

MOBILE DEVICE USAGE, EMPLOYER EXPECTATIONS, AND WORK-LIFE CONFLICT IN AN INDONESIAN NGO

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ABSTRACT

This study examines how mobile device usage relates to productivity, employer expectations and work-life conflict among employees of an international non-governmental organization (NGO X) in South Jakarta, Indonesia. Drawing on work/family border theory and the job demands–resources model, it disaggregates usage into work-related usage at work, work-related usage at home, and personal usage at work, and positions productivity and employer expectations as competing mediators. A cross-sectional census of all 160 full-time employees was conducted between March and May 2024 and analysed with PLS-SEM in SmartPLS 4. Of eleven hypothesised paths, four were supported. Work-related usage at home was positively associated with both productivity and employer expectations; personal usage at work was negatively associated with employer expectations; and employer expectations were very strongly associated with work-life conflict, the model accounting for 80.7% of its variance. Work-related usage at work was associated with neither mediator, job satisfaction was not associated with productivity, and productivity was not associated with employer expectations. Three paths were significant in the direction opposite to that hypothesised: personal usage at work related positively to productivity, flexibility in work structure related negatively to employer expectations, and work-related usage at home related weakly negatively to work-life conflict. Formal mediation testing showed that every significant indirect path ran through employer expectations and none through productivity. Because the design is cross-sectional, these results identify an associational structure rather than a causal one.

Keywords: : Employer Expectations; Availability Norms; Competing Mediation; Work-Life Conflict; Disaggregated Mobile Device Usage; Work/Family Border Theory; Non-Governmental Organization; Indonesia

INTRODUCTION

Globalization has been driven to a substantial degree by advances in information and communication technology, and among these advances the mobile device occupies a uniquely intimate position. Where internet access was once tethered to a desktop terminal, smartphones, tablets and laptops have made connectivity continuous and portable. Cascio and Montealegre (2016) observe that these devices allow employees to draft, store and transmit documents without paper, compressing tasks that once required physical movement between desks into a few seconds of screen time. Varghese and Kumari (2018) similarly report that messaging applications such as WhatsApp and Telegram raise the overall productivity of employees in the workplace by removing friction from document exchange. Communication, as Blakeman (2023) notes, is a foundational business process; it sustains relationships among colleagues and with internal and external stakeholders, and it underpins the accuracy and timeliness of strategic decisions.

Indonesia offers a particularly vivid setting in which to examine the consequences of this shift. Against a population of approximately 276.4 million people, industry data record roughly 353.8 million cellular mobile connections, implying that a large share of the population operates more than one device; some 212.9 million Indonesians have internet access and 60.4% of the population are active social media users (We Are Social & Meltwater, 2023). The population has, in effect, migrated from voice calls and text messages toward always-on social platforms.

The same portability, however, dissolves the boundary it was meant to bridge. Work-life conflict arises when the demands of work interfere with the demands of personal life (Huo & Jiang, 2023), and it is commonly attributed to long working hours, inflexible schedules, rising job demands and insufficient support at home or at work. Mazmanian et al. (2013) describe the resulting autonomy paradox: the very devices that grant employees freedom over where and when they work also generate an expectation of perpetual availability. Wright et al. (2014) find that work-related communication outside normal hours is associated with higher stress and reduced quality of family life, while French et al. (2015) trace the path from sustained job stress to burnout and its attendant physical and psychological costs.

The organizational setting of this study is NGO X, an international independent research organization based in Indonesia that works with governments, businesses, multilateral institutions and civil society groups on Forest and Other Land Use, Climate, Energy, Cities and Transportation, and the Ocean. Non-governmental organizations of this kind are no longer peripheral actors. Anheier (2014) documents how thoroughly the term has entered ordinary usage, and Banks et al. (2015) describe the expansion of NGO activity from basic service delivery and advocacy into emergency response, conflict resolution, policy analysis and research. Within NGO X, project deadlines and a proposal-driven work culture place a premium on responsiveness: employees are expected to reply to project teams and to produce or submit documents at short notice, and mobile device usage is correspondingly intense. A preliminary single-question survey conducted by the author within NGO X asked thirty employees whether they experienced work-life conflict in the organization. Twenty-eight answered yes and two answered no, indicating that 93.3% of those approached perceived such conflict. This figure motivated the present study.

Two prior studies frame the research. Brown and Palvia (2015) surveyed 325 respondents, of whom 165 responses were usable, and examined mobile device usage, productivity, employer expectations, flexibility in work structure and work-life conflict. Their central finding was that employer expectations rise because of home-based work usage, enhanced productivity and greater flexibility, and that both home usage for work and elevated

employer expectations contribute to work-life conflict. Senyamator et al. (2019) surveyed 217 basic school teachers in the Asante Akim South District of Ghana and reported a positive correlation between teacher job satisfaction and productivity. The present study takes the instrument of Brown and Palvia (2015) as a base without importing their results, adds the job satisfaction pathway of Senyamator et al. (2019), and re-estimates the combined model in an Indonesian non-governmental organization almost a decade later.

The gap addressed here is narrower and more specific than a general shortage of studies, and it has three components.

First, on construct specification. The meta-analytic evidence establishes that after-hours work-related technology use is positively associated with work-family conflict (Santos et al., 2023), but it does so by treating usage as a single undifferentiated behaviour. Blake et al. (2024) confirm that across twenty-three primary studies only two distinguished the functional from the perceptual aspects of use, and none partitioned usage simultaneously by location and by purpose. Border theory predicts that crossings in opposite directions carry opposite consequences; that prediction has not been tested against a model that can represent both directions at once.

