







Measuring employee attrition intention in an auto-component manufacturing organisation



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Orientation: The auto-component manufacturing sector, a critical contributor to industrial growth, faces persistent challenges related to employee attrition, affecting operational efficiency and workforce stability. This study examines the influence of job satisfaction, work-life balance, and job stress on attrition intention among employees in Indian auto-component manufacturing organisations.

Research purpose: To identify the key factors contributing to employee turnover and evaluate their relative impact on attrition intention.

Motivation for the study: Amid rising concerns over attrition in the manufacturing industry, this research aims to explore how work-life balance and job stress influence employees' intentions to leave their organisations.

Research approach/design and method: Data were collected from 192 employees across 10 auto-component manufacturing companies in Pune, Maharashtra, India, using a structured questionnaire. The responses were analysed through structural equation modelling (SEM) using SPSS and AMOS.

Main findings: The study reveals that work-life balance and job stress significantly impact attrition intention. Employees with poor work-life balance and high job stress are more likely to consider leaving. However, job satisfaction does not have a direct effect on attrition intention.

Practical/managerial implications: Organisations should prioritise improving work-life balance and managing job stress by implementing flexible work policies, wellness programmes, and realistic workload distribution.

Contribution/value-add: This study underscores the importance of addressing work-life balance and job stress in retention strategies, offering actionable insights for HR managers to mitigate attrition in the auto-component manufacturing sector.

Keywords: job satisfaction; work-life balance; job stress; employee attrition; structural equation modelling.

Introduction

Employee resignations, whether voluntarily or not, are referred to as attrition. An employee leaving a company or retiring is called attrition (Alduayj & Rajpoot, 2019). Employee turnover, also known as attrition, is increasingly viewed as a major concern by all businesses because of its detrimental effects on workplace productivity and fulfilling deadlines for corporate objectives. To continually have a more significant competitive advantage over its rivals, a company should make it a duty to limit staff attrition. Organisations can discover several reasons of attrition by examining employee data on numerous areas such as career objectives, promotions, recruitment, age, performance appraisal data and training data (El-Rayes et al., 2020). Recent advancements in predictive analytics (e.g. machine learning models) enable organisations to forecast employee attrition with up to 85% accuracy by analysing factors such as workload, tenure and engagement scores (Anuradha & Rani, 2024). Numerous other variables, such as inadequate pay levels that encourage employees to work for competitive firms, low motivation and morale among employees and hiring and selecting the wrong candidates, can also contribute to a high incidence of attrition (Katekhaye & Gahalod, 2024).

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Attrition is driven by poor job satisfaction linked to inadequate salaries, as pay scales directly impact satisfaction, and earnings fail to meet expectations amid inflation (Tu et al., 2024). Salary is more than just the money an employee gets each month. Bonuses, annual raises and other financial incentives are also used to measure it (El-Rayes et al., 2020). Employee satisfaction is strongly tied to financial security, and fair compensation not only enhances retention but also reduces the high costs of turnover, which can range from 50% to 200% of an employee's salary (Nemteanu & Dabija, 2021). Sometimes, in the company, there needs to be more opportunities for a career.

Employee interest in long-term employment with the company is maintained by possibilities for career advancement (Katekhaye & Gahalod, 2024). Employees have a purpose and something to strive for because it helps them focus. The presence of advancement opportunities encourages employees to stay, whereas the absence of development support can lead them to leave for better prospects (Ghani et al., 2022). Workplace culture significantly influences employee attrition; toxic cultures lead to higher turnover, whereas alignment with employee values and strong, positive organisational cultures are linked to improved retention and lower quit rates (Rugiubei & Cruceanu, 2024). Motivation drives retention. Recent studies confirm that motivated employees are 87% less likely to resign (Rugiubei & Cruceanu, 2024).

Promoting work-life balance fosters employee well-being, strengthens communication, enhances retention and addresses the human need for belonging in the workplace (Hoffman & Tadelis, 2021). Human instincts drive us to belong to a community and fit in. Every organisation is significantly impacted by employee wellness (Coco et al., 2023). Taking care of employees can completely change their lives, making them more content, effective and less worried.

A fantastic example of a business is Schneider Electric, which turned inward and developed its platform for workers' talent (Srivastava & Tiwari, 2020). They focus on employee retention and retraining people for new positions while using their company as a talent network. Promoting professional growth is essential, and people are less inclined to leave an organisation when they feel appreciated (Datta, 2020). It also suggests that, should their jobs become outdated, the Schneider Electric's plan of looking within and upskilling current people will be simple to put into practice. There is another side to attrition for firms: when a job role is taken out, a person does not need to resign. Those with institutional expertise and highly valued loyalty may be open to new training options (Datta, 2020). In the context of Indian auto-component manufacturing, where firms operate within tightly interwoven global supply chains, attrition can have a cascading effect on operational efficiency and delivery timelines (El-Rayes et al., 2020). This study focuses on a critical yet underexplored aspect: understanding how job satisfaction, work-life balance and job stress contribute to attrition in auto-component manufacturing organisations in India. Prior research has often examined these factors in

isolation or within service industries, leaving a significant gap in understanding their interplay in manufacturing contexts (Saha & Kumar, 2018). By integrating these variables into a single model and analysing data from Pune's auto-component sector, this research provides a nuanced perspective that is both region specific and industry relevant.

Literature review

Employee attrition occurs in some form, even in the biggest and best businesses in the world. It is a constant result of natural evolution. An organisation is predicted to drop 18% of its workers annually (Yang & Islam, 2020). Because they recognise their value, many people are willing to quit their existing positions for better opportunities. In addition, they will not accept working conditions that no longer favour them. Although there are many reasons to reduce staff attrition and turnover, money is one of the main ones. The financial effects of an employee leaving will be greater. There are some attrition factors. Satisfied employees are more likely to remain in the company in the long term. Some dissatisfying factors under which employees are continuously working will lead to higher attrition.

Job stress and attrition

Workplace stress within the Trinidad and Tobago Police Service contributes to officer burnout and health issues, negatively impacting emotional and physical well-being and leading to outcomes such as early retirement, low job satisfaction and reduced performance (Baek et al., 2021). Employees are subjected to various stress-inducing variables, including extended work hours, high productivity goals and superior harassment, etc. According to research, two of the most significant work-related stresses in the organisation are operational and organisational stressors (Domingues & Machado, 2017). The study found that high-stress hazards affected 8.2% of men and 8.3% of women. Key factors – such as physiological and psychological stress, workplace stressors, social support and job strain (high demands with low control) – were significantly associated with attrition (Kachi et al., 2020). Workplace stress raises the risk of turnover (Drew & Sosnowski, 2019). Stress increases turnover risk, with Japanese employees more likely to leave high-stress occupations (Kachi et al., 2020).

