The Influence of Job Characteristics and Work-Life Balance on Employee Performance with Mediation *Digital Dexterity*

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ABSTRACT

This study investigates the influence of job characteristics and work-life balance on employee performance among vocational high school teachers, examining the mediating role of digital dexterity. The research employed a quantitative approach, surveying 51 teachers at SMK Ketintang Surabaya. Partial Least Square (PLS) analysis was used for hypothesis testing. The findings indicate that both job characteristics and work-life balance have a significant positive effect on digital dexterity. Furthermore, job characteristics, work-life balance, and digital dexterity all demonstrate a significant positive influence on employee performance. Digital dexterity acts as a significant mediator in these relationships. The model explained 62.9% of the variance in digital dexterity (moderate effect) and 75.9% of the variance in employee performance (substantial effect). Work-life balance exhibited a larger effect size on digital dexterity compared to job characteristics, while digital dexterity had the most substantial effect size on employee performance among the predictors. In conclusion, well-designed job roles and effective work-life balance are vital for enhancing teacher performance, both directly and by fostering digital dexterity. Educational institutions are advised to focus on improving job characteristics, supporting work-life balance, and investing in digital skills development for their teaching staff.

Keywords: Job Characteristics, Work-Life Balance, Digital Dexterity, Employee Performance

INTRODUCTION

Employee performance plays an increasingly crucial role in the success of educational organizations in this modern era. In the past, the focus of performance in the education sector tended to be limited to exam results and teacher evaluations. However, the current educational paradigm has shifted towards a more holistic approach. The main goal of modern education is not only to produce high test scores, but also to create lifelong learners who are able to think critically and overcome future challenges. This shift implies that employee performance in educational institutions must be assessed based on the contribution of educators to the development of students' holistic abilities.(Solehan, 2024).

Competition between educational institutions also influences the importance of employee performance. Competition can encourage schools to increase effectiveness and innovate in attracting students.(Bayer et al., 2010). However, the long-term impact of excessive competition can be detrimental, potentially lowering student proficiency levels due to the sorting of high-achieving students into better schools. In addition, an overemphasis on competition can lead to an undue focus on student achievement, inequities in resource allocation, and stress on the mental well-being of educators.(Harrison & Rouse, 2014). Therefore, while competition can provide benefits, a

collaborative environment may be more conducive to continuous improvement in the education sector.(Harrison & Rouse, 2014).

Technological innovation in learning is also an important factor that demands adaptive employee performance. Technology improves the quality of teaching through interactive tools, personalized learning, and better collaboration.(Nisa et al., 2023). In addition, technology simplifies administrative tasks for teachers, allowing educators to focus more on teaching. In this context, digital skills become an important competency for educators to be able to utilize technology effectively.(Ahmed et al., 2022). Employee performance in the education sector today is no longer separated from the ability of educators to integrate and utilize digital tools proficiently.

Changing student needs also affect the performance expectations of educators and staff. Modern students are looking for industry-relevant skills and clear career outcomes from their education. There is a shift towards more individualized and personalized education to meet the unique needs of each learner. Educators need to adapt teaching methods to accommodate diverse learning styles and increase student engagement.(Suryadi et al., 2024). Thus, employee performance in the education sector is increasingly linked to the ability of educators to understand and respond to the evolving needs and expectations of students in a rapidly changing world.

Job characteristics are an important aspect that influences employee performance in various sectors, including education. The Job Characteristics Model (JCM) suggests that jobs that have high skill variety, task identity, task significance, autonomy, and feedback will result in better motivation, performance, and job satisfaction.(Mariska et al., 2024). This model provides a framework for understanding how the design of teaching and administrative roles can directly affect employee outcomes in educational institutions. Thus, by analyzing roles in the education sector through these five core characteristics, institutions can identify areas for job enrichment to improve employee performance.

Work-life balance is another crucial aspect that affects employee performance, especially in the education sector. Work-life balance involves setting clear boundaries between work and personal life and prioritizing one's well-being amidst the demands of teaching work.(Madigan & Kim, 2021). This means ensuring that work and personal life are not dominated by one or the other, creating a healthy balance. Excessive workload and lack of work-life balance are key drivers of mental health issues among education staff.(Madigan & Kim, 2021). The pressures and long hours of education make work-life balance a challenge but vital to employee wellbeing. The emotional and time demands of teaching can easily spill over into personal life, so proactive strategies are needed to maintain a healthy balance.

