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Flexible work arrangements and employee performance: Unpacking the mediating role of work-life balance among employees

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ABSTRACT

Despite growing interest in flexible work arrangements (FWAs), their effects on employee performance in the Malaysian construction industry, particularly the mediating role of work life balance (WLB), remain insufficiently explored. A total of 306 construction employees in Sarawak, Malaysia, were surveyed using structured questionnaires that were distributed through a simple random sampling method. The responses were subsequently analysed using structural equation modelling (SEM). The results indicate that WLB played a significant mediating role in determining whether FWAs have a positive impact on employee performance. This study offers valuable insights for organisations seeking to improve workplace learning, employee satisfaction, and performance through the implementation of effective FWAs. However, the study is limited by the need for further exploration of policy implications and management strategies to establish supportive conditions for FWAs. The study makes a significant contribution to the existing body of knowledge by highlighting the importance of FWAs and WLB in enhancing employee performance, particularly in the Malaysian construction sector.

Keywords: flexible work arrangements, work-life balance, employee performance, construction sector, Malaysia

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1 INTRODUCTION

Malaysia's 12th Plan outlines the need to enhance Flexible Work Arrangements (FWAs) to promote economic growth and improve the well-being of Malaysian families. Allowing employees to work more flexibly and have adaptable schedules that promote work-life balance is expected to improve job satisfaction and increase productivity. This aligns with the 12MP's aspiration to strengthen growth catalysts by enhancing workforce motivation and engagement, which are crucial for innovation and productivity (Latif et al., 2023; Ministry of Economy, Malaysia, 2021).

Globalisation and technological advancements have transformed traditional work practices (Tan & Doraisamy, 2025). As a result, concepts such as teleworking, flexible working, or hybrid working have become crucial in improving both productivity and employee satisfaction simultaneously (Aprilina & Martdianty, 2023; Feleen et al., 2021). These configurations empower employees to choose the structure of their work schedule in terms of what, when, and where they work, thereby allowing for a better distribution of family and job responsibilities (Latif et al., 2023).

FWAs in Malaysia have also seen greater adoption in recent years, following the outbreak of the COVID-19 pandemic, which emphasised the relevance of flexible work practices (Mohd Salim et al., 2023; Haziq et al., 2023). The Malaysian government has implemented numerous policies, such as the Employment Act 1955, and the 12th Malaysia Plan embraces FWAs due to their importance in economic growth and improving the quality of workers (Bahsri et al., 2023; Shaari & Amirul, 2023). However, the use of FWAs in Malaysia's construction sector remains limited, presenting both challenges and opportunities for research (Mahmud et al., 2022).

As another key outcome, FWAs impact observable performance behaviours, including task completion, cooperation, and commitment (Harzer & Ruch, 2014; Welbourne et al., 1998). WLB plays a moderating role in mediating between work and personal life, leading to enhanced Employee Performance (EP) (Aziz-Ur-Rehman & Siddiqui, 2020; van der Lippe & Lippenyi, 2020). However, limited research has been conducted specifically on the effects of FWAs on employee performance through the lens of WLB within Malaysia's construction sector, where the focus is on demanding schedules and project-based employment (Abd Razak et al., 2018; Ayuningtias et al., 2023).

This research aims to address the gap by examining the relationship between FWAs, employee productivity, and WLB in construction firms. Drawing on Social Exchange Theory (SET), which emphasises reciprocity in workplace interaction, this study provides how flexible work arrangements (FWAs) improve employee performance through mutual responsibilities (Zhenjing et al., 2022). The conclusions are discussed about their impact on organisational policies and managerial initiatives that could contribute to the improvement of the work environment.

1.1 Flexible Work Arrangements (FWAs)

Flexible Work Arrangements (FWAs) provide employees with flexibility in terms of time, location, and job nature. The increasing emphasis on work-life balance and technology has led employers to adopt FWAs, aiming to improve employee performance, productivity and job satisfaction. Research by Allen et al. (2013) highlights that FWAs yield increased job satisfaction and enhanced performance due to the flexibility in organising for family and work commitments. Nevertheless, in the construction industry, the utilisation of FWA remains comparatively weak and has been described by Aydinli Kulak and Tuzuner (2020). While FWAs have become a mainstay in most industries to attract and retain talent, the construction industry presents some unique challenges, including its traditionally rigid schedules and on-site work requirements. The sector has been slow to fully embrace FWAs because operational demands usually revolve around physical presence at the worksite, thereby rendering flexibility to only a small number of employees.

