

# An explorative study on intrinsic factors influencing decision-making and turnover intention with gender as moderating factor among call center employees in Malaysia

Ganesh Ramasamy<sup>1\*</sup>, Sri Sharmila Banu Dorai Raj<sup>2</sup>, <sup>D</sup>Abdul Rahman Bin S Senathirajah<sup>3</sup>, <sup>D</sup>Puvaneswary Ramasamy<sup>4</sup>, Kumarashvari Subramaniam<sup>5</sup>

<sup>1</sup>Faculty of Business and Communications, INTI International University, Nilai, Malaysia.
 <sup>2</sup>Zebra Technologies, United States.
 <sup>3</sup>INTI International University, Malaysia.
 <sup>4</sup>Tree Top International School, Kuala Lumpur, 52000, Malaysia.
 <sup>5</sup>Truong Dai Hoc Anh Quoc Viet NAM (BUV), Ecopark Campus, Hanoi, British University Vietnam.

Corresponding author: Ganesh Ramasamy (Email: ganesh.ramasamy@newinti.edu.my)

# Abstract

This study investigates intrinsic factors affecting employee turnover intention in Malaysian call centers, focusing on managerial empowerment, career growth, organizational commitment, and rewards management, with gender as a moderating factor. Drawing on Daniel Pink's motivation theory, which emphasizes autonomy, mastery, and purpose, the study explores how these intrinsic motivators impact employees' decisions. A quantitative, cross-sectional approach was employed, gathering data via a web-based questionnaire distributed to 320 executive and management-level respondents using convenience sampling. Smart PLS 4 was used to analyze the relationships between variables, yielding key findings. Managerial Behavioral Empowerment (H1) significantly reduced turnover intention ( $\beta = -0.426$ , t = 4.151, p = 0.047), indicating that empowered employees are less inclined to leave, aligning with the importance of autonomy and purpose in retention. Contrary to expectations, Career Growth Opportunities (H2) did not significantly influence turnover intention (β = 0.079, t = 0.673, p = 0.001), raising questions about career development's perceived value in call centers. Organizational Commitment (H3) negatively impacted turnover intention ( $\beta = -0.382$ , t = 2.222, p = 0.025), emphasizing that committed employees are less likely to leave, consistent with Pink's purpose-driven motivation. Rewards Management (H4) also had a significant negative effect ( $\beta = -0.382$ , t = 2.311, p = 0.046), highlighting the importance of fair compensation in reducing turnover. Gender (H5) moderated these relationships ( $\beta = -0.094$ , t = 2.587, p = 0.042), indicating gender differences in responses to organizational policies. Findings highlight the roles of managerial empowerment, organizational commitment, and rewards management in reducing turnover, suggesting that organizations should prioritize these areas while also considering gender-specific retention strategies. Additionally, the non-significant impact of career growth suggests a need to better align development opportunities with employee expectations. These insights contribute to turnover theory and offer practical guidance for designing targeted, intrinsic-motivator-based retention interventions.

Keywords: Career Growth Opportunity, Decision Making, Female Empowerment, Managerial Behavioral Empowerment, Organizational Commitment, Rewards Management.

## DOI: 10.53894/ijirss.v8i2.5317

Funding: This study received no specific financial support.

History: Received: 23 January 2025 / Revised: 25 February 2025 / Accepted: 4 March 2025 / Published: 12 March 2025

**Copyright:**  $\bigcirc$  2025 by the authors. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<u>https://creativecommons.org/licenses/by/4.0/</u>).

Competing Interests: The authors declare that they have no competing interests.

Authors' Contributions: All authors contributed equally to the conception and design of the study. All authors have read and agreed to the published version of the manuscript.

**Transparency:** The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

**Publisher:** Innovative Research Publishing

# **1. Introduction**

Call centers have become integral to Malaysia's economic growth, positioning the country as a global leader in business process outsourcing [1, 2]. Offering cost-effective solutions, call centers contribute significantly to organizational success by enhancing service quality in terms of reliability, responsiveness, assurance, tangibility, and empathy [3]. However, while the demand for call center services remains high, the working environment is often characterized by high levels of stress, monotony, and limited career growth opportunities, leading to a high turnover intention among employees [4, 5].

Employee turnover has emerged as one of the most pressing challenges for call centers, with the retention of skilled workers being crucial for maintaining service quality and operational efficiency [6, 7]. High turnover rates not only result in substantial recruitment and training costs but also lead to the loss of critical skills, knowledge, and experience, thereby disrupting operations and affecting employee morale [8]. These repercussions underline the importance of addressing turnover intention and developing strategies to retain competent employees. According to Posey [9], reducing turnover intention is vital to securing talent, enhancing productivity, and ensuring organizational sustainability. This is particularly relevant for call centers, where human resources are central to maintaining a competitive edge. Employee turnover has farreaching effects on organizational morale and overall productivity, particularly in Malaysia, where studies have underscored the negative impact of turnover on workplace efficiency [10, 11].

To mitigate turnover, one of the key approaches is empowering employees to improve morale, productivity, and innovation, which enhances retention [12]. Autonomy in the workplace—where employees are given the freedom to control their job tasks—has proven to be an effective way of motivating employees, leading to increased loyalty and engagement Pârjoleanu [13]. Pink and Pink [14] theory on motivation identifies autonomy, mastery, and purpose as central components in driving employee satisfaction, commitment, and reduced turnover intentions.

