LIFE INTERRUPTED: THE EFFECTS OF TECHNOLOGY-MEDIATED WORK INTERRUPTIONS ON WORK AND NONWORK OUTCOMES

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Appendix A

Review of Studies on the Effects of Work-Related Technology Use Outside the Work Domain

The literature review targeted articles published between 1995 and 2016 in the following journals: *MIS Quarterly, Information Systems Research, Journal of Management Information Systems, Journal of the Association for Information Systems, Journal of Strategic Information Systems, European Journal of Information Systems, Information Systems Journal, Information & Management, Information & Organization, Information Technology & People, Computers in Human Behavior, Academy of Management Journal, Academy of Management Review, Journal of Applied Psychology, Journal of Management, Management Science, Organization Science, Personnel Psychology, Human Resource Management Journal, Human Resource Management Review, Journal of Human Resource, Journal of Vocational Behavior,* and *Human Relations*; and in the proceedings of the following conferences: *International Conference on Information Systems and Americas Conference on Information Systems.*

We excluded studies on telecommuting and telework from our review because they represent institutionalized work arrangements and are different from the focus of our study.

Table A1. Review of Studies on the Effects of Work-Related Technology Use Outside the Work Domain

Study	Theories	Methodology	Independent Variable	Dependent Variable	Moderating Variable	Mediating Variable	Control Variable
Studies on Work-Related Technology Use in the Nonwork Domain (targeted at solely cross-domain technology use)							
Boswell and Olson-Buchanan (2007)	Boundary theory	Survey	Affective commitment, job involvement, ambition	Work-to-life conflict (reported by employee and significant other respectively)	N/A	*Frequency of communication technology use after hours*	Marital status, parental status, position, hours spent working during nonwork time in a typical week
Fenner and Renn (2010)	Technology acceptance model	Survey	Perceived usefulness, psychological climate	Work-family conflict	Setting goals/priorities, mechanics of time management, preference for organization	*Frequency of technology-assisted supplemental work*	Age, gender, education, household income, presence of children at home, conscientiousness, portability of work, reduction of interruptions, ability to work at one's own pace, telecommunications links with office
Chen and Karahanna (2011)	Work–life conflict, interruption	Survey	Frequency of nonwork-to-work other-initiated interruptions, frequency of work-to-nonwork self-initiated interruptions	Nonwork performance	N/A	Work–life conflict	Age, gender, device provided by employer, work load, nonwork load
Richardson and Benbunan-Fich (2011)	Human agency theory	Survey	Organizational distribution, subjective norm, polychronicity, role integration preference, personal innovativeness with IT	*Work connectivity behavior after-hours*	N/A	N/A	Age, gender, marital status, job level
Diaz, Chiaburu, Zimmerman, and Boswell (2012)	Theory of planned behavior	Survey	Communication technology flexibility	Work satisfaction	N/A	*Communication technology use to perform job during nonwork hours, work-to-life conflict*	N/A
Mazmanian (2013)	Frames of reference, cognitive frames	Interview, grounded theory	Use of mobile e-mail devices to work anywhere/ anytime (focus of the qualitative study)	Expanded accessibility, erosion of personal time	Frame (in)congruency	Communication norms, work identity, material aspects of the technological artifact, vulnerability to social pressures, visibility of communication practices	N/A
Mazmanian, Orlikowski, and Yates (2013)	Autonomy	Interview, grounded theory	Use of mobile e-mail devices to work anywhere/anytime (focus of the qualitative study)	Work norms, flexibility, personal autonomy, peace of mind, control over interaction, ability to disconnect from work	N/A	Collective expectations of availability, work engagement	N/A