Second, on mechanism. Blake et al. (2024) identify only two mediators tested anywhere in that literature — psychological detachment from work, and communication with a supervisor about family demands — and employer expectations enters their synthesis only as a moderator, never as the quantity transmitted. Whether device usage reaches conflict through a demand path or through a resource path therefore remains open, because existing designs do not estimate the two paths simultaneously and so cannot adjudicate between them.

Third, on context. The twenty-three studies reviewed by Blake et al. (2024) span nine countries, none of them Indonesian, and were conducted in commercial, construction, accounting and telecommunications settings. Mission-driven organizations, in which donor timetables set deadlines and commitment to the mission may itself sustain availability norms, are absent from the evidence base. Every included study also used convenience sampling, so none reports a complete enumeration of a defined workforce.

The objectives of this study follow directly: to determine whether work-related usage at work and at home, and personal usage at work, are related to productivity and to employer expectations; to determine whether job satisfaction is related to productivity and whether productivity and flexibility in work structure are related to employer expectations; and to determine whether home-based work usage and employer expectations are related to work-life conflict.

The novelty of this paper accordingly lies in three linked moves. It partitions mobile device usage by location and by purpose as border theory requires rather than treating it as one behaviour; it specifies productivity and employer expectations as competing mediators so that the demand path and the resource path are tested against each other rather than assumed; and it estimates the resulting model on a complete enumeration of the full-time workforce of an Indonesian non-governmental organization. To the author's knowledge this combination of disaggregated specification, competing-mediator design and mission-driven Southeast Asian setting has not previously been reported, and it is what allows the paper to identify which of the two candidate mechanisms actually carries the association.

LITERATURE REVIEW

Work-Life Balance, Work-Life Conflict and Mobile Device Usage

Work-life balance denotes the equilibrium between personal life and professional responsibility, and rests on time management, boundary setting, stress management and

flexibility in work structure (Wood et al., 2020). Haddon (2011) defines it as the ability of an individual to meet both work and family commitments, and argues that failure to achieve balance carries direct personal costs, of which burnout is the most visible (French et al., 2015). Work-life conflict is the corresponding failure state. Anwar and Shahzad (2011) trace its emergence as a global phenomenon to the early 1990s, when mothers entering paid employment encountered incompatible demands from work and household. Yun et al. (2012) characterise it as inter-role conflict in which the boundary between work and life is blurred and one domain is prioritised at the expense of the other. Turel et al. (2011) show that addiction to organizational pervasive technologies produces family- and work-related consequences of precisely this kind.

Mobile device usage is not a homogeneous behaviour. Brown and Palvia (2015) classify it into utilitarian, hedonic and social behaviours. Utilitarian usage is goal-oriented and directed at efficiency and task completion (Scarpi, 2005); it divides further into work-related usage, which serves organizational productivity, and personal utilitarian usage such as mobile banking. Hedonic usage is undertaken for pleasure, entertainment and relaxation (Schroeder, 2010), and social usage serves connection and relationship maintenance. This taxonomy matters analytically because it predicts that the same device will produce different outcomes depending on the purpose and location of use. The present study accordingly separates three usage constructs: work-related usage while at work (WAW), work-related usage while at home (WAH) and personal usage while at work (PAW).

Mobile Device Usage and Productivity

Productivity is the efficiency with which goods and services are produced in a given period (Dessler, 2015) and, more precisely, a measure of production efficiency that concerns the quality as well as the quantity of work performed (Yadav & Marwah, 2015). The Bureau of Labor Statistics (2021) identifies it as the fundamental driver of real income growth. Brynjolfsson and McAfee (2014) argue that the integration of advanced mobile devices, artificial intelligence and machine learning has allowed organizations to operate far more efficiently, and the McKinsey Global Institute (2017) estimates that digitalization can raise organizational productivity growth by 1.4 percent annually. At the individual level, Lu, Yueh and Lin (2015) find that mobile device usage supports employee work by enabling immediate client service, and Dessler (2015) reports that mobile-enabled telecommuting raises job satisfaction and productivity.

Where the device is used for purposes unrelated to work, the expected effect reverses. Pitichat (2013) documents how smartphone use in the workplace can become addictive and divert attention from work-related tasks, reducing focus and output. Organizations cannot fully prevent personal access to privately owned devices. These arguments yield the first set of hypotheses.

H1a: Mobile device usage (work-related while at work) will be positively related to productivity.

H2a: Mobile device usage (work-related while at home) will be positively related to productivity.

H3a: Mobile device usage (personal usage while at work) will be negatively related to productivity.

Mobile Device Usage and Employer Expectations

Employer expectations are the standards of behaviour and output that an organization sets for its employees, spanning job performance, professional conduct, policy compliance and teamwork. Lotko et al. (2015) show that employers frequently expect attributes such as

integrity, adaptability and diligence to be present on arrival rather than developed in post and expect substantial effort to be delivered within short timeframes. Mazmanian et al. (2004), in their study of ubiquitous wireless e-mail devices, found that the accessibility these devices afford creates a favourable impression of responsiveness while simultaneously raising the expectation that employees are reachable at any time and place. Yun et al. (2012) report survey evidence that a substantial proportion of employees monitor work e-mail outside working hours anticipating tasks from superiors. Because work-related documents are always at hand, employers may come to expect that tasks can be performed on the move or alongside personal activity.

Personal usage during working hours points in the opposite direction. Wright et al. (2011) argue that the overuse of personal devices erodes employer trust, since employers expect professionalism and sustained concentration during working hours, and Demerouti et al. (2014) note the additional security concern that personal devices are not secured to organizational standards. Accordingly:

H1b: Mobile device usage (work-related while at work) will be positively related to employer expectations.

