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## SEM Brief 9: Dehumanization, Work-Life Balance, Social Dialogue

Ana Antolin  
Laura Babbitt  
Drusilla Brown  
Le Dang Trung

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The first eight briefs focused on the impact of Better Work on conditions at work. We now turn to the impact the conditions of work have on the short-term outcomes for workers. Below, we focus on the extent to which workers feel dehumanized at work, work-life balance and social dialogue.

**Main conclusions:** Better Work reduces dehumanization at work, improves work-life balance and promotes social dialogue. Better Work reduces dehumanization and improves work-life balance by helping workers develop a sense of empowerment, making workers more resilient, ensuring that workers properly receive overtime pay, reducing work stress, reducing unfair obstacles to promotion, and reducing verbal abuse. Better Work also shortens the workweek, positively contributing to work-life balance.

As is emerging across the analysis, Better Work has a complex impact on workers through its impact on the use of incentive pay. Better Work factories are less likely to pay by the piece than other factories. Workers who are paid by the piece have their interests aligned with the factory. As a consequence, there may be less dehumanizing pressure applied by supervisors. However, piece rate pay has an adverse effect on work-life balance.

### 1. Reduced Form

Better Work reduced-form treatment effects are reported in Table 9.1. Workers in Better Work factories feel less dehumanized at work ( $b=-0.049$ ) and report a more satisfactory work-life balance ( $b=0.23$ ). They are more likely to be a member of a union ( $b=0.11$ ), but also more likely to fear that being a member of a union will result in termination ( $b=0.024$ ).

### 2. Theory

Our next step is to consider the theoretical determinants of these outcome variables. We would like to answer the question, how do working conditions particularly affect the extent to which a worker feels dehumanized and their perception of work-life balance. Results are reported in Table 9.2.

Note first, that even with working conditions controls, the Better Work treatment variable is still significant in the dehumanization, work-life balance and union termination equations. Therefore, Better Work has a treatment channel not identified by our analysis.

Turning to dehumanization, results are reported in column 1. Workers who are more resilient ( $b=-0.033$ ) and feel empowered ( $b=-0.22$ ) are also less likely to feel dehumanized at work. Ensuring that workers are properly paid for overtime ( $b=-0.042$ ) and providing adequate training ( $b=-0.079$ ) also reduce dehumanization. Dehumanization increases in stressful work environments ( $b=0.27$ ), when workers face unfair obstacles to promotion ( $b=0.18$ ) and when verbal abuse is common ( $b=0.11$ ).

Workers also feel less dehumanized when they are paid by the piece ( $b=-0.070$ ). As noted elsewhere, piece rate pay aligns the interests of the worker and the firm. In such settings, supervisors are less likely to use verbal abuse and degrading comments to motivate workers.

The factories that reduce dehumanization also promote work-life balance, though with some important exceptions. Workers who see themselves as resilient ( $b=0.20$ ) and have a shorter workweek ( $b=-0.0082$ ) report better work-life balance, while work stress ( $b=-0.22$ ), unfair obstacles to promotions ( $b=-0.12$ ) and verbal abuse ( $b=-0.10$ ) are associated with worse work-life balance.

In contrast to the findings with regard to dehumanization, piece rate pay, either full ( $b=-0.14$ ) or in part ( $b=-0.082$ ), worsens work-life balance. Piece rate pay may align worker and firm interests in a way that reduces abuse at work, but piece rate workers have more difficulty balancing the demands of their job and their home life.

### 3. Simultaneous Equation Modeling (SEM)

Our ultimate interest is in understanding how Better Work activates the working conditions channels that reduce dehumanization and promote work-life balance. For this purpose, we conduct simultaneous equation estimation. Results for dehumanization are reported in Table 9.3 and for work-life balance in Table 9.4. As before, cells highlighted in green identify a treatment channel initiated by Better Work that ultimately reduces dehumanization or improves work-life balance. Red cells indicate cases where Better Work activated a channel, but it had an adverse effect on workers. Yellow cells identify those variables that are impacted by Better Work or impact dehumanization and work-life balance but the chain of causality breaks for some reason.

Turning to dehumanization, Better Work promotes resilience (column 2), a sense of empowerment (column 3), and appropriate pay for overtime (column 4). These variables, in turn, reduce dehumanization, as can be seen in column 1. Better Work reduces unfair obstacles to promotion (column 10) and verbal abuse (column 11), both of which contribute to dehumanization.