Lack of work-life balance can lead to burnout, which negatively impacts the effectiveness of teaching and student learning.(Dousin et al., 2019). Burnout can manifest as emotional exhaustion, depersonalization, and decreased personal accomplishment, affecting educators. Teachers who experience high levels of anxiety due to burnout tend to have students who perform worse academically. Burnout is a significant barrier to effective teaching and can have direct negative consequences on student learning outcomes. The emotional investment required in teaching makes educators particularly vulnerable to burnout if educators lack adequate work-life balance and support.

In today's digital era, digital skills (digital dexterity) are becoming a crucial enabler in education. Digital skills are the ability to quickly learn and leverage new technologies to increase productivity and drive better outcomes.(Ahmed et al., 2022). In the context of education, digital skills go beyond basic computer literacy and include the capacity to effectively use technology for teaching, learning, administration, and communication. The integration of technology into all aspects of education requires educators and staff to have a range of digital skills and a willingness to adapt to new tools. Individuals with good digital skills tend to be agile, adept, and open to new tools,

overcoming the initial discomfort of mastering new software. A workforce with good digital skills is better prepared for future challenges and can drive innovation. Digital skills empower educators and staff to be more effective, efficient, and adaptive in their roles, ultimately improving their performance. The ability to leverage technology can simplify tasks, improve communication, and provide new ways to teach and learn, leading to improved overall performance.(Suryadi et al., 2024).

LITERATURE REVIEW

In the digital era, the nature of work is changing significantly due to the increasing use of digital information and communication technologies. This leads to a digital work environment characterized by aspects such as flexibility, autonomy, and increasing complexity of interactions with technology. Job characteristics, defined as the dimensions of work that affect employee psychological conditions and performance, become very important because digitalization directly affects(Scholze & Hecker, 2023). Understanding the demands and resources of digital work, as integrated into frameworks such as the Job Demands-Resources (JD-R) model, is critical to helping employees perform their jobs. Managing job characteristics that leverage digital resources is key to improving employee well-being and job performance for organizational success in a rapidly evolving digital landscape.

According to Job Characteristics Theory, job characteristics are critical to employee performance because certain job dimensions directly affect employees' critical psychological states, which in turn impact work outcomes. The five primary dimensions of job characteristics include skill variety, task identity, task significance, autonomy, and feedback. When jobs are designed with high levels of these dimensions (job enrichment), this creates high levels of critical psychological states in employees.(Prayogi et al., 2021). This high psychological state will then produce high performance. Job characteristics are considered the basis for employee work productivity which plays an important role in the success of the company. Understanding job characteristics allows employees to understand their jobs well, maximize skills, complete tasks effectively, and be able to provide optimal performance to achieve organizational goals.(Senen et al., 2020).

According to Conservation of Resources (COR) theory, individuals strive to acquire, maintain, foster and protect resources that they value as important(Hobfoll et al., 2018). Stress arises when resources are threatened with loss, are lost, or fail to be obtained after significant effort. In the digital age, digital skills are becoming a very important personal resource for employees.(Alvaro et al., 2010). Digital dexterity (the ability to use digital technology effectively) enables employees to effectively utilize digital resources. By having digital skills, employees can manage the increasing demands of digital work.(Scholze & Hecker, 2023). From a COR perspective, having digital skills acts as a buffer against the threat of resource loss (e.g., difficulty performing work), while also building a resource reserve for future challenges.(Alvaro et al., 2010). Therefore, investing in digital skills is key to protecting against losses and increasing the capacity to acquire new resources. Thus, digital skills, as personal resources, are crucial to facilitate adaptation, improve performance, and maintain employee well-being in the evolving digital work environment.

Theoretical Model and Hypothesis Development

The implementation of Job Characteristics Theory (JCT) and Conservation of Resources (COR) Theory is important because both provide complementary perspectives in understanding the dynamics of resources and work enthusiasm. JCT explains how job characteristics can improve performance, while COR Theory emphasizes that individuals strive to obtain, maintain, and protect resources. By combining these two theories, the study can be conducted more holistically by examining how digital dexterity acts as a mediator that facilitates resource management and

optimization of job characteristics, ultimately encouraging increased employee performance in the challenging digital era. This approach also allows exploration of the interaction between motivational factors (JCT) and resource management (COR Theory) in the context of increasingly complex work-life balance due to technology integration.