Study	Theories	Methodology	Independent Variable	Dependent Variable	Moderating Variable	Mediating Variable	Control Variable
Tennakoon, da Silveira, and Taras (2013)	Boundary theory, border theory, human agency	Survey	ICT perception, segmentation, work flexibility, work demands, nonwork demands	Work-related ICT use on work days, *work-related ICT use on nonwork days*, nonwork-related ICT use on work days, nonwork-related ICT use on nonwork days	N/A	N/A	Age, gender, education, income
Derks et al. (2014)	Psychological detachment	Survey (diary)	Work-related smartphone use after working hours	Work-related exhaustion	Perceived segmentation norm	Psychological detachment	Age, gender, workload
Butts, Becker, and Boswell (2015)	Affective events theory	Survey	Affective tone and time required of work-related electronic communication received during nonwork time	Work-to-nonwork conflict	Social context factors (abusive supervision, communication sender), receiver factors (segmentation preference)	Emotional responses (anger, happiness)	Age, gender, marital status, parental status, work hours, and workplace segmentation
Freitas, Maçada, and Brinkhues (2015)	Work–life conflict	Survey	Frequency of work-to-nonwork interruptions, frequency of nonwork-to-work interruptions	Work performance, nonwork performance	N/A	Work-to-nonwork conflict, nonwork-to-work conflict	N/A
Derks et al. (2016)	Boundary theory, work-family conflict	Diary study with surveys	Work-related smartphone use in evenings	Family role performance	Segmentation preference	Work-family conflict	Age, gender, educational level, marital status, number of children living at home, workload
Ferguson et al. (2016)	Family systems theory, conservation of resources theory	Survey	Frequency of mWork (i.e., using a smartphone or tablet with Internet access to engage in work tasks during family time)	Turnover intention	N/A	Time-based work-family conflict, strain-based work-family conflict, behavior-based work-family conflict, burnout, spousal resentment towards job incumbent's organization, organizational commitment, spousal commitment to job incumbent's organization	Age, gender, number of children, organizational tenure, hours worked per week, frequency of using a smartphone or tablet with Internet access to engage in work tasks during family time by spouse
Ragsdale and Hoover (2016)	Job demands-resources model	Survey	Work-related cell phone use during nonwork time	Emotional exhaustion, work engagement, work-family conflict	Cell phone attachment	N/A	N/A

Study	Theories	Methodology	Independent Variable	Dependent Variable	Moderating Variable	Mediating Variable	Control Variable
Studies on Work-Related Technology Use in the Nonwork Domain (technology use that includes both work- and nonwork-related uses)							
Cousins and Robey (2005)	Theory of human agency	Case study	Technology use by nomadic computing users (focus of the qualitative study)	Blurred boundary between work and personal life	Individual differences (from human agency perspective), boundary management	N/A	N/A
Middleton and Cukier (2006)	"Dark side" of mobility	Interview	Mobile e-mail usage (focus of the qualitative study)	Danger, anti-social behavior, distraction, infringement on work–life boundaries	Organizational culture	N/A	N/A
Prasopoulou, Pouloudi, and Panteli (2006)	Socio-temporal order	Interview, log	Use of mobile phones (focus of the qualitative study)	Vulnerability to organizational claims and any-time availability, temporal bound-aries that people enact in order to balance work and non-work demands	N/A	N/A	N/A
Golden and Geisler (2007)	Boundary theory	Interview	Intentions and goals for use	Satisfaction with PDA, perceived impact of PDA on work and life		Use of personal digital assistant (PDA)	Background, work and home situations, leisure activities
Abril and Romero (2010)	Masculinity	Interview	ICT use (focus of the qualitative study)	Management of time dedicated to work and personal life, extension of work day, nego-tiation between work, family, and personal domains, gender roles	N/A	N/A	N/A
Dery, Kolb, and MacCormick (2014)	Duality, requisite connectivity	Case study	Smartphone use (focus of the qualitative study)	Smartphone's representation of work and freedom from work, sense of disconnectivity from work	N/A	N/A	N/A
Carvalho, Francisco, and Relvas (2015)	Review	Conceptual	Attitudes toward information commu-nication tech-nologies (ICTs), types of ICTs	Family func-tioning: family cohesion, family roles, rules and intergenera-tional conflicts, family bound-aries, inter-actional scen-arios, family relational patterns	N/A	Use of ICTs in everyday family life (focus of the review)	N/A

