

Effects of Perceived Organizational and Supervisory Support on Public Sector Employee Engagement in COVID-19-Induced crises: Mediating Effects of Work-Life Policy Use

Geiguen Shin (신계균), Ph.D.

Assistant Professor

School of Public Policy & Administration

Kookmin University

Research Background: *Employee Engagement*

- Employee engagement as the key to individuals and organizational outcomes
 - For individuals: correlated with job satisfaction, organizational commitment, and job involvement (Saks & Gruman, 2014)
 - For organizations: higher shareholder returns, profitability, productivity, and customer satisfaction (Crawford et al., 2010; Harter et al., 2002)
- Deepening and widening ‘engagement gap’
 - “Employee engagement is on the decline and there is a deepening disengagement among employees today” (Saks & Gruman, 2014, p. 156).

Motivation

- Need to explore employee work and work-life experiences related to an external crisis like COVID-19 pandemic
- Need to redesign strategies to maintain employee engagement
- Role of organizational supports is a key for employee engagement
- Also, role of human agents (i.e., supervisory supports) as a key in dealing with the crisis

Research Questions

1. How do organizational supports affect employee engagement?
2. How do supervisory supports affect employee engagement?
3. How do work-life policy uptakes affect employee engagement during the external crisis like COVID-19 pandemic?

Theories & Concepts: *Employee Engagement*

- **Job engagement**

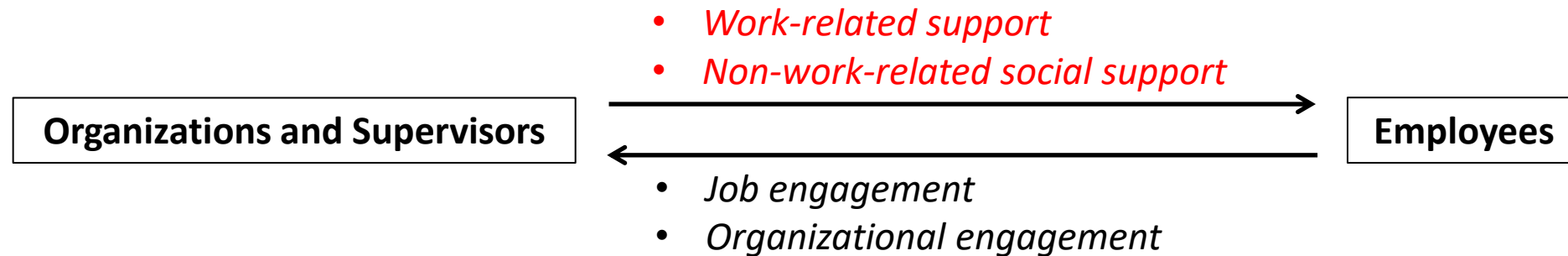
- Coupling one's self with the role (Kahn, 1990)
- “The harnessing of organization members’ selves to their work roles”
(Kahn, 1990, p. 694)

- **Organizational engagement**

- Employees being emotionally and intellectually committed to the organization (Baumruk, 2004; Richman, 2006; Shaw, 2005)
- Employees' discretionary efforts at work (Frank et al., 2004)

Theories & Concepts:

Social Exchange Theory (SET) & Organizational support theory (OST)



- SET posits reciprocal and interdependent relationships among two parties
- OST proposes reciprocal relationships between organizations and employees
 - Organizations and supervisors (as agents of the organization) provides care and support to employees
 - Given the care and support, employees develop the perception that the organization and supervisors value their contribution → ***committed to their job and organization in return***

