 1.10994, and for CES, the mean was 3.6889 with a standard deviation of 1.13308.

Table 5. Descriptive Statistics and Correlation test

	Mean	Std. Deviation	MBO	PA	ES	CES
MBO	3.3229	1.01819	1			
PA	2.9472	1.18309	.595**	1		
ES	3.3792	1.10994	.612**	.612**	1	
CES	3.6889	1.13308	.616**	.332**	.776**	1

\*\*Correlation is significant at the 0.01 level.

Correlation analysis revealed significant positive correlations between all variables. Specifically, MBO showed a moderate positive correlation with PA ( $r = 0.595$ ) and ES ( $r = 0.612$ ), indicating that higher levels of management by objectives are associated with higher levels of performance appraisal and employee satisfaction. Additionally, PA exhibited a moderate positive correlation with ES ( $r = 0.612$ ), suggesting that higher performance appraisal scores are related to higher levels of employee satisfaction. The strongest correlation was found between ES and CES ( $r = 0.776$ ), indicating a strong positive relationship between employee satisfaction and customer satisfaction.

Overall, these findings underscore the interconnectedness of MBO, PA, ES, and CES within the organizational context, highlighting the importance of considering their mutual influences on each other's outcomes.

#### 4. Results

Structural Equation Modeling (SEM) stands as a potent statistical technique employed by researchers to dissect intricate theoretical frameworks and scrutinize relationships among latent variables. Traditionally linked with normally distributed data, SEM exhibits adeptness in handling non-normal data, particularly in extensive sample sizes (Hu and Bentler, 1999). In this investigation, a measurement model was constructed to assure the reliability and validity of the measurement instrument utilized. Following this, the structural model will be utilized to explore the interconnections among latent variables, employing factor analysis and path analysis, alongside bootstrapping of 5000 samples. Despite potential deviations from normality in the data, SEM retains flexibility and adaptability to diverse data types and distributions (Kline, 2015), rendering it a fitting and robust method for probing complex relationships and model congruence in this inquiry.

To assess the model fit, various indices were employed in this study. Squared multiple correlation coefficients ( $r^2$ ) were computed for each latent variable: CES, ES, and PA, yielding values of (0.728, 0.358, 0.347), respectively. Adjusted squared multiple correlation coefficients (adjusted  $r^2$ ) were also derived, resulting in values of (0.719, 0.351, 0.340), respectively. These coefficients reflect the proportion of variance in the latent variables explicated by their corresponding indicators, indicating a reasonably favorable fit of the model. Additionally, other fit indices were taken into account: the Normed Fit Index (NFI) registered a value of 0.597, suggesting a moderate fit, while the Standardized Root Mean Square Residual (SRMR) returned a value of 0.148, indicating a relatively minimal discrepancy between observed and model-implied covariance matrices. Furthermore, other model fit statistics were scrutinized, including the discrepancy function ( $d_{ULS} = 5,062$ ) and the geometric discrepancy function ( $d_G = 1.936$ ). The chi-square value was also obtained as 828.634. Collectively, these fit indices, in conjunction with Cronbach's Alpha and Composite Reliability values, advocate that the proposed model manifests a reasonable fit, affirming the reliability and validity of the measurement model utilized in this investigation.

The present study employed a Structural Equation Modeling (SEM) model, depicted in Figure 2, to investigate the relationships among various variables. Table 6 summarizes the results of hypothesis testing in the context of these relationships. The study aimed to explore the associations between different factors related to employee satisfaction.

Overall, the results suggest that most of the examined factors (H1, H2, H3, H4, and H6) play critical roles in shaping employee satisfaction. However, the relationship between "Performance Appraisal" and "Consequences of Employee Satisfaction" (H5) was not supported in this study. These findings provide valuable insights into the factors influencing employee satisfaction, which can be helpful for organizations in enhancing employee well-being and performance.

- H1: Employee Satisfaction and Consequences of Employee Satisfaction: This finding suggests that higher levels of employee satisfaction lead to positive consequences for the organization. When employees are satisfied with their work environment, they are more likely to be motivated, engaged, and committed to their tasks. This, in turn, can result in increased productivity, improved performance, lower turnover rates, and higher levels of customer satisfaction. The positive consequences of employee satisfaction are well-documented in organizational research and underscore the importance of prioritizing employee well-being to achieve overall organizational success.