Job Satisfaction and attrition

Job happiness and organisational commitment can help moderate the effects of withdrawal behaviours (Falkenburg & Schyns, 2007). Organisational commitment and work satisfaction are traits that are influenced by human resource management methods (Aruldoss et al., 2021). Job satisfaction is a crucial component that might lower attrition. Employees who are happy at work become like pillars, and the business continually grows along with them. According to a review by Qu (2021), approximately 20.16% of individuals report being highly satisfied with their jobs and careers. Brand executives are individuals who sincerely care about their workplace (Mehra & Nickerson, 2019). Even when the

company offers a decent salary and a positive work environment, it is their dedication and perseverance that keep them there (Dhir et al., 2020). Reasons for job satisfaction include accomplishment, acknowledgement, accountability, development and other elements associated with a person's professional motivation (Cucina et al., 2018). Effective communication, support and direction from managers and supervisors have a major impact on the rise in job satisfaction and worker performance (Singhal & Salunkhe, 2024).

Work-life balance and attrition

The rising demands of modern careers, driven by global economic integration, have intensified the need for structured work-life balance initiatives, especially among working professionals striving for both career advancement and personal well-being (Ali et al., 2025). Employees are increasingly required to balance their emotional and behavioural time between professional responsibilities and personal obligations to themselves and their families, as the growing interest in work-life balance reflects a shifting organisational landscape (Bello et al., 2024). Changing labour markets, demographics, longer workdays and home dynamics increase the need for work-life balance, particularly for employees with extended hours or overtime (Gupta, Vasa, & Sehgal, 2024). In reaction to the substantial rise in working women professionals with dependent children in the early 1980s, the term 'work-life balance' was coined (Bello et al., 2024).

Employee demand for maintaining a work-life balance has reached unprecedented levels, prompting management to acknowledge its critical importance in today's environment (Gupta et al., 2024). Future management and HR professionals will face the challenge of addressing work-life balance, a topic poised to become one of the most debated issues in boardrooms (Bello et al., 2024). Work-life balance refers to an individual's ability to effectively manage or achieve equilibrium between paid work and personal or social responsibilities (Alzadjali & Ahmad, 2024). Work-life balance can significantly impact both employee well-being and organisational productivity (Alzadjali & Ahmad, 2024). The relentless pressure to meet profitability and growth targets creates significant stress, undermines employee productivity and erodes the ability to maintain a sustainable work-life balance (Hasyim & Bakri, 2025). Effective work-life balance strategies reduce stress, increase productivity and improve ROI, while poor balance harms employee engagement and customer service quality (Gupta et al., 2024).

When employees feel valued and supported in their growth, service quality improves. However, poor work-life balance remains a key driver of high turnover, imposing significant costs on organisations (Qi et al. 2024). According to research, Johnson and Johnson reduced absenteeism by over 50% by implementing flexible scheduling alternatives and employee welfare programmes (Bezuidenhout et al., 2025). Rising job pressure and relentless demands have led many employees to face lifestyle-related ailments and serious health

issues (Garg, 2025). Rising healthcare costs and declining employee productivity have made this a critical organisational concern (Bello et al., 2024). As a result, these challenges have prompted management to prioritise work-life balance and foster a healthier workplace through various developmental initiatives.

Attrition

Attrition refers to employees leaving an organisation for any reason (resignation, termination, retirement or death). The attrition rate is calculated by dividing employee departures by the average workforce size during a specific period (Krishna & Sidharth, 2024).

Employee attrition is a major challenge faced by organisations worldwide. Turnover incurs substantial costs, including lost revenue because of reduced team performance and service quality (Saha & Kumar, 2018), as well as expenses associated with recruiting and training new employees. To address this issue, companies such as Google, Amazon, Microsoft and IBM invest considerable resources and effort into understanding the causes of employee turnover, often through exit interview programmes (Gupta et al., 2024).

Employee attrition has been extensively studied across industries because of its pervasive impact on organisational productivity and costs. Research in service industries has frequently linked job satisfaction, work-life balance and job stress to employee turnover intentions (Cucina et al., 2018; Mas-Machuca et al., 2016). However, the interplay of these factors within manufacturing sectors, particularly in the context of Indian auto-component manufacturing, remains underexplored. This gap is significant given that the manufacturing industry operates under unique pressures, such as stringent production schedules and supply chain dependencies, which may exacerbate workplace stress and complicate work-life balance (Katekhaye & Gahalod, 2024).

Existing studies often focus on isolated variables. For instance, Baek et al. (2021) analyse the effects of job stress on health-related attrition, while Gupta et al. (2024) investigate the role of work-life balance in enhancing employee well-being. Furthermore, Gaur and Tarkar (2025) highlight work-life balance challenges in long-hour industries but overlook their interaction with stress and job satisfaction in manufacturing contexts. By contrast, this study builds on prior research by examining how these three factors (job satisfaction, work-life balance, job stress) collectively influence attrition in the Indian context. This integrated approach is particularly relevant in addressing the evolving expectations of the Indian workforce, which increasingly prioritises quality of life and holistic well-being over traditional job security concerns (Alzadjali & Ahmad, 2024).

Research design

The objective of this research is typically to determine why people depart, with the rationale being that if a business can

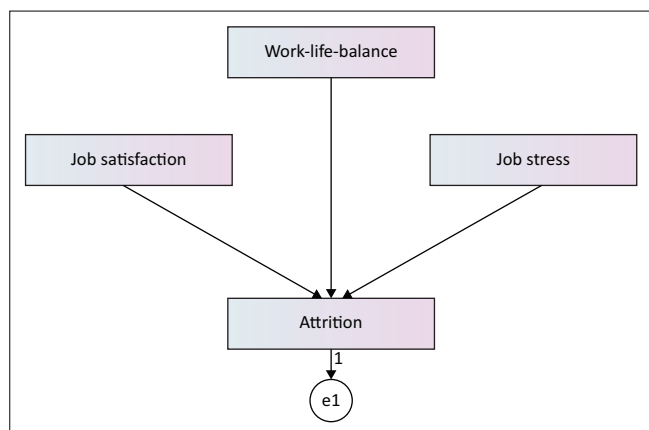


FIGURE 1: Conceptual proposed research model.

pinpoint the causes of layoffs, it may take steps to reduce both those numbers. For this, following hypotheses were formed for further study:

Hypothesis formation

- H1 – Job satisfaction has a significant influence on attrition.
- H2 – Work-life balance has a significant influence on attrition.
- H3 – Job stress has a significant influence on attrition.

Our research questions can be summarised as follows:

- *Is job satisfaction affecting attrition?*
- *Is work-life balance affecting attrition?*
- *Is job stress affecting attrition?*

The conceptual proposed research Model of Employee Attrition is shown in Figure 1.

To achieve these objectives, as shown in Figure 1, the research survey was conducted in 10 organisations, which are auto-component manufacturing companies, majorly which are the supplier companies of OEM (Original Equipment Manufacturing companies dealing two-wheeler and four-wheeler organisations) located in Pune, Maharashtra, India.