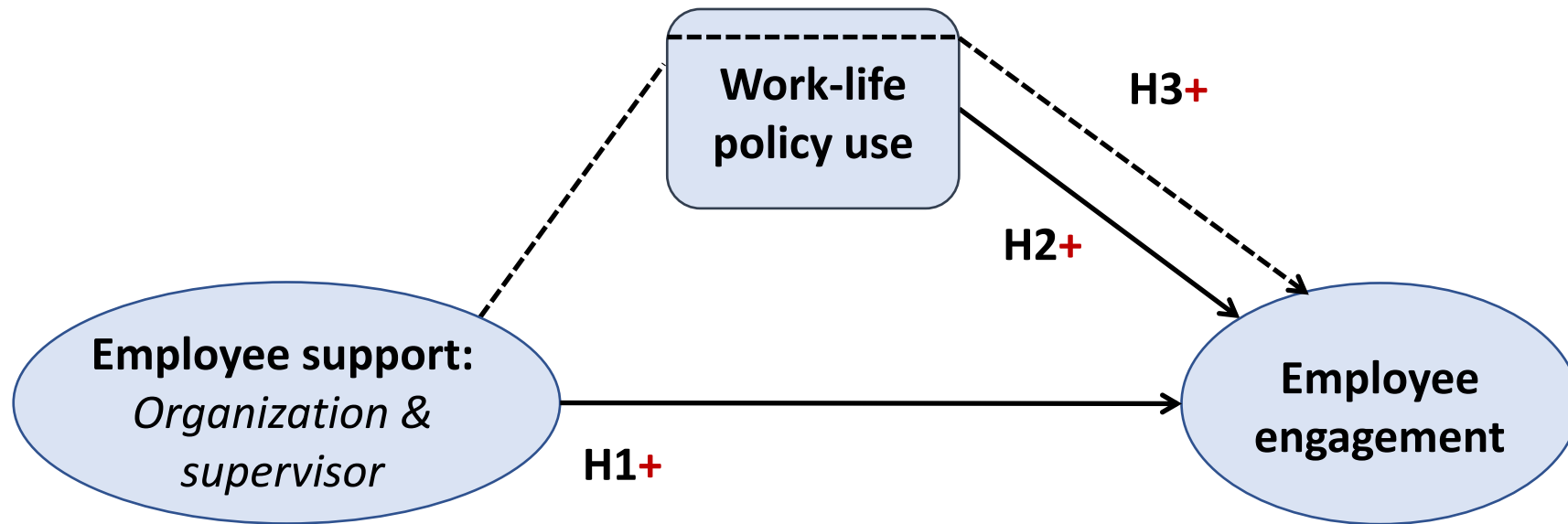
Theories & Concepts: *OST* & *POS/PSS*

- Concepts of perceived organizational support (POS) and perceived supervisor support (PSS)
 - Also explain how the reciprocity works and what is exchanged.
 - Explain employees' perception towards organizational and supervisory support
- Crucial for the effectiveness of formal and systemic supports (i.e., work-life policies)
 - Work-life policy use is a matter of organizational and supervisory support
 - Nurturing work-life friendly culture

Hypotheses

- H1 Organizational (i) work-related & (ii) non-work-related social support will have positive impacts on employee engagement
- H2 Supervisory (i) work-related & (ii) non-work-related social support will have positive impacts on employee engagement
- H3 Work-life policy uptake will increase employee engagement
- H4 Organizational (i) work-related & (ii) non-work-related social support will have positive impacts on employee engagement through work-life policy uptake
- H5 Supervisory (i) work-related & (ii) non-work-related social support will have positive impacts on employee engagement through work-life policy uptake

Empirical model



Data: Federal Employment Viewpoint Survey (FEVS) 2020

- Measures employees' personal work experiences, work unit, agency, supervisor/team leader, leadership, satisfaction, work-life programs, and demographics in US federal agencies
- US Office of Personnel Management (OPM) from Sep-22 to Nov-2, 2020
 - New items about the COVID-19 pandemic and its effect on the federal workforce are added

Data: Federal Employment Viewpoint Survey (FEVS) 2020

- Usable responses: 624,800 (Response Rate: 44.3%)
 - 82 Federal agencies, ranging from department-level to large and small/independent agencies
- Final sample of 464,616
 - Respondents in cabinet-level federal agencies only
 - Job characteristics (i.e., whether respondents had to be physically present at a worksite during the pandemic) and work-life policy uptake, other determinants of employee engagement vary by levels of agencies

Measures: Dependent variables

Observed variables	1 st order latent construct	2 nd order latent construct
Use four survey questions capturing how much respondents are committed to their job	Job engagement	Employee engagement
Use two survey questions capturing how much respondents engage into their agencies	Organizational engagement	

* The path coefficients (e.g., factor loadings) for the relationship between...

- Observed variables and 1st-order latent constructs
- 1st-order and 2nd-order latent constructs

... are statistically significant ($p < .001$) → *Latent constructs well represent the theoretical constructs of employee engagement*

Measures: Independent variables (1)

Observed variables	1 st order latent construct	2 nd order latent construct
Use two observed variables	Support on commuting and work travel	Organizational support on work and daily task (<i>work-related</i>)
Use ten observed variables	Providing resource to assist employees completing their work and daily task during the pandemic	
Use three observed variables	Expanding flexible work arrangement during the pandemic	Organizational support on employees' well-being (<i>non-work-related</i>)
Use five observed variables	Providing information & resource about health issues during the pandemic	
Use six observed variables	Support on social distancing & rearrange workplace during the pandemic	

Measures: Independent variables (2)

Observed variables	1 st order latent construct	2 nd order latent construct
Use two observed variables	Organization's senior leaders' support on workplace health & safety	Supervisory support on workplace health & safety <i>(work-related)</i>
Use two observed variables	Immediate supervisors' support on workplace health & safety	
Use two observed variables	Support on work-life balance <i>(non-work-related)</i>	N/A <i>(* 1st order latent construct is used for analysis)</i>

- Reviewed previous studies and performed confirmatory factor analyses (CFA) to validate the measures when selecting survey questions (as observed variables) to generate latent constructs for IVs
 - The path coefficients (e.g., factor loadings) for the relationship between...
 - Observed variables and 1st-order latent constructs
 - 1st-order and 2nd-order latent constructs
- ... are statistically significant ($p < .001$) → *Latent constructs well represent the theoretical constructs of employee engagement*

Measures: Independent variables (3)

Work-Life Policy	Program usage (0=no, 1=yes)
Flexible work arrangement	<ul style="list-style-type: none">• Alternative work schedule <i>or</i>• Telework (3 or more days a week) during the pandemic
Childcare program	<ul style="list-style-type: none">• Child Care Programs (for example, child care center, parenting classes and support groups, back-up care, subsidy, flexible spending account)
Adult dependent care program	<ul style="list-style-type: none">• Elder Care Programs (for example, elder/adult care, support groups, resources)
Leave	<ul style="list-style-type: none">• Leave under the Emergency Paid Sick Leave Act (part of the Families First Coronavirus Response Act)• Other types of leave (sick, weather & safety, administrative, unpaid, etc.)