Although Pink and Pink [14] theory is well-established, research on its application in Southeast Asia, particularly in Malaysia's call center industry, remains sparse. This study aims to fill that gap by exploring the relevance of Pink's motivational components in reducing employee turnover within the Malaysian call center sector context. Understanding how autonomy, mastery, and purpose influence employees' decision-making regarding their career trajectories can help organizations design effective retention strategies. Several factors have been found to influence turnover intention in call centers. Career growth opportunities have been shown to be a critical determinant, with employees perceiving a lack of advancement possibilities being more likely to leave the organization [4, 15, 16]. Furthermore, rewards management—both financial and non-financial—also plays a significant role in employee retention [17, 18]. Providing competitive compensation packages and career flexibility helps keep employees engaged, loyal, and motivated to contribute to the organization's growth [19, 20]. In addition, managerial behavioral empowerment has emerged as another important factor influencing turnover intention. Managers who empower their teams by offering support, autonomy, and opportunities for skill development can significantly reduce employees' intentions to leave [21]. This approach aligns with the broader goal of creating a work environment that fosters personal growth, innovation, and high morale, thereby enhancing organizational retention rates. Another aspect that cannot be overlooked in the Malaysian context is the role of gender in shaping turnover intention. Malaysia's multi-cultural society presents unique challenges and opportunities when examining how gender dynamics influence employee retention [22]. Gender may moderate the relationship between intrinsic factors—such as career growth, managerial support, and rewards management-and turnover intention. As such, gender differences should be explored in greater depth to understand how organizations can design more inclusive and equitable retention strategies.

## 2. Literature review

Employee turnover intention is defined as the subjective evaluation of an employee's likelihood of leaving the organization soon [23, 24]. This phenomenon has garnered significant attention in organizational studies because of its direct connection to increased costs, reduced productivity, and the loss of valuable talent [17, 18, 25]. Identifying the antecedents of turnover intention, rather than merely focusing on actual turnover, is critical for organizations to proactively manage human resources and mitigate employee exits [5].

Managerial behavioral empowerment refers to the social and psychological climate managers create within the organization [26, 27]. Empowerment is seen as a vital factor in retaining employees, as it directly impacts morale and fosters a positive work environment [27]. Studies have demonstrated that employees often quit their managers rather than their organizations, suggesting the critical role of leadership and supervision in curbing turnover intentions [28]. A

supportive manager who fosters open communication, offers autonomy, and encourages professional growth can enhance organizational commitment, reducing turnover intentions [29].

Managerial empowerment strengthens employees' belief in their abilities, which boosts their morale and retention. The creation of a two-way communication channel between management and employees is essential for fostering a suitable working environment. Leaders should exhibit an attitude that inspires confidence, promotes skill development, and demonstrates genuine concern for employees' well-being [23, 30]. In contrast, poor leadership and excessive stress can negatively impact job satisfaction, reducing commitment and increasing the likelihood of turnover [23].

Career growth opportunities are another significant factor influencing turnover intention. These opportunities encompass professional development, promotions, and skill enhancement [31-33]. Research suggests that organizations offering structured career paths and opportunities for professional advancement tend to retain employees longer [34]. Employees who perceive career stagnation are more likely to leave, even if they are otherwise satisfied with their current role [15]. Organizations that fail to recognize and reward employee efforts may exacerbate turnover intention [35]. A multidimensional understanding of career growth—spanning goal achievement, professional development, and career flexibility—has emerged as critical in addressing turnover [12]. Employees who feel that their personal and professional aspirations are being nurtured within the organization are more likely to exhibit organizational loyalty and less likely to contemplate leaving [33].

Organizational commitment reflects employees' psychological attachment to their organization [36, 37]. This commitment often manifests as loyalty, driven by a belief in the organization's mission and goals [38]. High levels of organizational commitment are inversely related to turnover intentions [39, 40]. Employees who are deeply involved in their work and identify with the organization's values are less likely to consider alternative employment opportunities.

Corporate cultures that emphasize learning and support create an atmosphere of trust, belonging, and loyalty. Organizations that foster such cultures can reduce turnover intention by strengthening employee commitment [41]. The alignment between organizational goals and individual employee aspirations leads to a stronger psychological contract, reducing the likelihood of turnover [42]. Reward systems, both financial and non-financial, play a crucial role in shaping employees' decisions to stay with or leave an organization. Financial rewards include salary increases, bonuses, and profit-sharing, which motivate employees through tangible compensation [43, 44]. Studies have shown that financial incentives positively impact job satisfaction and commitment, encouraging employees to remain loyal [45].

On the other hand, non-financial rewards, such as recognition, career development opportunities, and work-life balance, contribute to intrinsic motivation [46]. Non-monetary rewards have been found to significantly boost employee performance and satisfaction significantly, enhancing organizational effectiveness [47]. Organizations that implement a balanced rewards management system are better equipped to maintain a motivated workforce and reduce turnover intention [48]. Ignoring the power of both financial and non-financial rewards can lead to employee dissatisfaction, which may drive turnover [49]. A successful rewards strategy must incorporate both external and internal incentives to address the full spectrum of employee needs and aspirations [50].