Better Work promotes formal representation channels (column 12) but for some reason, formal channels of representation are associated with more dehumanization. It is possible that we are detecting reverse causality. Dehumanization creates a demand for formal representation. However, it is also possible that formal representation is increasing tension in the workplace.

The impact of Better Work on piece rate pay also creates an adverse channel to dehumanization. Better Work is associated with a reduction in piece rate pay (column 7). However, piece rate pay reduces dehumanization.

The channels from Better Work to work-life balance are similar to those for dehumanization but with some important exceptions. Resilience, empowerment and appropriate overtime pay all

improve work-life balance. Work stress, unfair obstacles to promotion and verbal abuse all make work-life balance worse.

Table 9.4 also exhibits a treatment channel through the length of the workweek. A shorter workweek (column 14) is associated with better work-life balance. Also, note that Better Work also affects work-life balance through piece rate pay. As the use of piece-rate pay declines, workers feel that they are more able to balance their work and home responsibilities.

## Data Construction

**Dehumanization** ( $\alpha=0.7523$ ) 5-point common scale

*Unimportant* How often do you feel small or unimportant after talking to your supervisor?

*Angry* How often do you feel angry or frustrated after talking to your supervisor?

*Unappreciated* How often do you feel unimportant or unappreciated in the factory?

*Embarrassed* How often do you feel embarrassed or humiliated at work?

**W\_L\_BalanceR** ( $\alpha=0.8375$ ) 5-point agree scale

*Job\_FamilyR* The amount of time my job takes up makes it difficult to fulfill family / social responsibilities

*HomeR* Things I want to do at home do not get done because of the demands my job puts on me

## Social Dialogue

*Union* Are you a member of a union (Binary)

*Union\_Termination* If you join or support a union, how likely is it that you will be terminated, or that your contract will not be renewed? (5-point scale)

*Thirsty*

You are thirsty at work.

*Hungry*

You are hungry at work.

*Obstacle Promotion*

You faced an unfair obstacle getting promoted

*Hot\_Cold*

Your factory is uncomfortably hot or cold

*Promotion Performance*

Promotions in my work unit are based on performance.

*Injured*

In the last three months, how often have you been injured because of your work?

*Supervisor\_Yell*

A supervisor yells at a worker to work faster or for making a mistake.

*Acceptable\_Yell*

In this factory, it's seen as acceptable for supervisors or managers to yell at workers who make mistakes or need to work faster.

*Change\_Behavior*

I can change my life by changing my behavior.

*Sad*

How often do you feel sad or depressed?

*Health*

How is your overall health?

*Female\_Sup*

Is your direct supervisor female or male? Your direct supervisor is the supervisor you interact with the most.

*Work\_Week*

What days of the week do you usually work?

What time do you begin and end each day you usually work?

*monthlywageUSD*

How often are you paid?

How much did you receive the last time you were paid?

*Bonus\_Pay\_USD*

Did you receive a production bonus the last time you were paid?

If yes on production bonus: How much was your bonus the last time you were paid?

*USD\_Hour*

$\text{monthlywageUSD} / \text{Work\_Week}$

*Training*

*OT\_After*

Do you get paid for overtime work? Yes, after 8 or 9 hours of work.

*Piece\_Rate, Time\_Rate*

Do you get paid by the piece or by time?

*Day\_Off*

How many weeks per month do you work on your day off/Sunday?

**Training** (a= 0.6779) 5-point agree scale

*Applicable\_Training* Overall, the on-the-job training I receive is applicable to my job.

*Training\_Needs* Overall, the training I receive on the job meets my needs.

**Representation** (a= 0.6703) Binary

*Union* Are you a member of union?