Measures: Control variables

Other factors that influence federal workers' engagement to their job and organizations and the use of work-life policy

Variables	Measures	N	Mean	Std. Dev.
Gender	0=male, 1=female	495,425	0.44	0.50
Minority status	0=no, 1=yes	471,247	0.26	0.44
Age group	0=under 40, 1=40 and +	496,898	0.77	0.42
Job tenure	1=10yrs and less, 2=11 to 20yrs, 3=more than 20yrs	515,628	1.89	0.79
Supervisory status	0=no, 1=yes	515,060	0.23	0.42
Childcare	0=no, 1=yes	519,124	0.38	0.48
Adult dependent care	0=no, 1=yes	517,469	0.18	0.38

Research Method

- Structural Equation Model (SEM) using second-order factors
 - Representing overall abstraction of organizational and supervisory supports as multiple specific (first-order) latent constructs
- Useful when 1st-order constructs are significantly correlated (Becker et al., 2012; Chen et al., 2005; Tehseen et al., 2019)
- Useful when 2nd-order constructs can explain relationships among the first-order constructs that are generated by multiple survey items (Becker et al., 2012; Chen et al., 2005; Tehseen et al., 2019)
- Using Mplus v8.6

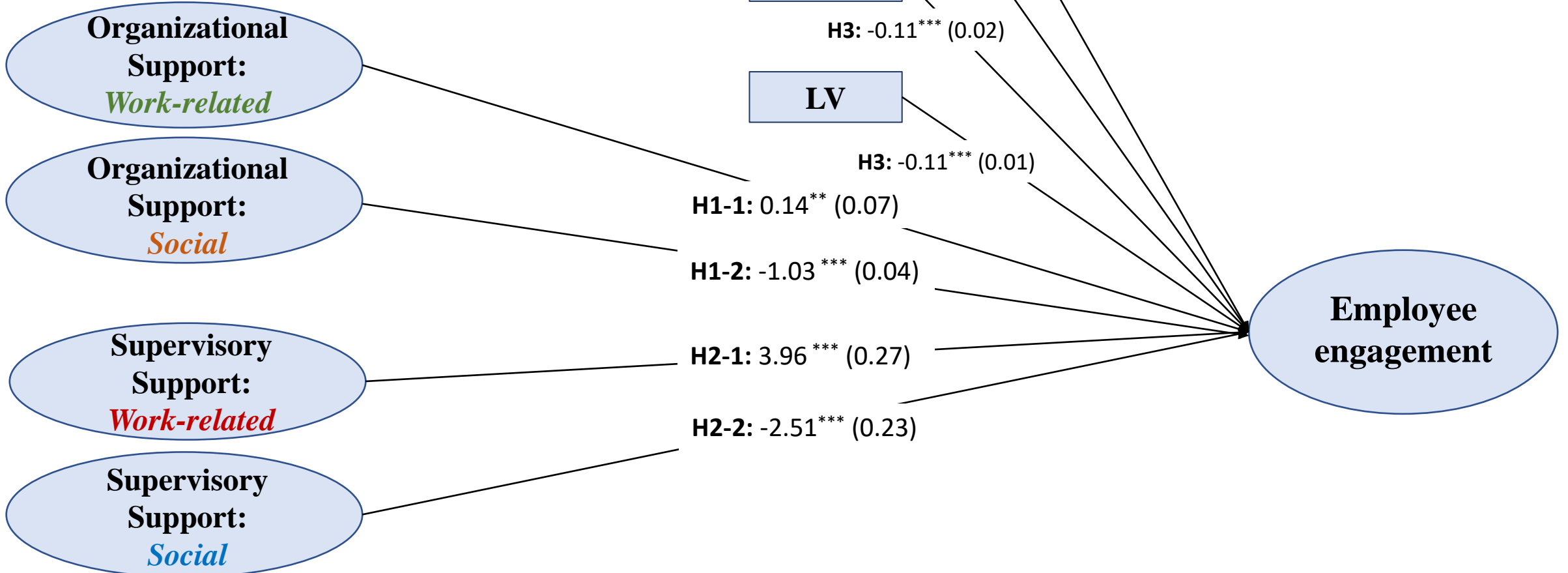
Findings: Model 1

- Among those who were required to be physically present at a worksite during the pandemic (N=128,085)
- Model fit test (Chi-square: $p < 0.001$, RMSEA = 0.033, CFI=0.981) results show that the SEM analysis model fits the data well.

Model 1: H1 through H3

Direct paths of...