Gender has been identified as a significant variable influencing turnover intention, with women generally exhibiting higher turnover rates than men [51, 52]. Research indicates that social affiliation and self-esteem significantly impact women's job satisfaction, while men prioritize career advancement opportunities and organizational support [53]. In organizations that promote gender equity and offer equal opportunities for advancement, the gender gap in turnover intention can be mitigated. However, when organizations fail to provide adequate support for either gender, turnover rates may increase [53]. The interplay between gender, organizational commitment, and rewards management requires further exploration to identify strategies for reducing turnover intention in diverse workforces [51].

Pink and Pink [14] theory of motivation highlights three key elements—autonomy, mastery, and purpose—as critical drivers of employee satisfaction and retention [13]. According to Pink, these intrinsic motivators are more effective in fostering long-term commitment than traditional financial incentives. While compensation is still important, employees are more motivated when they feel a sense of ownership over their work (autonomy), have opportunities to improve their skills (mastery), and believe their work contributes to a larger goal (purpose). The application of Pink's theory is especially relevant in high-turnover industries such as call centers, where employees may struggle to find intrinsic motivation due to monotonous tasks and limited growth opportunities. Organizations can better engage employees and reduce turnover by focusing on creating a work environment that fosters autonomy, mastery, and purpose [45].

Based on the review of prior findings, the following hypotheses were proposed:

 $H_{1:}$  Managerial behavioral empowerment is significantly and negatively related to employee turnover intention in call centers in Malaysia, such that higher levels of managerial support and autonomy reduce employee turnover intentions.

 $H_{2:}$  Perceived career growth opportunities are significantly and negatively related to employee turnover intention in call centers in Malaysia, whereby employees who perceive clear pathways for advancement are less likely to exhibit turnover intentions.

 $H_{3:}$  Strong organizational commitment is significantly and negatively associated with employee turnover intention in call centers in Malaysia, such that employees with higher levels of loyalty and identification with the organization demonstrate reduced turnover intentions.

 $H_{4:}$  Effective rewards management, including both financial and non-financial incentives, is significantly and negatively related to employee turnover intention in call centers in Malaysia, with well-structured compensation packages leading to lower turnover intentions.

 $H_{5:}$  Gender differences are significantly related to employee turnover intention in call centers in Malaysia, with gender moderating how other factors (such as career growth opportunities and organizational commitment) influence turnover intentions.

## 3. Methodology and Findings

This study adopts a positivist approach, which emphasizes the use of existing theory to generate testable hypotheses that can be validated or refuted based on empirical evidence [54]. The research design follows the research onion model proposed by Saunders, et al. [54], a comprehensive framework that guides the methodological choices at different stages of the research process. The study adheres to each layer of the model, ensuring a structured and rigorous approach to the research. The positivist philosophy was chosen to ensure objectivity, where the researcher remains detached from the subject matter. The hypotheses derived from the theory were tested using quantitative data collected from respondents, adhering to a deductive approach. The research was designed as a cross-sectional study, where data was gathered at a single point in time from employees of call centers in Malaysia.

The population for this study consists of call center employees in Malaysia, categorized into various job roles, such as executives and senior executives. The study employs non-probability convenience sampling, which allows for easy access to respondents based on availability rather than random selection. While this method may introduce bias, it is commonly used when random sampling is impractical. To determine the appropriate sample size, the study utilized the formula of Islam, et al. [55] which takes into account a 95% confidence level and a 0.05% margin of error. The required sample size was 383 respondents, although the final analysis was conducted with 320 fully completed responses, which is statistically acceptable for the analysis.

The study collected data through a direct approach with a structured questionnaire distributed to call center employees across different categories. These respondents provided insights into the variables being studied, which were used to test the research hypotheses. All responses were anonymized, and ethical guidelines were adhered to in the collection and handling of data. The data were analyzed using Smart Partial Least Squares (PLS) version 4.0 Structural Equation Modeling (SEM), a powerful statistical tool for analyzing complex relationships between latent variables. This method was selected due to its flexibility in handling smaller sample sizes and its ability to estimate multiple relationships simultaneously. A bootstrapping procedure of 5,000 sub-samples was used to assess the statistical significance of the path coefficients [56]. This non-parametric resampling technique is particularly useful when the assumptions of normality are not met, providing robust estimates of standard errors and significance levels. With that, the analysis was conducted in two stages: One Measurement Model that assessed the reliability and validity of the constructs. The study ensured that the measurement models were reliable and valid by examining factor loadings, composite reliability (CR), and average variance extracted (AVE). The Structural Model followed, which evaluated the relationships between the latent variables, allowing for hypothesis testing. From that, the path coefficients were estimated to determine the strength of the relationships.

# 3.1. Reliability and Convergent Validity

Based on the findings in Table 1 the composite factor reliability coefficients for all constructs are above 0.90, indicating a high level of internal consistency and reliability. This surpasses the threshold recommended by Fornell and Larcker [57] and Henseler, et al. [58] confirming the robust measurement model. Furthermore, Cronbach's  $\alpha$  values for all constructs are above 0.86, exceeding the commonly accepted minimum of 0.70, further demonstrating the reliability of the scale.

Regarding convergent validity, all constructs' Average Variance Extracted (AVE) values are above 0.50. This satisfies the criteria for convergent validity, meaning that the items associated with each construct are well correlated and explain a significant portion of the variance in the latent construct. This ensures that the constructs measure what they are intended to measure at the construct level. With that, the reliability and convergent validity results confirm the adequacy of the measurement model, ensuring that the constructs are both internally consistent and valid for further analysis in this research.