1.1.1 Relevance of Flexible Work Arrangements (FWA) in the Construction Industry

Flexible work arrangements (FWAs) are becoming increasingly important in sectors requiring high adaptability and responsiveness, such as the service industry (Ugargol & Patrick, 2018). However, in industries such as construction, where rigid schedules and on-site presence are typically the norm, adopting FWAs is challenging but necessary for improving employee satisfaction and operational efficiency. The construction sector, particularly in the post-COVID-19 era, has undergone significant changes, with a greater emphasis on technological advancements and adaptability (Aithal & Aithal, 2019). Although flexible working is more commonly associated with service-oriented sectors, its relevance in construction can help improve employee productivity, well-being, and retention (Choi, 2018). FWAs, such as telecommuting and flexible hours, could also enable construction firms to tap into a broader talent pool and ensure business continuity while maintaining employee satisfaction (Pich-Aguilera Ribas, 2020). Moreover, digital tools facilitating remote collaboration and communication have become crucial, allowing employees to work across locations and promoting a more inclusive workforce (Idris & Naqshbandi, 2019). This approach aligns with the growing trends towards employee-centric work practices that enhance both individual well-being and organisational effectiveness (Selvaratnam & Yeng, 2011).

1.1.2 Employee Performance (EP)

In this research, employee performance (EP) refers to task performance, interpersonal facilitation, and contextual performance as postulated by Nthiga and Ngui (2019). Task improvisation relates to an employee's behaviours regarding the accomplishment of tasks, interpersonal facilitation relates to behaviours regarding the work environment, and job dedication relates to an employee's commitment to work. These dimensions have been discussed by Malinen et al. (2019) to show that they enhance organisational performance in its broad perspective. Finally, such configurations of work arrangements offer a crucial link, as previous work in the context of FWA has shown that flexibility in work schedules or workplaces can have positive effects on these dimensions, leading to improved employee satisfaction and motivation (Kossek & Lautsch, 2018).

1.1.3 Work-Life Balance (WLB)

Work-life balance (WLB) stands for the situation in which an employee can balance their business and personal life. This has had a significant impact on the lives of employees. Research carried out by Greenhaus et al. (2012) noted that favourable WLB impacts organisational satisfaction levels, stress levels, and job performance. Moreover, WLB has been proposed as a moderator between FWA and performance, and the mediator and moderator have been defined as follows. According to Abid and Khan Barech (2017), FWA is mediated by WLB, meaning that the researcher shows how the concept of FWA affects the other aspects concerning the employees. Research findings have shown that staff with elevated levels of WLB have higher levels of job satisfaction/ performance than employees who have lower levels of WLB (Davidescu et al., 2020)

1.2 Impact of Specific Dimensions of FWA on Employee Performance

Flexible Work Arrangements (FWAs) have several characteristics, each with a distinct impact on employee performance. Organisational policies play a key role in determining the efficacy of FWAs. Flexible working hours and the ability to work from home are examples of policies that can significantly impact employee performance. Beauregard and Henry (2009) show that flexible working hours and the opportunity to work remotely assist in reducing stress, which can lead to enhanced employee well-being and motivation. Employees who have more control over their schedules and can better balance work and personal life report reduced burnout and higher job satisfaction, which frequently leads to increased productivity and improved performance outcomes.

Managerial support is critical in balancing the link between FWAs and employee performance. According to Jaya and Ariyanto (2021), when employees see managerial support for flexible work arrangements, they feel more valued and committed, which leads to higher engagement, motivation, and performance.

Another critical dimension of FWAs is the use of technology, particularly in remote work arrangements. As agencies continue to adopt the era of remote work, its impact on overall performance will become increasingly significant. Technology enables seamless conversation among group members, even if they are geographically dispersed. Widarsyah (2013) determined that the powerful use of conversation technology complements project performance by ensuring that personnel can collaborate, share information, and stay connected. This improved communication leads to greater task effectiveness, as employees can receive timely feedback and coordinate efforts more effectively.

Furthermore, technology not only enhances task performance but also strengthens interpersonal interactions, which are key to fostering a collaborative work environment. Employees working remotely can utilise virtual tools to maintain social connections, collaborate with colleagues, and share knowledge, all of which contribute to progressive teamwork and process satisfaction. As a result, the combination of generation in FWAs no longer simply enhances mission execution. However, additionally, it influences the interpersonal dynamics of teams, which can be vital for fostering an efficient and inspired workforce.

To conclude, the various dimensions of FWAs, including flexible work policies, managerial support, and the use of technology, have a significant and interconnected impact on employee performance. Organisations that implement supportive policies, foster a culture of managerial support, and effectively utilise technology for remote work are likely to experience better employee performance outcomes. As FWAs continue to evolve, understanding the specific impact of these dimensions on employee performance will be crucial for organisations seeking to optimise their workforce's productivity and well-being.

1.2.1 The Role of Technology in Flexible Work Arrangement (FWA) and Employee Performance

The use of technology has played a key role in improving Flexible Work Arrangements (FWAs), especially in areas where face-to-face interaction was previously required. Tools like virtual communication platforms, video conferencing, and cloud systems have increased employee flexibility, allowing them to operate from any location. This move has altered traditional work habits, enhanced work-life balance, and directly contributed to increased productivity and performance.