Job Characteristics and Digital Dexterity

Job characteristics can be understood through the Job Demands-Resources/JD-R model as the physical, psychological, social, and organizational aspects of a job that require exertion or serve as a resource to achieve work goals, reduce the costs of job demands, and stimulate personal growth.(Scholze & Hecker, 2023). The influence of job characteristics on digital dexterity is seen in how digital demands and digital resources shape the digital work environment.(Scholze & Hecker, 2023). High digital resources, such as increased autonomy and flexibility through information technology (IT), can motivate and support the development of self-efficacy and innovativeness which are key components of digital skills, while high digital demands can cause stress and hinder them (Ahmed et al., 2022;Duan et al., 2024;Scholze & Hecker, 2023). Thus, job design that considers the balance between digital demands and resources becomes crucial in developing the digital skills of the workforce.
H1. Job characteristics have a positive effect on digital dexterity

Work-Life Balance and Digital Dexterity

Work-life balance (WLB) is defined as an individual's relative perception of the relationship between the work and personal life domains, involving boundary management through the dimensions of flexibility (the ability of one domain to adapt to the demands of another domain) and permeability (the extent to which one domain can be penetrated by aspects of another domain), with the goal of achieving satisfaction and good functioning in both domains with minimal role conflict (Chatterjee et al., 2023);(Nam, 2014). The use of digital technology sometimes blurs boundaries and increases stress due to the intrusion of work into personal life (high permeability) or vice versa (Koffer, 2015;(Nam, 2014);Ye et al., 2024). Poor WLB, characterized by conflict, stress, or exhaustion due to digital demands and blurred boundaries, has the potential to deplete cognitive resources and reduce the motivation (ambition) needed for effective digital skills.(Nam, 2014;Ye et al., 2024). Conversely, positive WLB, supported by dynamic digital workplace policies and other organizational capabilities, can improve employee performance and well-being, thereby creating more conducive conditions for employees to develop and apply their digital skills.(Chatterjee et al., 2023). With a good balance, employees have the opportunity to learn, experiment, and adapt to new digital tools or platforms without feeling burdened by excessive work pressure. This improves their ability to think critically, solve problems, and utilize technology effectively, which is the essence of digital dexterity. In addition, sufficient free time also allows them to keep up with the latest technological developments, strengthening their confidence in facing digital transformation in the workplace.(Chatterjee et al., 2023).
H2. Work-life balance has a positive effect on digital dexterity

Job Characteristics and Employee Performance

Job characteristics affect employee performance because job design can trigger critical psychological conditions that in turn drive positive work outcomes. According to job characteristics theory, core dimensions of work such as skill variety, task identity, task significance, autonomy, and feedback can create psychological states such as feeling meaningful work, feeling responsible for work results, and knowing the actual results of work activities.(Prayogi et al., 2021);(Senen et al.,

2020);Trang, 2022). This positive psychological state then results in high internal work motivation and high quality performance.(Prayogi et al., 2021;Senen et al., 2020). Job characteristics can also increase the sense of psychological ownership of the job (job-based psychological ownership), which then positively influences in-role performance because employees feel more responsible and care about the work they "own".(Trang, 2022). In addition, the work environment formed by job characteristics and management support also affects performance directly and indirectly through increasing intrinsic motivation, adaptability, and proactive actions of employees.(Diamantidis & Chatzoglou, 2019). When employees feel that their work is challenging, provides freedom, has clear tasks, and has impact, they tend to be more motivated, satisfied, adaptive, proactive, and show better performance.(Diamantidis & Chatzoglou, 2019;Prayogi et al., 2021;Senen et al., 2020;Trang, 2022). H3. Job characteristics have a positive effect on employee performance.

Work-life Balance and Employee Performance

Work-life balance (WLB) has a positive effect on employee performance because it helps reduce conflict between work demands and personal life, which in turn improves employee psychological well-being and job satisfaction.(Agarwal & Bhakuni, 2024;Susanto et al., 2022;Tamunomiebi & Oyibo, 2020). The absence of WLB can lead to stress, fatigue, dissatisfaction, and other negative impacts that reduce performance.(Bataineh, 2019;Preena & Preena, 2021). In contrast, employees who feel able to balance work and non-work roles tend to be more satisfied with their jobs (Agarwal & Bhakuni, 2024), and this job satisfaction significantly predicts higher performance.(Preena & Preena, 2021;Susanto et al., 2022). When organizations support WLB, employees tend to reciprocate with better effort and performance as a form of gratitude.(Susanto et al., 2022). In addition, satisfaction and positive experiences in one life domain (balanced personal life) can spill over into another domain (work), resulting in better performance, while conflict and stress can spill over negatively.(Tamunomiebi & Oyibo, 2020). Thus, WLB contributes to higher employee performance through reduced stress and conflict, increased job satisfaction and happiness, and encouraging positive reciprocal efforts.(Agarwal & Bhakuni, 2024;Bataineh, 2019;Preena & Preena, 2021;Susanto et al., 2022;(Tamunomiebi & Oyibo, 2020).
H4. Work-life balance has a positive effect on employee performance.