Data collection process

The questionnaire was developed in English. Data were collected from the employees of 10 auto-component manufacturing organisations from Pune, Maharashtra state, India (Western part of India). A questionnaire survey was designed for this purpose and distributed to employees of the selected companies. It was essential to communicate the purpose and objectives of the research study to the participants. To ensure clarity and engagement, the questionnaires were completed in a single sitting with the respondents, allowing them to understand the study's aims and intentions fully.

Respondents were also allowed to ask questions about different variables in the questionnaire. The questionnaire was circulated among 250 employees, among whom 58

needed to be completed. The researcher got 192 complete responses from the employees used in the data analysis. This research was conducted by contacting company authorities and introducing a questionnaire to complete the questionnaire.

Sampling techniques

The researcher used a simple random sampling method for this research, where employees were chosen from the companies from the employee database, and a random questionnaire was administered to them.

Research instrument

A Likert-type scale of five points was employed for all constructs, where values ranged from 1, that is *strongly disagree* here means a 5 rating, and *strongly agree* means 1 rating. As mentioned in Table 1, the questionnaire has three independent variables (job stress, job satisfaction and work-life balance) and one dependent variable (attrition). Respondents were asked to recall their experience in previous organisations during questionnaire administration to ensure accuracy. Job stress was measured using nine items, adapted from Judge et al. (1994) and Shukla and Srivastava (2016). Job satisfaction (measured using 11 items) and job attrition (measured using 10 items) were adopted (Aruldhoss et al., 2021). Using six items adapted from Walton (1973) and Sirgy et al. (2001), the quality of work-life and work-life balance was measured.

Common methods bias

Common method bias (CMB) will likely occur when data for independent and dependent variables are gathered from the same sample set (Jebarajakirthy & Das, 2020). Statistical and non-statistical methods evaluated CMB's potential (Podsakoff et al., 2003). As a non-statistical metric, the survey items' clarity and respondents' confidentiality were ensured, reducing the likelihood of CMB (Ashaduzzaman et al., 2021). Various procedural and statistical methods were used to identify and control CMB, a concern in survey-based research (Podsakoff et al., 2003). A psychological separation was implemented in the questionnaire because both predictor and criterion variables were obtained from the same respondent. Numerous procedural measures were used while developing the survey, such as keeping responses anonymous and alerting respondents about the goal of the survey. All questions were closed ended, and some were reverse coded to determine non-serious responses.

Geographic bias: The study's focus on Pune-based organisations may introduce regional bias, as local work culture and labour dynamics may not represent broader national or global trends.

Sector-specific findings: The results are specific to the auto-component sector, limiting generalisability to other manufacturing industries with different operational challenges.

TABLE 1: Measurement constructs.

Items	Variable	Author
JSQ1	My responsibilities satisfy me	(Aruldoss et al., 2021)
JSQ2	I am pleased with the work itself	
JSQ3	I get recognition in my work	
JSQ4	I get a fair promotion in the organisation	
JSQ5	I am pleased with how my skills are being utilised in this organisation	
JSQ6	Because of my job, I am happy with my family life	
JSQ7	I am pleased with the organisation's job security	
JSQ8	I am pleased with the salary offered by the firms	
JSQ9	I get cooperation from organisation	
JSQ10	I am pleased with the communication from the superior	
WLB1	Even though I work in this organisation, I have enough time to spend with my family	Walton (1973) and Sirgy et al. (2001)
WLB2	Even though I work, I have enough time to care for my children	
WLB3	Even if I work with this organisation, I can care for elderly dependents	
WLB4	Even though I work at this organisation, I do not miss significant social events	
WLB5	Even if I work in this organisation, I can manage my work and family with a suitable timetable	
WLB6	Even though I work for this company, I have adequate time to have medical exams	
JSTR1	I do not experience any occupational diseases	Judge et al. (1994), Shukla and Srivastava (2016)
JSTR2	My work does not create stress in me	
JSTR3	My organisation does not take action against me without my mistake	
JSTR4	Compensation given me does not create stress in me	
JSTR5	Termination from job does not create any stress in me	
JSTR6	Extra working hours than standard working hours do not create any stress in me	
JSTR7	Job stress does not impact on my family life in this organisation	
ATR1	I do not want to leave this organisation as I am getting job-related diseases	(Aruldoss et al., 2021)
ATR2	I do not want to leave my organisation, though it creates stress in me	
ATR3	Despite receiving less compensation, I do not want to leave the organisation	
ATR4	Extra working hours than standard working hours do not discourage me to leave this organisation	
ATR5	I do not want to leave this organisation despite it has no salary increment	
ATR6	I do not want to quit this organisation despite the fact that I do not have enough holiday time for my personal or family demands.	
ATR7	Despite I have no work-life balance, I do not want to leave this organisation	

Note: Please see the full reference list of this article Hinge, P., Salunkhe, H.A., Boralkar, M., Bang, S., Thakur, A., & Adhegaonka, V.R. (2025). Measuring contemporary employee attrition intention in an auto-component manufacturing organisation. *SA Journal of Human Resource Management/SA Tydskrif vir Menslikehulpbronbestuur*, 23(0), a3003. <https://doi.org/10.4102/sajhrm.v23i0.3003> for more information.

JSQ, job satisfaction; WLB, work-life balance; JSTR, job stress; ATR, attrition.

Ethical considerations

Ethical clearance to conduct this study was obtained from JSPM University Research Ethics Committee (JU/REC/2025/02/02). All procedures performed in this study involving human participants were conducted ethically according to the ethical standards of the university and its later amendments or comparable ethical standards. Informed consent was obtained from all individual participants included in the

TABLE 2: Construct reliability.

Constructs	Factor-loading	AVE	CR	Alpha
Job satisfaction	-	0.57483	0.84388	0.798
JSQ3	0.733	-	-	-
JSQ5	0.769	-	-	-
JSQ6	0.775	-	-	-
JSQ9	0.755	-	-	-
Work-life balance	-	0.59705	0.8162	0.752
WLB4	0.748	-	-	-
WLB5	0.804	-	-	-
WLB6	0.765	-	-	-
Job stress	-	0.612	0.8245	0.786
JSTR3	0.873	-	-	-
JSTR5	0.701	-	-	-
JSTR7	0.764	-	-	-
Attrition	-	0.70881	0.90663	0.789
ATR1	0.853	-	-	-
ATR3	0.901	-	-	-
ATR5	0.778	-	-	-
ATR7	0.831	-	-	-

AVE, average variance extracted; CR, composite reliability.

study. Informed consent for the use of their data/samples was obtained from all participants.