Research by Alias et al. (2021) highlights the significant impact of integrating technology with FWAs on employee performance. Technology has been proven to enhance assignments entirely by offering personnel with gear that streamlines workflows, reduces time spent on manual processes, and improves access to real-time information. This accelerated performance is a key element that permits personnel to finish obligations with extra precision and within shorter timeframes. Furthermore, using verbal exchange technology enables personnel to interact in real-time collaboration and share insights more seamlessly, fostering stronger interpersonal relationships among team members.

One of the key advantages of technology-enabled FWAs is the option to work remotely, which gives employees more flexibility over their schedules and locations. This flexibility enhances the balance of work by allowing for better management of personal responsibilities, shorter commute times, and a healthier balance between work and personal life. As a result, personnel enjoy progressive process satisfaction, decreased pressure levels, and extended motivation to perform at their best. These blessings, overall, translate into better performance from workers, as happy personnel are more likely to be engaged and efficient in their roles.

Additionally, the remote accessibility of workplace resources and materials has further increased work efficiency and employee autonomy. Employees do not want to be a bodily gift within the workplace to get access to the tools, information, and aid they require to carry out their duties. Enyioko (2012) found that the potential of remote work to access work-related assets empowers personnel to take ownership of their work, control their duties independently, and make informed choices without relying on others for assistance. This sense of autonomy not only boosts activity delight but also complements personnel's self-assurance in their potential to provide tremendous work.

As technology advances, the relationship between FWAs and employee performance is projected to improve. Advancements in digital tools and platforms will enable organisations to offer more flexible and efficient work arrangements, empowering employees to manage their schedules and

tasks effectively, resulting in increased productivity. The incorporation of advanced technology, such as AI, automation, and data analytics, provides employees with enhanced support, enabling them to focus on value-added tasks and strategic initiatives. Organisations that use technology to support flexible work strategies are likely to sustain improvements in employee performance, engagement, and overall success.

The integration of technology with flexible work arrangements has proven to be a powerful drive for enhanced employee performance. By enabling remote work, improving task efficiency, fostering stronger interpersonal interactions, and promoting greater autonomy, technology has created an environment where employees can thrive. As organisations continue to leverage technological advancements, the positive impact of FWAs on employee performance will grow, offering both employees and organisations the opportunity to achieve their goals more effectively and efficiently.

1.2.2 Theoretical Framework: Self-Determination Theory (SST)

Social Exchange Theory (SET), introduced by Blau (1986), offers a detailed perspective for understanding the mutual dynamics of workplace relationships, where people seek to enhance rewards while reducing expenses. In organisational contexts, these exchanges are reflected in employees' perceived of duty to return supportive practices with positive behaviours such as increased engagement, enhanced commitment and improved performance. Flexible Work Arrangements (FWAs) can be viewed as organisational resources that represent a commitment to employee well-being, effectiveness and productivity. When organisations offer flexible work arrangements (FWAs) through well-defined policies, managerial support, technological readiness, and programs that boost satisfaction, these actions are viewed as beneficial. Driven by the principle of reciprocity, employees tend to react with increased job commitment, improved task execution, and enhanced teamwork. These reciprocal dynamics become particularly evident when FWAs help in balancing work and personal demands. Consequently, SET offers a strong rationale for how FWAs shape beneficial interactions between employees and organisations, ultimately enhancing both individual and organisational outcomes (Zhenjing et al., 2022)

1.3 Problem Statement

Flexible work arrangements (FWAs) factors comprising organisational policies, managerial support, employee satisfaction and technology-enabled systems have been effectively adopted in industries like IT, finance and consulting, resulting in enhancements in employee satisfaction, autonomy and productivity (Eng et al., 2025; Harshani, 2023). Employee satisfaction in flexible work arrangements (FWAs) is characterised by positive employee reactions to FWAs, influenced by supportive management and the efficient use of technologies like communication tools (such as Microsoft Teams, Zoom) and project management applications relevant to the construction industry (such as Microsoft Project, BIM software) (Abuhashesh et al., 2019; Onyekwelu et al., 2022). Nonetheless, the construction sector remains traditionally rigid, with limited implementation of FWAs due to site-based tasks and strict timelines (Abd Razak et al., 2018). Based on Social Exchange Theory (SET), support from an organisation support by policies, managerial support, and technological preparedness is seen as a resource that encourages

reciprocal responses from employees. When this kind of support is appreciated or valued, employees are more inclined to show heightened dedication, improved performance and teamwork. However, proof in the construction industry remains limited due to its strict timelines and challenging characteristics. Addressing this gap will offer insights into how FWAs promote positive outcome and guide tactics to enhance organisational policies (Zhenjing et al., 2022).

The following are the research objectives of the study:

1. To examine the relationship between flexible work arrangements (FWA) and employee performance (EP).
2. To examine the impact of specific flexible work arrangements (FWAs), such as organisational policy, employee satisfaction, managerial support, and technology, on the dimensions of employee performance, including task performance, interpersonal facilitation, and job dedication.
3. To examine the role of work-life balance (WLB) in the relationship between flexible work arrangements (FWA), which includes organisational policy, employee satisfaction, managerial support, and technology, and employee performance, focusing on task performance, interpersonal facilitation, and job dedication.