*Factory\_Union* Which of the following do you have in your factory? Union

*Factory\_Bargaining* Which of the following do you have in your factory? A collective bargaining agreement

*Factory\_Committee* Which of the following do you have in your factory? Worker-manager committee

**Help** (a= 0.8239) 5-point comfort scale

*Supervisor\_Help* If you have a complaint or concern about work, how comfortable would you feel seeking help from Your supervisor

*Coworker\_Help* If you have a complaint or concern about work, how comfortable would you feel seeking help from A co-worker

*HR\_Help* If you have a complaint or concern about work, how comfortable would you feel seeking help from HR

*Trade\_Union\_Help* If you have a complaint or concern about work, how comfortable would you feel seeking help from The trade union

*Committee\_Help* If you have a complaint or concern about work, how comfortable would you feel seeking help from A worker-manager committee

*ComplaintBox\_Help* If you have a complaint or concern about work, how comfortable would you feel seeking help from Suggestion/Complaint box

**Work Stress** (a= 0.6676) 5-point common scale

*Dizzy* In the last three months, how often have you felt dizzy or fainted at work?

*Ache* In the last three months, how often are you bothered by headache; backache or suffered from muscle stiffness?

*Injured* In the last three months, how often have you been injured because of your work?

*Worry* I often worry about finishing everything I have to do.

*Fatigue* I feel fatigued when I get up in the morning and have to face another day on the job.

*Frustrated* I feel frustrated by my job.

**Demographic Controls**

*Age*

*Factory\_Experience*

*i.Position*

*i.Education*

*Female*

*i.Married*

*Work\_Experience*

*changed\_jobs*

**Factory Characteristics**

*Factories\_Nearby* Are there other factories nearby where you could get another job?

*Vietnam*

*bw\_factory*

**Time Control**

*endline*



*Table 9.1 Reduced Form Treatment Effect*

VARIABLES	(1) Dehumanization	(2) Work-Life BalanceR	(3) Union	(4) Union Termination
bw_factory	-0.0490** (0.0221)	0.225*** (0.0309)	0.111*** (0.0158)	0.0244** (0.0123)
Constant	1.955*** (0.191)	3.353*** (0.299)	0.0385 (0.145)	0.279*** (0.105)
Observations	5,893	6,011	5,945	5,443
Number of uniqueID	3,503	3,554	3,505	3,330

Random Effects Panel Estimator

Demographic, Country, Time Controls

Standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 9.2 Theoretical Model

VARIABLES	(1) Dehumanization	(2) Work Life BalanceR	(3) Union	(4) Union Termination
bw_factory	0.0625*** (0.0221)	0.119*** (0.0365)	0.0184 (0.0197)	0.0364** (0.0152)
ResilienceR	-0.0329*** (0.0104)	0.202*** (0.0181)	-0.00147 (0.00974)	-0.0164** (0.00740)
Empowerment	-0.219*** (0.0244)	0.0260 (0.0423)	0.0384* (0.0228)	-0.00707 (0.0175)
OT_After_8_9	-0.0421* (0.0232)	-0.0117 (0.0404)	0.0307 (0.0217)	-0.0344** (0.0164)
Piece_Rate	-0.0700*** (0.0241)	-0.141*** (0.0410)	-0.0678*** (0.0221)	0.0864*** (0.0169)
Piece_Part	-0.0131 (0.0216)	-0.0815** (0.0372)	0.00130 (0.0200)	0.0304** (0.0152)
Work_Stress	0.267*** (0.0136)	-0.218*** (0.0235)	-0.0374*** (0.0127)	0.00880 (0.00966)
Training	-0.0788*** (0.0169)	-0.0356 (0.0295)	0.0201 (0.0159)	-0.0548*** (0.0120)
Help	-0.0112 (0.0131)	0.0278 (0.0228)	-0.0366*** (0.0123)	-0.0202** (0.00923)
Obstacle_Promotion	0.176*** (0.0110)	-0.119*** (0.0192)	0.0187* (0.0103)	-0.00964 (0.00780)
Supervisor_Yell	0.111*** (0.00891)	-0.101*** (0.0154)	-0.0110 (0.00831)	0.0129** (0.00629)
Representation	0.0628** (0.0303)	0.0185 (0.0524)	0.505*** (0.0283)	-0.143*** (0.0216)
USD_Hour	-0.000347 (0.00154)	-0.00972*** (0.00269)	-0.0102*** (0.00145)	0.00184* (0.00109)
Work_Week	-0.00136 (0.00114)	-0.00817*** (0.00197)	-0.00537*** (0.00106)	0.000723 (0.000803)
Constant	2.134*** (0.244)	4.119*** (0.428)	0.263 (0.231)	0.567*** (0.172)
Observations	3,295	3,313	3,306	3,171
Number of uniqueID	2,327	2,335	2,329	2,265

