

## The Effect of Polychronicity on Turnover Intention with Mediation of Job Satisfaction and Employee Engagement and Moderated by Work Environment

Muhammad Donal Mon<sup>a</sup>, Adi Neka Fatyandri<sup>b</sup>, Rahmadhanti<sup>c,\*</sup>

<sup>a,b,c</sup>Management Study Program, Faculty of Business and Management, Universitas Internasional Batam

\* Corresponding author e-mail: [muhammad.donal@uib.co.id](mailto:muhammad.donal@uib.co.id)

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### ABSTRACT

*This study investigated the relationships between job satisfaction, polychronicity, employee engagement, and turnover intention, with the work environment as a moderating factor. Using a quantitative approach, the research employed a survey method with purposive sampling to gather data from 360 employees across various manufacturing companies in Batam City. Structural equation modeling-partial least squares (SEM-PLS) was utilized for data analysis, processed with SmartPLS software. The findings revealed several significant relationships. Polychronicity positively and significantly affected employee engagement, job satisfaction, and turnover intention. Job satisfaction positively and significantly influenced employee engagement and negatively and significantly affected turnover intention. The work environment also had a positive and significant impact on job satisfaction. However, employee engagement negatively but not significantly affected turnover intention. Additionally, the work environment moderated the relationship between job satisfaction and polychronicity. These results underscore the importance of fostering a conducive work environment to enhance job satisfaction and manage turnover intention effectively. The study provides valuable insights for organizational leaders and HR practitioners in manufacturing industries, offering strategies to improve employee engagement and reduce turnover rates. Furthermore, the findings contribute to the theoretical understanding of the interplay between individual and environmental factors in workplace dynamics.*

## 1. INTRODUCTION

Employee turnover has become a major challenge faced by many companies. This high turnover rate can cause significant financial losses due to the costs that companies must incur to recruit and train new employees who will replace vacant positions (Andriani et al., 2021). In addition, turnover can also result in losses in terms of human resources and motivation, as companies lose valuable labor. This process of replacing employees not only involves recruitment costs, but also includes efforts in acclimating new employees to the work environment. While employees who remain may remain motivated and dedicated, there is still a risk that some employees may start looking for other employment opportunities, which could result in more turnover.

The importance of a stable and productive workforce has become a major focus of human resources. One indicator that reflects labor market dynamics is the turnover rate, which measures the frequency of employee turnover within an organization. On the other hand, the unemployment rate describes the proportion of individuals who are looking for a job but have not managed to find one in the labor market. The relationship between turnover rate and unemployment rate is an important aspect to study.

Batam City holds strategic importance as one of Indonesia's largest industrial zones, with a thriving manufacturing industry that plays a pivotal role in the nation's economy. As part of a free-trade zone within the Indonesia-Malaysia-Singapore Growth Triangle, Batam attracts significant domestic and international investment. This has led to the establishment of numerous manufacturing companies specializing in electronics, shipbuilding, and other export-driven sectors. The sector's labor-intensive nature makes workforce dynamics, such as turnover and unemployment rates, critical areas of study.

Data from the Statistics Indonesia (BPS Kota Batam, 2023) shows that the unemployment rate in Batam City decreased from 2021 to 2023, from 11.64% in 2021 to 8.23% in 2022, and further to 6.80% in 2023. While the decline in unemployment is a positive sign for the local economy, the manufacturing industry often faces challenges in retaining skilled workers and reducing turnover. High turnover rates can disrupt production cycles, increase recruitment costs, and affect overall productivity, making employee satisfaction and engagement key priorities for organizations in Batam. Studying Batam's labor market dynamics provides valuable insights not only for local businesses but also for policymakers aiming to sustain economic growth and workforce stability in one of Indonesia's most vital industrial regions.

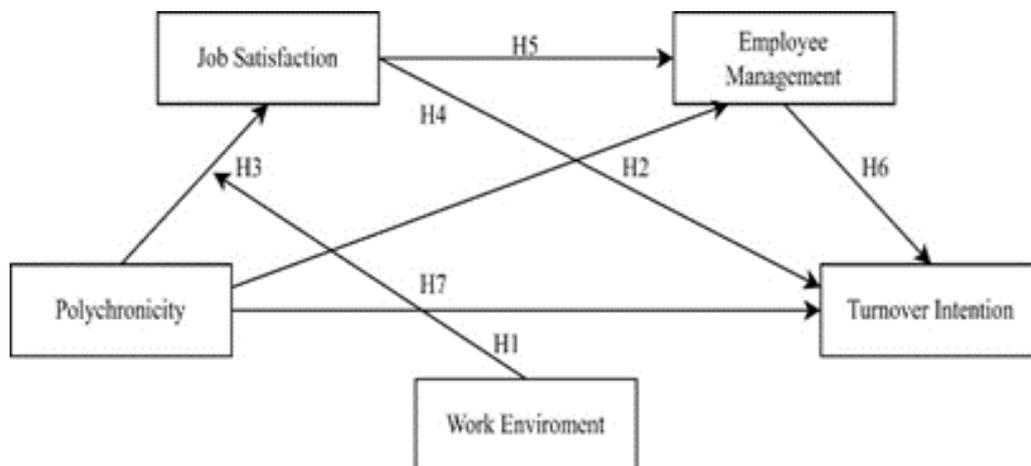
Polychronicity, defined as the ability to manage and perform multiple tasks simultaneously, is an important characteristic in dynamic work environments such as the manufacturing sector (Kumar et al., 2023). Unlike multitasking, which refers to engaging in multiple tasks at the same time but in a fragmented or task-switching manner, polychronicity involves the capacity to switch between tasks seamlessly, often handling several complex activities concurrently. This ability to operate polychronically is crucial in environments where efficiency and adaptability are key to productivity.

However, employees who are high in polychronicity may face increased work pressures and challenges due to the demands of juggling multiple responsibilities at once. Research suggests that this can lead to heightened stress levels, greater job demands, and ultimately, reduced job satisfaction (Liu et al., 2021). Job satisfaction and turnover intention are two critical variables in the workplace that are often influenced by these dynamics. Job satisfaction typically refers to the extent to which employees feel fulfilled and content with their roles, while turnover intention reflects the likelihood that an employee will seek to leave their current position.