2 METHODS

2.1 Participants

This study examines employees in the construction sector in Sarawak, Malaysia, encompassing approximately 1,500 employees from various fields. A total of 306 employees were selected using a simple random sampling method, as determined by the Krejcie and Morgan (1970) Table. This sample size ensures adequate power for conducting Structural Equation Modelling (SEM) analysis with a 95% confidence level and a 5% margin of error. The chosen participants were individuals who had experience with flexible work arrangements (FWAs), such as hybrid models and partial work-from-home (WFH), established during or following the COVID-19 pandemic. Participants comprised engineers, project managers, administrative staff and technical staff engaged in planning, fieldwork, and support services in the construction industry. This ensured a wide range of positions relevant to the study goals. Participants were categorised into four age groups: 24-34 years (Group 1), 35-44 years (Group 2), 45-54 years (Group 3), and 55-65 years (Group 4), ensuring diverse representation across demographic characteristics such as age group, gender, and education level. The random sampling method provided equal opportunities for all employees to participate, reducing selection bias and enhancing the reliability of the findings (Mulisa, 2022; Smith et al., 2018). The Krejcie and Morgan framework ensures that the sample is representative of the larger population, increasing the generalisability of the results (Makwana & Chudasama, 2023).

2.2 Design

This study employs a quantitative approach to analyse the relationships among Flexible Work Arrangements (FWA), Employee Performance (EP), and Work-Life Balance (WLB), with WLB

serving as a mediating factor. A cross-sectional research design was adopted, in which data were collected through self-administered questionnaires. This approach allows for the assessment of relationships between FWA, EP, and WLB at a single point in time, aligning with methodologies used in previous research (Ugwu et al., 2021; Wang & Cheng, 2020).

A cross-sectional design helps identify patterns and correlations between variables by collecting data at a single moment. This study provides insights into how FWAs impact employee performance, with work-life balance potentially influencing these effects. The method enables a timely and efficient examination of these dynamics without requiring long-term tracking.

2.3 Instruments

Self-administered questionnaires were used to collect data, allowing respondents to answer independently in a controlled environment, thereby minimising response bias. This method enhances the consistency and reliability of responses as all participants receive the same set of questions. The questionnaire was designed to explore participants' experiences with FWAs, their perception of work-life balance, job performance, utilising established scales and frameworks from previous studies (Eshak et al., 2021; Poulose & Sudarsan, 2014; Pradhan & Jena, 2017). All items in the questionnaire were measured using a 5-point Likert scale, from 1 (Strongly Disagree) to 5 (Strongly Agree). The items in the questionnaire were adapted from established and validated instruments previously used in research. Flexible Work Arrangements (FWA) focused on organisational policies, employee satisfaction, managerial support, and technology use, and were adapted from Eshak et al. (2021). Work-Life Balance (WLB) captured employees' perceptions of managing both work and personal responsibilities, based on the tool developed by Poulose and Sudarsan (2014). Employee Performance (EP), encompassing task performance, interpersonal facilitation, and job dedication, was measured using the scale by Pradhan and Jena (2017).

To assess the measurement model, Confirmatory Factor Analysis (CFA) was conducted. All constructs demonstrated strong psychometric properties: Cronbach's alpha values were 0.90 for FWA, 0.88 for WLB, and 0.92 for EP. In addition, all Average Variance Extracted (AVE) values exceeded 0.60, and Composite Reliability (CR) values were above 0.85, indicating high internal consistency and convergent validity across the constructs (see Table 1).

Table 1. Measurement model results.

Construct	Factor Loading Range	AVE	CR	Cronbach's Alpha
Flexible Work Arrangements (FWA)	0.72 – 0.89	0.65	0.87	0.90
Work-Life Balance (WLB)	0.70 – 0.85	0.62	0.85	0.88
Employee Performance (EP)	0.74 – 0.91	0.68	0.90	0.92

2.4 Procedure

Data was gathered using a structured questionnaire that was distributed to this group. Participants received explicit guidelines and ample time to finish the survey. Before the main study, a preliminary test was carried out to confirm the clarity and comprehensibility of the survey questions. A pilot study was conducted from November to December 2025 with 30 participants with similar construction industry backgrounds. The aim was to ensure the clarity, readability, structure, and internal coherence of the questionnaire. According to the feedback from the pilot test, slight modifications were implemented to enhance the wording and understanding of various items. The instruments demonstrated high internal reliability, with Cronbach's alpha values exceeding 0.70 for every construct, thereby validating the coherence of the items for the primary study. Ethical approval was secured prior to data gathering, and participants gave informed consent prior to taking part.