Results

Statistical Package for Social Science (SPSS) and analysis of moment structures (AMOS) were used to analyse and test the dependent and independent variables. The analysis provides the research results and rejects or proves the framed hypothesis stated in the research design. The data analysis reveals variable fit indices, descriptive analysis, structural equation modelling (SEM), discriminant validity, reliability of variables, regression analysis, confirmatory factor analysis (CFA) and Cronbach's alpha. The model is being researched to examine the relationship between three factors, namely workplace stress, job satisfaction, work-life balance and job attrition.

Interpretation (Demographic)

The majority of the employees are 25–54 years old, which is 87%. Sixty-three per cent of employees are male, and 37% are female. Most employees, i.e., 87%, are from the production purchase and quality department. Position-wise, employees working at junior level management are 28.1%, employees working in middle-level management are 46.9% and 25% are working at senior level management. 81.3% of employees are postgraduates, and 15.6% are undergraduates; education between 0 and 12 standards is only 3.1%. A total of 71.9% of employees are married, 15.6% are unmarried, 6.3% are single and 6.3% are widows. A total of 56.3% of employees belong to the nuclear family, and 43.8% belong to the joint family. Sixty-seven per cent of employees have at least one child. Seventy-seven per cent of employees have at least one elderly dependent on. Forty per cent of employees have at least one child at home. More than 45% of employees work more than 48 h a week.

Questionnaires in terms of validity and proof of reliability

The questionnaire employed in this study was rigorously developed based on established scales from prior literature to ensure construct validity. Items measuring job satisfaction, job stress, work-life balance and attrition intention were adapted from validated instruments cited in peer-reviewed studies (e.g. Aruldoss et al., 2021; Judge et al., 1994; Walton, 1973; Sirgy et al., 2001). This adaptation ensured content validity by aligning the items with the theoretical constructs relevant to the manufacturing sector.

Reliability of the instrument was statistically tested using Cronbach's alpha and composite reliability (CR). As shown in Table 3 of the manuscript, all constructs demonstrated Cronbach's alpha values above the threshold of 0.70, indicating satisfactory internal consistency (Nunnally, 1978). Composite reliability values for all constructs also exceeded 0.70, further confirming the robustness of the scale.

To assess construct validity, CFA was conducted. The average variance extracted (AVE) for each construct was above 0.50, demonstrating convergent validity (Fornell & Larcker, 1981). Discriminant validity was established by verifying that the square root of AVE for each construct was greater than the correlations with other constructs (Table 4).

Moreover, the Kaiser-Meyer-Olkin (KMO) values for all constructs exceeded the recommended cut-off of 0.6, supporting the adequacy of the sampling for factor analysis.

These measures collectively affirm that the questionnaire used in the study is both valid and reliable, ensuring the integrity and credibility of the results derived from the SEM.

Construct reliability

Cronbach's alpha reliability test was used to assess the internal reliability of the data (Bonett & Wright, 2014). A score exceeding 0.7 is considered satisfactory for the constructs (Nunnally, 1978; Raykov & Marcoulides, 2011).

TABLE 3: Discriminant validity ($N = 385$).

Constructs	KMO	JS	WL	JST	ATR
Job satisfaction (JS)	0.717	1	-	-	-
Work-life balance (WL)	0.691	0.229**	1	-	-
Job stress (JST)	0.568	0.426**	0.791**	1	-
Attrition (ATR)	0.683	0.207**	0.114	0.368**	1

Notes: The scores in the diagonal parenthesis are the square roots of the individual constructs' AVEs. Cross-construct squared correlations are values that are not diagonal.

KMO, Kaiser-Meyer-Olkin.

*, $p < 0.05$; **, $p < 0.01$; ***, $p < 0.001$.

TABLE 4: Goodness-of-fit model.

Measure	Symbol	Range	Value
Normed Chi-square	CMIN/df	$1.0 < \text{CMIN}/df < 3.0$	2.347
Goodness of fit	GFI	$0.8 < \text{GFI} < 0.9$ acceptable fit	0.921
Normed fit index	NFI	$0.8 < \text{GFI} < 0.9$ acceptable fit	0.934
Comparative fit index	CFI	$0.8 < \text{GFI} < 0.9$ acceptable fit	0.917
Root mean square error of approximation	RMSEA	$\text{RMSEA} < 0.08$ means good fit $0.08 < \text{RMSEA} < 0.01$ moderate fit	0.066

The Cronbach's alpha values for all constructs were acceptable, confirming internal reliability. In addition, CR for all constructs exceeded 0.7 (Hair et al., 2010), as shown in Table 2, further demonstrating reliability. The AVE was above 0.5, establishing convergent validity (Bagozzi & Yi, 1987; Fornell & Larcker, 1981). Table 2 provides details on factor loadings, AVE, CR and Cronbach's alpha. Descriptive statistics, including the mean and standard deviation for all constructs, are also presented in Table 2.

The Kaiser–Meyer–Olkin test

The adequacy of the data for factor analysis is evaluated using the KMO test. The percentage of common variance that underlying causes could explain is evaluated by KMO and is used as a sample adequacy indicator. A high KMO score of more than 0.6 suggests the potential utility of factor analysis. Table 4 shows that all KMO values are above 0.6, which validates the data for factor-loading purposes.

Discriminant validity

In order to determine the scales' discriminating validity, it was necessary to determine whether each of its components reflected a different dimension. Standardised linear or covariance correlations were used to calculate the constructs' correlations. Because they take values far from one, the results show discriminatory validity indices between the many criteria assessed. To analyse this dependence further, aims were set to ensure that any two constructs' correlation confidence interval did not equal one, as shown in Table 3. It was essential to establish the estimated model's fits using the indices listed in Table 3 before analysing the CFA findings and after verifying the discriminatory validity of the scales (Hair et al., 2010). Table 4 demonstrates that the square root of AVE is more than the correlations of the cross-constructs.

Confirmatory factor analysis

Confirmatory factor analysis is performed on all constructs, as shown in Figure 2. This approach is numerical for investigating the relationship between two unknown structures or potential variables. Confirmatory factor analysis is used to check that the primary variables or constructs are consistent with the conceptual framework of the research. This ensures the consistency of the primary variables or constructs with the research's conceptual framework. A two-step model construction approach with a measurement model is utilised to determine the model's goodness of fit. A structural model was presented by Anderson and Gerbing (1988). For each model component, the measurement and validity of the hypothesised model were calculated. Figure 2 shows four variables (three independent and one dependent) and 30 items. It also demonstrates that the correlations between the variables of the measure define a concept that cannot be directly measured (Gorecki et al., 2016). The results of the CFA model are all within acceptable limits, indicating that the model is ready for further research. Table 4 displays the standard ranges and values of the fit indices.