Study	Theories	Methodology	Independent Variable	Dependent Variable	Moderating Variable	Mediating Variable	Control Variable
Cousins and Robey (2015)	Affordances	Interview	Use of mobile technologies by mobile workers	Affordances for managing work–life boundaries: mobility, connectedness, interoperability, identifiability, personalization	N/A	N/A	N/A
Fujimoto et al. (2016)	Positive psychology of optimal human functioning	Interview, survey	Mobile technology usage	Work engagement, emotional exhaustion	N/A	Job autonomy	Age, gender, occupation type, job tenure, extraversion
Other Studies Related to Work-Related Technology Use in the Nonwork Domain							
Turel, Serenko, and Bontis (2008)	Work–life interface, technology acceptance model, technology addiction	Survey	Addiction to mobile e-mail	Perceived usefulness, work-family conflict, organizational commitment	N/A	Technology-family conflict, work overload	Age, gender (removed after first stage of analysis)
Turel, Serenko, and Bontis (2011)	Social cognitive theory, technology addiction	Survey	Addiction to mobile e-mail	Work-family conflict, organizational commitment	N/A	Technology-family conflict, work overload	Age, gender
Köffer et al. (2014)	Work–life conflict	Survey	Organizational encouragement for dual use of mobile IT (i.e., for both private and work activities), work–life segmentation culture	Work-to-life conflict	Work–life segmentation preference	Work overload	N/A
Harris et al. (2015)	Conservation of resources theory, leader-member exchange	Survey	Information overload, communication overload, system feature overload	Work-family conflict	Leader-member exchange quality	N/A	Age, gender, marital status, spouses who worked in paid work activities, organizational tenure, computer hours worked per week
Weinert, Laumer, Maier, and Weitzel (2016)	Role conflict theory	Survey	IT-based work-home conflict	Work exhaustion	N/A	Time-based work-home conflict, strain-based work-home conflict, behavior-based work-home conflict, IT-based exhaustion	Age, gender

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Appendix B

Pilot Study

The pilot study was conducted at a Fortune 1000 technology company, which is headquartered in the Midwest, had a revenue of approximately $1.76 billion, and employed a total of 6,600 employees at the time of data collection. We sent the questionnaire to 300 knowledge workers in the company and received 119 valid responses back, yielding a response rate of 39.7%. The main purpose of the pilot study was to refine and validate our measures.

The pilot study makes two major contributions to the main study. First, it helped us refine the operationalization of our constructs, especially items measuring interruptions and performance. In particular, we realized that duration represents an important aspect of interruption and subsequently included it in our main study. Moreover, our pilot study used very broad measures of performance from the Organizational Behavior literature that were not sufficiently granular for our context. As a result, we developed new measures of performance for the main study.

Second, the pilot study motivated us to theorize the mediating mechanisms to account for the positive and negative effects of interruptions. Data analysis in our pilot study provided preliminary evidence of the existence of positive and negative effects of interruptions. This motivated us to identify mediating mechanisms to explain the observed effects, which we do in the current study.

Appendix C

Constructs and Scales

Table C1. Constructs and Measures			
Construct	**Definition**	**Source**	**Measure***
Extent of work-related cross-domain interruptions	Technology-mediated work-related cross-domain interruption refers to a technology-based occurrence that originates from the work domain but takes place in the personal life domain, impeding or delaying an individual by breaking the continuity of an ongoing task (e.g., receiving a work-related phone call while having dinner at home).	Items based on an exploratory study (n = 16) and refined through a pilot survey (n = 119)	Frequency 1: During my time off, I frequently get interrupted about work related matters through technology (phone call, e-mail, and messaging). Frequency2: I frequently stop what I am doing during my time off to initiate work related activities through technologies (phone call, e-mail, and messaging).
			Duration 1: During my time off, dealing with work-related interruptions initiated by others (via phone call, e-mail, and messaging) is time-consuming. Duration 2: Dealing with work interruptions I initiate during my time off (via phone call, e-mail, and messaging) is time-consuming.