Digital Dexterity and Employee Performance

Digital dexterity has a positive effect on employee performance because digital dexterity includes the ability and willingness of employees to use digital technology effectively to achieve better work results in an increasingly digitalized work environment.(Akter et al., 2023). Employees with high digital skills tend to be more productive and efficient because they are able to navigate digital devices, solve technical problems independently, and save the organization time and energy.(Ahmed et al., 2022;Jacob & Alsabban, 2023). In addition, digital skills, especially those related to personal innovation and self-confidence in technology, drive innovative behavior and employee creativity.(Bindel Sibassaha et al., 2025;Awad & Martin-Rojas, 2024), and increase their willingness to engage in work. Digital skills also increase employee agility, which includes proactive actions, adaptability, and resilience, where this agility directly mediates the positive relationship between digital skills and both task performance and contextual performance.(Chong & Zainal, 2024). Furthermore, self-efficacy, or employees' beliefs about their ability to use technology, positively influences performance and may mediate the relationship between digital capabilities and job(Ibrahim & Aldawsari, 2023). Therefore, digital skills are essential as they enable employees to adapt to technological changes, increase efficiency, drive innovation and ultimately improve their

performance in the modern digital work landscape.(Bindel Sibassaha et al., 2025;Halik et al., 2024;Jacob & Alsabban, 2023).

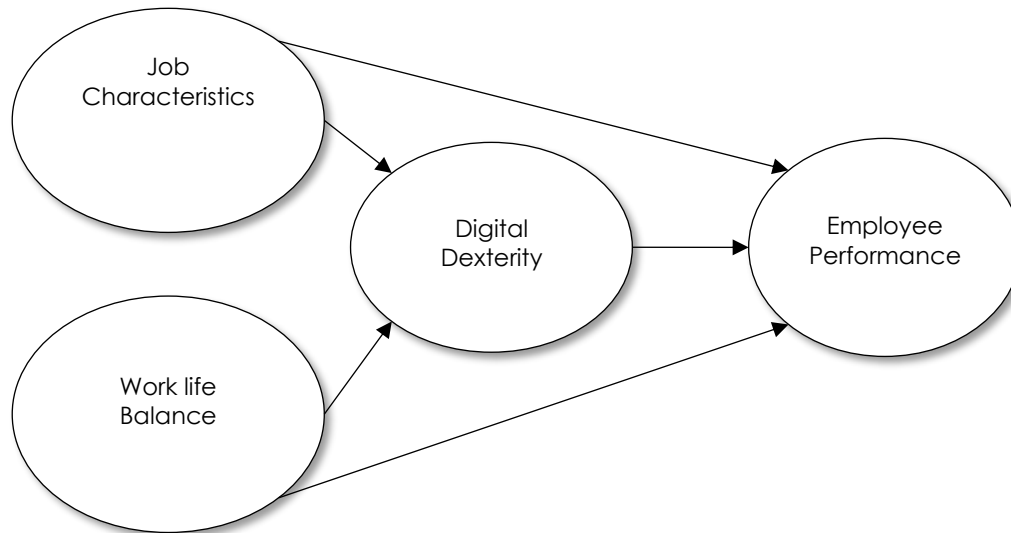H5. Digital dexterity has a positive effect on employee performance.

Figure 1
Conceptual Framework

RESEARCH METHODS

The research sample was 51 teachers of SMK Ketintang Surabaya. Each research variable was measured from previous research. Job characteristics variables with 5 statement items adopted fromPrayogi et al. (2021). Work-life balance is measured by 6 statement items adopted fromBorowiec & Drygas (2023). Digital dexterity is measured with 6 statement items adopted from(Nikou et al., 2022). Employee performance is measured by 6 statement items adopted from(Susanto et al., 2022). All items are measured with a 5-point Likert Scale. The analysis technique used is Partial Least Square (PLS), which is a component based predictive model with a variance based or component based approach.(Ghozali, 2019). Evaluation of the measurement model consists of three stages, namely convergent validity test, discriminant validity test and composite reliability test. Evaluation of the structural model is carried out by conducting the R-squared (R^2) test and the path coefficient significance test.