2.5 Data Analysis

Research hypotheses were tested using Structural Equation Modelling (SEM). This method was selected because it allows for the examination of multiple interdependent relationships between independent and dependent variables, including both direct and indirect effects. Prior to SEM analysis, data were screened for missing values, outliers, and normality. Descriptive statistics, including frequency and percentages, were used to assess data distributions. Measures of central tendency and variability were computed, while internal consistency was evaluated using Cronbach's alpha coefficients.

The analysis was conducted using IBM SPSS AMOS software. First, the measurement model was assessed to examine the psychometric properties of the constructs. CFA was performed to validate the hypothesised factors and establish construct validity by assessing factor loadings, AVE, and CR. The structural model was then utilised to test direct and mediated relationships between the variables. Specifically, the study examined whether WLB mediates the relationship between FWA and EP. The bootstrapping method was applied to assess indirect effects, and model fit was evaluated using the Chi-square/df ratio, RMSEA, CFI, and TLI (see Table 2).

Table 2. Model fit indices.

Fit Index	Value	Acceptance Criteria	Decision
Chi-square/df Ratio	2.15	< 3.0	Model Accepted
RMSEA	0.05	≤ 0.08	Model Accepted
CFI	0.94	≥ 0.90	Model Accepted
TLI	0.92	≥ 0.90	Model Accepted

Finally, post-hoc analysis was conducted to examine exogenous and endogenous regression tests of key variables, assessing the strength, direction, and significance of the association between FWA and EP, with WLB as a mediating variable.

3 RESULTS

Surveys collected from employees in the construction sector underwent thorough data screening for missing values, outliers, and normality, resulting in all responses being retained for analysis. The dataset showed minimal missing data (under 5%) and no evidence of straight-lining or disengaged responses, which maintains the integrity and dependability of the data utilised in subsequent analyses.

The findings showed a significant relationship between flexible work arrangements (FWAs) and employee performance (EP). FWAs had a considerable positive impact on task performance ($\beta = 0.342$, $t = 4.831$, $p < 0.001$), interpersonal facilitation ($\beta = 0.311$, $t = 4.217$, $p < 0.001$), and job dedication ($\beta = 0.376$, $t = 5.102$, $p < 0.001$). Additionally, each dimension of FWAs, including organisational policies ($\beta = 0.295$, $t = 3.762$, $p < 0.001$), employee satisfaction ($\beta = 0.328$, $t = 4.089$, $p < 0.001$), managerial support ($\beta = 0.344$, $t = 4.567$, $p < 0.001$), and technology ($\beta = 0.367$, $t = 5.011$, $p < 0.001$), showed notable impacts on employee performance. These findings indicate that employees provided with flexible work arrangements tend to be more productive, cooperative, and dedicated (see Table 3).

The mediating role of Work–Life Balance (WLB) was also verified, underscoring its importance in bridging the relationship between FWAs and EP. WLB was observed to partially mediate the relationship between FWAs and EP, as well as the relationships between organisational policies, employee satisfaction, managerial support, and technology with the dimensions of EP (task performance, interpersonal facilitation, and job dedication). For example, the indirect effect of FWA on EP through WLB was significant ($\beta = 0.243$, $t = 3.876$, $p < 0.001$), indicating that WLB enhances the effect of FWA on employee performance (see Figure 1). The quantitative analysis further demonstrated an acceptable model fit, with indices such as CFI = 0.95, TLI = 0.93, and RMSEA = 0.05. Please refer to Table 4 for quantitative model fit indices.

The bootstrap findings further validated the mediating function of work–life balance (WLB). For each relationship examined, the direct path (such as FWA → EP) remained significant, while the indirect path through WLB (such as FWA → WLB → EP) was also significant, with $p < 0.05$ in every case. These findings provide evidence of partial mediation. The pathway from organisational policies to work–life balance (WLB) to employee performance (EP) showed an indirect effect size of $\beta = 0.215$, $t = 3.342$, $p < 0.01$, highlighting that robust organisational policies enhance employee performance more effectively when work–life balance is supported. Similarly, the pathway from managerial support to WLB to EP produced $\beta = 0.238$, $t = 3.689$, $p < 0.01$, indicating that supportive leadership combined with a healthy work–life balance leads to improved performance. These findings suggest that work–life balance is not only a personal benefit but also a strategic organisational mechanism that strengthens the positive effects of flexible work arrangements. This has important implications for both scholars and practitioners seeking to improve employee performance through human resource policies and flexible work arrangements (see Table 5).

Table 3. Relationships between FWA, WLB, and EP.

Variable	Relationship	Affected Dimensions	Role of WLB
Flexible Work Arrangements (FWAs)	Positive impact on Employee Performance (EP)	Task Performance- Interpersonal Facilitation- Job Dedication	Mediator
Organisational Policies	Positive impact on Employee Performance (EP)	Dimensions of EP: Task Performance, Interpersonal Facilitation, Job Dedication	Mediator
Employee Satisfaction	Positive impact on Employee Performance (EP)	Dimensions of EP: Task Performance, Interpersonal Facilitation, Job Dedication	Mediator
Managerial Support	Positive impact on Employee Performance (EP)	Dimensions of EP: Task Performance, Interpersonal Facilitation, Job Dedication	Mediator
Technology	Positive impact on Employee Performance (EP)	Dimensions of EP: Task Performance, Interpersonal Facilitation, Job Dedication	Mediator

Table 4. Quantitative model fit indices.