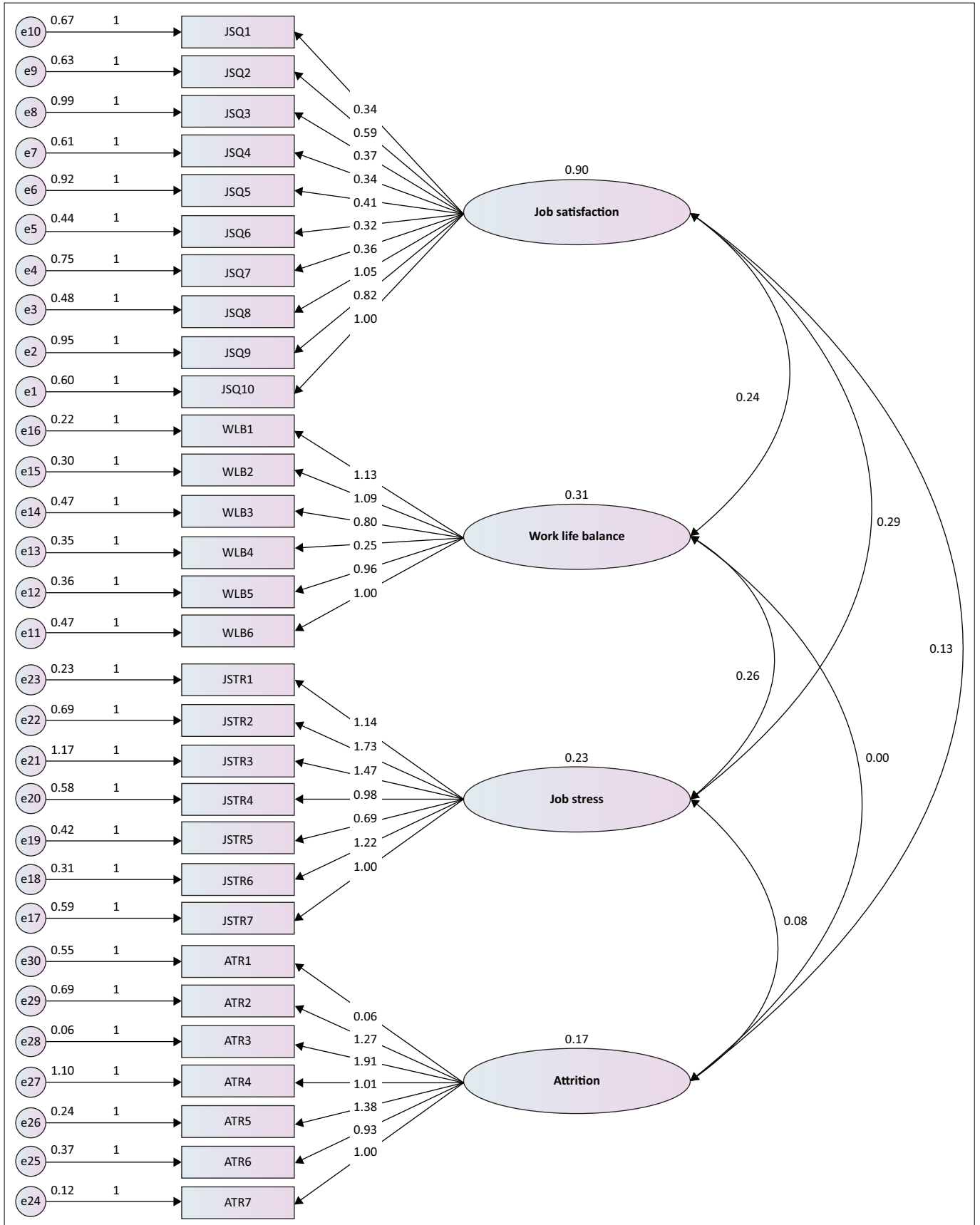


FIGURE 2: Confirmatory factory analysis.

Regression coefficient

The regression analysis determines whether the attributes (job stress, work-life balance and job satisfaction) are favourable or unfavourable regarding their relationship with dependent attribute attrition (Table 5). Where it is found that H1 – job satisfaction has a significant influence on attrition is disapproved. Hypothesis 2 – work-life balance significantly influences attrition and H3 – job stress significantly influences attrition, which has been accepted. *R*-value, which is 0.468, shows that the independent factors of job satisfaction, work-life balance and job stress significantly impact attrition in the organisation. Regression weights show that Job satisfaction has no significant relationship with attrition, but work-life balance and job stress have a significant relationship with attrition (dependable variable).

Structural equation model and hypothesis testing

The SEM is an analytical method for investigating the effect of independent variables on dependent variables (Figure 3). The SEM defines and proves relationships between two variables in the proposed model. Table 6 is created based on the SEM data and the hypothesis testing summary. It gives supported and not supported attributes. Hypothesis in this model is ATR JS, ATR WL, ATR JST. The hypothesis is supported by *p*-values less than 0.05, whereas values greater than 0.05 result in the hypothesis being rejected. With a value less than 0.01 and a *p*-value of ***, a supported and strong hypothesis is indicated.

TABLE 5: Regression coefficient.

Regression	Value	Unstandardised coefficients		Standardised coefficients Beta	<i>t</i>	Sig.
		B	SE			
(Constant)	-	1.256	0.196	-	6.417	0.000
Job satisfaction	-	-0.001	0.066	-0.001	-0.014	0.989
Work-life balance	-	-0.482	0.109	-0.474	-4.411	0.000
Job stress	-	0.663	0.103	0.743	6.426	0.000
<i>R</i>	0.468	-	-	-	-	-
<i>R</i> ²	0.219	-	-	-	-	-
Adjusted <i>R</i> ²	0.207	-	-	-	-	-
SE of the estimate	0.49413	-	-	-	-	-

SE, standard error; Sig., significance.

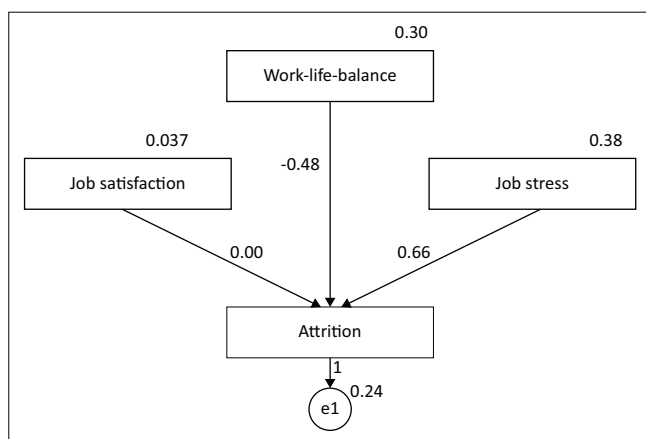


FIGURE 3: Structural equation modelling.

Discussion

H1 – Job satisfaction has a significant influence on attrition: Unsupported

Significance value for an independent variable job satisfaction is greater than 0.05; hence, Hypothesis-1 (H-1) is rejected, which shows job satisfaction has no significant impact on attrition in the company. Factors that are leading to job satisfaction, for example, happiness with responsibilities, recognition of the job, fairness in promotion, job security, cooperation from the organisation and superior communication, have limited significance in terms of attrition compared to other factors such as work-life balance and job stress.

