

The Negative Effect of Work Environment and Team & Co-Worker Toward Employee Burnout: Testing the Mediating Role of Engagement

Volume 5 Issue 1
(April 2023)

e-ISSN 2716-5191

doi: [10.30997/ijsr.v5i1.255](https://doi.org/10.30997/ijsr.v5i1.255)

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ARTICLE INFO

Article history:

Received: 12-21-2022

Revised version received: 12-28-2022

Accepted: 03-28-2023

Available online: 04-02-2023

Keywords:

work environment; team and co-worker relationship; employee engagement; burnout level

How to Cite:

Angela, C., & Yustina, A. I. (2023).

The Negative Effect of Work Environment and Team & Co-Worker Toward Employee Burnout: Testing the Mediating Role of Engagement.

Indonesian Journal of Social Research (IJSR), 5(1), 36-52.

<https://doi.org/10.30997/ijsr.v5i1.255>

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ABSTRACT

Due to its relevance to businesses, employee engagement has been the subject of extensive study, and many scholars have linked it to burnout as its antipode. The work environment and team and co-worker interactions promote engagement and reduce burnout if well-managed. This study investigates the function of engagement as a mediator between the indirect effects of work environment, team, and co-worker relationships on employee burnout. Respondents are sourced from a public firm employee (Tbk). Using SEM-PLS, three hundred thirty-one obtained data are processed. The results indicate that burnout is negatively related to the work environment and team and co-worker relationships and that employee engagement somewhat mediates these relationships. To mitigate burnout, an additional study can investigate employee satisfaction and performance.



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1. Introduction

No matter how small the company is, whether it is a public company or not, there should be employees in a company. When it comes to a company's success, the employee is one of the factors that must be replaced since they are the ones who will run the company. Hence, employee engagement in the workplace should be considered necessary (Bakker & Leiter, 2010). Anitha (2014) found that the work environment is integral to engagement. Work environment means the place where an employee works. A supportive working environment will produce an excellent psychological condition for the employee, and a good psychological state will make the employee willing to invest and engage in their work (May et al., 2004).

Moreover, since most adults spend their time at work (Harter et al., 2003) automatically, their workplace has become their second home. One should be comfortable in the workplace to fully engage in their tasks. Hence, the researcher considers the work environment one of the main factors of employee engagement. Besides the work environment, one specific aspect, team and co-worker relationship, is considered essential to building good engagement in work (Anitha, 2014). The term refers to each individual's relationship in the workplace, especially with their team member (member of the same team or division). A supportive team will lead to higher engagement of employees (Macey & Schneider, 2008). Having good teammates who genuinely support them will boost the mood and the employee's motivation to finish their tasks well, so their persistence. That is why the team and co-worker relationship has also been included as a factor of employee engagement in this research. Engaged employees are an employee who is willing to carry out the company's goals and values and commit themselves. Their mind is filled with positive, work-related thoughts defined by three factors: vigor, dedication, and absorption (Schaufeli et al., 2002). Engaged employees go beyond their tasks or duty to play their part in brilliance. Thus, employee engagement boosts the company's performance (Dhir & Shukla, 2019; Macey & Schneider, 2008).

Researchers have widely researched employee engagement (Anitha, 2014; Bailey et al., 2017; Caniëls et al., 2018). The large number has proved the importance of employee engagement in every occupation/ job. Amongst many studies, employee engagement has also been widely associated with the burnout level of the employee negatively (Bakker & Leiter, 2010; Schaufeli et al., 2002). Research has shown that all engagement and burnout aspects were significantly and contrarily related (Schaufeli et al., 2002; Schaufeli & Salanova, 2011) was explained as an emotional syndrome occurred that is three-dimensional, which are emotional exhaustion, depersonalization (cynicism), and lack of personal accomplishment (professional efficacy). Exhaustion, which indicates low activation, and vigor, which indicates vigorous activity, are opposites. Based on the information provided by researchers, a limited study investigates how co-workers and the workplace environment can mitigate burnout.

This study aims to extend the research by Anitha (2014), which found that the working environment and team and co-worker relationships are the two main factors influencing employee engagement. By extending Anitha's (2014) research, this study will strengthen the model by exploring the two factors on a large scale or in a publicly traded company. The author chooses to extend this study due to the importance of employee engagement in work, and the result will explore more about employee engagement in Indonesia, especially in Jakarta. The author chose to study in Jakarta since Jakarta is the capital city of Indonesia, and many public companies are located in Jakarta.