Given these factors, it is essential to explore the relationship between polychronicity and turnover intention in the manufacturing sector, where high demands and fast-paced work environments are common. Understanding this relationship can provide insights into how employees' ability to manage multiple tasks affects their work experience and career decisions. The increasing complexity of modern work environments makes this investigation particularly relevant, as it could help organizations identify strategies to mitigate turnover by improving job satisfaction and addressing stress-related issues. The main indicators of these variables include task completion rates and work-related stress (for polychronicity), overall job fulfillment (for job satisfaction), and the likelihood of leaving the job (for turnover intention).

This research will explore the relationship between Polychronicity and Turnover Intention, including Employee Engagement, Job Satisfaction, which is mediated by Work Environment. Research conducted by (Asghar et al., 2020) found that Polychronicity has a negative and significant effect on Turnover Intention. Other research by als (Twaissi et al., 2022) o found that Polychronicity has a positive influence on Employee Engagement. And in another study by (W. Zhang et al., 2021) also found that Polychronicity has a positive and significant effect on Job Satisfaction. This study aims to examine the mediating role of Work Environment in the relationship between Polychronicity, Job Satisfaction, Employee Engagement, and Turnover Intention among manufacturing industry employees.

This study will use a survey method to collect data regarding Polychronicity, Job Satisfaction, Employee Engagement, Work Environment, and Turnover Intention. The purpose of this study is to determine the mediating role of Work Environment in the relationship between Polychronicity, Job Satisfaction, Employee Engagement, and Turnover Intention among manufacturing industry employees which will generally involve an in-depth understanding of the dynamics of the work environment and how certain factors affect satisfaction, employee engagement, and turnover intention. Based on this explanation, the following research model is presented.



**Figure 1. Research Model**

Source: (Andriani et al., 2021)

**Relationship between Polychronicity and Turnover Intention.** According to (Asghar et al., 2020) polychronic is someone who prefers to be involved in many tasks at the same time and often moves from one task to another. Polychronic behavior is the habit of someone who tends to feel comfortable doing several tasks at once. Meanwhile, according to (Andriani et al., 2021) employees as human resources are the main controllers in every operational activity in an organization, so maintaining their employees is certainly a difficult thing for every company.

Polychronicity, can reduce the desire to move, where employees must adjust to high work demands and be ready to provide optimal service to customers (Andriani et al., 2021). Based on the findings of the study conducted by (Asghar et al., 2020) and supported by other research (Andriani et al., 2021), it can be concluded that Polychronicity has a significant negative impact on Turnover Intention. H1: There is a significant influence between Polychronicity and Turnover Intention.

**Relationship between Polychronicity and Employee Engagement.** Polychrony involves switching between tasks or working or doing different activities at the same time. Polychronic individuals can carry out and manage multiple tasks at the same time while dealing with interruptions and achieve their goals to the best of their ability (Twaissi et al., 2022). To support this argument, polychronic servers should remain enthusiastically and joyfully engaged with their work (Asghar et al., 2020). From the evaluation results, polychronic-oriented employees were found to be more focused and engaged at work with a multitasking approach at the same time (Twaissi et al., 2022). Work environment support successfully creates a positive meaning to the achievements shown by employees (Andriani et al., 2021).

Therefore, polychronicity affects employee engagement. Employee dissatisfaction that leads to resignation is often caused by work environment conditions, such as ineffective communication, politics in the work environment, and coworker behavior. These working conditions are the main factors that trigger employees' decisions to leave work (Andriani & Disman, 2023). Based on the results of research conducted by (Twaissi et al., 2022), (Andriani et al., 2021), (Asghar et al., 2020), and supported by research (Andriani & Disman, 2023) it can be concluded

that Polychronicity has a positive influence on Employee Engagement. H2: There is a significant influence between Polychronicity and Employee Engagement.

**Relationship between Polychronicity and Job Satisfaction.** Polychronicity is an existing preference for switching attention between ongoing tasks, rather than sticking to one task until completion and also moving on to another task (Andriani et al., 2021). Employees can engage in multiple activities by switching between different tasks. While it may frustrate others to leave tasks unfinished, Polychronic oriented may find engaging and switching between multiple tasks to be efficient and satisfying (W. Zhang et al., 2021).

When employees report higher levels of polychronicity, they also report higher levels of job satisfaction and lower levels of intention to quit. Therefore, their time use preferences are helpful in dealing with high-intensity work environments (W. Zhang et al., 2021). Based on the results of research conducted by (Andriani et al., 2021) and supported by research (W. Zhang et al., 2021) it is concluded that Polychronicity has a positive and significant effect on Job Satisfaction. H3: There is a significant influence between Polychronicity and Job Satisfaction.

**Relationship between Job Satisfaction and Turnover Intention.** Job satisfaction is explained as optimism, level of satisfaction, and sense of satisfaction that starts from the interpretation of an employee's work exposure and professional experience (Saeed et al., 2023). Meanwhile, according to (Ramlawati et al., 2021) this intention to move is also related to satisfaction with work and commitment to the organization. Turnover itself is when employees leave the company and the company must immediately replace these employees (Neka Fatyandri et al., 2024). Turnover intention is also a serious problem for a company if employees who leave are employees who have the potential to have expertise, abilities and experience or employees who occupy important positions in the company which can interfere with the effectiveness of the company (Arta, 2022).

This causes one of the losses in a company when many potential employees leave the company. Employee turnover intention greatly affects employees in terms of job satisfaction (Hakro et al., 2022). Findings from studies testing turnover models show that job satisfaction is a major factor in turnover intention. In other words, when employees are dissatisfied with their jobs, they tend to exhibit behaviors that indicate a desire to leave the organization (T. Zhang & Li, 2020).

In addition, job satisfaction plays a crucial role in organizational success, where high levels of job satisfaction can reduce the desire to change jobs and encourage employee morale (Marzuqi, 2021). When an employee obtains a higher level of job satisfaction at work, he will have a higher level of employee attachment; thus, his intention to move will be reduced (Wang et al., 2020). (Andriani et al., 2023) also found that the higher the job satisfaction, the lower the desire to move. Based on the results of research conducted by (Saeed et al., 2023), and supported by (Ramlawati et al., 2021), (Hakro et al., 2022), (T. Zhang & Li, 2020), (Wang et al., 2020),

(Andriani et al., 2023), (Neka Fatyandri et al., 2024), (Arta, 2022), (Marzuqi, 2021) it can be concluded that Job satisfaction has a significant negative effect on Turnover intention. H4 : There is a significant influence between Job Satisfaction and Turnover Intention.