- H2: Management by Objectives and Consequences of Employee Satisfaction: This result indicates that organizations that effectively implement Management by Objectives (MBO) practices are likely to experience positive outcomes related to employee satisfaction. MBO involves setting clear goals, providing feedback, and aligning individual objectives with organizational goals. When MBO is effectively implemented, employees have a clear understanding of their roles and responsibilities, feel empowered to achieve their objectives, and are

more likely to experience job satisfaction. Additionally, MBO can foster a sense of ownership and accountability among employees, leading to improved performance and organizational outcomes.

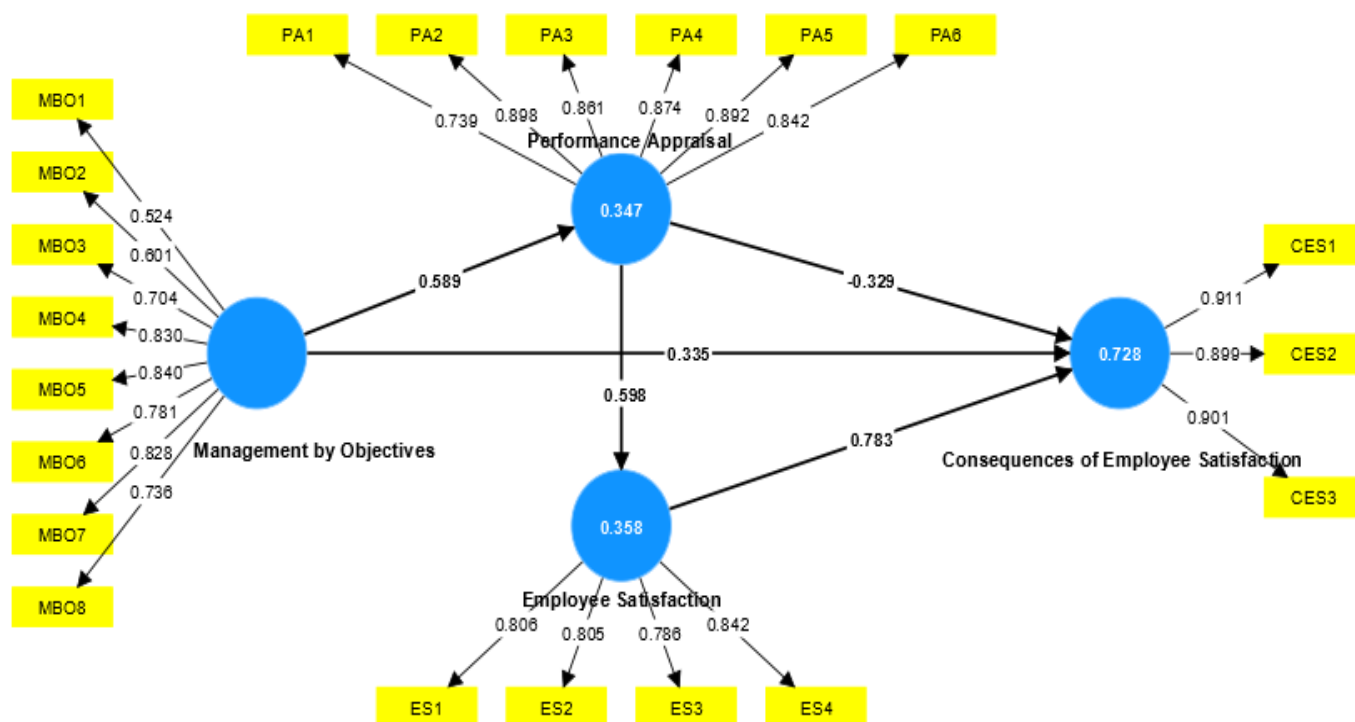


Figure 2. The Estimated Structural Equation Model

- **H3: Management by Objectives and Employee Satisfaction:** This finding suggests that there is a significant positive relationship between Management by Objectives (MBO) and Employee Satisfaction. When organizations implement MBO practices effectively, employees are more likely to feel engaged, motivated, and satisfied with their work. MBO provides employees with clear expectations, feedback, and opportunities for growth, which are important factors in enhancing job satisfaction. Employees who are satisfied with their work are more likely to be committed to the organization, perform at higher levels, and contribute positively to organizational success.
- **H4: Management by Objectives and Performance Appraisal:** This result indicates that organizations that utilize Management by Objectives (MBO) practices are likely to have effective performance appraisal systems in place. MBO emphasizes setting specific, measurable, achievable, relevant, and time-bound (SMART) objectives, which provide a clear framework for evaluating employee performance. Performance appraisal is an essential component of MBO, as it allows organizations to assess employee progress, provide feedback, and identify areas for improvement. When MBO is effectively implemented, performance appraisal becomes a valuable tool for recognizing and rewarding employee achievements, facilitating professional development, and enhancing overall organizational performance.
- **H5: Performance Appraisal -> Consequences of Employee Satisfaction:** The lack of support for this hypothesis suggests that there may not be a direct impact of performance appraisal on the broader consequences of employee satisfaction, such as organizational performance or customer satisfaction. While performance appraisal is an essential aspect of managing employee performance and development, its direct influence on organizational outcomes beyond employee satisfaction may be limited. Other factors, such as organizational culture, leadership, and external market conditions, may play a more significant role in shaping the broader consequences of employee satisfaction.