Construct	Definition	Source	Measure*
Work Performance	Work performance refers to the fulfilment of the general demands and responsibilities associated with work.	Items based on work performance scale (Kossek et al. 2001; Williams and Anderson 1991) and refined through an exploratory study (n = 16), a pilot survey (n = 119), and card sorts (n = 10)	Work Perf.1: I am viewed as very responsive in dealing with work-related matters. Work Perf.2: I am viewed as very responsive in my work-related communications. Work Perf.3: Overall, I am very effective in getting my work done. Work Perf. 4: I provide help and support to my colleagues, clients, and other work contacts in a very timely manner. Work Perf.5: I solve work-related problems in a very timely manner.
Nonwork Performance	Nonwork performance refers to the fulfilment of the general demands and responsibilities associated with nonwork.	Items adapted from work performance scale (Kossek et al. 2001; Williams and Anderson 1991) and refined through an exploratory study (n = 16), a pilot survey (n = 119), and card sorts (n = 10)	Nonwork Perf 1: I am viewed as very responsive to attending to my personal life responsibilities. Nonwork Perf.2: I am viewed as very responsive in my personal communications. Nonwork Perf.3: I provide help and support to my family and friends in a timely manner. Nonwork Perf.4: I deal with personal life demands in a very timely manner. Nonwork Perf.5: Overall, I am effective in fulfilling my personal life demands.
Work emotional exhaustion	Work emotional exhaustion refers to the depletion of one's mental resources due to one's work.	Items based on work exhaustion subscale of the General Burnout Questionnaire (Schaufeli et al. 1995) and card sorts (n = 10)	Work Exhaustion 1: I feel emotionally drained from my work. Work Exhaustion 2: I feel emotionally fatigued because of the demands of my job. Work Exhaustion 3: I feel burned out from my work.
Nonwork emotional exhaustion	Nonwork emotional exhaustion refers to the depletion of one's mental resources due to one's personal life.	Items based on work exhaustion subscale of the General Burnout Questionnaire (Schaufeli et al. 1995) and card sorts (n = 10)	Nonwork Exhaustion 1: I feel emotionally drained from my personal life. Nonwork Exhaustion 2: I feel emotionally fatigued from the demands of my personal life. Nonwork Exhaustion 3: I feel burned out from my personal life.
Interruption overload	Interruption overload occurs when an individual has more work-related interruptions during his/her time off than one can adequately handle.	Items based on information overload scale (Roberts and O'Reilly 1974) and card sorts (n = 10)	Interruption Overload 1: During my time off, I have more work-related interruptions than I have energy to deal with. Interruption Overload 2: During my time off, I have more work-related interruptions than I can handle. Interruption Overload 3: During my time off, I have more work-related interruptions than I have time to deal with. Interruption Overload 4: During my time off, work-related interruptions take up more energy than I have. Interruption Overload 5: During my time off, the number of work-related interruptions I receive exceeds my ability to handle them. Interruption Overload 6: During my time off, I don't have enough time to deal with all the work-related interruptions that I receive.

Construct	Definition	Source	Measure*
Task closure	Task closure refers to the extent to which work-related interruptions during one's time off allow one to bring to completion unfinished work-related communications or tasks.	Items based on literature (Straub and Karahanna 1998) and card sorts (n = 10)	Task Closure 1: Work-related interruptions during my time off allow me to bring closure to unfinished work-related tasks.
			Task Closure 2: Work-related interruptions during my time off allow me to bring unfinished work-related communications to closure.
Psychological transition	Psychological transition refers to the mental movement between the domains of work and personal life, including mental disengagement from one domain (exit) and engagement in another (entry).	Items based on literature (Ashforth et al. 2000) and card sorts (n = 10)	Psychological Transition 1: After a work-related interruption during my time off, it typically takes me some time to stop thinking about work.
			Psychological Transition 2: After a work-related interruption during my time off, it typically takes me some time to mentally disengage from work.
Polychronicity orientation	Polychronic orientation refers to the extent to which one prefers to be engaged in two or more tasks or events simultaneously.	Items based on the polychronic orientation scale (Bluedorn et al. 1999; Turner and Reinsch 2004) and card sorts (n = 10)	Polychronicity 1: I like to juggle several activities at the same time.
			Polychronicity 2: I like to multi-task.
Fashion conscious-ness	Fashion consciousness refers to an individual's involvement with fashionability (marker variable).	Items based on the generalized overall fashion consciousness scale (Gould and Stern 1989)	Fashion 1: I'm very alert to changes in fashion.
			Fashion 2: I would say I'm very fashion conscious.

All constructs were measured on a 7-point Likert scale (strongly disagree – strongly agree).

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Appendix D

Descriptives, Correlations, and Measurement Model Statistics ▰

Table D1. Descriptives, Correlations, and Measurement Model Statistics													
	Reliability	**Mean (SD)**	**CFA Item Loadings^**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
1. Extent of interruptions	0.93	3.49 (1.86)	0.89-0.97	0.93									
2. Work performance	0.85	5.87 (0.91)	0.61-0.84	0.02	0.74								
3. Nonwork performance	0.87	5.40 (1.08)	0.68-0.88	-0.10	0.34	0.77							
4. Work exhaustion	0.93	4.17 (1.84)	0.88-0.93	0.32	-0.10	-0.42	0.90						
5. Nonwork exhaustion	0.91	3.39 (1.65)	0.84-0.93	0.16	-0.18	-0.21	0.31	0.88					
6. Interruption overload	0.95	2.67 (1.61)	0.80-0.93	0.69	-0.23	-0.28	0.49	0.29	0.87				
7. Psychological transition	0.89	4.25 (1.91)	0.88-0.91	0.63	0.02	-0.23	0.51	0.10	0.57	0.89			
8. Task closure	0.91	4.35 (1.66)	0.91-0.93	0.50	0.18	-0.02	0.05	0.09	0.24	0.39	0.92		
9. Polychronicity	0.79	5.00 (1.40)	0.75-0.87	0.20	0.15	0.42	-0.18	-0.03	0.00	0.01	0.23	0.81	
10. Fashion consciousness	0.87	3.81 (1.50)	0.70-0.94	-0.11	0.10	0.01	-0.09	-0.15	-0.10	0.04	-0.01	-0.05	0.83