**Relationship between Job Satisfaction and Employee Engagement.** According to (Hakro et al., 2022) job satisfaction is the most important factor influencing employee engagement. (Millena & Donal Mon, 2022) Job satisfaction is a positive level of employee response to their work, and this plays a crucial role in fostering employee engagement. The concept of employee engagement is about fostering employees who are genuinely interested, involved, and willing to invest their time and energy to achieve outstanding results in their roles (Sudibjo & Sutarji, 2020). And the satisfaction of employees who feel involved is not influenced by the situation at hand, but is satisfied when they can play a role in the work they are entrusted with. Employee involvement is believed to have a positive impact on increasing customer satisfaction and job satisfaction. And also when employees get support from superiors and organizational culture is also seen as a job satisfaction factor that keeps employees engaged in their work without looking for alternative jobs (Hakro et al., 2022). Also employee engagement is the motivation or energy of employees in helping the organization to achieve the goals of the company (Sentoso & Sang Putra, 2021).

Job satisfaction, which describes likes or dislikes with the work produced, has a relationship with the level of employee engagement or employee involvement in organizational tasks and goals (Kristanto & Tajib, 2023). Job satisfaction, which describes the evaluation of individual feelings towards their work, is often related to employee engagement, which is the level of employee involvement and commitment to the company and the tasks they perform (Sabil, 2021). Then job satisfaction, which is a cognitive and emotional response to work and is manifested through a comparison of actual and expected results, is closely related to the level of employee engagement or employee involvement in organizational tasks and goals (Yu et al., 2020). The concept of job satisfaction is not easy because it relates to human feelings and perceptions, and employees' relationship with this is key in understanding how the work environment and company policies affect individual productivity and well-being (Rinny et al., 2020).

This job satisfaction refers to the positive emotional status experienced by employees towards the company and work, explained through a comparison between actual and expected results (Koo et al., 2020). Based on the results of research conducted by (Hakro et al., 2022) and supported by (Millena & Donal Mon, 2022), (Sudibjo & Sutarji, 2020), (Sentoso & Sang Putra, 2021), (Koo et al., 2020), (Rinny et al., 2020), (Yu et al., 2020), (Kristanto & Tajib, 2023), (Sabil, 2021) it can be concluded that Job Satisfaction has a significant positive effect on Employee Engagement. H5 : There is a significant influence between Job Satisfaction and Employee Engagement.

**Relationship between Employee Engagement and Turnover Intention.** This worker engagement refers to a person's positive traits or habits at work. Workers who are engaged at work are physically, cognitively, and emotionally involved and have an energetic and effective relationship with the work they carry out (Wang et al., 2020). Work engagement is also often seen

as a predictor of commitment. In the context of the workplace, commitment means the desire to remain in the organization where one currently works (T. Zhang & Li, 2020). Every organization makes record profits every year because employees are engaged in their work. Employee engagement boosts employee morale. It reduces turnover every year and keeps turnover intentions at the lowest level (Hakro et al., 2022). Actively disengaged workers cause concern as they not only deliver substandard performance but also demotivate other workers. Emotional attachment to the organization and the desire to stay with the organization are the most frequent ways practitioners characterize engagement (Otoo, 2022).

In addition, engagement theory suggests that accessibility, significance, and protection are important prerequisites for engagement (Arokiasamy et al., 2022). Based on the results of research conducted by (Wang et al., 2020), and supported by (T. Zhang & Li, 2020), (Hakro et al., 2022), (Otoo, 2022) and (Arokiasamy et al., 2022) it can be concluded that Employee Engagement has a significant negative effect on Turnover Intention. H6 : There is a significant influence between Employee Engagement and Turnover Intention.

**Relationship between Polychronicity and Job Satisfaction moderated by Work Environment.** A good work environment plays an important role in creating and increasing employees' job satisfaction, which in turn increases their loyalty to the organization and a healthy work environment, both physically and non-physically, creates a pleasant, safe, and calm atmosphere (Yuswardi et al., 2024). By feeling satisfied, employees tend to be able to carry out their duties and responsibilities well (Irma & Yusuf, 2020), while polychronic is defined as the behavioral tendency or ability of a person to complete many tasks or jobs in one period of work time (Setiawati et al., 2021). In this context, a supportive work environment can play an important role in regulating and moderating employees' polychronic attitudes. A good work environment plays an important role in increasing employee productivity, which in turn results in better employee performance (Donal Mon & Armeta Herman, 2024).

When the work environment provides opportunities for flexible timings and facilitates effective collaboration, employees can adapt their polychronic work style well without compromising the balance between productivity and personal well-being (Wen, 2022). This results in higher job satisfaction as employees can feel efficient and competent in completing their tasks without excessive pressure. Based on the results of research conducted by (Donal Mon & Armeta Herman, 2024), and supported by (Setiawati et al., 2021), (Irma & Yusuf, 2020), (Wen, 2022), (Yuswardi et al., 2024) it can be concluded that Polychronicity and Job Satisfaction has not significant positive effect on Work Environment. H7 : There is not significant influence between Polychronicity and Job Satisfaction moderate by Work Environment.

## **RESEARCH METHODS**

This research belongs to the category of causal research which aims to explore the causal relationship between variables (Sugiyono, 2018). This study uses a survey method using Google

Form to determine and assess the impact of polychronicity on job satisfaction and employee engagement on turnover intention mediated by the work environment within the scope of the manufacturing industry in Batam City. The number of respondents associated with these variables was determined through the use of questionnaires or statements using a Likert scale. Data analysis was conducted using quantitative approach in the research methodology. Table 1 shows 360 employees from manufacturing industry spread across Batam City.