RESULTS OF ANALYSIS AND DISCUSSION

Respondents were dominated by men with a total of 32 people or 63%, most of whom, with a total of 25 people or 49%, were between 36 and 45 years old. Length of service was dominated by respondents with a total of 5 to 10 years of service with a total of 30 people or 59%. As for education, the dominant respondents were those with a Bachelor's degree with a total of 44 people or 86%.

The results of the convergent validity analysis show that all outer loading values of each variable have a value greater than 0.7. This indicates that all indicators of the research variables have met the criteria of convergent validity. The results of the convergent validity test with the AVE value also show that each variable has an AVE value greater than 0.5, so it can be said that the indicators of each variable have high convergent validity.

Table 1 Respondent Characteristics

Demographics	Characteristics	Amount	Percentage
Gender	Man	32	63%
	Woman	19	37%
Age	< 25 years	3	6%
	25 - 35 years old	18	35%
	36 - 45 years old	25	49%
	45 years and above	5	10%
Length of work	< 5 years	17	33%
	5 - 10 years	30	59%
	> 10 years	4	8%
Education	Diploma	4	8%
	S1	44	86%
	S2	3	6%

Table 2. Validity and Reliability

Variable/Item	Outer Loading	Cronbach's Alpha	Composite Reliability	AVE
Job Characteristics (Prayogi et al., 2021)		0.902	0.928	0.720
My job requires me to do many things using various skills and talents.	0.854			
The job involves overall identification from start to finish.	0.857			
The results of my work significantly impact the lives or well-being of others.	0.838			
The job allows me to decide for myself how I do this job.	0.810			
In addition to feedback from coworkers, the job provides feedback on how well I am doing my job.	0.881			
Work-life Balance(Borowiec & Drygas, (2023)		0.918	0.936	0.710
Sometimes I can't go to the cinema, entertainment venues, or social gatherings because I have to do my professional work during this time (reversed)	0.836			
Even in a situation full of workload, I still find time to do physical activity.	0.769			
I usually find enough time for my family.	0.919			
I am often so busy that I don't pay attention to what I eat and when I eat (reversed)	0.854			
I don't use sick leave, even when I'm really sick and feeling unwell (reversed)	0.809			
I have enough time to pursue non-professional interests or hobbies.	0.862			
Digital Dexterity (Nikou et al., 2022)		0.908	0.929	0.684
I know how to solve my own technical (information technology related) problems	0.843			
I can learn new digital technologies easily	0.822			
I know about many different digital technologies	0.817			
I have the technical skills I need to use digital technology for work/study and create presentations that demonstrate my understanding of what I have learned.	0.821			
I am confident in my search and evaluation abilities to obtain information from the Web.	0.838			
Digital technology allows me to collaborate better with my colleagues on project work and other work/study.	0.821			
Employee Performance(Susanto et al., 2022)		0.901	0.924	0.669

Variable/Item	Outer Loading	Cronbach's Alpha	Composite Reliability	AVE
I meet the formal performance requirements of this job.	0.806			
I fulfill the responsibilities specified in the job description.	0.807			
I am involved in activities that can positively influence my performance evaluation.	0.809			
I do the tasks expected of me	0.843			
I can provide constructive suggestions for the overall functioning of my work group.	0.841			
I encourage others to try new, more effective ways of doing their jobs.	0.802			

Table 3. Fornell-Larcker Criterion

Variables	DD	EP	JC	WLB
Digital Dexterity(DD)	**0.827**			
Employee Performance(EP)	0.815	**0.818**		
Job Characteristics(JC)	0.649	0.713	**0.848**	
Work-Life Balance(WLB)	0.722	0.732	0.508	**0.843**

The results of the discriminant validity analysis with the Fornell-Larcker Criterion show that the AVE root value of the digital dexterity (DD) construct of 0.827 is higher than the correlation between the digital dexterity (DD) construct and employee performance (EP), job characteristics (JC), and work-life balance (WLB). Likewise, the AVE root value of the employee performance (EP) construct of 0.818, job characteristics (JC) of 0.848, and work-life balance (WLB) of 0.843, each of which is higher than the correlation with other constructs. This shows that the indicators of each variable have appropriately measured the construct of the variable.

The results of the discriminant validity analysis with crossloading in table 4 show that the correlation of the job characteristics (JC) construct with its indicators is higher than the correlation of the job characteristics (JC) indicators with the work-life balance (WLB), digital dexterity (DD) and employee performance (EP) constructs. This also applies to the other three variables, namely work-life balance (WLB), digital dexterity (DD) and employee performance (EP). So based on the results of the crossloading test, it shows that each latent construct predicts its block indicators better than the indicators in other variable blocks.