- Organizational & supervisory support and employee engagement
- Work-life policy and employee engagement

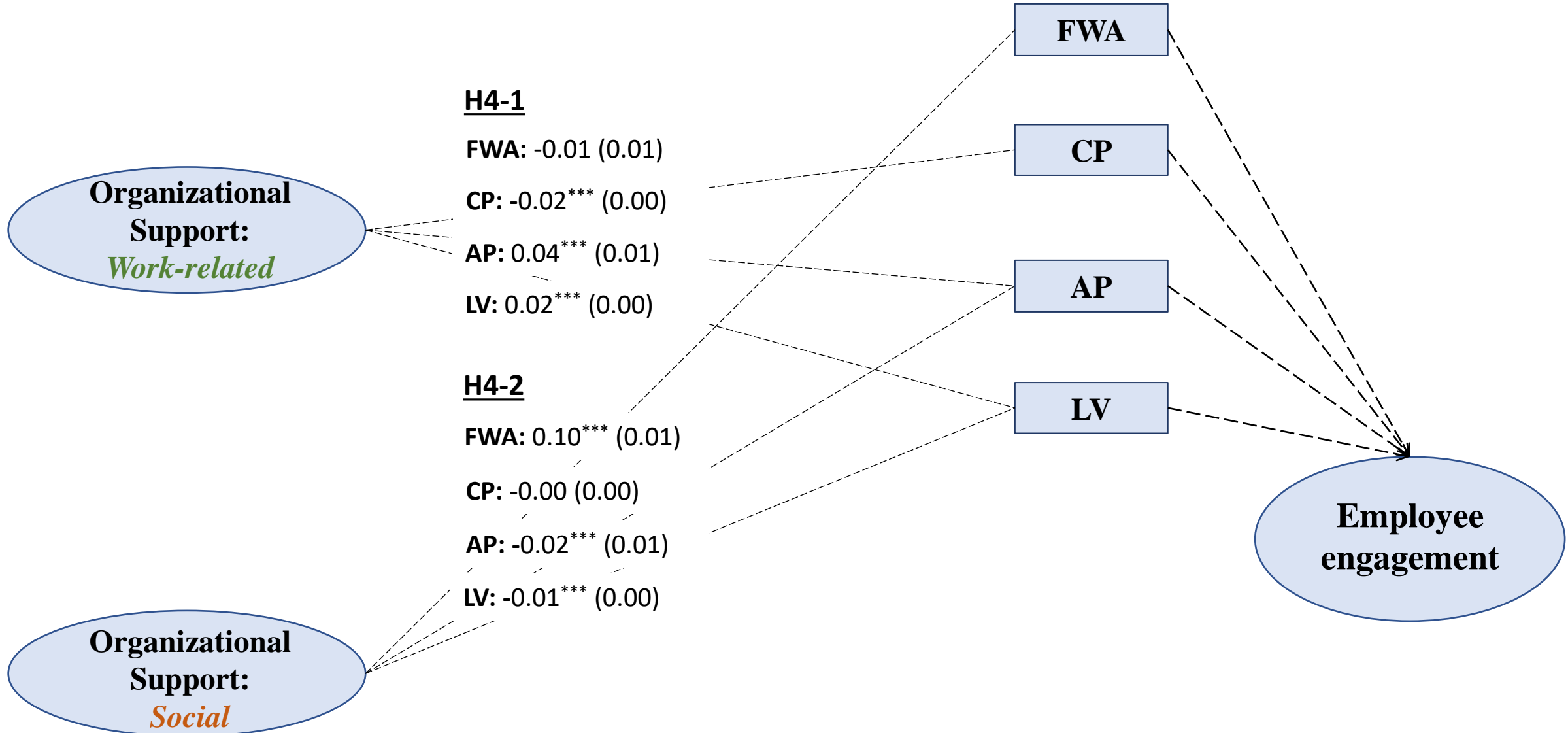


- FWA: Flexible work arrangement
- CP: Childcare program
- AP: Adult dependent care program
- LV: Leave

Model 1: H4

Indirect effects of organizational support on employee engagement through work-life policy use