#### Table 1.

The Average Variance Extracted (AVE).						
<b>Turnover Intention Dimensions</b>	AVE	<b>Composite Reliability</b>	Cronbach's Alpha			
Career Growth	0.763	0.941	0.931			
Gender	0.702	0.943	0.929			
Management Behavioral Empowerment	0.722	0.928	0.903			
Organizational Commitment	0.513	0.827	0.864			
Rewards Management	0.544	0.851	0.914			
Turnover Intentions	0.755	0.939	0.921			

### 3.2. Fornell-Larcker Criterion

The Fornell-Larcker criterion was applied to assess discriminant validity, as shown in Table 2. The results confirm that each construct's square root of the Average Variance Extracted (AVE) is greater than its correlations with all other constructs (represented by the values below the diagonal). This indicates that each construct shares more variance with its own indicators than with other constructs in the model. This finding meets the discriminant validity requirements, as per the

Fornell-Larcker criterion. The constructs in this study are conceptually distinct and measure different phenomena. Therefore, the study achieves discriminant validity, ensuring that the constructs are reliable but also unique and distinguishable. Accordingly, the measurement model meets the necessary criteria for discriminant validity, reinforcing the rigor and validity of the constructs in this study for further hypothesis testing and model evaluation.

Variables	CGO	GE	ME	OM	RM	TI
CGO	0.873					
GE	0.517	0.838				
ME	0.523	0.719	0.849			
OM	0.638	0.612	0.561	0.716		
RM	0.572	0.599	0.462	0.526	0.738	
TI	-0.105	-0.216	-0.218	-0.160	-0.160	0.869

14010 21
Discriminant validity through the Fornell-Larcker criterion.

# 3.3. Heterotrait-Monotrait (HTMT) Ratio of Correlations

The Heterotrait-Monotrait (HTMT) ratio of correlations was used to further assess discriminant validity in this study, following the guidelines of Henseler, et al. [58]. As shown in Table 3, all HTMT values are below the preferred threshold of 0.9, indicating that the constructs are sufficiently distinct from one another. This result confirms that the degree of correlation between constructs does not exceed the acceptable limit, thus meeting the discriminant validity criteria. The HTMT method strengthens the evidence that the constructs in this study do not overlap and represent separate theoretical concepts. The HTMT analysis provides further support for discriminant validity in the measurement model, ensuring that the constructs are distinct and valid for subsequent analysis. This adds robustness to the study's findings and the model's overall quality.

Variables	CGO	GE	MBE	OM	RM	TI
CGO						
GE	0.558					
MBE	0.572	0.783				
OM	0.817	0.740	0.677			
RM	0.597	0.764	0.540	0.782		
TI	0.105	0.206	0.221	0.114	0.108	

Table 3.

Table 2

# 3.4. Structural Model Path Coefficient

The structural model results (Table 4) provide significant insights into the factors influencing employee turnover intention. Managerial Behavioral Empowerment (H1): The significant negative  $\beta$  value (-0.426) and p-value (0.047) indicate that managerial behavioral empowerment reduces employee turnover intention. This suggests that employees are less likely to leave when managers empower them by providing autonomy and support. This finding aligns with previous studies emphasizing empowerment as a key factor in employee retention, reinforcing that managerial practice can significantly affect turnover.

Career Growth Opportunity (H2): Despite a positive  $\beta$  value (0.079), the p-value (0.001) and t-statistic (0.673) indicate no significant relationship between career growth opportunities and turnover intention. This finding contradicts existing literature, where career development is often cited as a critical factor in reducing turnover. It could suggest that other factors, such as organizational culture or personal motivations, may play a more vital role in this study's context than career advancement opportunities.

Organizational Commitment (H3): The negative  $\beta$  value (-0.382) with a p-value (0.025) demonstrates a significant reduction in turnover intention when organizational commitment is high. Employees who feel a strong commitment to their organization are less likely to leave. This result is consistent with prior research that links high organizational commitment with lower turnover rates, emphasizing the importance of fostering loyalty and a sense of belonging within the organization.

Rewards Management (H4): The  $\beta$  value (-0.382) and p-value (0.046) suggest that effective rewards management significantly decreases turnover intention. When rewarded fairly and adequately, employees tend to stay with the organization. This finding is in line with other studies that highlight the importance of compensation, benefits, and recognition as key motivators for employee retention. Effective rewards management can help organizations retain top talent.

Gender (H5): The significant negative  $\beta$  value (-0.094) with a p-value (0.042) suggests that gender has a small but significant impact on turnover intention. This could indicate that turnover intentions vary slightly between genders, potentially due to different experiences or priorities in the workplace. While many studies recognize that gender may influence job satisfaction and turnover, the magnitude and direction of this effect can vary depending on the industry, job roles, or cultural factors. This finding highlights the importance of considering demographic variables in turnover studies.

Hypo- thesis	Relationship	β value	<i>t</i> -Statistics (>1.96)	<i>p</i> -values (<0.05)	Decision
H1	Managerial Behavioral Empowerment → Employee Turnover Intention	-0.426	4.151	0.047	Supported
H2	Career Growth Opportunity → Employee Turnover Intention	0.079	0.673	0.001	Not Supported
H3	Organizational Commitment → Employee Turnover Intention	-0.382	2.222	0.025	Supported
H4	Rewards Management $\rightarrow$ Employee Turnover Intention	-0. 382	2.311	0.046	Supported
H5	Gender $\rightarrow$ Employee Turnover Intention	-0.094	2.587	0.042	Supported

 Table 4.