H2b: Mobile device usage (work-related while at home) will be positively related to employer expectations.

H3b: Mobile device usage (personal usage while at work) will be negatively related to employer expectations.

Job Satisfaction, Productivity and Employer Expectations

Job satisfaction reflects an employee's evaluative response to the job; where it is absent, Locke (1991) argues, negative attitudes and reduced effort follow. Camp (1994) observes that employees with low satisfaction divert working time to personal tasks and withdraw discretionary contribution, damaging both organizational performance and the wider working environment. Imran et al. (2015) identify a pleasant work environment, supportive management, adequate remuneration, job security, organizational justice and career opportunity as the principal antecedents of satisfaction and note that employees perform well only when they are satisfied with the organization. Aquino et al. (1999) show that perceived injustice predicts employee deviance, and Senyamentor et al. (2019) report a positive association between job satisfaction and productivity among teachers.

The link from productivity to employer expectations rests on a simple behavioural mechanism: as employees demonstrate the capacity to complete assigned work, employers respond by assigning more (Yun et al., 2012). Clear expectations in turn clarify roles and responsibilities, which can reinforce output. Thus:

H4: Job satisfaction will be positively related to productivity.

H5: Productivity will be positively related to employer expectations.

Flexibility in Work Structure and Employer Expectations

Dessler (2016) defines flexibility in working structure as the ability to control work schedules, location and job roles in a way that satisfies both organizational goals and employee needs; Hill et al. (2008) frame it as the ability of workers to make choices influencing when, where and for how long they engage in work-related tasks. Its forms include job sharing, which distributes workload and reduces burnout while retaining employees who cannot commit to full-time hours (French et al., 2015); compressed workweeks, which Bauer and Erdogan (2012) associate with improved work-life balance, reduced commuting and lower absenteeism; and telecommuting, whose individual and organizational advantages and disadvantages Harpaz (2002) sets out in detail. Gaskell (2016) reports that flexible workers are absent less often and

work longer hours because higher job satisfaction protects them from burnout, which in turn raises what employers expect of their performance. Hence:

H6: Flexibility in work structure will be positively related to employer expectations.

Home Usage, Employer Expectations and Work-Life Conflict

Mazmanian et al. (2013) show that the expectation of constant availability leads work and personal time to overlap, and Mazmanian et al. (2004) record employees' own sense that the obligation to respond promptly intrudes on personal space. Derks et al. (2014) demonstrate that smartphone use produces work-home interference whose severity is moderated by social norms and work engagement, while Wright et al. (2014) link out-of-hours communication technology use to perceived work-life conflict, burnout, reduced job satisfaction and turnover intention. Tarafdar et al. (2015) trace the same mechanism through technostress to role stress. On the expectations side, Bell et al. (2012) find that rising employer expectations increase job stress, which degrades work-life balance and heightens work-life conflict; McShane et al. (2015) describe the consequent deterioration in job performance, satisfaction and productivity. Therefore:

H7: Mobile device usage (work-related while at home) will be positively related to work-life conflict.

H8: Employer expectations will be positively related to work-life conflict.

The resulting conceptual framework contains six constructs and eleven hypothesised paths, with productivity and employer expectations acting as mediators between the three usage constructs and work-life conflict.

It is presented in Figure 1.

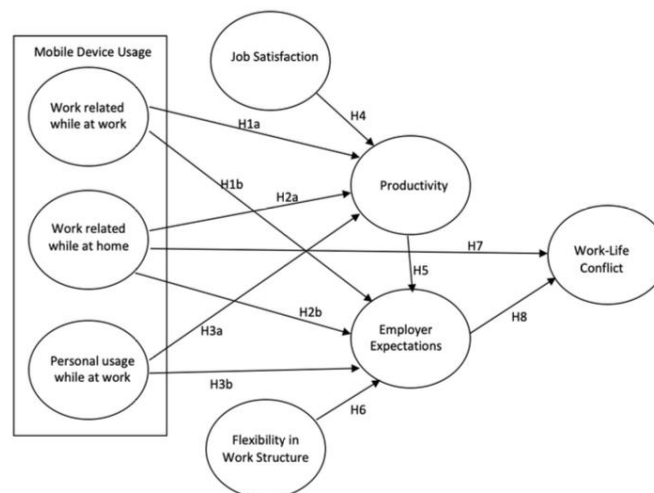


Figure 1. Research model

Source: adapted from Brown and Palvia (2015) and Senyamator et al. (2019)

RESEARCH METHOD

Research Paradigm and Design

The study adopts a positivist paradigm, in which knowledge proceeds from hypotheses that are tested against measurable reality, and is therefore quantitative in type: the data are numerical and are interpreted through statistical calculation (Sekaran & Bougie, 2016). In terms of data collection time the design is cross-sectional, with data gathered once, between

March and May 2024, by questionnaire. The unit of analysis is the individual, since the study seeks individual assessments of the relationship between device usage, productivity, employer expectations and work-life conflict.

Ethical conduct followed a deontological framework built on four principles: respect for participant autonomy, secured through informed consent obtained before data collection; promotion of justice, through equal opportunity to participate; ensuring beneficence, in that the research is intended to be useful to respondents and to the organization; and ensuring non-maleficence, implemented through anonymity and confidentiality. No participant was exposed to physical or psychological risk.

Population, Sample and Location

The research site is NGO X in South Jakarta. Jakarta was selected because it is Indonesia's economic hub, because the organization's headquarters and the majority of its full-time employees are located there, and because proximity permitted efficient distribution of the instrument. Respondents were required to be full-time employees aged eighteen or above, working in one of four departments (Agriculture, Forest and Other Land Use; Climate, Energy, Cities and Ocean; Communications; Operations), and to own at least one mobile device.