As mentioned above, this research will adopt the work environment and team and co-worker relationship as the factors of employee engagement that will be tested. Furthermore, the negative relationship between the factors of employee engagement and the burnout level of the employee is also tested. It has been proved that employee engagement and burnout are negatively related constructs (Anthony-McMann et al., 2017; Eldor, 2018). It would be interesting to test the contribution of different employee engagement factors to (lower) burnout levels (Caniëls et al., 2018), and by addressing the gap (recommendation), employees' burnout

level will be considered as the negative outcome of the work environment and team and co-worker relationship, considering engagement and burnout are related constructs. Thus, the researcher decided to extend the study this way.

1.1. Work Environment

The good working condition may trigger an engaged feeling in the employee. There is a high amount of research that has found such a relationship. For example, studies done by May et al. (2004); Hanaysha (2016) have revealed that several aspects of the work environment could be a significant element that triggers employee engagement. Thus, the employee will feel engaged and willing to invest in their work if their environment is supportive and comfortable.

Based on the literature above, friendly and comfortable working condition is one factor that could enhance employee engagement. It could be the distribution of the tasks, the number of paychecks, and the facilities. If one views their work environment as good and is already enough for their liking, they will feel more comfortable and motivated to go to work. If they are comfortable, they will be more engaged. Thus, the work environment could enhance employee engagement.

1.2. Team and Co-worker Relationship

Team and co-worker relationship refers to the relationship between people in an organization or company, both in the same position in the hierarchy or not (can be lower and higher), as long as they interact with each other in a team (Bunk & Magley, 2011). It includes cooperation while finishing the task and the support of another person in the team. One could feel happy and energetic to go to work if their team relationship is good and supporting each other. Wickramasinghe and Widyaratne (2012) found that supportive and trusting interpersonal relationships and a supportive team will likely have a higher chance of increasing employee engagement. A supportive team could alleviate the mood of employees since they will be more motivated to finish the task. Research has found that team condition, talent, communication, aim, ethical climate, and relationship play a considerable role in a team working great (Gander et al., 2020). Supportive environments also allow members to experiment, try new things, and even fail without fear of the consequences (Wickramasinghe & Widyaratne, 2012). Therefore, creating a good relationship between each team member should be essential. If the relationship between team members is in a good atmosphere, it will likely enhance employee engagement. It could enhance the employee's engagement since a good atmosphere can help lift the employee's mood and eagerness to do their work, thus making them engaged. They will find it difficult to quit their job if they have a good time with their co-workers, engaging them in work.

1.3. Employee Engagement

Employee Engagement addresses the employee's involvement, motivation, and emotional commitment. Macey and Schneider (2008) introduce employee engagement and defines the term as "harnessing organizational members' selves to their work roles." He added that "people employ and express themselves physically, cognitively, and emotionally in engagement during role performances." These days, the term has been called employee engagement, developed by the Gallup Research Group (Anitha, 2014). Some other resources mention this as work engagement also. Employees are called engaged if they are committed to their job and enjoy what they do in the company. Furthermore, engaged employees value the company's goals and are willing to do more than their original tasks.

After the term increased and became popular, many researchers investigated the same concept. Based on the Chartered Institute of Personnel and Development (CIPD) in 2007, Employee Engagement is an association between commitment to the organization (i.e., concerned about the company's growth) with its values and the willingness to help out colleagues. Schmidt et al. (2004) define engagement as bringing satisfaction and commitment together. Eldor (2018); Hanaysha (2016) explain engagement as a positive attitude held by the employee towards the organization and its values. Schaufeli et al. (2002) have developed the engagement concept as the opposite of burnout. It is a positive mindset related to the job, represented by vigor, dedication, and absorption. Vigor is identified by tremendous energy and mental flexibility/ resistance in an individual's job, the eagerness to invest attempt at someone else work, and persistence under challenging situations. Dedication could be defined as an abundance of pride, passion, a sense of significance, inspiration, and challenge. Meanwhile, absorption includes great concentration and absorption by someone else work. They feel like time passes quickly in work while finding it challenging to quit working.

Engagement of the employees is critical for a company to increase its performance since the company's most important resource is human. Human resources and employees; are irreplaceable. If maintained or handled perfectly, they are becoming a vital asset. An organization/ company needs employees to run the business. On top of that, the competitor will not be able to imitate its rival's employees, making it a considerable success factor (Anitha, 2014). Employee engagement also has been proven to have a statistical relationship with productivity, profitability, employee retention, safety, and customer satisfaction (Al-Ali et al., 2019; Bailey et al., 2017; Gander et al., 2020).