 Structural Model Path Coefficient

Note: \*\*p<0.01, \*p<0.05

# 4. Discussion

This study examines the factors influencing employee turnover intention, focusing on managerial behavioral empowerment, career growth opportunities, organizational commitment, rewards management, and gender. The findings are grounded in statistical analysis and provide important insights for organizational strategies to reduce turnover, particularly within call centers. Below is a discussion of the key findings:

The data supports the hypothesis regarding managerial behavioral empowerment, with a significant negative correlation between empowerment and turnover intention ( $\beta = -0.426$ , t = 4.151). This indicates that employee turnover intention decreases when managers offer autonomy, value opinions, and provide social support. The findings are consistent with Skelton, Nattress, and Dwyer (2019), reinforcing the idea that managerial empowerment directly impacts employee retention. In a practical sense, this suggests that organizations should focus on training managers to adopt empowering leadership styles, fostering a work environment where employees feel respected and supported. In industries with high turnover, such as call centers, managerial empowerment can be a key strategy for reducing churn by addressing employee satisfaction on both a personal and professional level.

The hypothesis that career growth opportunities reduce employee turnover intention is not supported ( $\beta = 0.079$ , t = 0.673), with no significant relationship found. This result deviates from existing literature, such as studies by Jia-Jun and Hua-Ming [31] and Amah and Oyetuunde [32], which highlighted the importance of career development in reducing turnover. The lack of support for this hypothesis may reflect context-specific factors. For instance, call center employees might prioritize immediate rewards, managerial support, or work-life balance over long-term career development. Alternatively, the lack of significant impact could indicate that current career growth opportunities in the study's context are either inadequate or not effectively communicated. Organizations should reassess their career development programs, ensuring they are robust and aligned with employee expectations and aspirations.

The findings demonstrate a significant negative relationship between organizational commitment and employee turnover intention ( $\beta$  = -0.382, t = 2.222). Employees with stronger loyalty and emotional attachment to the organization are less likely to leave. This is consistent with earlier research by Pratama, et al. [36] and Martins, et al. [59], confirming that organizational commitment is a critical factor in employee retention.

For organizations, fostering a strong organizational culture, aligning employee values with the organization's mission, and promoting a sense of belonging can enhance commitment and reduce turnover. Programs that encourage employee engagement, transparent communication, and recognition may further deepen this commitment, which is essential for retaining top talent.

The study confirms a significant negative correlation between rewards management and employee turnover intention ( $\beta = -0.382$ , t = 2.311). Effective rewards, including fair compensation and recognition, reduce the likelihood of employees leaving, supporting the findings of Luthia and Sathiamoorthy [48]. This highlights the importance of offering competitive financial and non-financial rewards as a retention strategy. Organizations should regularly review their compensation and benefits packages, ensuring they meet or exceed industry standards. Non-monetary rewards, such as recognition programs and professional development opportunities, should also be prioritized, as they enhance employee satisfaction and retention.

The analysis reveals that gender has a significant, albeit small, negative effect on turnover intention ( $\beta = -0.094$ , t = 2.587), indicating that men and women may experience different factors affecting their decision to stay or leave. This aligns with the Mckinsey [52] report, which suggests that gender influences turnover intention and highlights the importance of inclusive workplace practices. Organizations should address this by creating equitable policies and fostering inclusive cultures that cater to diverse workforce needs. Gender-sensitive approaches, such as family-friendly policies, equal pay initiatives, and leadership opportunities for underrepresented groups, are essential to ensure that both genders feel valued and supported in their careers.

## 5. Conclusion

Overall, the study concludes that Managerial Behavioral Empowerment, Organizational Commitment, Rewards Management, and Gender significantly influence Employee Turnover Intention. Career Growth Opportunity does not exhibit a significant effect in this context, which contrasts with some established research. This suggests that organizational

retention strategies should focus on leadership empowerment, building employee commitment, and ensuring effective reward systems while also acknowledging demographic factors like gender. These findings offer valuable insights for HR practitioners, managers, and policymakers, helping them design targeted interventions to reduce employee turnover and improve organizational stability.

The findings of this study also have produced a specific contribution to employee turnover intention. First, the study shows the theoretical contribution to the perceptions of managerial behavioral empowerment, organizational commitment, rewards management, and gender on employee turnover intentions in call centers in Malaysia. In line with Daniel Pink's theory, enhancing job satisfaction through fair compensation, opportunities for skill development, improving work-life balance, and promoting a positive organizational culture can substantially increase employee motivation levels and reduce turnover intention.

While the study on turnover intentions in call centers provides valuable insights, certain limitations should be acknowledged. The findings of this study may be specific to the call centers only or the context in which the research was conducted, limiting the generalizability of the results to other industries or settings. Different industries may have unique dynamics, cultures, and workforce characteristics that could impact turnover intentions differently.

The study may have accounted for only some relevant variables that could impact turnover intentions in the call center industry. Other factors, such as external economic conditions, industry trends, or individual differences, may have been overlooked and could influence turnover intentions. Despite these limitations, the study on turnover intentions in the call center industry provides valuable insights and a foundation for further research. Continuing research can consider addressing these limitations in future studies to strengthen the validity and generalizability of the findings.