Table 4. Crossloading

Indicator	*Digital Dexterity* (DD)	*Employee Performance* (EP)	*Job Characteristics* (JC)	*Work-life Balance* (WLB)
DD1	**0.843**	0.623	0.456	0.496
DD2	**0.822**	0.680	0.569	0.660
DD3	**0.817**	0.658	0.428	0.625
DD4	**0.821**	0.717	0.560	0.607
DD5	**0.838**	0.660	0.560	0.526
DD6	**0.821**	0.694	0.624	0.647
EP1	0.626	**0.806**	0.614	0.680
EP2	0.626	**0.807**	0.583	0.572
EP3	0.675	**0.809**	0.619	0.554
EP4	0.687	**0.843**	0.547	0.598
EP5	0.653	**0.841**	0.504	0.628

EP6	0.728	**0.802**	0.625	0.560
JC1	0.544	0.555	**0.854**	0.391
JC2	0.630	0.635	**0.857**	0.589
JC3	0.510	0.629	**0.838**	0.316
JC4	0.415	0.611	**0.810**	0.320
JC5	0.628	0.593	**0.881**	0.506
WLB1	0.707	0.610	0.483	**0.836**
WLB2	0.565	0.641	0.403	**0.769**
WLB3	0.561	0.627	0.402	**0.919**
WLB4	0.680	0.669	0.512	**0.854**
WLB5	0.558	0.588	0.384	**0.809**
WLB6	0.550	0.547	0.355	**0.862**

The results of the reliability analysis show that the composite reliability and Cronbach's alpha values for each variable of job characteristics (JC), work-life balance (WLB), digital dexterity (DD) and employee performance (EP) show values above 0.70, so it can be stated that the construct of each variable has good reliability.

Table 5: Results of Testing the Significance of Path Coefficients of the Structural Model

Hypothesis	Path Coefficient	P value	Information
H1: Job Characteristics (JC)→Digital Dexterity (DD)	0.380	0,000	Supported
H2: Work-Life Balance (WLB)→Digital Dexterity (DD)	0.529	0,000	Supported
H3: Job Characteristics (JC)→Employee Performance (EP)	0.299	0.002	Supported
H4: Work-Life Balance (WLB)→Employee Performance (EP)	0.275	0.040	Supported
H5: Digital Dexterity (DD)→Employee Performance (EP)	0.422	0.001	Supported

The results of the hypothesis testing show the following results:

1. The path coefficient value of the influence of job characteristics (JC) on digital dexterity (DD) is positive at 0.380, with a p value of 0,000< significance level of 0.05. Shows that job characteristics (JC) have a significant positive effect on digital dexterity (DD). So the first hypothesis stating that job characteristics have a positive effect on digital dexterity is supported.

2. The path coefficient value of the influence of work-life balance (WLB) on digital dexterity (DD) is positive at 0.529, with a p value of 0,000< significance level of 0.05. Shows that work-life balance (WLB) has a significant positive effect on digital dexterity (DD). So the second hypothesis stating that work-life balance has a positive effect on digital dexterity is supported.

3. The path coefficient value of the influence of job characteristics (JC) on employee performance (EP) is positive at 0.299, with a p value of 0.002< significance level of 0.05. Shows that job characteristics (JC) have a significant positive effect on employee performance (EP). So the third hypothesis stating that job characteristics have a positive effect on employee performance is supported.

4. The path coefficient value of the influence of work-life balance (WLB) on employee performance (EP) is positive at 0.275, with a p value of 0.040< significance level of 0.05. Shows that work-life balance (WLB) has a significant positive effect on employee performance (EP). So the fourth hypothesis stating that work-life balance has a positive effect on employee performance is supported.