**Table 1. Manufacturing Industries**

<b>Industries</b>	<b>Percentage</b>	<b>Employees</b>
Electronic	86,0%	310
Garment	3,4%	12
Food and Beverages	8,6%	31
Furniture	2%	7
Total		360

*Source: Processed Data (2024)*

The data was then analyzed using SEM-PLS with SMARTPLS tool version 3.3.3 with three stages of the testing process: outer model test, inner model, and hypothesis. The operationalization of variables for measurement was adapted from various prior studies. Indicators Polychronicity, Employee Engagement, and Turnover Intention variables were adopted from (Asghar et al., 2020) study, consisting of 22 items. Work Environment variables are adopted from (Wen, 2022) which consists of 8 items. While Job Satisfaction variables adopted from (Koo et al., 2020) with 6 items.

**Table 2. Indicator of Latent Variable**

<b>Variable &amp; Reference</b>	<b>Indicator</b>	<b>Item</b>
Polychronicity (Asghar et al., 2020)	Polychronicity	7
Job Satisfaction (Koo et al., 2020)	Job Satisfaction	6
Employee Engagement (Asghar et al., 2020)	Employee Engagement	9
Turnover Intention (Asghar et al., 2020)	Turnover Intention	6
Work Environment (Wen, 2022)	Work Environment	8

*Source: Processed Data (2024)*

## **2. RESULTS & DISCUSSION**

Table 3 shows that the demographics of respondents in terms of gender are primarily female, as many as 51,1% and 48,9% male. In terms of age, the majority of respondents are in the age range 18-25, as much as 51,4%, followed by the age range 26-30, as much as 32,9%, age range 31-35 is 9,7%, age range 36-40 is 3,7%, while the age range >40 is 2,3%. Where most of the respondents are single as much as

64% and 36% are married. Based on their latest education, the majority of respondents, 61.4%, were high school students, 36,6% are in Bachelor's degree, 1,4% holds a Master's degree, and 2,3% in Doctoral degree. 67,2% of employees have worked within 1–5 years, 19,1% worked within less than 1 years, and 8% have worked for 6-10 years.

**Table 3. Respondent Demographics**

	Unit	%
<b>Gender</b>		
Male	179	48,9%
Female	181	51,1%
<b>Age</b>		
18–25	186	51,4%
26–30	119	32,9%
31–35	34	9,7%
36–40	13	3,7%
>40	8	2,3%
<b>Education</b>		
Senior High School	224	61,4%
Bachelor (S1)	129	36,6%
Master (S2)	5	1,4%
Doctoral (S3)	2	0,6%
<b>Marital Status</b>		
Single	232	64%
Married	128	36%
<b>Position</b>		
Operator	132	37%
Quality Control	80	22%
Supervisor	50	14%
Logistic	12	3%
Staff	69	19%
Warehouse	17	5%
<b>Monthly Income</b>		
< Rp.4.000.000	36	10,3%
Rp.4.000.001–Rp.7.000.000	195	54%
Rp.7.000.001–Rp.10.000.000	68	18,6%
Rp.10.000.001–Rp.15.000.000	40	11,4%
>Rp.15.000.000	21	5,7%
<b>Length of Employment</b>		
<1 years	70	19,1%
1–5 years	242	67,2%
6–10 years	28	8%
11–15 years	16	4,6%
>15 years	4	1,1%

Source: Processed Data (2024)

Table 4 shows the result of the convergent validity test with loading factor parameters. The result demonstrates that all indicators of the latent variable are > 0.6, which shows a strong

relation between the measurement variable and its factor, making the test valid (Hair et al., 2019), (Ghozali, 2021).

**Table 4. Loading Factor**

	<b>Employee Engagement</b>	<b>Job Satisfaction</b>	<b>Polychronicity</b>	<b>Moderating Effect</b>	<b>Turnover Intention</b>	<b>Work Environment</b>
Employee Engagement1	0.711					
Employee Engagement2	0.849					
Employee Engagement3	0.846					
Employee Engagement4	0.882					
Employee Engagement5	0.832					
Employee Engagement6	0.828					
Employee Engagement7	0.778					
Job Satisfaction1		0.823				
Job Satisfaction2		0.815				
Job Satisfaction3		0.620				
Job Satisfaction4		0.792				
Job Satisfaction6		0.726				
Polychronicity1			0.791			
Polychronicity2			0.850			
Polychronicity4			0.783			
Polychronicity6			0.751			
Polychronicity -> Work Environment				1.141		
Turnover Intention1					0.780	
Turnover Intention2					0.789	
Turnover Intention3					0.779	
Turnover Intention4					0.801	
Turnover Intention6					0.785	
Work Environment1						0.759
Work Environment2						0.815
Work Environment3						0.836
Work Environment4						0.861
Work Environment5						0.840
Work Environment6						0.849
Work Environment7						0.785
Work Environment8						0.815

*Source: Processed Data (2024)*

Table 5 illustrates the evaluation of convergent validity using the average variance extracted (AVE) parameter. The findings reveal that all latent variables are greater than 0.5 - indicating that the indicators within each construct consistently and accurately measure the respective construct (Ghozali, 2021).

**Table 5. Average Variance Extracted**

	Average Variance Extracted (AVE)
Employee Engagement	0.672
Job Satisfaction	0.576
Moderating Effect 1	1.000
Polychronicity	0.631
Turnover Intention	0.619
Work Environment	0.674

Source: Processed Data (2024)

Table 6 shows the Fornell-larcker discriminant validity test. The results suggest that a construct has excellent validity if its AVE value is more extensive than its quadratic correlation with other constructs in the model (Fornell & Lacker, 1981).

**Table 6. Fornell-Lacker**

	Employee Engagement	Job Satisfaction	Moderating Effect	Polychronicity	Turnover Intention	Work Environment
Employee Engagement	<b>0.820</b>					
Job Satisfaction	0.733	<b>0.759</b>				
Moderating Effect	0.170	0.251	<b>1.000</b>			
Polychronicity	0.379	0.421	-0.102	<b>0.794</b>		
Turnover Intention	-0.187	-0.189	-0.148	0.075	<b>0.787</b>	
Work Environment	0.718	0.720	0.300	0.331	-0.184	<b>0.821</b>

Source: Processed Data (2024)

Table 7 shows the reliability test results with Cronbach’s Alpha and composite reliability parameters. The findings indicate that all parameter values are greater than 0.6, proving that the measuring tool used in this study is reliable (Hair et al., 2019), (Ghozali, 2021).

