



# SEM Brief 6: Verbal Abuse

Ana Antolin Laura Babbitt Drusilla Brown Le Dang Trung Main conclusion: The main channels through which Better Work reduces verbal abuse are through deterring norms tolerating verbal abuse, promoting communication and problem-solving mechanisms and improving mental health. Better Work also operates on the channel that requires firms to pay overtime once the regular workday is complete. However, compliant overtime pay practices increase verbal abuse. Verbal abuse may occur when workers fail to reach their production target during the course of the regular workday causing work to have to continue into the overtime period at the overtime pay rate.

#### 1. Reduced Form

The reduced form treatment effects on the variables in the verbal abuse model are reported in Table 6.1. Better Work is associated with a reduction in verbal abuse (column 1) and a reduction in norms tolerating verbal abuse (column 2). Better Work is also associated with reduced depression (column 10) and better health (column 11).

### 2. Theory

Our theory of verbal abuse is determined by verbal abuse norms, training a worker has received, pay practices that incentivize pay, mental and physical health and some personality traits. Test of the theory is reported in Table 6.2.

First, note that, even with controls added to the equation, Better Work is still associated with less verbal abuse. Verbal abuse norms also play a role. The more acceptable verbal abuse, the more common it is. Strong problem-solving systems in the factory also reduce verbal abuse.

Interestingly, workers who have an internal locus of control are more likely to report verbal abuse. It is possible that this variable is capturing a willingness to report.

A second perhaps surprising result is that compliant pay for overtime increases verbal abuse. Verbal abuse is more common when workers report that overtime pay begins as soon as the regular workday is over. This result is, in fact, as we would expect. Workers who do not complete their target during the regular workday will commonly continue to work into the overtime hours at the overtime rate. Supervisors may press workers to complete their target during the regular workday so that the factory is not paying the overtime rate for regular work.

A third perhaps surprising result is that training does not reduce verbal abuse. Workers who feel they have received enough training are no less likely to report verbal abuse than other workers.

Incentives are also important. Workers who are paid by the piece or have a large production bonus experience less verbal abuse.

Finally, mental and physical health are contributors. Workers who report more depression are more likely to be abused and workers who are healthy report less verbal abuse.

### 3. Simultaneous Equation Modeling (SEM)

We estimate a simultaneous mediation model to identify the channels through which treatment has its effect on verbal abuse. In the SEM, Better Work deters verbal abuse norms, promotes compliant overtime pay practices, reduces the exclusive use of piece rate, strengthens formal representation, strengthens communication and problem solving and reduces depression.

Verbal abuse is reduced when norms tolerating verbal abuse are weakened, worker effort is incentivized by bonus pay, a factory has strong communication and problem-solving practices and workers are in good physical and mental health.

In the SEM, the Better Work treatment variable is no longer significant, indicating that we have captured the Better Work treatment effect through the mediators.

The most important Better Work mediation channel is through its impact on verbal abuse norms, the promotion of communication and problem solving (Help) and reduction in depression (Sad).

There is one aspect of Better Work that is promoting verbal abuse: compliant pay of overtime. We have seen in Brief 5 that when factories start overtime pay at the end of the regular workday, average hourly compensation rises. Supervisors may press workers to complete their target to avoid paying overtime rates for the work they believe should have been completed during regular hours.

#### **Data Construction**

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

monthlywageUSD/ 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 <u>A co-worker</u>

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

*Trade\_Union\_Help* If you have a complaint or concern about work, how comfortable would you feel seeking help from <a href="https://example.com/Thetrade union">Thetrade union</a>

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

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

### **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

Figure 6.1 Verbal Abuse SEM

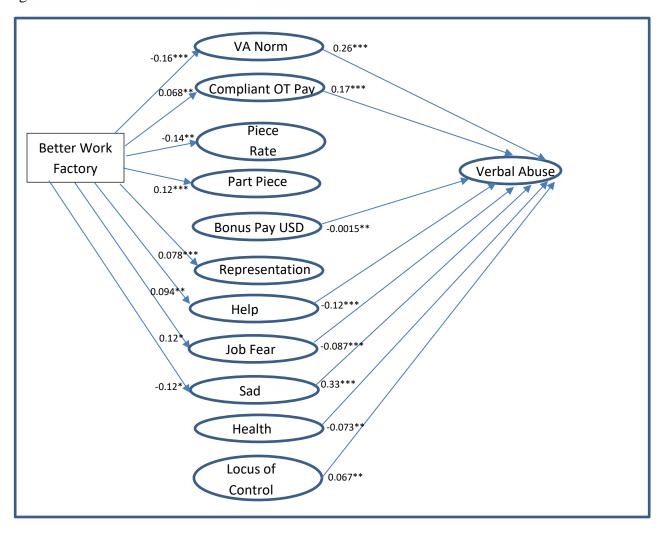


Table 6.1 Reduced Form Treatment Effect

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
VARIABLES	Supervisor Yell	Acceptable Yell	Change Behavior	Compliant OT Pay	Piece Rate	Representatio n	Help	Job Fear	Bonus Pay_USD	Sad	Health
bw_factory	-0.157***	-0.166***	0.0600**	0.0696***	-0.140***	0.0859***	0.0931***	0.124***	2.916***	-0.122***	0.0571**
	(0.0369)	(0.0380)	(0.0264)	(0.0136)	(0.0128)	(0.0124)	(0.0286)	(0.0327)	(0.787)	(0.0304)	(0.0230)
Observations	5,975	6,003	5,998	5,848	6,004	4,478	4,441	6,030	5,647	6,043	6,065
Number of uniqueID	3,532	3,552	3,560	3,501	3,545	2,790	2,918	3,564	3,430	3,567	3,575

Demographic, Country, Time Controls

Standard errors in parentheses

<sup>\*\*\*</sup> p<0.01, \*\* p<0.05, \* p<0.1

Table 6.2 Verbal Abuse Theoretical Model

	(1)				
VARIABLES	Supervisor_Yell				
h ft	0.0025*				
bw_factory	-0.0835*				
At-lele Vell	(0.0431) 0.258***				
Acceptable_Yell					
Change Debagies	(0.0156) 0.0703***				
Change_Behavior					
Intellinense	(0.0218) -0.0255				
Intelligence	-0.0255 (0.0185)				
Comple Cup	(0.0185) -0.0567				
Female_Sup					
Training	(0.0433) -0.0424				
Training	(0.0345)				
OT After 9 0	0.177***				
OT_After_8_9	(0.0472)				
Piece Rate	-0.0924*				
riece_nate	(0.0486)				
Piece Part	-0.0714				
ricce_rare	(0.0444)				
Bonus Pay USD	-0.00153**				
bonus_r uy_osb	(0.000741)				
Representation	-0.00658				
Representation	(0.0614)				
Help	-0.115***				
	(0.0261)				
Job_Fear	-0.0868***				
	(0.0179)				
USD Hour	0.000159				
_	(0.00210)				
Sad	0.328***				
	(0.0193)				
Health	-0.0727***				
	(0.0255)				
Constant	1.706***				
	(0.465)				
Observations	3,218				
Number of uniqueID					
Namber of uniqueid	2,310				

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