The shaded leading diagonal elements represent the square root of average variance extracted (AVE).
^The CFA loadings reflect the range of loadings (lowest loading-highest loading) that the items of each scale have on their latent construct.
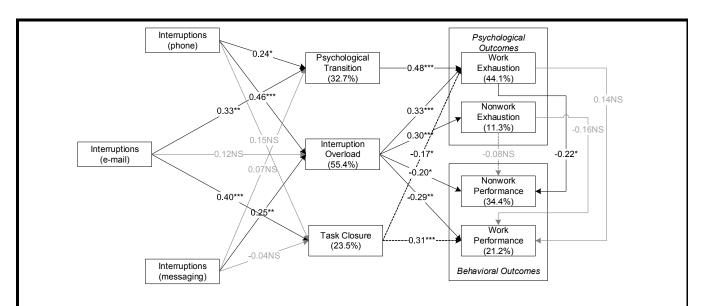
Appendix E

Sobel Mediation Test Results

Table E1. Sobel Mediation Test Results					
Test	**Path**	**Beta**	**S.E.**	***t*-value**	***p*-value**
H1: Extent of interruptions → Interruption overload → Work exhaustion	Extent of interruptions → Interruption overload	0.74	0.04	3.99	0.00
	Interruption overload → Work exhaustion	0.33	0.08		
H2: Extent of interruptions → Interruption overload → Nonwork exhaustion	Extent of interruptions → Interruption overload	0.74	0.04	3.56	0.00
	Interruption overload → Nonwork exhaustion	0.29	0.08		
H3: Extent of interruptions → Interruption overload → Nonwork performance	Extent of interruptions → Interruption overload	0.74	0.04	-2.21	0.03
	Interruption overload → Nonwork performance	-0.20	0.09		
H4: Extent of interruptions → Interruption overload → Work performance	Extent of interruptions → Interruption overload	0.74	0.04	-2.79	0.01
	Interruption overload → Work performance	-0.29	0.10		
H5: Extent of interruptions → Psychological transition → Work exhaustion	Extent of interruptions → Psychological transition	0.72	0.04	5.36	0.00
	Psychological transition → Work exhaustion	0.48	0.08		
H6: Extent of interruptions → Task closure → Work exhaustion	Extent of interruptions → Task closure	0.51	0.06	-2.32	0.02
	Task closure → Work exhaustion	-0.18	0.07		
H7: Extent of interruptions → Task closure → Work performance	Extent of interruptions → Task closure	0.51	0.06	3.74	0.00
	Task closure → Work performance	0.27	0.09		

Appendix F

Post Hoc Analysis by Technology Type

Nonsignificant effects are represented by grayed-out lines; for paths between mediators and dependent variables, adverse effects are represented by solid lines and beneficial effects by dotted lines.

Control Variables	Work Performance	Nonwork Performance	Work Exhaustion	Nonwork Exhaustion
Polychronicity orientation	0.09NS	0.40***	-0.20**	-0.06NS
Age	0.28***	0.12NS	-0.09NS	-0.002NS
Gender (0 = male, 1 = female)	0.07NS	-0.04NS	0.13*	0.13NS
Number of children under 18	0.09NS	0.20**	-0.08NS	0.13NS