**Table 7. Reliability Test**

	Cronbach's Alpha	Composite Reliability
Employee Engagement	0.918	0.935
Job Satisfaction	0.816	0.871
Moderating Effect	1.000	1.000
Polychronicity	0.805	0.872
Turnover Intention	0.850	0.890
Work Environment	0.930	0.943

Source: Processed Data (2024)

Table 8 shows the result of the inner model test with the *R-square* parameter, demonstrating that there are three adjusted *R-square* values, the Employee Engagement variables (0.789), the Job Satisfaction variables (0.697), and the Turnover Intention variables (0.630). Based on these findings, it can be inferred that the structural model in this study falls within the category of moderate to strong. The *R-square* value is considered significant if it is greater than 0.67 and moderate if it is greater than 0.33 (Chin, 1998).

**Table 8. R-Square**

	<b>R-Square</b>	<b>R Square Adjusted</b>
Employee Engagement	0.789	0.785
Job Satisfaction	0.697	0.691
Turnover Intention	0.630	0.622

Source: Processed Data (2024)

Table 9 is the result of the inner model test with the SRMR parameter approach. The result shows that the SRMR parameter value in the estimated model is  $0.078 < 0.1$ , meaning this research model is reliable (Hu & Bentler, 1998).

**Table 9. Estimated Model**

	<b>Saturated Model</b>	<b>Estimated Model</b>
SRMR	0.063	0.078
d_ULS	1.706	2.624
d_G	0.547	0.577
Chi Square	1154.028	1192.634
NFI	0.831	0.825

Source: Processed Data (2024)

Table 10 shows that from the eight hypotheses, two hypothesis is rejected, namely the effect of Employee Engagement on Turnover Intention as its significance value is  $> 0.05$ . Meanwhile, the other six hypotheses are accepted as their significance values are  $< 0.05$ , indicating significant impacts of Job Satisfaction on Employee Engagement, Job Satisfaction on Turnover Intention, Polychronicity on Employee Engagement, Polychronicity on Job Satisfaction, Polychronicity on Turnover Intention and Work Environment on Job Satisfaction.

**Table 10. Hypothesis Test**

	<b>Original Sample (O)</b>	<b>T Statistics ( O/STDEV )</b>	<b>P Values</b>
Employee Engagement -> Turnover Intention	-0.135	1.576	0.116
Job Satisfaction -> Employee Engagement	0.697	20.701	0.000
Job Satisfaction -> Turnover Intention	-0.174	2.000	0.046
Moderating Effect 1 -> Job Satisfaction	0.077	1.886	0.060
Polychronicity -> Employee Engagement	0.085	1.970	0.049

Polychronicity -> Job Satisfaction	0.225	5.295	0.000
Polychronicity -> Turnover Intention	0.199	3.178	0.002
Work Environment -> Job Satisfaction	0.619	15.148	0.000

Source: Processed Data (2024)

**Polychronicity on Job Satisfaction.** The analysis shows that polychronicity, or the ability to perform several tasks simultaneously, has a significant impact on job satisfaction in the manufacturing industry of Batam City. This is confirmed by the fact that the resulting statistical T-value is 5.295, while the p-value is 0.000. The analysis shows that polychronicity, the ability to perform multiple tasks simultaneously, has a significant influence on the level of job satisfaction in the manufacturing industry of Batam City, especially when looking at it through the lens of demographics. This research is also supported by previous research conducted by (Andriani & Disman, 2023) who said positive job characteristics such as polychronicity (multitasking behavior) can increase job satisfaction.

(1) Differences in frequency between men and women may impact the way polychronicity affects job satisfaction, especially as women tend to have different preferences and responses to polychronicity compared to men. This may make polychronicity have a more significant impact on women's job satisfaction levels compared to men. (2) Younger people may have different preferences and responses to polychronicity compared to older people. This can be related to energy levels, flexibility, or the desire for variety in work. Overall, the impact of polychronicity on job satisfaction varies by demographics as preferences, needs and responses to the ability to perform multiple tasks simultaneously differ between individuals based on demographic characteristics.

**Polychronicity on Employee Engagement.** The analysis shows that polychronicity, the ability to perform several tasks simultaneously, has a significant impact on the level of employee engagement in the manufacturing industry of Batam City. This is supported by the finding that the resulting T statistic value is 1.970, with a p-value of 0.049. In this analysis, various demographic factors, age, marital status income and length of service are closely related to the effect of polychronicity on work engagement in the manufacturing industry. This research is also supported by research conducted previously by (Waheed et al., 2021) which states that employee engagement also helps employees to increase their ability to create new concepts and solutions and unique work attitudes. This engagement increases the likelihood that they will not leave their jobs and will try to find creative and useful ideas to do many things at the same time.

(1) Different age ranges may influence how individuals respond to polychronicity and its impact on employee engagement. Younger individuals may be more skilled at multitasking, so polychronicity may be more likely to increase work engagement for them. (2) Marital status may affect one's responsibilities and time demands. Married individuals may have additional responsibilities that require multitasking, so polychronicity may have a more significant impact on

their employee engagement. Income and tenure can also influence perceptions of tasks and stress levels. Individuals with higher incomes may be better able to manage multitasking effectively, while longer work experience may help in developing mature multitasking strategies, which can increase work engagement.

**Polychronicity on Turnover Intention.** The results of the analysis show that polychronicity, or the ability to perform several tasks simultaneously, has a significant impact on turnover intention in the manufacturing industry of Batam City. This research is also supported by research conducted previously by (Andriani et al., 2021), which concluded that the effect of polychronicity (X) on turnover intention (Y) is significant. This is confirmed by the fact that the resulting statistical T value is 3.178, while the p-value is 0.002. In this analysis, various demographic factors, such as job type, age and income, are closely related to the effect of polychronicity on turnover intention in the manufacturing industry. The majority of respondents work as operators, in an industrial environment that often requires polychronicity, or the ability to perform multiple tasks simultaneously.