Probability sampling was used, since the number of full-time employees owning mobile devices is known precisely, in combination with a judgmental technique that applied the respondent characteristics above (Sekaran & Bougie, 2016). Following the sample-to-variable ratio of 20:1 recommended for multivariate work, the minimum requirement was 120 respondents (6 variables $\times$ 20). The questionnaire was distributed via Google Forms to all 160 full-time employees and 160 usable responses were returned, a complete enumeration of the full-time population and a figure above the minimum threshold.

Instrument and Measurement

The questionnaire has two sections. The first records respondent characteristics; the second contains the construct items, each measured on a five-point Likert scale anchored at 1 (strongly disagree) and 5 (strongly agree). A five-point scale was chosen because it shortens response time relative to six- to nine-point alternatives and reduces both acquiescence bias and extreme response bias. Items were adapted from instruments that had already passed reliability and validity testing, and both positively and negatively phrased items were included to discourage patterned responding. A pre-test of the items was conducted before full distribution. Table 1 summarises the constructs, their indicators and their sources.

Table 1. Research Instrument

Construct	Items	Indicator content	Source
Mobile device usage — work-related while at work (WAW)	6	Using a mobile device while at work to send work-related e-mails; access work-related documents; search work-related information; join work-related social media; send work-related messages; make work-related phone calls	Brown and Palvia (2015)
Mobile device usage — work-related while at home (WAH)	6	The same six activities performed while at home	Brown and Palvia (2015)
Mobile device usage — personal usage while at work (PAW)	8	Using a mobile device while at work to send private e-mails; access private documents; search private information; access private banking; purchase products and services for personal use; join private social media; send private messages; make private phone calls	Brown and Palvia (2015)
Productivity (PRO)	5	Mobile device usage helps me finish work faster;	Brown and Palvia

Construct	Items	Indicator content	Source
		improves the quality of my work; makes work easier to finish; makes me finish work more effectively; helps me finish more work	(2015)
Employer expectations (EE)	5	The device creates more work than I have experienced before; I feel constantly busy; I feel pressured by constant device usage; my employer expects more work because I own a device; my co-workers expect more work because I own a device	Brown and Palvia (2015)
Job satisfaction (JS)	6	Satisfaction with salary; satisfaction with fringe benefits; motivation to go to work; provision of skills training and workshops; perceived career growth; recognition of individual and team achievement	Senyamator et al. (2019)
Flexibility in work structure (FLX)	5	Flexibility over where I work; over when I finish my work; over which work I finish first; over how I do my work; over whom I work with	Brown and Palvia (2015); Hill et al. (2008)
Work-life conflict (WLC)	5	Work demands interfere with home and family life; the time my job takes makes family responsibilities difficult; things I want to do at home go undone; my job produces strain that makes family duties difficult; work duties force changes to family plans	Brown and Palvia (2015)

Source: adapted from Brown and Palvia (2015), Hill et al. (2008) and Senyamator et al. (2019)

Data Analysis Method

Because the model contains eight latent constructs and eleven simultaneous paths, partial least squares structural equation modelling (PLS-SEM) was selected and estimated in SmartPLS version 4.1.0.3 (Ghozali & Latan, 2012). Responses were exported to a spreadsheet, converted to CSV and imported into the software. Analysis proceeds in two stages.

The outer model establishes the relationship between indicators and latent variables. Indicator reliability is assessed through outer loadings, with a cut-off of 0.4 applied in this study; internal consistency through Cronbach's alpha and composite reliability, both required to exceed 0.7; and convergent validity through average variance extracted, required to exceed 0.5. Discriminant validity is assessed with the heterotrait-monotrait ratio of correlations, which is more sensitive than the Fornell-Larcker criterion and for which values below 0.9 indicate that constructs are empirically distinct.

The inner model evaluates the structural relationships. Multicollinearity is checked through the variance inflation factor, which must remain below 5; explanatory power is assessed through R-squared, where 0.75 is substantial, 0.50 moderate and 0.25 weak; and the hypotheses are tested by bootstrapping with path analysis, using a one-tailed test at the 5% error level. A path is accepted where the t-statistic exceeds 1.65 and the p-value falls below 0.05 (Malhotra, 2017). Specific indirect effects are examined separately to identify the operative mediation pathways.

RESULTS AND DISCUSSION

Respondent Profile

A total of 160 full-time employees of NGO X completed the online questionnaire between March and May 2024. Their characteristics are reported in Table 2. The workforce is predominantly male and young: half of all respondents fall in the 25-31 age band and the great majority are single or without children. It is also highly educated, with every respondent holding at least a bachelor-level qualification and 59% holding a postgraduate degree, and highly experienced, with 94% having four or more years of service.

The usage profile is the most striking finding. Every respondent owns both a smartphone

and a laptop, and 84% additionally own a desktop computer. Every respondent uses WhatsApp and Telegram, every respondent belongs to an organizational group chat, and every respondent uses e-mail, Telegram and G-Docs or Microsoft applications to transmit work documents. Every respondent reports spending more than three hours at home on work, every respondent still receives tasks while not at work, and 88% continue working while travelling. The organization therefore operates, in practice, without a boundary between work location and non-work location.