- **H6: Performance Appraisal -> Employee Satisfaction:** The support for this hypothesis indicates that performance appraisal has a significant impact on employee satisfaction. When performance appraisal processes are fair, transparent, and provide meaningful feedback to employees, they can enhance employees' sense of recognition, achievement, and engagement, leading to higher levels of job satisfaction. Performance appraisal serves as a mechanism for recognizing and rewarding employee contributions, clarifying expectations, and identifying areas for improvement, all of which contribute to overall employee satisfaction.

Overall, these results highlight the importance of implementing effective management practices, such as MBO, to promote employee satisfaction and achieve positive organizational outcomes. Effective management practices not only contribute to employee well-being but also play a crucial role in driving organizational success and competitiveness in today's dynamic business environment (Ongan et al., 2022; Long et al 2024).

## 5. Discussion

The purpose of this study was to examine the influence of the Management by Objectives (MBO) method as a performance appraisal tool on

Table 6. Hypothesis Testing

Hypothesis		P values	Remarks
H1	Employee Satisfaction -> Consequences of Employee Satisfaction	0	Supported
H2	Management by Objectives -> Consequences of Employee Satisfaction	0	Supported
H3	Management by Objectives -> Employee Satisfaction	0.003	Supported
H4	Management by Objectives -> Performance Appraisal	0	Supported
H5	Performance Appraisal -> Consequences of Employee Satisfaction	0.215	Not Supported
H6	Performance Appraisal -> Employee Satisfaction	0	Supported

employee satisfaction. The research aimed to analyze various factors within the MBO method and assess their impact on increasing employee productivity and satisfaction, ultimately determining whether these components enhance employees' effectiveness. By utilizing one dependent variable and three latent variables representing both direct and indirect relationships, six hypotheses (H1, H2, H3, H4, H5, and H6) were tested to explore the relationships between MBO factors, employee satisfaction, and productivity. The findings from the hypothesis testing provide valuable insights into these relationships.

#### Hypothesis H1: Employee Satisfaction and Its Consequences

Hypothesis H1 reveals a significant association between "Employee Satisfaction" and the "Consequences of Employee Satisfaction," supporting the hypothesis that there is a substantial link between employee satisfaction and the outcomes that stem from it. This underscores the importance of employee satisfaction in driving positive organizational outcomes, such as increased productivity and engagement. The findings align with previous studies indicating that satisfied employees are more likely to exhibit higher performance levels, commitment, and overall job satisfaction, leading to beneficial outcomes for the organization (Locke et al., 1981; Steers and Porter, 1974).