However, high polychronicity in combination with high workload may increase the risk of turnover intention. Operators may feel pressured by heavy tasks and tight deadlines, prompting them to seek more adequate or less demanding jobs. Meanwhile, the majority of the respondents are young so the lack of sufficient work experience in this age group may make them unaccustomed to managing polychronicity efficiently, thus increasing the risk of stress and burnout which in turn increases the desire to quit the job. Other factors such as relatively low income may also come into play, where employees may feel unappreciated for the workload they carry. This could encourage them to look for jobs that offer better compensation. Therefore, an understanding of the relationship between polychronicity and turnover intention should consider the demographic context of the respondents to design effective management strategies.

**Job Satisfaction on Employee Engagement.** Data analysis shows that job satisfaction has a significant impact on employee engagement in the manufacturing industry of Batam City. The resulting statistical T-value of 20.701, with a very low p-value of 0.000, confirms the strong relationship between job satisfaction and employee engagement. This study is also supported by previous research conducted by (Ngwenya & Pelsner, 2020), which says so, the greater the employee job satisfaction, the greater the level of employee engagement. The demographics of the respondents also play an important role, the majority of respondents are female may have different preferences or needs in the work environment, which affects their assessment of satisfaction and performance levels. Meanwhile, younger respondents tend to have different expectations of work and are more susceptible to factors such as job satisfaction.

They may seek recognition, rapid career development, or flexibility in the work environment, so their job satisfaction has a significant impact on performance. Job position also influences evaluations of job satisfaction and performance. A supervisor, for example, may judge their performance not only based on personal achievements, but also based on the performance of their team or unit. By considering these demographic factors, we can better understand how job satisfaction affects employee engagement in the manufacturing industry of Batam City.

**Job Satisfaction on Turnover Intention.** The results of the analysis show that job satisfaction has a significant impact on turnover intention in the manufacturing industry of Batam City, as indicated by a significant T statistic value of 2.000 and a low p-value of 0.046. This study is also supported by research conducted previously by (Chen et al., 2023), the results from this study also confirmed job satisfaction as a significant determinant of turnover intention, which supports previous findings. In other words, the importance of job satisfaction as a predictor of turnover intention should not be overlooked. Demographic differences such as gender, age, marital status, monthly income, and tenure have a significant influence on the relationship between job satisfaction and turnover intention. For example, preferences and perceptions of work may differ between men and women, with factors such as work-life balance and promotion opportunities playing an important role.

Similarly, individuals in different age groups may have different needs from their jobs, such as a focus on career development for younger individuals, or stability for older individuals. Marital status is also an important consideration, as family responsibilities and schedule flexibility can affect reactions to job satisfaction. In addition, income level and tenure also contribute to how individuals respond to job satisfaction and turnover intentions.

**Employee Engagement on Turnover Intention.** The analysis shows that Employee Engagement has no significant impact on Turnover Intention in the manufacturing industry in Batam City. This is confirmed by the fact that the resulting statistical T-value is only 1.576, while the p-value reaches 0.116. This could be due to several factors that may affect the relationship between employee engagement and turnover intention, regardless of the demographic characteristics of the respondents. This research is also supported by research conducted previously by (Fauzia & Marwansyah, 2020) which concluded that when employees are actively engaged with the company, they are less likely to leave the company. The research findings indicate a negative relationship between employee engagement and turnover intention.

One possibility is that there are other factors beyond employee engagement that are more dominant in influencing employees' decisions to stay or leave a job, such as economic factors, work environment, or company policies. In addition, differences in interpretation and perception of work engagement and turnover intention among certain demographic groups may also affect the results of the analysis. For example, individuals in different age groups may have different priorities and needs in terms of career and job stability, which may affect how they interpret the relationship between work engagement and the desire to leave. Therefore, although the demographics of the respondents show diversity, the results of the analysis show that employee engagement does not significantly affect turnover intention in the manufacturing industry of Batam City, suggesting that there are other factors to consider in understanding the dynamics of turnover in such workplaces.

**Polychronicity on Job Satisfaction moderates by Work Environment.** Data analysis shows that the indirect effect of Work Environment on Employee Engagement through Job Satisfaction

has a T statistic value of 11,504 with a P-Value of 0.000, indicating that Job Satisfaction acts as a mediator between Work Environment and Employee Engagement. This research is also supported by research conducted previously by (Andriani et al., 2021) which concluded that the work environment is proven to be effective in moderating employee job satisfaction on employee turnover intention, meaning that employee job satisfaction can reduce the level of employee turnover intention moderated by a conducive work environment. The work environment is proven to be effective in moderating employee engagement on employee turnover intention, meaning that employee engagement behavior can reduce the level of turnover intention moderated by a conducive work environment. The higher the level of polychronic effectiveness, the level of job satisfaction, the level of employee engagement, and the level of conduciveness of the work environment, the lower the level of turnover intention.

### **3. CONCLUSION & SUGGESTION**

Research in Batam City's manufacturing industry found that job satisfaction plays a key role in reducing employees desire to leave their jobs (turnover intention) while boosting their engagement with the organization. Job satisfaction also helps mediate the relationship between polychronicity (a preference for multitasking) and turnover intention. Polychronicity was shown to have both positive and negative effects: it increases employee engagement and satisfaction but can also raise turnover intention. Meanwhile, employee engagement does not mediate the connection between job satisfaction and turnover intention. These findings suggest that improving job satisfaction and carefully managing polychronicity can help reduce turnover and enhance organizational stability.

Future research should focus on a few key areas to gain deeper insights and improve organizational practices. First, since job satisfaction significantly impacts employee engagement, studies should look into what factors can improve job satisfaction in the manufacturing industry. For example, researchers can examine how the work environment, company policies, and social support from colleagues or managers contribute to higher satisfaction levels.

Second, it is important to explore how these factors influence the relationships between employee engagement, job satisfaction, polychronicity, and turnover intention. Understanding these connections will provide a clearer picture of the dynamics within organizations and help create strategies to improve employee retention and engagement. Lastly, research should aim to develop practical strategies that companies can use to address these issues. By focusing on improving job satisfaction and managing polychronicity effectively, businesses can create a more positive work environment, reduce employee turnover, and promote overall well-being among their workforce.