Cultural context

The rejection of the hypothesis that job satisfaction significantly influences attrition may be explained by the cultural resilience of Indian workers. Employees often prioritise job stability and financial security over satisfaction, especially in manufacturing sectors where alternative job opportunities may be limited (Cucina et al., 2018). In addition, hierarchical work environments prevalent in Indian organisations might make employees more accepting of moderate dissatisfaction as part of their roles.

Organisational context

The presence of standardised HR practices, such as annual appraisals and defined promotion cycles, might mitigate dissatisfaction by providing employees with a sense of predictability, reducing its impact on attrition.

H2 – Work-life balance has a significant influence on attrition: Supported

The significance value for work-life balance factors is (*p*) < 0.05, and Hypothesis-2 (H-2) is accepted. From this, it is concluded that work-life balance-related factors have a negative relation to attrition. When employees have no work-life balance, for example, they have no sufficient family time to take their children or elders who depend on them, when they have no time to attend social occasions, when they cannot maintain work and family with a proper schedule, when they have no time to take care about their health and health checkup, they are likely to result in attrition. In the long term, employees cannot bear work-life imbalance and are likely to leave the organisation.

Broader implications

Global shifts towards valuing work-life integration have influenced employee expectations. Indian manufacturing workers, facing long hours and rigid schedules, increasingly demand better work-life balance, aligning with international trends in workforce priorities (Gupta et al., 2024). The cultural significance of family in India further amplifies the impact of work-life balance on attrition.

Organisational insight: Companies with limited flexibility in work schedules or inadequate support systems (e.g. child or elder care) may inadvertently increase attrition.

TABLE 6: Structural equation model results.

Hypothesised relationships	Structural equation model	Estimate	SE	CR	<i>p</i>	Label
H1-ATR <---	JS-job satisfaction	-0.001	0.058	-0.016	0.987	Not supported
H2-ATR <---	WL-work-life balance	-0.482	0.065	-7.414	***	Supported
H3-ATR <---	JST-job stress	0.663	0.057	11.620	***	Supported

CR, composite reliability; ATR, Attrition; SE, standard error; CR, composite reliability.

*, $p < 0.05$; **, $p < 0.01$; ***, $p < 0.001$.

H3 – Job stress has significant influence on attrition: Supported

The significance value for job stress factors is $p < 0.05$, and H3 is accepted. It can be concluded that job stress-related factors significantly lead to organisational attrition. Factors related to stress, like job (occupational) related.

Cultural Nuances

Job stress is universally recognised as a critical factor in attrition. In the Indian context, extended working hours and high job demands in manufacturing exacerbate stress, particularly when compounded by inadequate support for managing personal responsibilities (Baek et al., 2021; Katekhaye & Gahalod, 2024).

Findings

Considering the data analysis, interpretation and results, it is found that this study contradicts earlier studies that job satisfaction has a significant influence on attrition. In this case, factors such as happiness with responsibilities, recognition of the job, fairness in promotion, job security, cooperation from the organisation and superior communication show limited significance in terms of attrition compared to other factors such as work-life balance and job stress. It may be because employees experience less or more dissatisfaction in every job and organisation, as individual personalities will always be different from others. As said, five fingers are not the same, but they are still part of one palm. Employees gain maturity over job satisfaction-related issues, which may be cooperation issues at the workplace, interpersonal or superior communication-related issues related to job recognition or unfair promotions and job security factors in the organisation. In the modern, contemporary business environment, there are many similar or diversified organisations where people can switch jobs and secure jobs in the market. These job-satisfying factors may have become less significant for employees, and they tend to tolerate them, assuming that similar issues exist in other organizations or based on their past experiences.

However, this research says that two other independent factors, such as work-life balance and job stress, have more influence on attrition. This may be because nowadays employees, more than job security, want a quality of life as they have seen the standard of life from their parents or themselves, which they maintain by doing work. As several diverse opportunities are available in terms of jobs inside the country or globally, they are not worried about existing job. In the contemporary era, employees are more concerned

about their work-life balance and job stress-related issues, disturbing their families and health. They want to manage their family responsibility as well as work-related responsibilities with ease. Most employees are responsible for elders, children and spouses at home. This research says that employees responded negatively regarding their future retention in the current organisation if they cannot manage their family and work with ease; many employees showed future impossibility as retention as they are not getting sufficient time for their family (children, elders, etc.); many employees have told they are even unavailable for important social events just because their busy work schedule does not permit it. Many employees have job-related stress because of excessive work time; stress arises as a result of family disturbances, as they are not getting sufficient time to take care of or spend time with family. Many employees consider these work-life balance and job stress-related problems as future attrition in the current organisation.

This research focuses on contemporary independent factors, which are the significant causes of attrition, wherein it is proven from the data analysis that employees do not see job satisfaction-related factors as more significant factors causing their attrition, however, employees may consider work-life balance and job stress-related factors as more significant reasons for their decision to leave the organisation. If organisations consider these factors related to work-life balance and job stress for improvements, organisations can reduce attrition in the company. Organisations can refine and develop their human resources strategies, providing better work-life balance where employees can get time for their families whenever required. It will increase their happiness, and if organisations can reduce job stress in the organisation, it will improve the quality of work at the workplace and the mental and physical health of the employees, leading to a higher percentage of retention.

Discrepancies with prior studies: The findings that job satisfaction has no significant influence on attrition diverge from earlier research emphasising its critical role (Cucina et al., 2018). This discrepancy may reflect evolving employee priorities, particularly in the Indian manufacturing sector, where workers might tolerate moderate dissatisfaction if other factors, like work-life balance, are adequately addressed. In addition, the availability of alternative job opportunities could make employees more willing to overlook job satisfaction issues, shifting their focus to more immediate concerns like work-life balance and stress.

Broader implications for global supply chains: Attrition in Indian auto-component manufacturing, a key supplier for global automotive markets, can disrupt supply chains, delaying production and delivery timelines. This highlights the importance of addressing work-life balance and stress management as strategic imperatives for retaining skilled workers. Global companies relying on these suppliers must recognise and support local retention efforts, emphasising collaborative solutions to mitigate attrition's cascading impact on international operations.

Scope of further research

Expanding regional and industry contexts: Future studies could explore employee attrition across different geographic regions and industries, such as electronics, textiles or IT, to examine whether the identified factors – work-life balance, job stress and job satisfaction – hold consistent significance. A comparative analysis would provide insights into regional and sector-specific variations in attrition drivers.

Longitudinal studies on attrition trends: Conducting longitudinal research would help track changes in attrition patterns, especially in response to evolving workforce expectations and organisational policies. This approach could reveal how interventions like flexible work arrangements or stress management programmes influence attrition in the long term.