#### Hypothesis H2: MBO and the Consequences of Employee Satisfaction

Hypothesis H2 demonstrates a significant relationship between "Management by Objectives" and the "Consequences of Employee Satisfaction," indicating that the implementation of MBO is closely connected to the consequences arising from employee satisfaction. This finding suggests that effectively using MBO can lead to improved outcomes reflective of employee satisfaction, highlighting the importance of clear and aligned objectives in fostering a positive work environment. It emphasizes that MBO, when implemented correctly, can serve as a powerful tool to enhance employee morale and performance (Koontz and O'Donnell, 1976; Stewart, 1993).

#### Hypothesis H3: MBO and Employee Satisfaction

Hypothesis H3 indicates a significant association between "Management by Objectives" and "Employee Satisfaction," suggesting that the utilization of MBO significantly impacts the level of employee satisfaction within the organization. Employees who have clear, aligned objectives are likely to experience higher levels of satisfaction, which can enhance their overall performance and engagement. This supports the idea that well-defined goals and regular feedback, core components of MBO, are crucial for maintaining a motivated and satisfied workforce (Hoffmann-Burdzińska and Flak, 2016; Bieniok, 2004).

#### Hypothesis H4: MBO and Performance Appraisal

Hypothesis H4 shows that "Management by Objectives" is significantly related to "Performance Appraisal," indicating that the use of MBO has a notable impact on the performance appraisal process. Implementing MBO helps create a more structured and objective performance appraisal system, which can lead to fairer and more accurate evaluations of employee performance, ultimately contributing to increased employee satisfaction. This is consistent with the idea that MBO provides a clear framework for assessing employee performance against predefined objectives (Atiyomo, 2000; Fajana, 1997).

#### Hypothesis H5: Performance Appraisal and the Consequences of Employee Satisfaction

However, Hypothesis H5 indicates no significant association between "Performance Appraisal" and the "Consequences of Employee Satisfaction," suggesting that the consequences resulting from employee satisfaction are not significantly influenced by the performance appraisal process alone. This implies that other factors, such as management practices and organizational culture, may play a more critical role in determining these outcomes. It highlights the complexity of factors influencing employee satisfaction and the need for a holistic approach in performance management (Miles, 2012; Armstrong and Taylor, 2014).

#### Hypothesis H6: Performance Appraisal and Employee Satisfaction

Lastly, Hypothesis H6 reveals a significant relationship between "Performance Appraisal" and "Employee Satisfaction," indicating that the performance appraisal process substantially impacts the level of employee satisfaction. Effective performance appraisals provide employees with constructive feedback, recognition, and opportunities for growth, which are crucial for maintaining high levels of satisfaction. This finding underscores the importance of a well-structured appraisal system in fostering a motivated and engaged workforce (Rao, 1984; Armstrong and Taylor, 2014).

## 6. Conclusion

In conclusion, this study aimed to explore the impact of the Management by Objectives (MBO) method as a performance appraisal tool on



employees' satisfaction and productivity. Through comprehensive analysis and the use of Structural Equation Modeling (SEM), we investigated the relationships between various MBO factors and their influence on employee effectiveness. The results of the study supported the hypotheses proposed, revealing that the MBO method significantly contributes to increasing employees' satisfaction and productivity. Our findings demonstrated that the different components within the MBO approach play essential roles in enhancing employee performance and contentment.

By utilizing factor analysis and SEM, we uncovered both direct and indirect relationships between the MBO factors and employee satisfaction and productivity. This not only adds to the existing body of knowledge on performance appraisal but also provides practical insights for organizations looking to improve their performance management practices and foster a more satisfied and productive workforce. The significance of this research lies in its contribution to the understanding of how the MBO method can be leveraged as an effective tool for enhancing employee performance and overall organizational success. As businesses continue to prioritize employee satisfaction and productivity, the findings of this study can serve as a valuable guide for implementing and optimizing the MBO approach within the workplace. However, it is essential to acknowledge some limitations of the study. The research focused solely on the MBO method's impact on employee satisfaction and productivity, and further investigations could explore other potential factors that may influence these outcomes. Additionally, the study was conducted in a specific organizational context, and results may vary across different industries and cultures.

In conclusion, this research underscores the importance of the MBO method in driving employee satisfaction and productivity. It offers valuable implications for HR practitioners and organizational leaders seeking to create a more effective and content workforce through well-structured performance appraisal practices. As the landscape of performance management continues to evolve, the findings of this study can serve as a foundation for future research and organizational development efforts.

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