Table 2. Respondent Profile (N = 160)

Characteristic	Category	Count	%
Gender	Male	97	61%
	Female	66	39%
Age	18-24	12	7.5%
	25-31	80	50.0%
	32-38	30	19.0%
	Above 38	38	23.5%
Marital status	Single	98	61%
	Married	62	38%
Parental status	No children	72	45%
	One child	21	13%
	Two or more children	67	42%
Education	D4-S1 (bachelor)	67	41%
	Postgraduate	97	59%
Department	AFOLU	62	40%
	CECO	43	26%
	Communications	15	9%
	Operations	40	25%
Working experience	1-3 years	10	6%
	4-6 years	75	47%
	More than 6 years	75	47%
Devices owned	Smartphone	160	100%
	Laptop	160	100%
	Computer	135	84%
	Tablet	102	63%
Time at home on work	More than 3 hours	160	100%
Organizational group chat	Yes	160	100%
Still working while travelling	Yes	142	88%
Still receiving tasks when not at work	Yes	160	100%

Source: Google Forms output, 2024

Descriptive Statistics

Construct means were interpreted against a five-band scale in which 1.00-1.80 is very low, 1.81-2.60 low, 2.61-3.40 neutral, 3.41-4.20 high and 4.21-5.00 very high. Table 3 reports the range of indicator means within each construct.

Table 3. Summary of Indicator Means by Construct

Construct	Range of means	Construct pattern	Interpretation
WAW (work-related at work)	3.625 - 4.463	Agree to strongly agree	Consistent work use during hours
WAH (work-related at home)	3.556 - 4.481	Agree to strongly agree	Work use extends fully into the home
PAW (personal use at work)	2.769 - 4.475	Neutral to strongly agree	Personal messaging highest (4.475)
Productivity	4.475 - 4.806	Strongly agree	Devices seen as clearly productivity-enhancing
Employer expectations	3.231 - 4.444	Neutral to strongly agree	Feeling constantly busy highest (4.444)
Job satisfaction	2.362 - 3.862	Disagree to agree	Career growth lowest (2.362); training 2.506
Flexibility	3.013 - 4.606	Neutral to strongly agree	Location flexibility highest; choice of colleagues lowest
Work-life conflict	3.925 - 4.225	Agree to strongly agree	Interference with family life highest (4.225)

Source: SPSS output, 2024

Two patterns deserve emphasis. First, productivity records the highest means of any construct, with every indicator in the strongly-agree band: employees are unambiguously convinced that their devices help them work faster, more effectively and in greater volume. Second, job satisfaction is the weakest construct, and its two lowest indicators are organizational rather than personal, namely the provision of skills training (2.506) and perceived career growth (2.362). Work-life conflict, by contrast, is uniformly high.

Outer Model: Validity and Reliability

The outer model was estimated three times, with invalid and unreliable indicators removed at each iteration. Six indicators were eliminated (PRO2, PRO3, WAW2, WAW3, WLC5 and FLX4), leaving 40 indicators across eight constructs. Table 4 presents the retained loadings alongside AVE, Cronbach's alpha and composite reliability. The estimated measurement and structural model is shown in Figure 2.

Table 4. Convergent Validity and Reliability

Construct	Retained indicators (loading)	AVE	CA	CR	Result
WAW	WAW1 (0.662); WAW4 (0.799); WAW5 (0.760); WAW6 (0.937)	0.633	0.811	0.906	Valid
WAH	WAH1 (0.557); WAH2 (0.857); WAH3 (0.839); WAH4 (0.788); WAH5 (0.886); WAH6 (0.911)	0.664	0.899	0.927	Valid
PAW	PAW1 (0.728); PAW2 (0.919); PAW3 (0.873); PAW4 (0.744); PAW5 (0.773); PAW6 (0.685); PAW7 (0.519); PAW8 (0.661)	0.558	0.889	0.921	Valid
JS	JS1 (0.879); JS2 (0.884); JS3 (0.792); JS4 (0.847); JS5 (0.887); JS6 (0.563)	0.667	0.907	0.968	Valid
PRO	PRO1 (0.847); PRO4 (0.801); PRO5 (0.767)	0.649	0.732	0.749	Valid
EE	EE1 (0.875); EE2 (0.908); EE3 (0.948); EE4 (0.901); EE5 (0.566)	0.724	0.899	0.935	Valid
FLX	FLX1 (0.660); FLX2 (0.610); FLX3 (0.839); FLX5 (0.836)	0.553	0.758	0.905	Valid
WLC	WLC1 (0.888); WLC2 (0.818); WLC3 (0.870); WLC4 (0.896)	0.755	0.891	0.892	Valid

Source: SmartPLS 4, 2024. Cut-off values: loading > 0.4; AVE > 0.5; CA and CR > 0.7