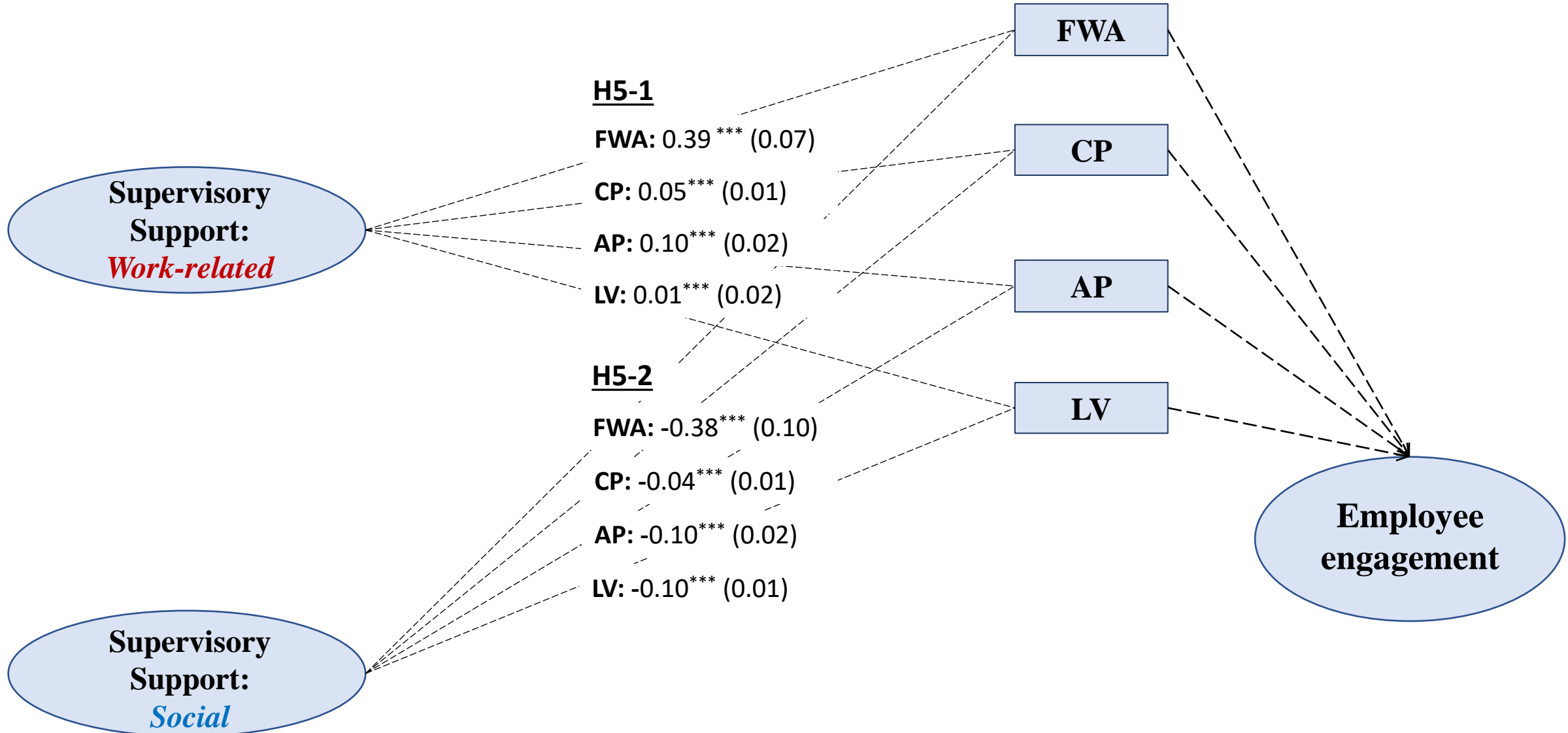
- FWA: Flexible work arrangement
- CP: Childcare program
- AP: Adult dependent care program
- LV: Leave



Model 1: H5

Indirect effects of supervisory support on employee engagement through work-life policy use

- FWA: Flexible work arrangement
- CP: Childcare program
- AP: Adult dependent care program
- LV: Leave



Note: Dotted lines and arrows indicate indirect effects.

Findings: Model 1

	Path	β	Std. Error	H. support
H1	Organizational support → Employee engagement (EE)			
H1-1	Work-related support → EE	0.14**	0.07	Supported
H1-2	Non-work-related social support → EE	-1.03***	0.04	Not supported
H2	Supervisory support → EE			
H2-1	Work-related support → EE	3.96***	0.27	Supported
H2-2	Non-work-related social support → EE	-2.51***	0.23	Not supported

Findings: Model 1

	Path	β	Std. Error	H. support
H3	Work-life policy use (WLP) → Employee engagement (EE)			Partially supported
	Flexible work arrangement → EE	0.24***	0.02	
	Childcare program → EE	0.09***	0.01	
	Adult dependent care program → EE	-0.11***	0.02	
	Leave → EE	-0.11***	0.01	

Findings: Model 1

	Path	β	Std. Error	H. support
H4	Organizational support \rightarrow WLP \rightarrow EE			
H4-1	Work-related support \rightarrow <u>WLP</u> \rightarrow EE			Partially supported
	• Flexible work arrangement	-0.01	0.01	
	• Childcare program	-0.02***	0.00	
	• Adult dependent care program	0.04***	0.01	
	• Leave	0.02***	0.00	
H4-2	Non-work-related social support \rightarrow <u>WLP</u> \rightarrow EE			Partially supported
	• Flexible work arrangement	0.10***	0.01	
	• Childcare program	-0.00	0.00	
	• Adult dependent care program	-0.02***	0.01	
	• Leave	-0.01***	0.00	

Findings: Model 1

	Path	β	Std. Error	H. support
H5	Supervisory support \rightarrow WLP \rightarrow EE			
H5-1	Work-related support \rightarrow <u>WLP</u> \rightarrow EE			Supported
	• Flexible work arrangement	0.39***	0.07	
	• Childcare program	0.05***	0.01	
	• Adult dependent care program	0.10***	0.02	
	• Leave	0.01***	0.02	
H5-2	Non-work related social support \rightarrow <u>WLP</u> \rightarrow EE			Not supported
	• Flexible work arrangement	-0.38***	0.10	
	• Childcare program	-0.04***	0.01	
	• Adult dependent care program	-0.10***	0.02	
	• Leave	-0.10***	0.01	