### **REFERENCES**

Andriani, R., & Disman, D. (2023). The Effect of Polychronicity on Employee Engagement: Conditional Process of Job Satisfaction and Compensation. *Journal of Economics, Business, & Accountancy Ventura*, 26(1). <https://doi.org/10.14414/jebav.v26i1.3069>

- Andriani, R., Disman, D., Ahman, E., & Santoso, B. (2021). Polychronicity: Model and analysis of conditional process toward employee turnover intentions. *Journal of Innovation in Business and Economics*, 5(01), 1–14. <https://doi.org/10.22219/jibe.v5i01.15867>
- Andriani, R., Disman, D., Ahman, E., & Santoso, B. (2023). Empirical Effects of Work Environment, Job Satisfaction and Work Engagement on Turnover Intention in Hospitality Industry. *Jurnal Aplikasi Bisnis Dan Manajemen*, 9(1), 129–140. <https://doi.org/10.17358/jabm.9.1.129>
- Arokiasamy, A. R. A., Rizaldy, H., & Qiu, R. (2022). Exploring the Impact of Authentic Leadership and Work Engagement on Turnover Intention: The Moderating Role of Job Satisfaction and Organizational Size. *Advances in Decision Sciences*, 26(2). <https://doi.org/10.47654/V26Y2022I2P26-47>
- Arta, D. N. C. (2022). Asian Journal of Management Entrepreneurship and Social Science The Effect of The Non-Physical Work Environment and Career Development on Turnover Intention With Job Satisfaction Mediation Work on PT. Yoshioka Indonesia. *Asian Journal of Management Entrepreneurship and Social Science*, 02(04), 195–210. <https://ajmesc.com/index.php/ajmesc>
- Asghar, M., Gull, N., Tayyab, M., Zhijie, S., & Tao, X. (2020). Polychronicity at work: Work engagement as a mediator of the relationships between job outcomes. *Journal of Hospitality and Tourism Management*, 45(October), 470–478. <https://doi.org/10.1016/j.jhtm.2020.10.002>
- BPS Kota Batam. (2023). *Tingkat Pengangguran Terbuka (Persen) 2021-2024*. <https://kepri.bps.go.id/indicator/6/224/1/tingkat-pengangguran-terbuka.html>
- Chen, X., Al Mamun, A., Hussain, W. M. H. W., Jingzu, G., Yang, Q., & Al Shami, S. S. A. (2023). Envisaging the job satisfaction and turnover intention among the young workforce: Evidence from an emerging economy. *PLoS ONE*, 18(6 JUNE). <https://doi.org/10.1371/journal.pone.0287284>
- Chin, W. W. (1998). *The Partial Least Squares Approach to Structural Equation Modeling*. <https://www.researchgate.net/publication/311766005>
- Donal Mon, M., & Armeta Herman, T. (2024). The Influence of Corporate Culture, Work Environment, and Leadership Skills on Employee Performance Mediated by Employee Motivation on Fast Food Restaurants in Batam. *Journal of Accounting Auditing and Business*, 7(1). <https://doi.org/10.24198/jaab.v7i1.51480>
- Fauzia, N. K., & Marwansyah. (2020). Pengaruh Employee Engagement terhadap Turnover Intention Studi Kasus PT XYZ Bandung. *Jurnal Riset Bisnis Dan Investasi*, 6(1). <https://doi.org/10.35313/jrbi.v6i1.1873>
- Fornell, & Lacker. (1981). Discriminant Validity Assessment : Use of Fornell & Larcker criterion versus HTMT Criterion Discriminant Validity Assessment : Use of Fornell & Larcker criterion versus HTMT Criterion. *Journal of Physics: Conference Series PAPER*, 890(1).
- Ghozali, I. (2021). Partial Least Squares, Konsep, Teknik, dan Aplikasi Menggunakan Program SmartPLS 3.2.9 untuk peneliti. In *Universitas Diponegoro* (Vol. 3).
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hakro, T. H., Jhatial, A. A., & Chandio, J. A. (2022). RJSSER Employee Turnover Intentions: Investigating the role of Work Overload, Job Satisfaction, Employee Engagement and Job Stress. *Research Journal of Social Sciences & Economics Review*, 3(April), 2707–9015. [https://doi.org/10.36902/rjsser-vol2-iss2-2022\(71-82\)CITATIONS](https://doi.org/10.36902/rjsser-vol2-iss2-2022(71-82)CITATIONS)