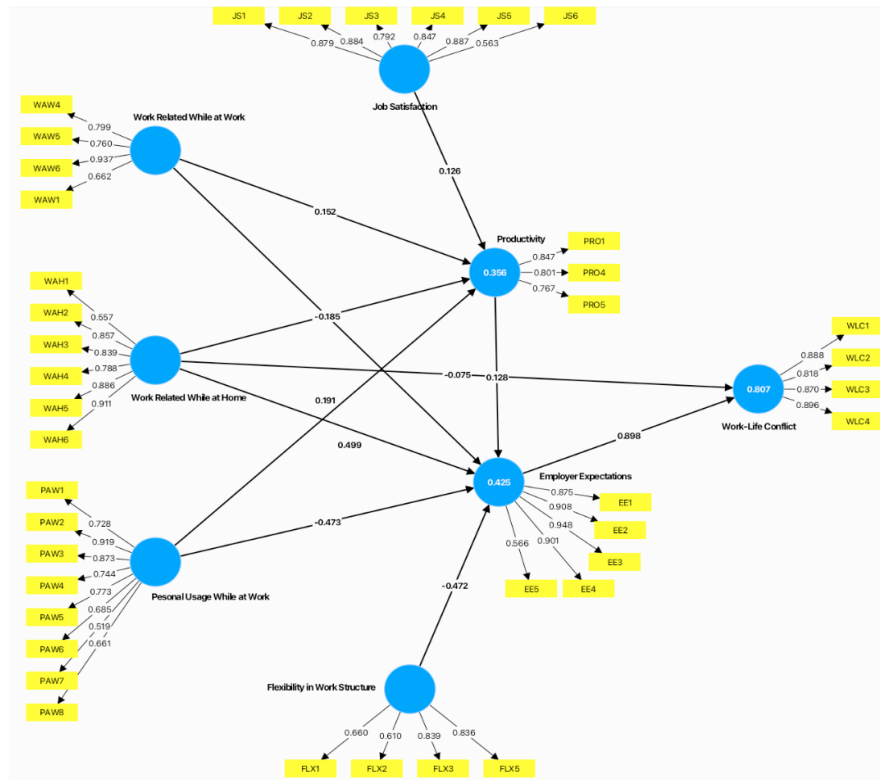


Figure 2. Smartpls Algorithm Result
Source: Smartpls 4, 2024

Every retained loading exceeds 0.4, every AVE exceeds 0.5, and every alpha and composite reliability exceeds 0.7. The instrument is therefore convergently valid and internally consistent across all eight constructs.

Table 5. Discriminant Validity (HTMT)

	EE	FLX	JS	PAW	PRO	WLC	WAH	WAW
EE								
FLX	0.409							
JS	0.276	0.563						
PAW	0.485	0.371	0.429					
PRO	0.261	0.690	0.458	0.441				
WLC	0.194	0.546	0.484	0.455	0.619			
WAH	0.210	0.653	0.583	0.413	0.572	0.817		
WAW	0.977	0.306	0.203	0.415	0.212	0.227	0.283	

Source: SmartPLS 4, 2024

All HTMT values fall below 1, indicating that the indicators discriminate adequately and that each set measures its own construct. The value of 0.977 between WAW and EE is nonetheless high and approaches the point at which the two constructs would cease to be empirically separable; this is noted as a limitation and returned to in the concluding section.

Inner Model: Collinearity and Explanatory Power

All variance inflation factors lie below the threshold of 5, with the highest at 2.555 (WAW on productivity), so multicollinearity does not distort the estimates. Table 6 reports the

coefficient of determination for the three endogenous constructs.

Table 6. Coefficient of Determination (R-Squared)

Endogenous construct	R-squared	Interpretation
Work-life conflict	0.807	Substantial — 80.7% explained by the model
Employer expectations	0.425	Moderate to weak — 42.5% explained
Productivity	0.356	Weak — 35.6% explained

Source: SmartPLS 4, 2024

Work-life conflict is very well explained by the model, leaving only 19.3% attributable to factors outside it, such as the availability of support systems at home and at work and the presence or absence of family-friendly organizational policies. Employer expectations and productivity are less well explained; the residual variance in employer expectations is plausibly attributable to job role and responsibility level, organizational culture and organizational goals, and that in productivity to organizational culture, workload allocation and individual time management.

Hypothesis Testing

Path coefficients were estimated by bootstrapping using a one-tailed test at the 5% error level. Results appear in Table 7.

Table 7. Hypothesis Test Results

No.	Path	Original sample (O)	Standard deviation	T statistics	P values
H1a	WAW → Productivity	0.152	0.128	1.184	0.118
H1b	WAW → Employer expectations	-0.185	0.133	1.388	0.083
H2a	WAH → Productivity	0.296	0.108	2.734	0.003
H2b	WAH → Employer expectations	0.499	0.084	5.952	0.000
H3a	PAW → Productivity	0.191	0.075	2.555	0.005
H3b	PAW → Employer expectations	-0.473	0.070	6.804	0.000
H4	Job satisfaction → Productivity	0.126	0.080	1.576	0.058
H5	Productivity → Employer expectations	0.128	0.091	1.415	0.079
H6	Flexibility → Employer expectations	-0.472	0.095	4.978	0.000
H7	WAH → Work-life conflict	-0.075	0.026	2.910	0.002
H8	Employer expectations → Work-life conflict	0.898	0.027	33.274	0.000

Source: SmartPLS 4, 2024. Criterion for support: $t > 1.65$, $p < 0.05$, and sign consistent with the hypothesised direction

Four hypotheses are supported: H2a, H2b, H3b and H8. Four are not supported because the relationship is statistically insignificant: H1a, H1b, H4 and H5. Three, namely H3a, H6 and H7, are statistically significant but carry the opposite sign to that predicted, and are therefore recorded as not supported while nonetheless constituting substantive findings in their own right. The strongest single relationship in the model by a wide margin is H8, where employer expectations predict work-life conflict with a coefficient of 0.898 and a t-statistic of 33.274. Because the model is mediated, specific indirect effects were tested separately. Only three of the thirteen indirect pathways reach significance, and all three run through employer expectations rather than productivity.

Table 8. Significant Specific Indirect Effects

Indirect pathway	T statistics	P values
WAH → Employer expectations → Work-life conflict	5.978	0.000
PAW → Employer expectations → Work-life conflict	6.171	0.000
Flexibility → Employer expectations → Work-life conflict	4.494	0.000

Source: SmartPLS 4, 2024. All remaining indirect pathways, including every pathway routed through productivity, returned $p > 0.05$

Discussion

The results depart from the pattern anticipated in the literature in ways that are internally coherent and, taken together, point to a single interpretation: in this organization the device is not the source of conflict, and expectations are.