Conclusion

This research found that job satisfaction has no significant influence on attrition in the organisation. However, work-life balance and job stress-related factors have more influence on attrition. By studying this, organisations can intervene in these factors to reduce attrition and increase retention. Our data research shows that workers may perceive work-life balance and workplace stress as more important factors in their turnover than job happiness. Companies may minimise turnover by improving work-life balance and job stress. Organisations may improve their HR strategy to provide workers more time with their families to raise their satisfaction, and reducing job stress will enhance the quality of the workplace, mental and physical health and retention. To address attrition, organisations should prioritise enhancing work-life balance through flexible work policies, family support initiatives and wellness programmes to manage stress effectively. Realistic workload management and targeted stress-reduction interventions can further reduce turnover. While job satisfaction was less significant, offering career growth opportunities and improving communication can still enhance morale. Lastly, leveraging predictive analytics can help identify high-risk employees, enabling proactive retention strategies. These measures can foster a supportive work environment, boosting retention and productivity.

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Authors' contributions

P.H. and H.A.S. performed the conceptualisation and literature review, compiled the data, article, and edited references. S.B. and A.T. performed the methodology, analysed the data, and V.R.A. and M.B. prepared the article and edited the text.

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Data availability

The data that support the findings of this study are available from the corresponding author, H.A.S., upon reasonable request.

Disclaimer

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References

- Alduay, S.S., & Rajpoot, K. (2019). Predicting employee attrition using machine learning. In *Proceedings of the 2018 International Conference on Innovations in Information Technology (IIT)* (pp. 93–98). Retrieved from https://www.researchgate.net/profile/KMohbey/publication/342401626_Employee%27s_Attrition_Prediction_Using_Machine_Learning_Approaches/links/5ff5655745851553a022a2cf/Employees-Attrition-Prediction-Using-Machine-Learning-Approaches.pdf
- Ali, R., Naz, A., & Azhar, M. (2025). Work-life balance, career motivation and women: A systematic literature review and research agenda in the Indian context. *Gender in Management: An International Journal*, 40(3), 467–504. <https://doi.org/10.1108/GM-01-2024-0022>
- Alzadajali, B., & Ahmad, S.Z. (2024). The impacts of a high commitment work system on well-being: The mediating role of organization support and employee work-life balance. *Industrial and Commercial Training*, 56(1), 53–77. <https://doi.org/10.1108/ICT-11-2022-0084>
- Anderson, J.C., & Gerbing, D.W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411–423. <https://doi.org/10.1037/0033-2909.103.3.411>
- Anuradha, M., & Rani, K.J. (2024). Predictive analytics in HR: Using AI to forecast employee turnover and improve succession planning. *Zibaldone Estudios Italianos*, 11(2), 157–173.
- Aruldoss, A., Kowalski, K.B., & Parayitam, S. (2021). The relationship between quality of work life and work life balance: Mediating role of job stress, job satisfaction, and job commitment: Evidence from India. *Journal of Advances in Management Research*, 18(1), 36–62. <https://doi.org/10.1108/JAMR-05-2020-0082>
- Ashaduzzaman, M., Jebarajakirthy, C., Das, M., & Shankar, A. (2021). Acculturation and apparel store loyalty among immigrants in Western countries. *Journal of Marketing*, 37(5–6), 488–519. <https://doi.org/10.1080/0267257X.2020.1833963>
- Baek, H., Choi, N.Y., & Seepersad, R. (2021). The role of job stress and burnout on health-related problems in the Trinidad and Tobago police service. *Policing: An International Journal*, 44(2), 246–260. <https://doi.org/10.1108/PIJPSM-11-2019-0177>
- Bagozzi, R.P., & Yi, Y. (1987). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74–94. <https://doi.org/10.1007/BF02723327>
- Bello, B.G., Tula, S.T., Omotoye, G.B., Kess-Momoh, A.J., & Daraojimba, A.I. (2024). Work-life balance and its impact in modern organizations: An HR review. *World Journal of Advanced Research and Reviews*, 21(1), 1162–1173. <https://doi.org/10.30574/wjarr.2024.21.1.0106>
- Bezuidenhout, A., Johnston, K., Corbett, S., Van Zyl, D., & Pasamar, S. (2025). Sustainable management of stress, work-life balance and well-being in the vocational education and training sector. *Public Money & Management*, 1–10. <https://doi.org/10.1080/09540962.2025.2490711>
- Bonett, D.G., & Wright, T.A. (2014). Cronbach's alpha reliability: Interval estimation, hypothesis testing, and sample size planning. *Journal of Organizational Behavior*, 36(1), 3–15. <https://doi.org/10.1002/job.1960>
- Coco, L.K., Heidler, P., Fischer, H.A., Albanese, V., Marzo, R.R., & Kozon, V. (2023). When the going gets challenging—Motivational theories as a driver for workplace health promotion, employees well-being and quality of life. *Behavioral Sciences*, 13(11), 898. <https://doi.org/10.3390/bs13110898>
- Cucina, J.M., Byle, K.A., Martin, N.R., Peyton, S.T., & Gast, I.F. (2018). Generational differences in workplace attitudes and job satisfaction: Lack of sizable differences across cohorts. *Journal of Management Psychology*, 33(3), 246–264. <https://doi.org/10.1108/JMP-03-2017-0115>
- Datta, A. (2020). Measuring the influence of hospitality organizational climate on employee turnover tendency. *The TQM Journal*, 32(6), 1307–1326. <https://doi.org/10.1108/TQM-08-2019-0198>