Fit Index	Value	Acceptance Criteria	Decision
CFI	0.95	≥ 0.90	Model Accepted
TLI	0.93	≥ 0.90	Model Accepted
RMSEA	0.05	≤ 0.08	Model Accepted

Table 5. Bootstrap analysis results for work-life balance mediation role.

Direct Pathway	Indirect Pathway (Through WLB)	Significance (p)	Mediation Effect
FWA → EP	FWA → WLB → EP	< 0.05	Confirmed
Organisational Policies → EP	Organisational Policies → WLB → EP	< 0.05	Confirmed
Employee Satisfaction → EP	Employee Satisfaction → WLB → EP	< 0.05	Confirmed
Managerial Support → EP	Managerial Support → WLB → EP	< 0.05	Confirmed
Technology → EP	Technology → WLB → EP	< 0.05	Confirmed

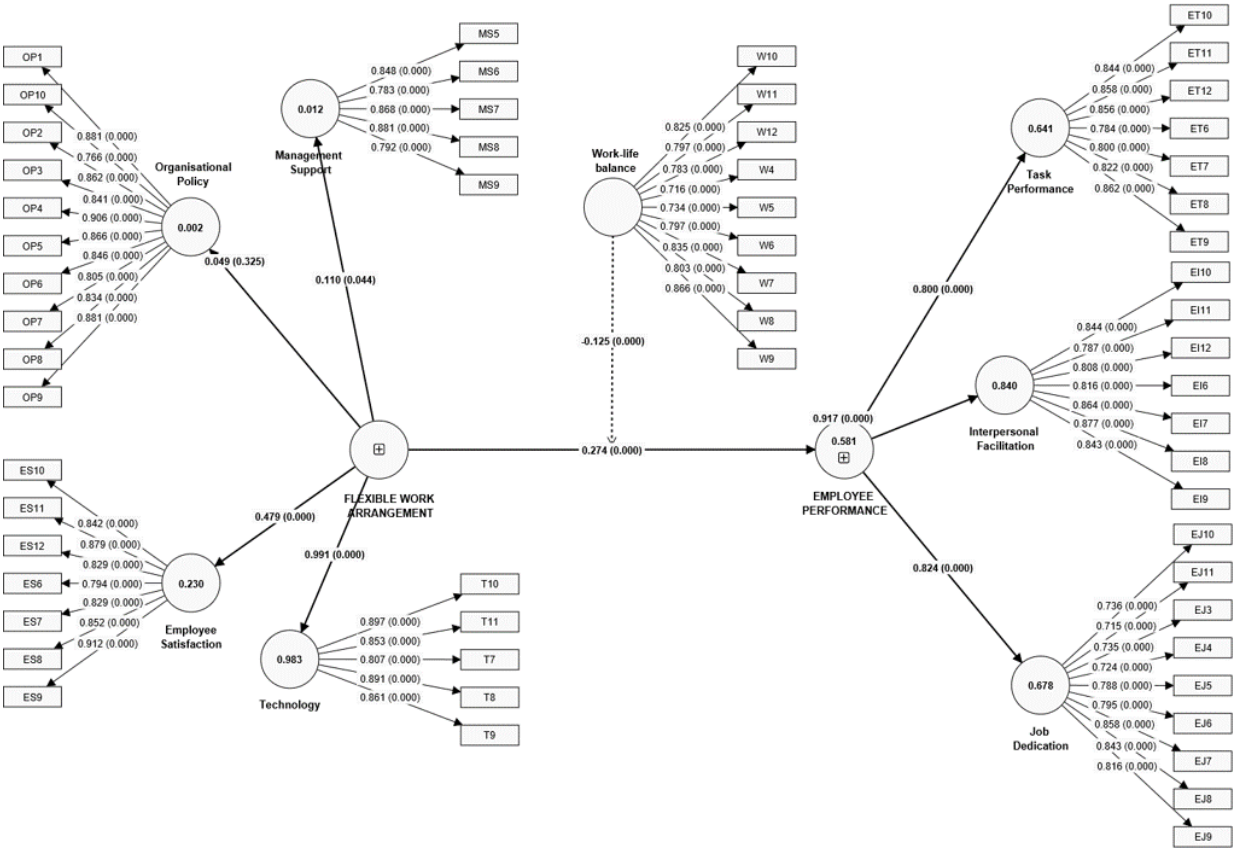

Figure 1. Fit model, factor loadings, beta coefficients, p values, and structural equation model (SEM) path diagram of flexible work arrangements, organisational factors, and employee performance.