Random Effects Panel Estimator  
Demographic, Country, Time Controls  
Standard errors in parentheses  
\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 9.3 Dehumanization SEM

VARIABLES	(1) Dehuman	(2) ResilienceR	(3) Empower	(4) OT After 8 9 Hours	(5) Work Stress	(6) Train	(7) Piece Rate	(8) Help	(9) Piece Part	(10) Obstacle Promote	(11) Sup Yell	(12) Represent	(13) USD Hour	(14) Work Week
bw	0.0606**	0.135***	0.0597**	0.0678**	-0.162***	0.0186	-0.140**	0.0939**	0.119***	-0.134***	-0.155*	0.0777***	0.0695	-1.392**
factory	(0.0303)	(0.0520)	(0.0254)	(0.0286)	(0.0622)	(0.0282)	(0.0552)	(0.0476)	(0.0358)	(0.0489)	(0.0862)	(0.0215)	(0.518)	(0.616)
ResilienceR	-0.0341***													
	(0.0103)													
Empower	-0.218***													
	(0.0209)													
OT After 8-9 Hours	-0.0371*													
	(0.0189)													
Work Stress	0.270***													
	(0.0140)													
Training	-0.0824***													
	(0.0221)													
Piece Rate	-0.0735***													
	(0.0235)													
Help	-0.0129													
	(0.0133)													
Piece Part	-0.0169													
	(0.0182)													
Obstacle Promotion	0.177***													
	(0.0152)													
Supervisor Yell	0.113***													
	(0.0148)													
Represent	0.0684**													
	(0.0338)													
USD Hour	-0.000917													
	(0.00198)													
Work Week	-0.00129													
	(0.00145)													
Constant	2.169***	2.951***	3.617***	0.550***	2.203***	3.787***	0.427***	3.247***	0.231***	1.733***	2.551***	0.637***	-0.489	61.77***
	(0.226)	(0.328)	(0.133)	(0.193)	(0.275)	(0.155)	(0.147)	(0.181)	(0.0642)	(0.349)	(0.407)	(0.116)	(1.371)	(4.477)
Observations	6,069	6,069	6,069	6,069	6,069	6,069	6,069	6,069	6,069	6,069	6,069	6,069	6,069	6,069

Demographic, Country, Time Controls

Standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Figure 9.1 Dehumanization SEM