- Dhir, S., Dutta, T., & Ghosh, P. (2020). Linking employee loyalty with job satisfaction using PLS-SEM modelling. *Personnel Review*, 49(8), 1695–1711. <https://doi.org/10.1108/PR-03-2019-0107>
- Domingues, I.P., & Machado, J.C. (2017). The loosely coupled factors of organizational stress in police forces. *Policing*, 40(4), 657–671. <https://doi.org/10.1108/PJPSM-08-2016-0128>
- Drew, S.V., & Sosnowski, C. (2019). Emerging theory of teacher resilience: A situational analysis. *English Teaching*, 18(4), 492–507. <https://doi.org/10.1108/ETPC-12-2018-0118>
- El-Rayes, N., Fang, M., Smith, M., & Taylor, S.M. (2020). Predicting employee attrition using tree-based models. *International Journal of Organizational Analysis*, 28(6), 1273–1291. <https://doi.org/10.1108/UOA-10-2019-1903>
- Falkenburg, K., & Schyns, B. (2007). Work satisfaction, organizational commitment and withdrawal behaviours. *Management Research News*, 30(10), 708–723. <https://doi.org/10.1108/01409170710823430>
- Fornell, C., & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
- Garg, R.K. (2025). The alarming rise of lifestyle diseases and their impact on public health: A comprehensive overview and strategies for overcoming the epidemic. *Journal of Research in Medical Sciences*, 30(1), 1. https://doi.org/10.4103/jrms.jrms_54_24
- Gaur, J., & Tarkar, P. (2025). A study on balancing work-life dynamics for optimal job satisfaction in India. *Employee Responsibilities and Rights Journal*, 1–27. <https://doi.org/10.1007/s10672-025-09529-5>
- Ghani, B., Zada, M., Memon, K.R., Ullah, R., Khattak, A., Han, H., Ariza-Montes, A., & Araya-Castillo, L. (2022). Challenges and strategies for employee retention in the hospitality industry: A review. *Sustainability*, 14(5), 2885. <https://doi.org/10.3390/su14052885>
- Gorecki, T., Krzysko, M., Waszak, Ł., & Wołyński, W. (2016). Selected statistical methods of data analysis for multivariate functional data. *Statistical Papers*, 59(1), 153–182. <https://doi.org/10.1007/s00362-016-0757-8>
- Gupta, S., Vasa, S.R., & Sehgal, P. (2024). Mapping the experiences of work-life balance: Implications for the future of work. *Journal of Asia Business Studies*, 18(5), 1344–1365. <https://doi.org/10.1108/JABS-06-2023-0223>
- Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.E. (2010). *Multivariate data analysis: A global perspective*. Pearson Education.
- Hasyim, H., & Bakri, M. (2025). Work-life imbalance: Its impact on employee motivation and well-being. *Economics and Digital Business Review*, 6(1), 280–297.
- Hoffman, M., & Tadelis, S. (2021). People management skills, employee attrition, and manager rewards: An empirical analysis. *Journal of Political Economy*, 129(1), 243–285. <https://doi.org/10.1086/711409>
- Jebarajakirthy, C., & Das, M. (2020). How self-construal drives intention for status consumption: A moderated mediated mechanism. *Journal of Retailing and Consumer Services*, 55, 102065. <https://doi.org/10.1016/j.jretconser.2020.102065>
- Judge, T.A., Boudreau, J.W., & Bretz, R.D. (1994). Job and life attitudes of male executives. *Journal of Applied Psychology*, 79, 767–782. <https://doi.org/10.1037/0021-9010.79.5.767>
- Kachi, Y., Inoue, A., Eguchi, H., Kawakami, N., Shimazu, A., & Tsutsumi, A. (2020). Occupational stress and the risk of turnover: A large prospective cohort study of employees in Japan. *BMC Public Health*, 20(1), 1–8. <https://doi.org/10.1186/s12889-020-8289-5>
- Katekhaye, D., & Gahalod, P. (2024). Exploring factors contributing to job stress in the manufacturing industry. In S. Dash, M. Chakraborty, Y. Vaishnav, P. Ogale, L. Vesna J, F. ul Ain Sonia, V. Sharma, & A.K. Pandey (Eds.), *Paradigm shift: Multidisciplinary research for a changing world* (Vol. 2, p. 266). REDSHINE Publication.
- Krishna, S., & Sidharth, S. (2024). HR analytics: Analysis of employee attrition using perspectives from machine learning. In S. Sushil, N. Rani, & R. Joshi (Eds.), *Flexibility, Resilience and Sustainability* (pp. 267–286). Springer Nature Singapore.
- Mas-Machuca, M., Berbegal-Mirabent, J., & Alegre, I. (2016). Work-life balance and its relationship with organizational pride and job satisfaction. *Journal of Management Psychology*, 31(2), 586–602. <https://doi.org/10.1108/JMP-09-2014-0272>
- Mehra, P., & Nickerson, C. (2019). Organizational communication and job satisfaction: What role do generational differences play? *International Journal of Organizational Analysis*, 27(3), 524–547. <https://doi.org/10.1108/UOA-12-2017-1297>
- Nemteanu, M.S., & Dabija, D.C. (2021). The influence of internal marketing and job satisfaction on task performance and counterproductive work behavior. *International Journal of Environmental Research and Public Health*, 18(7), 3670. <https://doi.org/10.3390/ijerph18073670>
- Nunnally, J.C. (1978). *Psychometric theory* (2nd edn., p. 245). McGraw-Hill.
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y., & Podsakoff, N.P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903.
- Qi, L., Yee, C.M., Chan, B., & Fah, Y. (2024). The role of work-life balance in enhancing employee loyalty. *Accounting and Corporate Management*, 6(1), 43–47. <https://doi.org/10.23977/accm.2024.060106>
- Qu, J. (2021). Job satisfaction, expected retirement financial insufficiency, and the expected retirement age of entrepreneurs. *Journal of Entrepreneurship in Emerging Economies*, 13(4), 221–231.
- Raykov, T., & Marcoulides, G.A. (2011). *Introduction to psychometric theory*. Routledge.
- Rugiubei, R., & Cruceanu, S. (2024). The management of organizational culture in the quiet quitting phenomenon in Romanian companies. *Management Dynamics in the Knowledge Economy*, 12(4), 354–370. <https://doi.org/10.2478/mdke-2024-0021>
- Saha, S., & Kumar, S.P. (2018). Organizational culture as a moderator between affective commitment and job satisfaction. *International Journal of Public Sector Management*, 31(2), 184–206. <https://doi.org/10.1108/IJPSM-03-2017-0078>
- Shukla, A., & Srivastava, R. (2016). Development of a short questionnaire to measure an extended set of role expectation conflict. *Cogent Business & Management*, 3(1), 1–19. <https://doi.org/10.1080/23311975.2015.1134034>
- Singhal, D., & Salunkhe, H.A. (2024). An analysis of factors associated with employee satisfaction in information technology companies. *International Journal of Human Capital in Urban Management*, 9(1), 135–156.
- Sirgy, M.J., Efraty, D., Siegel, P., & Lee, D.J. (2001). A new measure of quality of work life (QWL) based on need satisfaction and spillover theories. *Social Indicators Research*, 55, 241–302. <https://doi.org/10.1023/A:1010986923468>
- Srivastava, D.K., & Tiwari, P.K. (2020). An analysis report to reduce the employee attrition within organizations. *Journal of Discrete Mathematical Sciences and Cryptography*, 23(2), 337–348. <https://doi.org/10.1080/09720529.2020.1721874>
- Tu, W., Hsieh, C.W., Chen, C.A., & Wen, B. (2024). Public service motivation, performance-contingent pay, and job satisfaction of street-level bureaucrats. *Public Personnel Management*, 53(2), 256–280. <https://doi.org/10.1177/00910260231201628>
- Walton, R.E. (1973). Quality of working life: What is it? *Sloan Management Review*, 15(1), 11–12.
- Yang, S., & Islam, M.T. (2020). IBM employee attrition analysis. *arXiv*. Retrieved from <http://arxiv.org/abs/2012.01286>