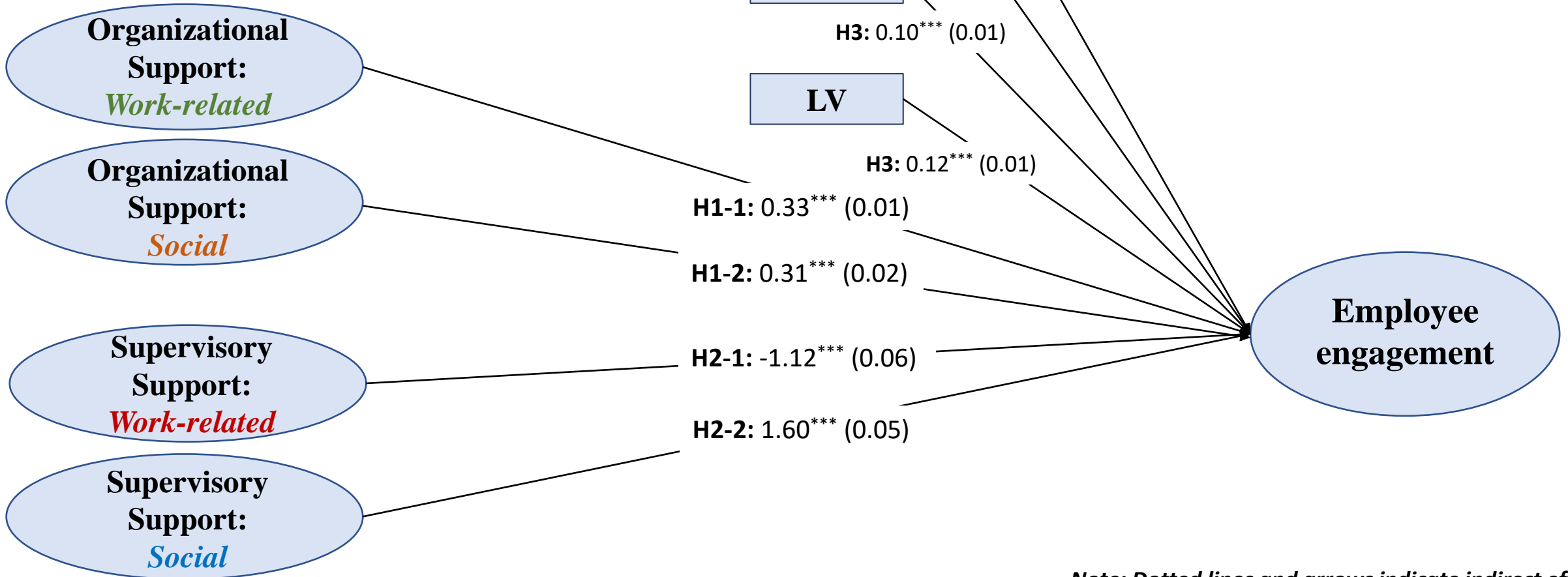
Findings: Model 2

- Among those who were **NOT** required to be physically present at a worksite during the pandemic (N=336,531)
- Model fit test (Chi-square: $p < 0.001$, RMSEA = 0.027, CFI = 0.983) results show that the SEM analysis model fits the data well.

Model 2: H1 through H3

Direct paths of...

- Organizational & supervisory support and employee engagement
- Work-life policy and employee engagement