Usage at Work Has No Measurable Effect

Neither H1a nor H1b is supported. Work-related device usage during working hours does not significantly predict productivity ($t = 1.184$) or employer expectations ($t = 1.388$). This is a striking result given that the descriptive statistics place every WAW indicator in the agree or strongly-agree band: employees plainly do use their devices for work while at work, but doing so has no discernible marginal consequence. Two explanations are consistent with the data. First, a device carried for work is simultaneously a conduit for interruption; Rasool et al. (2022) show that technology overload at the workplace degrades focus, and Bittner et al. (2021) demonstrate that device-enabled task switching lowers the quality of output while lengthening completion time. The descriptive result for FLX3, on which respondents agreed (mean 4.181) that they can choose which task to complete first, indicates precisely the discretionary switching that erodes the productivity gain. Second, on the expectations side, Lotko et al. (2015) argue that employers treat efficiency-related attributes as prerequisites rather than achievements, so ordinary in-office device use registers as a baseline rather than as evidence warranting higher expectations. These finding replicates that of Brown and Palvia (2015).

Usage at Home Raises Both Productivity and Expectations

H2a and H2b are both supported, and H2b is one of the strongest direct effects in the model (0.499, $t = 5.952$). Once the device leaves the office it becomes consequential. Employees of NGO X work in hybrid mode, and mobile devices allow organizational tasks to be handled outside the office and outside office hours (Yun et al., 2012), extending effective working time and raising measured output (Dessler, 2016). The same extension is visible to the employer as continuous availability and rapid coordination, which Demerouti et al. (2014) associate with faster decision cycles and which employers value highly. The context makes this unsurprising: every respondent reports spending more than three hours at home on work and every respondent still receives tasks when not at work.

Personal Usage at Work: Productive, but Costly to Reputation

The two personal-usage hypotheses diverge sharply, and this divergence is among the most interesting results of the study. H3a is significant ($t = 2.555$) but positive (0.191), the reverse of the prediction. Personal device use during working hours is associated with higher, not lower, productivity. Ivarsson and Larsson (2012) argue that prohibiting personal internet and device use provokes employee resistance, increased sick leave and higher turnover, and Delecta (2011) shows that a deficit of work-life balance itself damages motivation and productivity. On this reading, permitted personal use functions as a recovery mechanism that sustains psychological well-being across the working day rather than as a straightforward

distraction. The contrast with Pitichat (2013), who anticipates addiction-driven decline, suggests that moderate personal use and compulsive use are qualitatively different behaviours. H3b, by contrast, is supported and strongly negative (-0.473 , $t = 6.804$). The same behaviour that helps employees sustain output damages how employers evaluate them. Wright et al. (2011) find that visible personal device use erodes employer trust and creates a perception of reduced dedication and reliability, with consequences for performance evaluation and advancement; Demerouti et al. (2014) add the security dimension, since personal devices are not secured to organizational standards and may expose sensitive information. The practical implication is uncomfortable: employees are penalised in reputation for a behaviour that measurably supports their output.

Job Satisfaction and Productivity are Decoupled

H4 is not supported ($t = 1.576$, $p = 0.058$), narrowly failing the threshold. This departs from Senyamator et al. (2019). Fisher (2003) offers the most direct explanation: job satisfaction is a broad construct spanning emotional well-being, work environment, remuneration, benefits, relationships and personal goals, and no single dimension of it need translate into output. The descriptive data support this. Respondents are neutral about salary (2.938) and benefits (2.850) but clearly dissatisfied with training provision (2.506) and career growth (2.362), while simultaneously reporting the highest productivity scores in the study. Employees of NGO X appear to be productive despite, rather than because of, their satisfaction with the organization — a pattern consistent with mission-driven work. Wright and Cropanzano (2000) further show that psychological well-being and job satisfaction operate as distinct predictors of performance.

Productivity Does Not Raise Expectations; Flexibility Lowers Them

H5 is not supported ($t = 1.415$). De Jong and Den Hartog (2007) note that employer expectations frequently fail to track employee capability and circumstance, and Hackman and Oldham (1976) observe that conventional quantitative productivity measures do not capture the qualitative dimensions of work by which employers actually judge performance. Expectations in NGO X appear to be set by donor timetables and project deadlines rather than by observed output.

H6 produces the most counter-intuitive result: flexibility in work structure significantly reduces employer expectations (-0.472 , $t = 4.978$), inverting the prediction drawn from Gaskell (2016). Two mechanisms explain the inversion. First, flexibility removes the close monitoring and immediate supervision that give employers assurance about productivity and quality, so expectations are moderated by uncertainty rather than raised by demonstrated capacity (McNall et al. 2018). Second, dispersed working creates genuine coordination difficulty; Hill et al. (2015) show that work venue materially affects work and family outcomes, and even with universal group chat coverage in NGO X, aligning schedules for regular check-ins across remote and hybrid arrangements is difficult, producing misunderstandings and inefficiency that suppress rather than inflate what employers feel able to demand.

Expectations, Not Devices, Drive Work-Life Conflict

H7 is significant but negative (-0.075 , $t = 2.910$), so the hypothesis is not supported. Home-based work usage is, if anything, weakly associated with lower work-life conflict. The coefficient is very small, and the reading most consistent with the wider model is that home usage in this organization functions as an instrument for absorbing an externally imposed workload rather than as an independent cause of intrusion: employees who can process work at home experience marginally less conflict than those who cannot, precisely because the work arrives regardless. Role boundary theory nonetheless cautions that this accommodation carries

a cost in role conflict and in sleep, fatigue and burnout outcomes, and the finding that all 160 respondents spend more than three hours at home on work indicates that the accommodation is substantial.