1.4. Burnout Level

Burnout is a condition of physical, emotional, and mental depletion caused by excessive pressure/ stress. It can occur to everyone. Eldor (2018); Schaufeli et al. (2002) defined burnout as a disorder of emotional exhaustion and cynicism that often happens for people who do 'people work.' They contended that job burnout is the broad/ extensive strain and mental fatigue that employees must overcome. Specifically, burnout is a multidimensional concept wherein a worker experiences emotional exhaustion, depersonalization, and a reduced sense of personal accomplishment (Anthony-McMann et al., 2017; Eldor, 2018). Early burnout research has focused only on human service or care practitioners, such as doctors, nurses, daycare staff, and other services (Borritz et al., 2006; O'Mahony, 2011; Vera et al., 2016). However, nowadays, researchers are already aware that burnout could also happen in other areas of occupation, such as retail or manufacturing, caused by many factors. Burnout is characterized by three dimensions (Schaufeli et al., 2002), namely exhaustion, cynicism (or depersonalization), and inefficacy (or reduced personal accomplishment). Specifically, exhaustion refers to feeling emotionally and physically drained and having low energy levels; cynicism is a detached attitude towards work or people at work.

The consequences of burnout are severe, both for the staff (people) and the organization. Several scholars have investigated long research on burnout and have found that burnout staff could lead to the decreasing service quality of an organization provided by staff (Bhui et al., 2012; Eldor, 2018; Shmailan, 2016). It is also suggested that burnout affects job turnover, absenteeism, and low morale. For example, if you are feeling burned out from the job, you could turn lazy and will not do your job correctly. It could result in lousy company performance and also your performance itself.

1.5. Hypothesis Development

1.5.1. Relationship between Work Environment and Employee Engagement

As studied by many experts, the work environment is a significant element that could increase employee engagement. It could be proven since the research by Anitha (2014), Bakker and Leiter (2010), and Rich et al. (2010) all resulted in the engagement of employees being the outcome of various aspects of the work environment. A study done by Anitha (2014) has shown that a supportive working environment is one of the most significant causes of employee engagement, along with team and co-worker relationships. It indicates that employees need a healthy work environment, such as having a good leader, a supportive team, a chance to develop, good paychecks compared to the work, and practical tasks. The average adult spends most of his/ her life working. Almost a quarter or even a third of their life span is spent working (Josef et al., 2016). The character and nature of work (as of the routinization, leadership, or supervision and its complexity) have been associated with individuals' depression levels (Bhui et al., 2012). A positive and supportive work environment makes employees feel good and eager to come to work, motivating them to do their tasks well. Thus, it is customary to consider that the workplace stimulates employees' well-being and engagement. It could boost employee engagement by having a good and supportive work environment. Hence,

Hypothesis 1: Work Environment (WE) positively influences Employee Engagement (EE).

1.5.2. Relationship between Team and Co-Worker Relationship and Employee Engagement

As stated in Anitha's research in 2014, the team and co-worker relationship is another factor that influences work engagement (along with the work environment). We will feel more comfortable around people supporting our efforts and less motivated if grouped with non-cooperative or passive people. The same goes for the engagement theory. An open and supportive environment is essential for employees to feel safe and engage totally with their responsibility. Such a work condition may trigger employees to feel attached to the work, thus enhancing engagement (Anitha, 2014). Bunk and Magley (2011) have stated that an individual has this so-called relatedness need that is owned by each person and argued that individuals who have positive interpersonal interactions with their co-workers also should experience more significant meaning in their work. Thus if the employee has good relationships with their co-workers, their engagement towards the job is expected to be high. Hence,

Hypothesis 2: Team and Co-worker Relationship (CW) positively influences Employee Engagement (EE).

1.5.3. Relationship between Employee Engagement and Burnout Level

Bria et al. (2014) researched engagement and burnout as opposite poles that could be measured using only one measurement: Maslach Burnout Inventory – General Survey (Schaufeli et al., 2002). Their research suggested that engagement consists of factors directly opposite the burnout characteristics: participation, energy, and efficacy (the opposite of burnout characteristics, which are cynicism, depletion, and low self-efficacy). As stated by the authors, people who score poorly in cynicism and depletion while maintaining a high score in efficacy are the one who is engaged in their work. Anthony-McMann et al. (2017) stated that engagement and burnout should be developed as a positive antipode and measured using different measurements to study their relationship further. They mentioned that engagement and burnout scales (UWES and MBI-GS, respectively) are significantly and adversely related. Thus, engagement and burnout are two opposite factors that are negatively related. The hypothesis is:

Hypothesis 3: Employee Engagement is negatively related to Burnout Level.