5. The path coefficient value of the influence of digital dexterity (DD) on employee performance (EP) is positive at 0.422, with a p value of 0.001< significance level of 0.05. Shows that digital dexterity (DD) has a significant positive effect on employee performance (EP). So the fifth

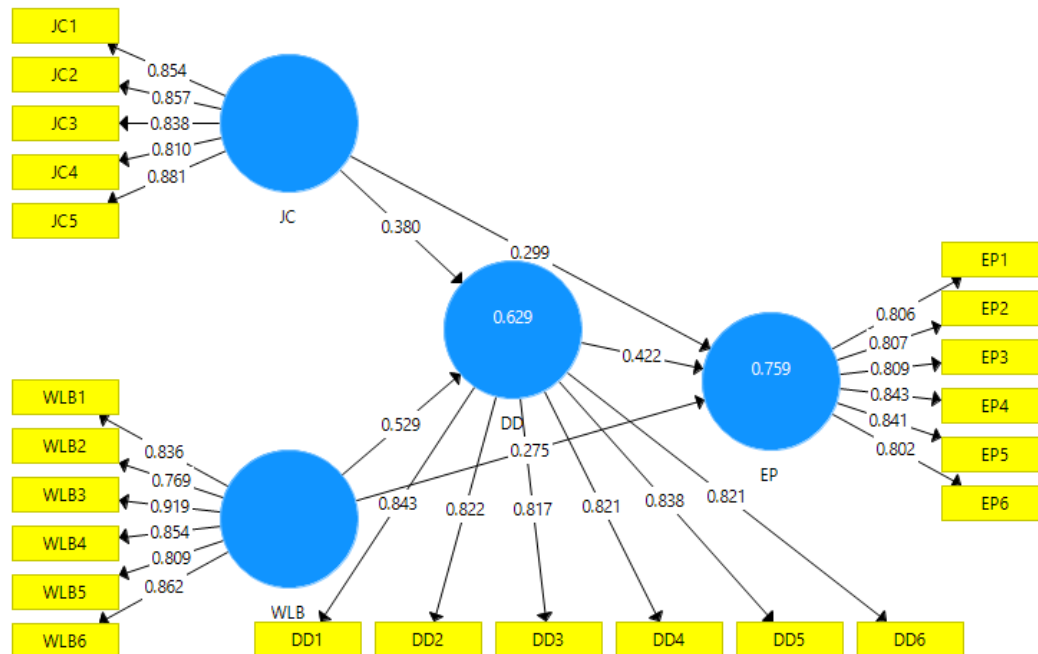hypothesis stating that digital dexterity has a positive effect on employee performance is supported.

Figure 2. PLS Analysis Results

Table 6: Value of the Determination Coefficient or R Square (R2)

Endogenous Variables	R2 value
Digital Dexterity(DD)	0.629
Employee Performance(EP)	0.759

Based on the coefficient of determination value, it can be explained that:

1. The influence of job characteristics (JC) and work-life balance (WLB) on digital dexterity (DD) shows an R-Square value of 0.629, which can be interpreted that the variability of the digital dexterity (DD) construct that can be explained by job characteristics (JC) and work-life balance (WLB) is 62.9%, while the remaining 37.1% is still explained by other variables that were not studied.

2. The influence of job characteristics (JC), work-life balance (WLB) and digital dexterity (DD) on employee performance (EP) shows an R-Square value of 0.759, which can be interpreted that the variability of the employee performance (EP) construct that can be explained by job characteristics (JC), work-life balance (WLB) and digital dexterity (DD) is 75.9%, while the remaining 24.1% is still explained by other variables that were not studied.

According toHair et al. (2019), in general the R2 limits of 0.75; 0.50; or 0.25 for endogenous constructs can be described respectively as substantial, moderate, and weak influences. The results of the analysis show that the R2 value for digital dexterity (DD) is 0.659 which is in the moderate category, because it is in the range of 0.50 - 0.75. The R2 value for employee performance (EP) is 0.759 which is in the substantial category, because it is above 0.75.

Table 7: Results of f2 Effect Size Analysis

	DD	EP
Digital Dexterity(DD)		0.274
Job Characteristics(JC)	0.289	0.214
Work-Life Balance(WLB)	0.561	0.149

Based on the results of the f2 effect size analysis, it can be explained that the job characteristics (JC) and work-life balance (WLB) variables in explaining the digital dexterity (DD) variable each have an f2 effect size of 0.289 and 0.561. According to Hair et al. (2019), the f2 values of 0.02; 0.15; and 0.35 respectively represent a small, medium and large influence of a variable. Referring to the opinionHair et al. (2019), it can be concluded that job characteristics (JC) has a moderate effect size because it is in the range of 0.15 - 0.35, while work-life balance (WLB) has a large effect size because it is above 0.35. The effect of work-life balance on digital dexterity is stronger than job characteristics, because it has a larger effect size value.