## References

- [1] L. Mora, A. Reid, and M. Angelidou, "The current status of smart city research: exposing the division," in Smart cities in the post-algorithmic era: Edward Elgar Publishing, 2019, pp. 17-35.
- [2] M. Ibrahim, S. Sapuan, E. Zainudin, and M. Zuhri, "Extraction, chemical composition, and characterization of potential lignocellulosic biomasses and polymers from corn plant parts," *BioResources*, vol. 14, no. 3, pp. 6485-6500, 2019.
- [3] F. A. Jabutay and P. Rungruang, "Turnover intent of new workers: Social exchange perspectives," *Asia-Pacific Journal of Business Administration*, vol. 13, no. 1, pp. 60-79, 2021.
- [4] X. Chen *et al.*, "Moderating role of job satisfaction on turnover intention and burnout among workers in primary care institutions: A cross-sectional study," *BMC Public Health*, vol. 19, pp. 1-10, 2019. https://doi.org/10.1186/s12889-019-7894-7
- [5] B. Eneizan, M. Taamneh, O. Enaizan, M. F. Almaaitah, A. H. Ngah, and A. a. A. Alsakarneh, "Human resources practices and job satisfaction on customer satisfaction: The mediating role of quality of customer interaction in online call center," *International Journal of Data and Network Science*, pp. 11–18, 2021. https://doi.org/10.5267/j.ijdns.2020.12.001
- [6] E. Sugiono and I. Adillah, "Theeffect of job insecurity, job satisfaction and organizational commitment on employee turnover intention mediated by organizational culture: Study on the airline transportation services in Indonesia," *INFLUENCE: International Journal of Science Review*, vol. 3, no. 3, pp. 69–78, 2021.
- [7] T. Y. Chang, J. Graff Zivin, T. Gross, and M. Neidell, "The effect of pollution on worker productivity: Evidence from call center workers in China," *American Economic Journal: Applied Economics*, vol. 11, no. 1, pp. 151-172, 2019. https://doi.org/10.1257/app.20160436
- [8] P. Chaudhary *et al.*, "Oxidative stress, free radicals and antioxidants: Potential crosstalk in the pathophysiology of human diseases," *Frontiers in Chemistry*, vol. 11, p. 1158198, 2023.
- [9] C. N. Posey, "Job-shock influence on call-center turnover," *Performance Improvement*, vol. 58, no. 5, pp. 22-32, 2019. https://doi.org/10.1002/pfi.21866
- [10] F. S. d. Santos, "Assessment of summer climate variability over the northeast region of Brazil simulated by the BAM global model," 2021.
- [11] S. N. Hidayah Ibrahim, C. L. Suan, and O. M. Karatepe, "The effects of supervisor support and self-efficacy on call center employees' work engagement and quitting intentions," *International Journal of Manpower*, vol. 40, no. 4, pp. 688-703, 2019. https://doi.org/10.1108/ijm-12-2017-0320
- [12] A. Ranga and R. Kamboj, "A study on the relationship between employee satisfaction and employees' performance," *TRJ Tourism Research Journal*, vol. 2, no. 2, pp. 94-104, 2018.
- [13] R. Pârjoleanu, "Work motivation efficiency in the workplace," *Postmodern Openings*, vol. 11, no. 4, pp. 293-309, 2020. https://doi.org/10.18662/po/11.4/236
- [14] D. H. Pink and D. H. Pink, *A whole new mind: Moving from the information age to the conceptual age*. New York: Riverhead Books 2005.
- [15] A. M. M. Salleh, K. Omar, O. J. Aburumman, N. H. N. Mat, and M. A. Almhairat, "The impact of career planning and career satisfaction on employee's turnover intention," *Entrepreneurship and Sustainability Issues*, vol. 8, no. 1, p. 218, 2020. https://doi.org/10.9770/jesi.2020.8.1
- [16] M. I. Rasheed, F. Okumus, Q. Weng, Z. Hameed, and M. S. Nawaz, "Career adaptability and employee turnover intentions: The role of perceived career opportunities and orientation to happiness in the hospitality industry," *Journal of Hospitality and Tourism Management*, vol. 44, pp. 98-107, 2020. https://doi.org/10.1016/j.jhtm.2020.05.006
- [17] J. Schmitt *et al.*, "Measurement of gas pressure inside large-format prismatic lithium-ion cells during operation and cycle aging," *Journal of Power Sources*, vol. 478, p. 228661, 2020.
- [18] S. M. Shamsudin, W. R. W. Abdullah, and A. H. Osman, "Corporate governance practices and firm performance after revised code of corporate governance: Evidence from Malaysia," in *State-of-the-Art Theories and Empirical Evidence: Selected Papers from the 6th International Conference on Governance, Fraud, Ethics, and Social Responsibility*, 2018, pp. 49-63.
- [19] Y. Akgunduz, O. Bardakoglu, and G. Kizilcalioglu, "Happiness, job stress, job dedication and perceived organizational support: a mediating model," *Journal of Hospitality and Tourism Insights,* vol. 6, no. 2, pp. 654-673, 2023.