H8 is supported overwhelmingly (0.898, $t = 33.274$), and the model explains 80.7% of the variance in work-life conflict. This is the central result of the study. Employer expectations, not device usage, are what convert into conflict. The indirect effect tests confirm the mechanism decisively: every significant indirect pathway to work-life conflict runs through employer expectations (WAH, $t = 5.978$; PAW, $t = 6.171$; flexibility, $t = 4.494$), and not one pathway routed through productivity attains significance. The descriptive data corroborate the outcome, with respondents strongly agreeing (4.225) that work demands interfere with home and family life. Bell et al. (2012) predicted exactly this chain from expectations through job stress to conflict, and French et al. (2015) and McShane et al. (2015) describe its terminus in burnout and degraded performance.

CONCLUSION

This study examined the effect of mobile device usage on employees' work-life conflict in an international non-governmental organization in South Jakarta, using a complete enumeration of the organization's 160 full-time employees and PLS-SEM estimation of a six-construct, eleven-path model. Four hypotheses were supported. Work-related mobile device usage while at home raises both productivity and employer expectations; personal usage while at work reduces employer expectations; and employer expectations raise work-life conflict very strongly, accounting with the rest of the model for 80.7% of its variance. Four hypotheses failed on significance: work-related usage during working hours affects neither productivity nor employer expectations, job satisfaction does not predict productivity, and productivity does not predict employer expectations. Three relationships were significant with the sign reversed: personal usage at work is positively rather than negatively related to productivity, flexibility in work structure reduces rather than raises employer expectations, and home-based work usage is weakly negatively rather than positively related to work-life conflict.

The single most consequential conclusion is mechanistic. Mobile devices do not generate work-life conflict directly; they generate it through the expectations that surround them. Every significant indirect pathway in the model reaches work-life conflict through employer expectations, and none reaches it through productivity. Policy aimed at devices will therefore miss its target; policy aimed at expectations will not.

THEORETICAL IMPLICATIONS

The study makes three contributions. First, it demonstrates the analytical value of disaggregating mobile device usage by location and purpose. Treating usage as a single construct would have concealed the fact that in-office work usage has no effect, home work usage has a strong effect and personal usage has effects that run in opposite directions for productivity and for employer perception. Second, it establishes employer expectations rather than productivity as the operative mediator between technology use and work-life conflict, refining the mediated structure proposed by Brown and Palvia (2015). Third, it fails to replicate the job satisfaction-productivity association reported by Senyametor et al. (2019) in a Ghanaian education setting, suggesting that the association is context-dependent and that in mission-driven organizations productivity may be sustained by commitment to the mission rather than by satisfaction with the employer. The reversal of the flexibility hypothesis further indicates that flexibility and expectation may be substitutes rather than complements where supervisory

visibility is low.

MANAGERIAL IMPLICATIONS

Three courses of action follow for NGO X and for comparable organizations.

1. Implement clear policies on mobile device usage. Management should establish explicit availability guidelines that define working hours and specify when employees are and are not expected to respond, together with a work-life balance policy limiting out-of-hours and weekend e-mail to genuinely urgent matters. The need is evident from the finding that 100% of respondents still receive tasks when not at work and 88% continue working while travelling. Consolidating communication onto a unified platform would also reduce the fragmentation created by the multiple channels — e-mail, Telegram, WhatsApp and Microsoft or Google applications — currently in simultaneous use.
2. Promote a culture of work-life balance from the top. Policies take effect only when modelled. Senior management should refrain from sending late-night and weekend messages, should actively encourage the use of paid time off, and should ensure that employees can take their full leave entitlement without an implicit expectation of remaining reachable. The mean of 2.731 on motivation to go to work indicates that the current climate is not sustaining engagement.
3. Provide training and support resources. The organization should offer training in time management and workload prioritisation, and provide access to counselling and wellness support for stress. Respondents disagreed (mean 2.506) that the organization currently provides skills training and workshops, and rated perceived career growth lowest of all indicators at 2.362; both are addressable and both bear on the satisfaction deficit identified in the discussion of job satisfaction above.

LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

Several limitations qualify these findings. The sample of 160, although it constitutes the entire full-time workforce, excludes approximately 210 part-time consultants who form the majority of the organization's total workforce and who were not reachable within the study period because they are dispersed across Indonesia and hold external commitments; their workloads and backgrounds differ materially from those of full-time staff. The concentration of respondents in Jakarta may also narrow the range of responses, since working norms in Jakarta differ from those in less pressured Indonesian cities. Male and female respondents were unequally represented, which prevented analysis of how work-life conflict differs by gender. The mobile device usage items were framed broadly and did not distinguish between smartphones, tablets and laptops, although these devices are used differently. Some findings, notably that for personal usage at work, could not be interrogated further because the corresponding behaviour was not captured in the respondent characteristics. The very high HTMT value between WAW and employer expectations (0.977) warrants attention in any replication. Finally, the cross-sectional design precludes causal inference.

Future research should extend the sample to part-time consultants and to staff outside Jakarta, balance gender representation, and record employee grade or position, since level of seniority is likely to determine both workload and the intensity of employer expectations. The instrument should be refined to separate device types. Above all, the job satisfaction-

productivity relationship merits dedicated investigation with a richer set of constructs — job motivation, job characteristics, organizational commitment, organizational culture and support at home — since the present study finds it considerably more complex than the prior literature suggests. A longitudinal design would allow the causal direction of the expectations-conflict relationship, the strongest finding reported here, to be established.

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