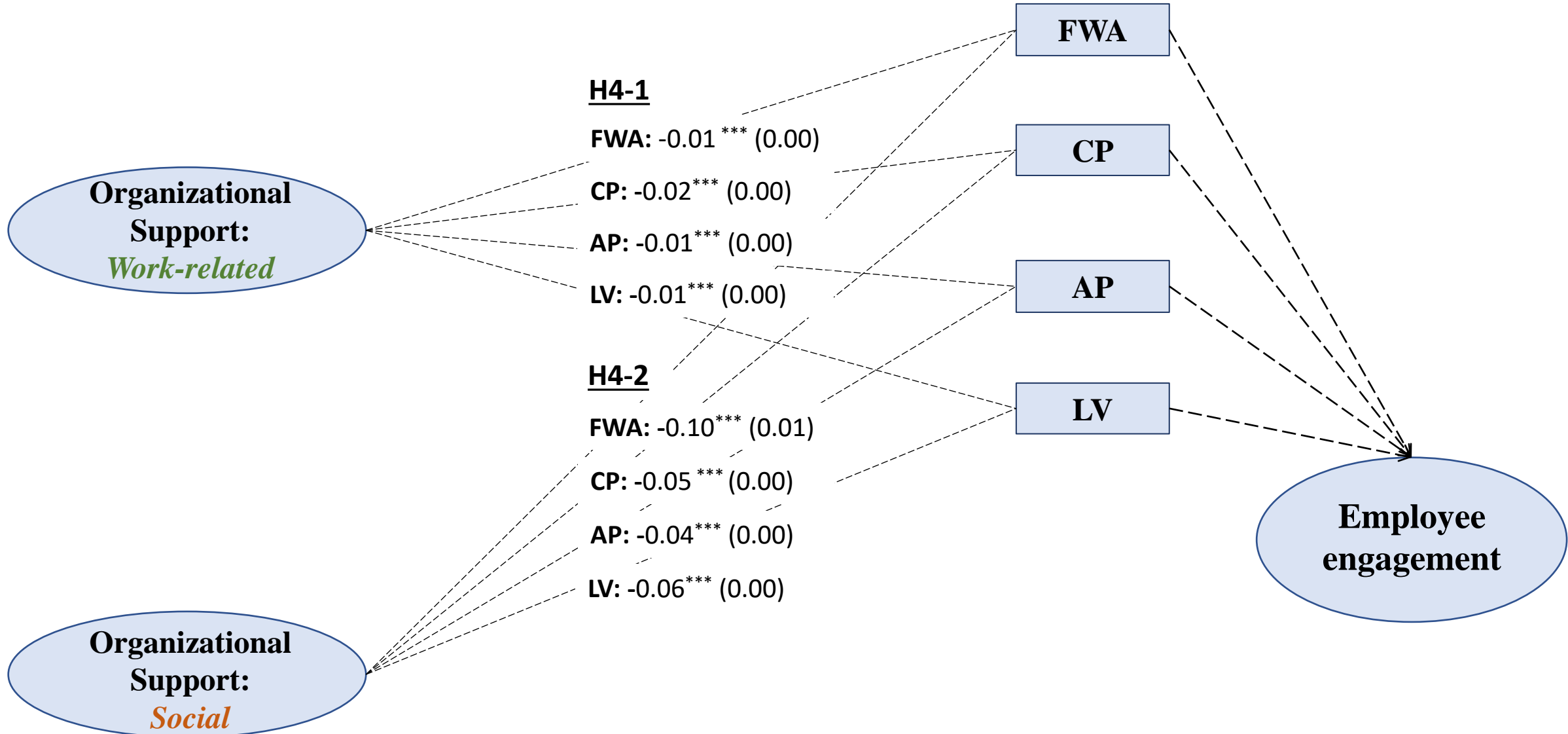
- FWA: Flexible work arrangement
- CP: Childcare program
- AP: Adult dependent care program
- LV: Leave

Note: Dotted lines and arrows indicate indirect effects.

Model 2: H4

Indirect effects of organizational support on employee engagement through work-life policy use

- FWA: Flexible work arrangement
- CP: Childcare program
- AP: Adult dependent care program
- LV: Leave