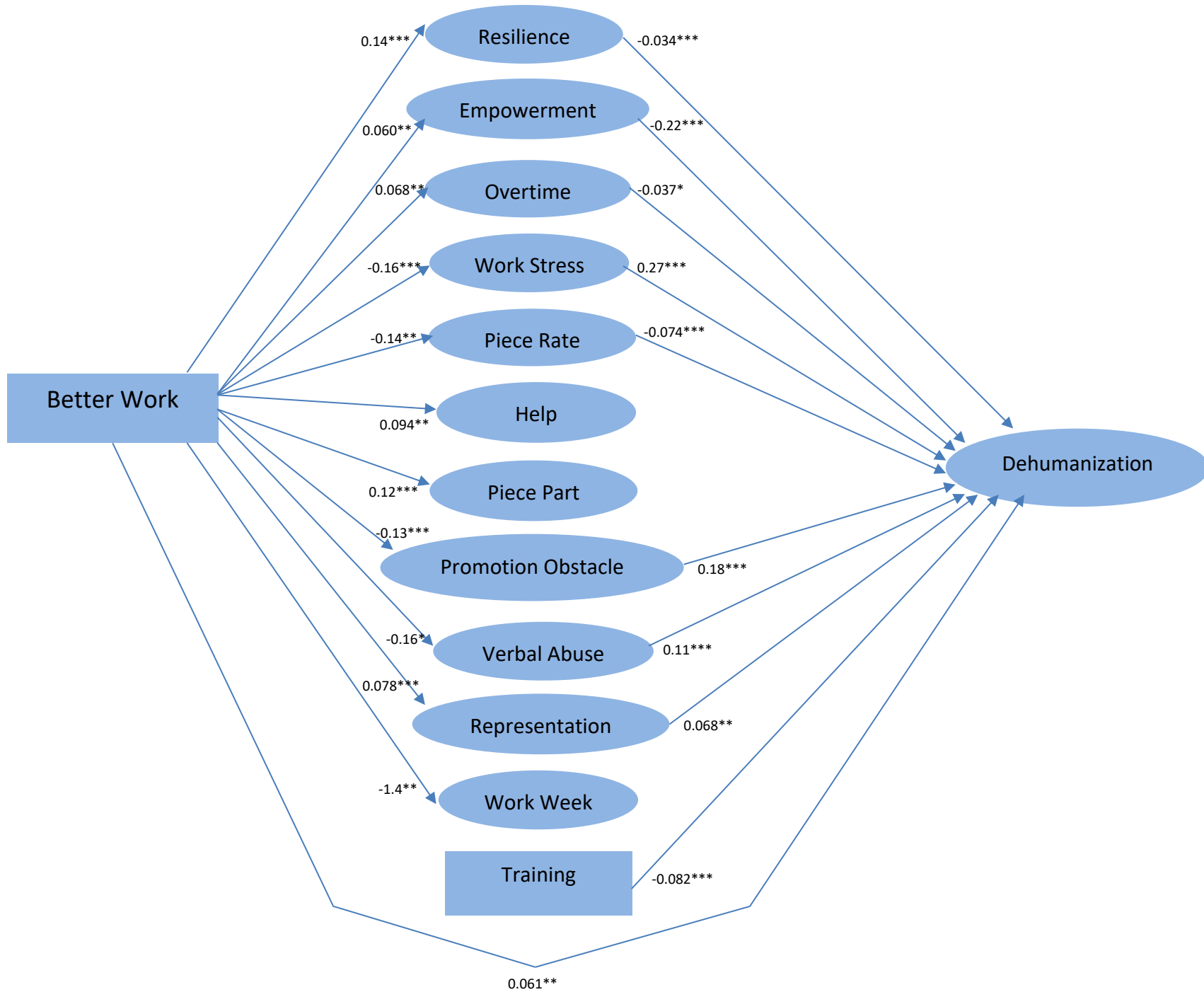


Table 9.4 Work-Life Balance SEM

VARIABLES	(1) Work-Life Balance	(2) ResilienceR	(3) Empower	(4) OT After 8 9 Hours	(5) Work Stress	(6) Train	(7) Piece Rate	(8) Help	(9) Piece Part	(10) Obstacle Promote	(11) Sup Yell	(12) Represent	(13) USD Hour	(14) Work Week
bw	0.113**	0.135***	0.0597**	0.0678**	-0.162***	0.0186	-0.140**	0.0939**	0.119***	-0.134***	-0.155*	0.0777***	0.0695	-1.392**
factory	(0.0506)	(0.0520)	(0.0254)	(0.0286)	(0.0622)	(0.0282)	(0.0552)	(0.0476)	(0.0358)	(0.0489)	(0.0862)	(0.0215)	(0.518)	(0.616)
ResilienceR	0.205***													
	(0.0186)													
Empower	0.0265													
	(0.0507)													
OT After 8-9 Hours	-0.00922													
	(0.0687)													
Work Stress	-0.218***													
	(0.0385)													
Training	-0.0340													
	(0.0337)													
Piece Rate	-0.141**													
	(0.0557)													
Help	0.0280													
	(0.0297)													
Piece Part	-0.0837*													
	(0.0448)													
Obstacle Promotion	-0.118**													
	(0.0511)													
Supervisor Yell	-0.101***													
	(0.0157)													
Represent	0.0220													
	(0.0525)													
USD Hour	-0.0103**													
	(0.00466)													
Work Week	-0.00804***													
	(0.00309)													
Constant	4.096***	2.951***	3.617***	0.550***	2.203***	3.787***	0.427***	3.247***	0.231***	1.733***	2.551***	0.637***	-0.489	61.77***
	(0.447)	(0.328)	(0.133)	(0.193)	(0.275)	(0.155)	(0.147)	(0.181)	(0.0642)	(0.349)	(0.407)	(0.116)	(1.371)	(4.477)
Observations	6,069	6,069	6,069	6,069	6,069	6,069	6,069	6,069	6,069	6,069	6,069	6,069	6,069	6,069

Demographic, Country, Time Controls

Standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Figure 9.2 Work-Life Balance SEM