4 DISCUSSION

The findings of this study show that flexible work arrangements (FWAs) greatly enhance employee performance (EP) by positively influencing task performance, interpersonal facilitation, and job dedication. This supports the argument that FWAs improve productivity and employee engagement (Petitta & Ghezzi, 2025). However, the study emphasises that FWAs must be managed comprehensively, considering critical elements such as organisational policy, employee satisfaction, managerial support, and technology, as each of these elements plays a crucial role in influencing overall employee results.

The study indicated that flexible work arrangements (FWAs) greatly improve task performance by boosting productivity and improving task completion rates. Adjusting work hours elevates focus and efficiency, as tasks can be synchronised with optimal productivity times. FWAs also reduce the pressure of commuting and fixed working hours, allowing more time to be dedicated to tasks (Subramaniam et al., 2022). These findings align with previous studies that suggest that increased control over work schedules through FWA enhances the capacity to meet deadlines and generate high-quality work (Angayarkanni et al., 2024).

Interpersonal relationships are crucial for fostering smooth collaboration and effective teamwork (Nwinyokpugi & Omunakwe, 2019). This study found that flexible work arrangements (FWA) play a vital role in fostering trust and cooperation, cultivating a more cohesive work environment. By promoting a healthier work-life balance, FWAs improve participation in team activities and encourage dynamic knowledge sharing. Remote work, supported by advanced digital collaboration tools, maintains team connectivity, increases synergy, and reduces conflicts caused by burnout. The incorporation of virtual platforms like Microsoft Teams, Zoom, and Slack has transformed workplace communication, facilitating smooth project coordination, an essential benefit in the construction sector, where collaborative efforts in real time are crucial for success (Ajiva et al., 2024).

Employees with access to effectively established FWAs showed greater organisational commitment, reflecting elevated levels of job dedication (Jaya & Ariyanto, 2021). The ability to successfully manage work and personal commitments led to employees becoming more engaged and eager to exceed their defined roles. FWAs that allow employees to have control over their work in minimising job-related stress and burnout, which are frequent obstacles to job commitment (Aziz-Ur-Rehman & Siddiqui, 2020). Employees with caregiving duties who received flexible work arrangements showed greater loyalty and heightened motivation, as employees felt valued and supported by the organisation (Davidescu et al., 2020).

The study strongly demonstrates the mediating role of work-life balance (WLB) in the connection between flexible work arrangements (FWAs) and employee performance. The beneficial impacts of FWAs on EP were enhanced when employees managed to strike a balance between work and personal life (Allen et al., 2013). Employees who successfully balanced their work and personal obligations were observed to be more concentrated and effective in duties (Beauregard & Henry, 2009). When the work-life balance is effectively managed, employees experience less cognitive overload, allowing them to fulfil their duties with improved focus and precision (Subramaniam et al., 2022).

Work-life balance is vital for minimising workplace stress, which in turn improves positive interactions among employees (Abid & Khan Barech, 2017). With increased control over their schedules, individuals experience reduced workplace stress, which in turn fosters better outcomes from successful work-life balance initiatives. Employees tend to be more collaborative, helpful, and involved in team efforts, thereby fostering a more harmonious workplace. Furthermore, employees who believe their work-life balance requirements are satisfied often show increased commitment to positions (Ryan & Deci, 2000). When employees are not burdened by job-related stress, they tend to remain dedicated and put in additional effort for organisations (Davidescu et al., 2020).

The study also emphasises that not every FWA affects employee performance in the same way. Various elements such as organisational policy, employee satisfaction, managerial support, and technology have unique impacts on performance outcomes (Shaari & Amirul, 2023). Well-defined FWA policies act as a basis for effective implementation. Workers operating under clearly defined policies enjoy greater job security and satisfaction, resulting in better performance (Aithal & Aithal, 2019). For example, formal telecommuting guidelines that specify explicit expectations

and performance metrics promote accountability while allowing employees the freedom to manage their tasks efficiently (Aziz-Ur-Rehman & Siddiqui, 2020).

In addition, employee satisfaction was identified as a crucial factor influencing employee performance. Employees who are satisfied with flexible work arrangements demonstrate higher levels of engagement and dedication (Allen et al., 2013). The study found that job satisfaction is a significant indicator of employee performance, as satisfied employees tend to be more motivated, proactive, and productive (Alias et al., 2021).

Management support was recognised as a key element in influencing the success of FWAs. Employees who received encouragement from their managers were more likely to embrace FWAs without worrying about adverse effects (Jaya & Ariyanto, 2021). Consistent check-ins, clear communication, and trust from management enabled employees to work flexibly, resulting in uncertainty and opposition to flexible work initiatives (Choi, 2018).

The importance of technology in enabling FWAs cannot be overlooked. Incorporation of digital communication and collaboration tools has simplified flexible work arrangements for employees, ensuring that they remain connected and efficient (Wong & Kee, 2022). The study findings suggest that organisations investing in advanced remote work experienced increased employee engagement and productivity (Feleen et al., 2021). For example, real-time project management platforms such as Asana and Trello improved task monitoring and team collaboration, allowing employees to efficiently handle workload regardless of location (Ugargol & Patrick, 2018).