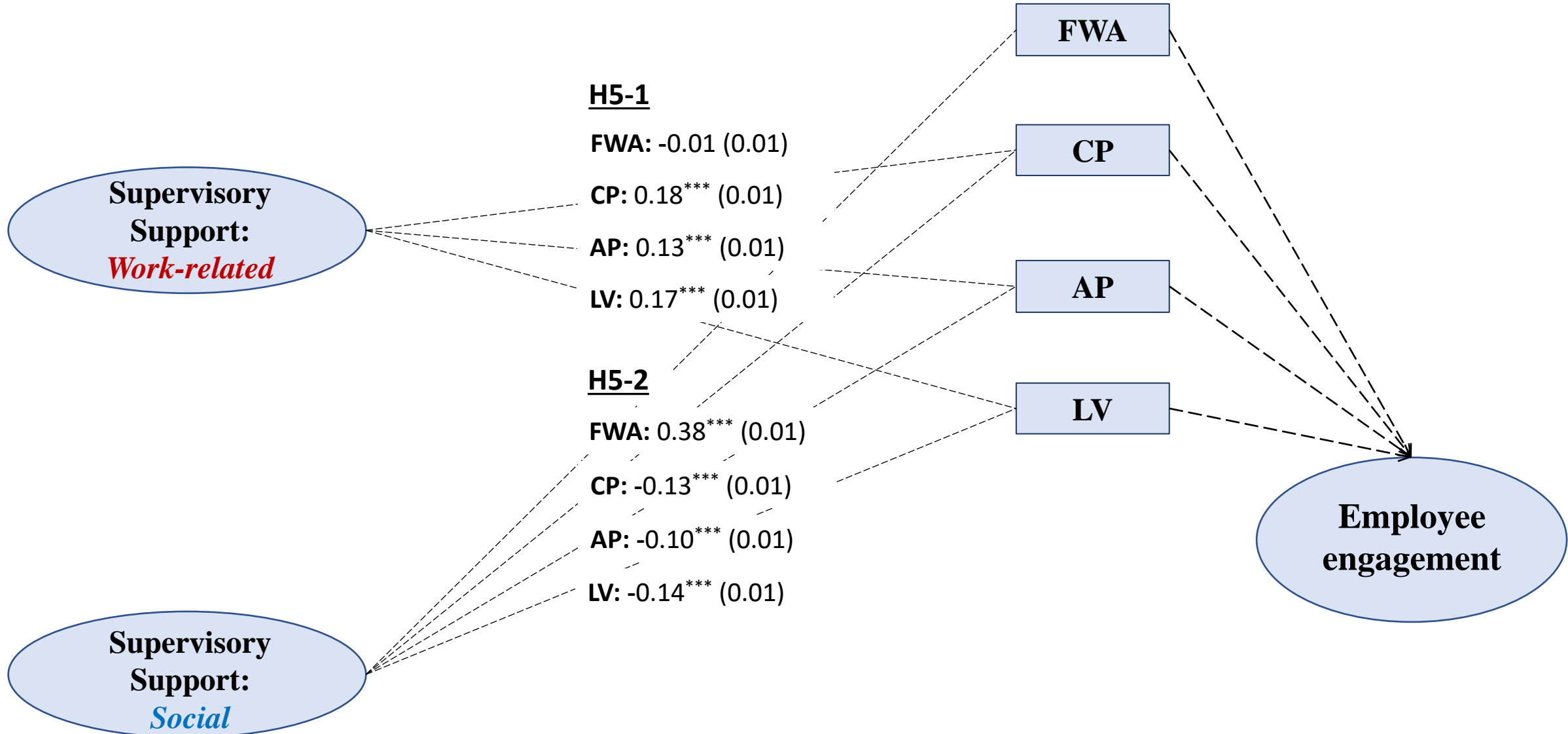


Note: Dotted lines and arrows indicate indirect effects.

Model 2: H5

Indirect effects of supervisory support on employee engagement through work-life policy use

- FWA: Flexible work arrangement
- CP: Childcare program
- AP: Adult dependent care program
- LV: Leave



Note: Dotted lines and arrows indicate indirect effects.

Findings: Model 2

	Path	β	Std. Error	H. support
H1	Organizational support → Employee engagement (EE)			
H1-1	Work-related support → EE	0.33 ^{***}	0.01	Supported
H1-2	Non-work-related social support → EE	0.31 ^{***}	0.02	Supported
H2	Supervisory support → EE			
H2-1	Work-related support → EE	-1.12 ^{***}	0.06	Not supported
H2-2	Non-work-related social support → EE	1.60 ^{***}	0.05	Supported

Findings: Model 2

	Path	β	Std. Error	H. support
H3	Work-life policy use (WLP) → Employee engagement (EE)			Partially supported
	Flexible work arrangement → EE	-0.15***	0.01	
	Childcare program → EE	0.12***	0.01	
	Adult dependent care program → EE	0.10***	0.01	
	Leave → EE	0.12***	0.01	

Findings: Model 2

	Path	β	Std. Error	H. support
H4	Organizational support \rightarrow WLP \rightarrow EE			
H4-1	Work-related support \rightarrow <u>WLP</u> \rightarrow EE			Not supported
	• Flexible work arrangement	-0.02***	0.00	
	• Childcare program	-0.02***	0.00	
	• Adult dependent care program	-0.01***	0.00	
	• Leave	-0.01***	0.00	
H4-2	Non-work-related social support \rightarrow <u>WLP</u> \rightarrow EE			Not supported
	• Flexible work arrangement	-0.10***	0.00	
	• Childcare program	-0.05***	0.00	
	• Adult dependent care program	-0.04***	0.00	
	• Leave	-0.06***	0.00	

Findings: Model 2

	Path	β	Std. Error	H. support
H5	Supervisory support → WLP → EE			
H5-1	Work-related support → <u>WLP</u> → EE			Partially supported
	• Flexible work arrangement	-0.01	0.01	
	• Childcare program	0.18***	0.01	
	• Adult dependent care program	0.13***	0.01	
	• Leave	0.17***	0.01	
H5-2	Non-work related social support → <u>WLP</u> → EE			Partially supported
	• Flexible work arrangement	0.03***	0.01	
	• Childcare program	-0.13***	0.01	
	• Adult dependent care program	-0.10***	0.01	
	• Leave	-0.14***	0.01	

Results

- For those who were required to be physically present at a worksite during the pandemic...
 - Work-related organizational and supervisory support enhances employee engagement during the pandemic
 - Among various work-life policy, flexible work arrangement and childcare program enhance their employee engagement during the pandemic
 - When it comes to indirect impacts of organizational support on employee engagement through work-life policy, work-related support through adult dependent care and leave programs enhance employee engagement during the pandemic.
 - When it comes to indirect impacts of supervisory support on employee engagement through work-life policy, work-related support has significant positive indirect impacts on employee engagement through the use of ***all*** work-life policy programs.

Results

- For those who were **NOT** required to be physically present at a worksite during the pandemic...
 - Work-related organizational support enhances employee engagement during the pandemic
 - When it comes to supervisory support, only non-work-related support enhances employee engagement during the pandemic
 - Among various work-life policy, childcare program, adult dependent care and leave programs enhance their employee engagement during the pandemic
 - When it comes to indirect impacts of organizational support on employee engagement through work-life policy, neither work-related nor non-work-related social support through the use of work-life policy enhance employee engagement during the pandemic.
 - When it comes to indirect impacts of supervisory support on employee engagement through work-life policy, work-related support through the use of childcare program, adult dependent care and leave programs enhance employee engagement during the pandemic.

Conclusion

- Impacts of organizational and supervisory support on employee engagement vary depending on the work context (i.e., whether required to be physically present at a worksite during the pandemic or not).
- Verifying the conclusions of previous research that the availability of work-life program may not be enough. Organizational and supervisory support matter. Again, their impacts on employee engagement vary depending on the work context.
- Verifying the need to redesign strategies to maintain employee engagement especially when organizations and employee experience external crisis like COVID-19 pandemic