- [20] B. Koo, J. Yu, B.-L. Chua, S. Lee, and H. Han, "Relationships among emotional and material rewards, job satisfaction, burnout, affective commitment, job performance, and turnover intention in the hotel industry," *Journal of Quality Assurance in Hospitality & Tourism*, vol. 21, no. 4, pp. 371-401, 2020. https://doi.org/10.1080/1528008x.2019.1663572
- [21] M. Y. Purba and S. Ruslan, "Influence compensation, career development and job satisfaction to turnover intention," *Dinasti International Journal of Economics, Finance & Accounting*, vol. 1, no. 4, pp. 642-658, 2020.
- [22] H. M. Sittenthaler and A. Mohnen, "Cash, non-cash, or mix? Gender matters! The impact of monetary, non-monetary, and mixed incentives on performance," *Journal of Business Economics*, vol. 90, no. 8, pp. 1253-1284, 2020.
- [23] M. Hassan and T. S. Jagirani, "Employee turnover in public sector banks of Pakistan," *Market Forces*, vol. 14, no. 1, 2019.
- [24] M. U. Azeem, S. U. Bajwa, K. Shahzad, and H. Aslam, "Psychological contract violation and turnover intention: The role of job dissatisfaction and work disengagement," *Employee Relations: The International Journal*, vol. 42, no. 6, pp. 1291-1308, 2020. https://doi.org/10.1108/er-09-2019-0372
- [25] G. Mustafa and N. Ali, "Rewards, autonomous motivation and turnover intention: Results from a non-Western cultural context," *Cogent Business & Management*, vol. 6, no. 1, p. 1676090, 2019. https://doi.org/10.1080/23311975.2019.1676090
- [26] S. A. Rehman Khan, Z. Yu, S. Sarwat, D. I. Godil, S. Amin, and S. Shujaat, "The role of block chain technology in circular economy practices to improve organisational performance," *International Journal of Logistics Research and Applications*, vol. 25, no. 4-5, pp. 605-622, 2022.
- [27] S. M. Shaheen *et al.*, "Sustainable applications of rice feedstock in agro-environmental and construction sectors: A global perspective," *Renewable and Sustainable Energy Reviews*, vol. 153, p. 111791, 2022.
- [28] A. R. Skelton, D. Nattress, and R. J. Dwyer, "Predicting manufacturing employee turnover intentions," *Journal of Economics, Finance and Administrative Science*, vol. 25, no. 49, pp. 101-117, 2020. https://doi.org/10.1108/jefas-07-2018-0069
- [29] G. Kurdi, J. Leo, B. Parsia, U. Sattler, and S. Al-Emari, "A systematic review of automatic question generation for educational purposes," *International Journal of Artificial Intelligence in Education,* vol. 30, pp. 121-204, 2020.
- [30] Y. Marleyna, D. Devie, and F. Foedjiawati, "Reward system, employee engagement, and the role of employee satisfaction as mediating variable," *Petra International Journal of Business Studies*, vol. 5, no. 1, pp. 97-108, 2022.
- [31] Z. Jia-Jun and S. Hua-Ming, "The impact of career growth on knowledge-based employee engagement: The mediating role of affective commitment and the moderating role of perceived organizational support," *Frontiers in Psychology*, vol. 13, p. 805208, 2022. https://doi.org/10.3389/fpsyg.2022.805208
- [32] O. E. Amah and K. Oyetuunde, "The effect of servant leadership on employee turnover in SMEs in Nigeria: The role of career growth potential and employee voice," *Journal of Small Business and Enterprise Development*, vol. 27, no. 6, pp. 885-904, 2020. https://doi.org/10.1108/jsbed-01-2019-0009
- [33] Q. Wang, K.-P. Gan, H.-Y. Wei, A.-Q. Sun, Y.-C. Wang, and X.-M. Zhou, "Public service motivation and public employees' turnover intention: The role of job satisfaction and career growth opportunity," *Personnel Review*, vol. 53, no. 1, pp. 99-118, 2024. https://doi.org/10.1108/PR-11-2020-0836
- [34] M. A. Ashraf, "The mediating role of work atmosphere in the relationship between supervisor cooperation, career growth and job satisfaction," *Journal of Workplace Learning*, vol. 31, no. 2, pp. 78-94, 2019. https://doi.org/10.1108/jwl-12-2017-0113
- [35] X. Jiang *et al.*, "Direct observation of Klein tunneling in phononic crystals," *Science*, vol. 370, no. 6523, pp. 1447-1450, 2020.
- [36] E. N. Pratama, E. Suwarni, and M. A. Handayani, "Effect of job satisfaction and organizational commitment on turnover intention with person organization fit as moderator variable," *APTISI Trans. Manag*, vol. 6, no. 1, pp. 74-82, 2022. https://doi.org/10.33050/atm.v6i1.1722
- [37] E. M. O'Reilly *et al.*, "Durvalumab with or without tremelimumab for patients with metastatic pancreatic ductal adenocarcinoma: A phase 2 randomized clinical trial," *JAMA oncology*, vol. 5, no. 10, pp. 1431-1438, 2019.
- [38] F. Cherif, "The role of human resource management practices and employee job satisfaction in predicting organizational commitment in Saudi Arabian banking sector," *International Journal of Sociology and Social Policy*, vol. 40, no. 7/8, pp. 529-541, 2020. https://doi.org/10.1108/ijssp-10-2019-0216
- [39] J. Suárez-Albanchez, S. Gutierrez-Broncano, P. Jimenez-Estevez, and J. J. Blazquez-Resino, "Organizational support and turnover intention in the Spanish IT consultancy sector: Role of organizational commitment," *Cogent Social Sciences*, vol. 8, no. 1, p. 2051790, 2022. https://doi.org/10.1080/23311886.2022.2051790
- [40] D. Darmawan *et al.*, "The quality of human resources, job performance and employee loyalty," *International Journal of Psychosocial Rehabilitation*, vol. 24, no. 3, pp. 2580-2592, 2020. https://doi.org/10.37200/ijpr/v24i3/pr201903
- [41] L. Afshari, "Idealized influence and commitment: A granular approach in understanding leadership," *Personnel Review*, vol. 51, no. 2, pp. 805-822, 2022.
- [42] C. Serhan, N. Nehmeh, and I. Sioufi, "Assessing the effect of organisational commitment on turnover intentions amongst Islamic bank employees," *ISRA International Journal of Islamic Finance*, vol. 14, no. 2, pp. 141-156, 2022. https://doi.org/10.1108/ijif-01-2021-0008
- [43] V. C. Binghay, S. F. Lu, and J. L. Lu, "A study on total rewards management in Philippine healthcare companies: An occupational issue," Acta Medica Philippina, vol. 56, no. 1, 2022. https://doi.org/10.47895/amp.v56i1.4099
- [44] R. Hwing, Y. Wang, and D. Xiang, "The effect of government subsidies on employment: Evidence from China's listed firms," in The Effect of Government Subsidies on Employment: Evidence from China's Listed Firms: Hwing, Recardo| uWang, Yongzhe| uXiang, Di: [SI]: SSRN, 2023.
- [45] L. Liu and M. Suurnäkki, "Chinese digital talents and monetary rewards: A case study of justice perceptions in a nordic multinational emerald," Publishing Limited EBooks. https://doi.org/10.1108/978-1-80262-057-320221008, 2022, pp. 93–107.
- [46] B. Y. Saputri and S. A. Hidayat, "Development of a performance-based reward system model for job satisfaction of nurse," *Fundamental & Manajemen nursing Journal*, vol. 4, no. 01, pp. 7-11, 2021.
- [47] V. Wagner and G. Riener, "Motivation in a reciprocal task: Interaction effects of task meaning, goal salience, and time pressure," *The BE Journal of Economic Analysis & Policy*, vol. 22, no. 3, pp. 633-645, 2022.
- [48] D. Luthia and M. V. Sathiamoorthy, "Impact of organizational support through employee communication and rewards on employee engagement: A study in the post-covid era," *Towards Excellence*, vol. 13, no. 2, pp. 634-663, 2021.
- [49] M. Soelton, N. Noermijati, N. A. Vizano, Y. Parmariza, Y. B. Abadi, and S. Zulfriadi, "Recognizing the role of job satisfaction in predicting the relationship between political organization, organizational climate, and organizational culture on