Figure F1. Model Results by Technology

Table F1. Sobel Tests of Mediation for Interruptions Via Phone

Test	Path	Beta	S.E.	*t*-value	*p*-value
H1: Extent of interruptions → Interruption overload → Work exhaustion	Extent of interruptions → Interruption overload	0.46	0.09	3.17	0.00
	Interruption overload → Work exhaustion	0.33	0.08		
H2: Extent of interruptions → Interruption overload → Nonwork exhaustion	Extent of interruptions → Interruption overload	0.46	0.09	3.01	0.00
	Interruption overload → Nonwork exhaustion	0.30	0.08		
H3: Extent of interruptions → Interruption overload → Nonwork performance	Extent of interruptions → Interruption overload	0.46	0.09	-2.01	0.04
	Interruption overload → Nonwork performance	-0.20	0.09		
H4: Extent of interruptions → Interruption overload → Work performance	Extent of interruptions → Interruption overload	0.46	0.09	-2.50	0.01
	Interruption overload → Work performance	-0.29	0.10		
H5: Extent of interruptions → Psychological transition → Work exhaustion	Extent of interruptions → Psychological transition	0.24	0.12	1.92	0.06
	Psychological transition → Work exhaustion	0.48	0.08		
H6: Extent of interruptions → Task closure → Work exhaustion	Extent of interruptions → Task closure [†]				
	Task closure → Work exhaustion				
H7: Extent of interruptions → Task closure → Work performance	Extent of interruptions → Task closure[†]				
	Task closure → Work performance				

[†]Given the nonsignificant effect of extent of *phone* interruptions on task closure, task closure does not significantly mediate the effects of extent of *phone* interruptions on work exhaustion (H6) or work performance (H7).

Table F2. Sobel Tests of Mediation for Interruptions Via E-mail

Test	Path	Beta	S.E.	*t*-value	*p*-value
H1: Extent of interruptions → Interruption overload → Work exhaustion	Extent of interruptions → Interruption overload [††]				
	Interruption overload → Work exhaustion				
H2: Extent of interruptions → Interruption overload → Nonwork exhaustion	Extent of interruptions → Interruption overload [††]				
	Interruption overload → Nonwork exhaustion				
H3: Extent of interruptions → Interruption overload → Nonwork performance	Extent of interruptions → Interruption overload [††]				
	Interruption overload → Nonwork performance				
H4: Extent of interruptions → Interruption overload → Work performance	Extent of interruptions → Interruption overload [††]				
	Interruption overload → Work performance				
H5: Extent of interruptions → Psychological transition → Work exhaustion	Extent of interruptions → Psychological transition	0.33	0.1	2.86	0.00
	Psychological transition → Work exhaustion	0.48	0.08		
H6: Extent of interruptions → Task closure → Work exhaustion	Extent of interruptions → Task closure	0.40	0.11	-1.98	0.05
	Task closure → Work exhaustion	-0.17	0.07		
H7: Extent of interruptions → Task closure → Work performance	Extent of interruptions → Task closure	0.40	0.11	2.75	0.00
	Task closure → Work performance	0.31	0.08		

[††]Given the nonsignificant effect of extent of *e-mail* interruptions on interruption overload, interruption overload does not significantly mediate the effects of extent of *e-mail* interruptions on work exhaustion (H1), nonwork exhaustion (H2), nonwork performance (H3), or work performance (H4).

Table F3. Sobel Tests of Mediation for Interruptions via Messaging					
Test	**Path**	**Beta**	**S.E.**	*t*-value	*p*-value
H1: Extent of interruptions → Interruption overload → Work exhaustion	Extent of interruptions → Interruption overload	0.25	0.08	2.46	0.01
	Interruption overload → Work exhaustion	0.33	0.08		
H2: Extent of interruptions → Interruption overload → Nonwork exhaustion	Extent of interruptions → Interruption overload	0.25	0.08	2.39	0.02
	Interruption overload → Nonwork exhaustion	0.30	0.08		
H3: Extent of interruptions → Interruption overload → Nonwork performance	Extent of interruptions → Interruption overload	0.25	0.08	-1.79	0.07
	Interruption overload → Nonwork performance	-0.20	0.09		
H4: Extent of interruptions → Interruption overload → Work performance	Extent of interruptions → Interruption overload	0.25	0.08	-2.11	0.04
	Interruption overload → Work performance	-0.29	0.10		
H5: Extent of interruptions → Psychological transition → Work exhaustion	Extent of interruptions → Psychological transition [†††]				
	Psychological transition → Work exhaustion				
H6: Extent of interruptions → Task closure → Work exhaustion	Extent of interruptions → Task closure [†††]				
	Task closure → Work exhaustion				
H7: Extent of interruptions → Task closure → Work performance	Extent of interruptions → Task closure [†††]				
	Task closure → Work performance				

[†††]Given the nonsignificant effects of extent of *messaging* interruptions on psychological transition and task closure, psychological transition does not significantly mediate the effect of extent of *messaging* interruptions on work exhaustion (H5), and task closure does not significantly mediate the effects of extent of *messaging* interruptions on work exhaustion (H6) or work performance (H7).