In conclusion, the research emphasises that FWAs are crucial for enhancing task performance, interpersonal support, and job dedication. However, the effectiveness of these arrangements depends on a holistic approach, where organisational policy, employee satisfaction, managerial support, and technology are carefully aligned. Additionally, work-life balance acts as a vital factor that improves the beneficial effects of FWAs on employee productivity.
This study enhances the understanding of social exchange theory (SET) by applying it in the context of flexible work arrangements (FWAs) and impact on employee performance within the construction industry. The findings show that when organisations offer supportive resources like policies, management support and technological, employees perceive these as valuable investments. Aligned with the principle of reciprocity, employees demonstrate enhanced task performance, interpersonal facilitation and job dedication. Work–life balance further enhances this relationship, confirming its position as a key mediator that links FWAs with positive behavioural outcomes. These findings emphasise that supportive practices boost not only employee well-being but also increase organisational efficiency. The impact is considerable as it broadens the use of SET in a labour-intensive field such as construction, where mutual exchanges have been less explored. The study addresses a theoretical gap by demonstrating how FWAs create shared advantages for employees and organisations.

The findings of this study offer clear and practical guidance for organisations and HR practitioners, particularly within the construction sector, on implementing flexible work arrangements (FWAs) to improve employee performance. Key recommendations include formalising organisational policies by developing structured and documented FWA guidelines that specify eligibility, procedures, and expectations, especially for roles suitable for remote or hybrid work, such as

administrative, design, and planning positions. Additionally, it is important to enhance managerial support by training managers in flexible leadership approaches that grant autonomy in task execution, provide emotional and logistical assistance, and assess performance based on outcomes rather than hours worked. Furthermore, organisations should invest in digital infrastructure, utilising cloud storage, virtual conferencing tools like Microsoft Teams and Zoom, and project management applications such as Microsoft Project and BIM to facilitate effective collaboration and communication irrespective of employees' physical location.

Organisations can enhance productivity, employee satisfaction, engagement, and overall well-being by implementing FWAs through a structured and role-specific approach. This is particularly relevant for project-based and schedule-intensive sectors such as construction. The findings of this study hold important consequences for the development of labour policies and national workforce strategies in Malaysia. Although current frameworks, such as the Employment Act 1955 and the 12th Malaysia Plan, recognise the significance of FWAs, this research suggests that more comprehensive and focused policies are necessary. Suggested steps include creating industry-specific guidelines for implementing flexible work arrangements, particularly in labour-intensive and project-oriented sectors such as construction. Providing financial support to organisations that invest in digital infrastructure, staff training, and flexible scheduling systems is also recommended. Additionally, incorporating work–life balance (WLB) metrics into labour standards and national productivity measures would help assess the impact of flexibility on employee well-being and performance.

By implementing these measures, policymakers can promote the broad, efficient, and sustainable implementation of FWAs in different sectors. Over time, this will help in creating a more resilient, involved, and high-performing workforce, fostering national economic development and social well-being.

Numerous boundaries on this observation must be taken into consideration while inspecting the connection between FWA, WLB, and EP. First, the observations were conducted in the production area of Malaysia, which limits the generalizability of the findings to different industries or regions. Future studies may want to discover the effect of FWAs in numerous industries to better understand their outcomes across unique contexts. Secondly, the study utilised cross-sectional and self-reported data collected through questionnaires, which may introduce biases such as sampling bias, socially desirable responses, or inaccurate self-assessments. To address this limitation, future studies should consider a multi-source approach, incorporating supervisor evaluations or performance appraisal data to enhance the accuracy of the findings. Lastly, while the study focused on work-life balance as a mediator, it did not explore the influence of other potential variables such as organisational culture, job satisfaction, or motivation. Future research could examine these additional factors to broaden our understanding of the relationship between FWAs and employee performance.

Although the study has certain limitations, future research could broaden its reach by investigating the influence of FWAs in sectors other than construction, such as service, manufacturing or technology. Long-term quantitative research could also investigate the impact of FWAs on employee performance and health. Future research should also investigate the moderating influence of technical improvements and digital media in implementing FWAs, particularly in

business settings where work-from-home or hybrid models are becoming more prevalent. The moderating influence of personality factors and individual differences on FWAs and self-performance should help identify the optimal work arrangements for employees with diverse personalities.

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AUTHOR CONTRIBUTIONS

The first author carried out the study, encompassing conceptualisation, research design, data collecting, analysis and manuscript drafting. The co-author played a role in forming the introduction and method, aided in interpreting the findings, proposed improvements for the discussion, examined and approved the final version of the manuscript.

CONFLICT OF INTEREST

The authors declare that there are no conflicts of interest related to this study

DATA AVAILABILITY STATEMENT

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

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