- Hu, L.-T., & Bentler, P. M. (1998). Fit Indices in Covariance Structure Modeling: Sensitivity to Underparameterized Model Misspecification. In *Psychological Methods* (Vol. 3, Issue 4).
- Irma, A., & Yusuf, M. (2020). Pengaruh Lingkungan Kerja terhadap Kepuasan Kerja Pegawai. *JURNAL MANAJEMEN*, 12(2), 253–258. <http://journal.feb.unmul.ac.id/index.php/JURNALMANAJEMEN>
- Koo, B., Yu, J., Chua, B. L., Lee, S., & Han, H. (2020). 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 and Tourism*, 21(4), 371–401. <https://doi.org/10.1080/1528008X.2019.1663572>
- Kristanto, A. D., & Tajib, E. (2023). Pengaruh Compesantion Dan Job Satisfaction Terhadap Employee Performance Dimediasi Employee Engagement Pada Bank Swasta Di Jakarta. *Glosains: Jurnal Sains Global Indonesia*, 4(1), 9–20. <https://doi.org/10.59784/glosains.v4i1.386>
- Kumar, A., Memon, B., Sohu, Z. H., & Maharvi, M. W. (2023). *Polychronicity as Moderator in the Relationship between Skill Variety and Job Satisfaction*. 12, 269–276.
- Liu, J., Cho, S., Yang, S., & Xue, C. (2021). How and when does multitasking affect customer orientation of hotel employees? *Journal of Hospitality and Tourism Management*, 47(February), 335–342. <https://doi.org/10.1016/j.jhtm.2021.04.009>
- Marzuqi, N. A. (2021). Pengaruh Job Insecurity, Job Satisfaction dan Lingkungan Kerja Terhadap Turnover Intention Karyawan. *Jurnal Ilmu Manajemen*, 9(4), 1393–1405. <https://doi.org/10.26740/jim.v9n4.p1393-1405>
- Millena, R., & Donal Mon, M. (2022). Analisis Pengaruh Kompensasi Pelatihan dan Pengembangan Terhadap Retensi Karyawan Dengan Kepuasan Kerja Sebagai Mediasi Pada Karyawan Manufaktur Tunas Bizpark Kota Batam. *JWM (JURNAL WAWASAN MANAJEMEN)*, 10(3), 157–166. <https://doi.org/10.20527/jwm.v10i3.220>
- Neka Fatyandri, A., Yuswardi, Y., & Ananda, A. D. (2024). Pengaruh Kepuasan Masyarakat, Lingkungan Kerja, Motivasi Kerja, Disiplin Kerja dan Kepemimpinan Terhadap Pelayanan Publik di MPP Kota Batam dengan Kinerja Pegawai Sebagai Mediasi. *REVITALISASI: Jurnal Ilmu Manajemen*, 13.
- Ngwenya, B., & Pelsler, T. (2020). Impact of psychological capital on employee engagement, job satisfaction and employee performance in the manufacturing sector in Zimbabwe. *SA Journal of Industrial Psychology*, 46. <https://doi.org/10.4102/sajip.v46i0.1781>
- Otoo, F. N. K. (2022). Human resource development and employee turnover intentions the mediating role of employee engagement. *International Journal of Business Ecosystem & Strategy* (2687-2293), 4(4), 01–12.
- Ramlawati, R., Trisnawati, E., Yasin, N. A., & Kurniawaty, K. (2021). External alternatives, job stress on job satisfaction and employee turnover intention. *Management Science Letters*, 11, 511–518. <https://doi.org/10.5267/j.msl.2020.9.016>
- Rinny, P., Bohlen Purba, C., & Handiman, U. T. (2020). The Influence Of Compensation, Job Promotion, And Job Satisfaction On Employee Performance Of Mercubuana University. *Www.Ijbmm.Com International Journal of Business Marketing and Management*, 5(2), 2456–4559. [www.webometrics.info/Asia/Indonesia](http://www.webometrics.info/Asia/Indonesia)
- Sabil, A. P. (2021). Pengaruh Employee Well-being dan Job Satisfaction terhadap Employee Performance. *Jurnal Ilmu Manajemen*, 9(4), 1341–1348. <https://doi.org/10.26740/jim.v9n4.p1341-1348>

- Saeed, F., Mir, A., Hamid, M., Ayaz, F., & Billah Iyyaz, U. (2023). Employee Salary and Employee Turnover Intention: A Key Evaluation Considering Job Satisfaction and Job Performance as Mediators. *International Journal of Management Research and Emerging Sciences*, 13(1), 1–23. <https://doi.org/10.56536/ijmres.v13i1.234>
- Sentoso, A., & Sang Putra, F. (2021). Analysis of The Ethical Effect of Leadership on Employee Performance and Moderated with Employee Engagement and Organizational Citizenship Behavior. *Business and Accounting Research (IJEBAR) Peer Reviewed-International Journal*, 5. <https://jurnal.stie-aas.ac.id/index.php/IJEBAR>
- Setiawati, H., Supartha, W. G., Subudi, M., & Mnc Bank Internasional, P. T. (2021). *Kajian Literatur Orientasi Polychronic Dalam Hubungannya Dengan Kepuasan Kerja, Keadilan Distributif Serta Keinginan Berpindah Kerja*.
- Sudibjo, N., & Sutarji, T. (2020). The roles of job satisfaction, well-being, and emotional intelligence in enhancing the teachers' employee engagements. *Management Science Letters*, 10(11), 2477–2482. <https://doi.org/10.5267/j.msl.2020.4.002>
- Sugiyono. (2018). Prof. Dr. Sugiyono. 2018. Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Bandung: Alfabeta. *Prof. Dr. Sugiyono. 2018. Metode Penelitian Kuantitatif, Kualitatif, Dan R&D. Bandung: Alfabeta*.
- Twaissi, N. M., Alhawtmeh, O. M., & Al-Laymoun, O. H. (2022). Polychronicity, job performance, and work engagement: The mediating role of supervisor's organizational embodiment and moderation of psychological ownership. *Cogent Business and Management*, 9(1). <https://doi.org/10.1080/23311975.2022.2143012>
- Waheed, J., Jun, W., Yousaf, Z., Radulescu, M., & Hussain, H. (2021). Towards employee creativity in the healthcare sector: Investigating the role of polychronicity, job engagement, and functional flexibility. *Healthcare (Switzerland)*, 9(7). <https://doi.org/10.3390/healthcare9070837>
- Wang, C., Xu, J., Zhang, T. C., & Li, Q. M. (2020). Effects of professional identity on turnover intention in China's hotel employees: The mediating role of employee engagement and job satisfaction. *Journal of Hospitality and Tourism Management*, 45(December 2019), 10–22. <https://doi.org/10.1016/j.jhtm.2020.07.002>
- Wen, T. Y. (2022). *The Effect of Supportive Work Environment and Workspace Diversity on Employee Engagement in Hotel Industry*.
- Yu, J., Ariza-Montes, A., Giorgi, G., Lee, A., & Han, H. (2020). Sustainable relationship development between hotel company and its employees: Linking job embeddedness, job satisfaction, self-efficacy, job performance, work engagement, and turnover. *Sustainability (Switzerland)*, 12(17). <https://doi.org/10.3390/su12177168>
- Yuswardi, Donal Mon, M., & Dwiham Ginting, R. (2024). Pengaruh Lingkungan Kerja, Kepemimpinan, Rekan Kerja, Keamanan Pekerjaan, dan Gaji terhadap Kinerja Karyawan yang Dimediasi oleh Kepuasan Kerja di Perusahaan Manufaktur di Kota Batam. *REVITALISASI: Jurnal Ilmu Manajemen*, 13.
- Zhang, T., & Li, B. (2020). Job crafting and turnover intention: The mediating role of work engagement and job satisfaction. *Social Behavior and Personality*, 48(2). <https://doi.org/10.2224/sbp.8759>
- Zhang, W., Roberts, K. R., Jang, J., & Durtschi, J. (2021). Why Do People Leave? a Study Of Non-supervisory Restaurant Employees' Polychronic Time Use Preference and Turnover Intention. *International Journal of Hospitality and Tourism Administration*, 22(1), 45–63. <https://doi.org/10.1080/15256480.2018.1547237>