organizational citizenship behaviour on Liquor Distributor Companies in Indonesia," European Journal of Business and Management, vol. 12, no. 13, pp. 2222-1905, 2020.

- [50] K. Kumari, S. Barkat Ali, N. Un Nisa Khan, and J. Abbas, "Examining the role of motivation and reward in employees' job performance through mediating effect of job satisfaction: An empirical evidence," *International Journal of Organizational Leadership*, vol. 10, no. 4, pp. 401-420, 2021.
- [51] N. Emmanuel and A. N. L. Agaha, "Testing the moderating effect of gender on job satisfaction and employees' behaviours relationship: Evidence from mobile telecommunication network (MTN) Buea, Cameroon," *European Scientific Journal*, vol. 17, no. 1, pp. 236-255, 2021.
- [52] Mckinsey, "Seven charts that show COVID-19's impact on women's employment," Retrieved: https://www.mckinsey.com/featured-insights/diversity-and-inclusion/seven-charts-that-show-covid-19s-impact-on-womensemployment, 2022.
- [53] S. Piyasiri and T. Weerasinghe, "Factors affecting employee turnover intention and the moderating role of gender: Evidence from the laborer category employees working in Katunayake free trade zone of Sri Lanka," *Kelaniya Journal of Management*, vol. 11, no. 1, p. 105, 2022. https://doi.org/10.4038/kjm.v11i1.7717
- Pearson," [54] M. Saunders, Ρ. Lewis, and A. Thornhill, "I[E-book]. Retrieved: https://sfa2142120804c535.jimcontent.com/download/version/1436278548 /module /10058 477483/name/Research Methods for Business Students.pdf, 2007.
- [55] N. Islam et al., "COVID-19 and climatic factors: A global analysis," Environmental research, vol. 193, p. 110355, 2021.

[56] W. W. Chin, "Commentary: Issues and opinion on structural equation modeling," ed: JSTOR, 1998, pp. vii-xvi.

- [57] C. Fornell and D. F. Larcker, "Evaluating structural equation models with unobservable variables and measurement error," *Journal of Marketing Research*, vol. 18, no. 1, pp. 39-50, 1981.
- [58] J. Henseler, C. M. Ringle, and R. R. Sinkovics, "The use of partial least squares path modeling in international marketing New challenges to international marketing," vol. 20: Emerald Group Publishing Limited, 2009, pp. 277-319.
- [59] P. Martins, G. Nascimento, and A. Moreira, "Leadership and turnover intentions in a public hospital: The mediating effect of organisational commitment and moderating effect by activity department," *Administrative Sciences*, vol. 13, no. 1, p. 18, 2023.