The influence of job characteristics (JC), work-life balance (WLB) and digital dexterity (DD) variables in explaining employee performance (EP) variables each have f2 effect sizes of 0.214, 149 and 0.274. So it can be concluded that work-life balance (WLB) has a small effect size because it is in the range of 0.02 - 0.15. Meanwhile, job characteristics (JC) and digital dexterity (DD) each have a moderate effect size because they are in the range of 0.15 - 0.35. The influence of digital dexterity on employee performance is the strongest compared to other variables, because it has the highest effect size value.

Discussion

The results of the analysis show that job characteristics have a positive and significant effect on digital dexterity. This finding supports the idea that good job design, as explained in Job Characteristics Theory and the Job Demands-Resources (JD-R) model, can facilitate the development of employees' digital capabilities. When jobs provide resources such as autonomy and skill variety, this can motivate employees to learn and master new technologies.(Scholze & Hecker, 2023). Jobs designed to balance digital demands and resources are considered crucial in developing the digital skills of the workforce.(Ahmed et al., 2022;Duan et al., 2024).

The analysis found a positive and significant effect of work-life balance on digital dexterity. This is in line with the argument that the balance between work and personal life creates conducive conditions for employees to develop their digital skills. A good balance provides employees with the cognitive resources and motivation needed to adapt to new technologies.(Chatterjee et al., 2023;Nam, 2014). Conversely, high work-personal conflict due to blurred boundaries by technology can drain resources and hinder the development of digital dexterity.(Köffer, 2015;Ye et al., 2024). Through work-life balance, employees have the opportunity and energy to experiment and learn technology, strengthening their capabilities.(Chatterjee et al., 2023).

The results of the study found that job characteristics have a positive and significant effect on employee performance. These results support the Job Characteristics Theory, which states that core job dimensions such as skill variety, task significance, and autonomy can increase positive psychological states (feeling meaningful work), which in turn encourages internal motivation and high-quality performance.(Prayogi et al., 2021;Senen et al., 2020;Trang, 2022). When jobs are well designed, employees tend to feel more responsible, motivated, and perform better.(Diamantidis & Chatzoglou, 2019).

The research results show that work-life balance has a positive and significant effect on employee performance. This finding is consistent with the view that the ability to balance work and

personal life demands reduces stress and conflict, thereby increasing well-being and job satisfaction, which ultimately has a positive impact on performance.(Agarwal & Bhakuni, 2024;Bataineh, 2019;Susanto et al., 2022;Tamunomiebi & Oyibo, 2020). Employees who feel balanced tend to be more satisfied with their jobs, and job satisfaction is an important predictor of performance.(Preena & Preena, 2021). Organizational support for WLB can also encourage employees to perform better as a form of reciprocity.(Susanto et al., 2022).

The analysis confirms that digital dexterity has a positive and significant impact on employee performance. This highlights the crucial role of digital skills in the modern workplace. Digitally proficient employees are able to leverage technology to increase efficiency, productivity and innovation.(Ahmed et al., 2022;Akter et al., 2023;Jacob & Alsabban, 2023). These skills are also associated with increased employee agility, adaptability, and resilience, all of which contribute to better performance.(Chong & Zainal, 2024). In addition, self-confidence in using technology (digital self-efficacy) has also been shown to positively influence performance.(Ibrahim & Aldawsari, 2023). The ability to adapt and utilize technology effectively is the key to improving performance in the digital era.(Bindel Sibassaha et al., 2025;(Halik et al., 2024).

CONCLUSION

The results of the study concluded that job characteristics and work-life balance have a positive and significant influence on teacher performance at SMK Ketintang Surabaya, both directly and through digital dexterity mediation. The study confirmed that well-designed jobs (having skill variety, task identity, task significance, autonomy, and feedback) and a balance between work and personal life can improve teachers' ability to use digital technology effectively and improve overall teacher performance.

The implications of these findings for SMK Ketintang as an educational institution are the importance of paying attention to and improving aspects of job characteristics and supporting teachers' work-life balance. Schools can redesign jobs to increase autonomy, skill variety, and provide clear feedback to encourage teacher motivation and performance. In addition, policies that support work-life balance need to be implemented to reduce stress and increase teacher job satisfaction. Given the important role of digital skills as a mediator and predictor of performance, SMK Ketintang needs to invest in training and developing teachers' digital skills and providing technology support. For further research, it is recommended to explore other variables that may affect teachers' digital skills and performance, considering that there is still some variance that cannot be explained. Further research can also test the model in different school contexts or educational levels, use larger samples, or investigate in more depth the specific mechanisms by which job characteristics and work-life balance affect technology adoption and performance in educational settings.

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