1.5.4. Relationship between Work Environment, Employee Engagement, and Burnout Level

Hanaysha (2016); Rich et al. (2010) mentioned that the work environment was a significant factor that could increase employee engagement. Work engagement results from different aspects of the workplace, such as how supportive the colleagues are, the building or place, the job demands, and others. A supportive and conducive workplace could boost employee engagement (Anitha, 2014). In addition, a good working place, as it boosts the engagement level, could also reduce the possibility of burnout for the employee since engagement and burnout are opposite poles (Schaufeli & Salanova, 2011). If the engagement level is high, it will likely reduce the employee's burnout level. So, it could be concluded that; Hypothesis 4: Employee Engagement mediates the negative effect of Work Environment (WE) on Burnout Level (BO).

1.5.5. Relationship between Team and Co-Worker Relationship, Employee Engagement and Burnout Level

Team and co-worker relationship is perceived as necessary for intensifying engagement. Vera et al. (2016) mentioned that people tend to be liked and related to others (relatedness needs). This kind of need makes people feel they must seek an environment where they can enjoy and feel included in the work to find meaningful work. If one has a great interpersonal relationship with the teammates in the company, he or she might feel engaged with the work. Suppose the relationship in the team could be more supportive. In that case, it could cause an unhappy and less comfortable feeling, indicating low engagement and leading to higher burnout. Thus, the conclusion is;

Hypothesis 5: Employee Engagement (EE) mediates the negative effect of Team and Co-Worker Relationships (CW) on Burnout Level (BO).

2. Methods

2.1. Sample and Data Collection

The research questionnaire was distributed through an internet-based survey (docs.google.com) to several industries in Indonesia. The questionnaire was then circulated over social media networks such as Twitter, WhatsApp, Instagram, and others. The "snowball sampling" technique was used to acquire sampling data by distributing questionnaires. Of 560 questionnaires, only 347 responses were collected; therefore, only 331 were usable to analyze (the response rate was 59.1%). Table 1 shows the detail of the respondents.

Table 1 Demographic details of the respondents

	<i>% of respondents</i>
<i>Gender</i>	
Male	59,82%
Female	40,18%
<i>Age</i>	
21 – 25	52,27%
26 – 31	23,26%
32 – 36	9,37%
37 – 41	5,14%

> 41	9,97%
<i>Work experience</i>	
Three months - 1 year	23,56%
1 - 4 years	35,05%
4 - 7 years	14,20%
> 7 years	27,19%
<i>Education</i>	
D3	12,69%
S1	77,95%
S2	9,06%
S3	0,30%
<i>Position</i>	
Staff	52,57%
Supervisor	22,05%
Assistant Manager	6,34%
Manager	11,18%
Senior Manager	1,51%
Assistant Director	1,21%
Director	2,11%
Others	3,02%
<i>Industry</i>	
Manufacture	26,59%
Retail	12,08%
Service	29,61%
E-Commerce	3,32%
Banking	8,46%
Research and Development (ex; IT)	6,34%
Others	13,60%

2.2. Variable and Measurement

2.2.1. Independent Variable

Two independent variables will be tested in this research. The first variable is the work environment, defined by everything related to employees' working conditions, both physically and psychologically. A good work environment means the company is desirable and comfortable enough for employees to work there. If the work environment is good enough, then it will likely increase employee engagement. The second independent variable being tested is the team and co-worker relationship. It refers to the relationship between people in the organization involved in one team. If the people's relationship among divisions or teams is excellent and supportive, it will help employees feel more motivated to do their job. Also, it will alleviate the employee's engagement.

For the measurement items for the work environment and team and co-worker relationship, the author used questionnaire items from Copenhagen Psychosocial Questionnaire / COPSQ (Kristensen et al., 2005) and the 11-item Co-worker Relationship Scale (Hain, 2005), respectively. A sample item from the co-worker scale is "The more I interact with my co-workers, the better I enjoy my job." The Cronbach's Alpha is 0.906. The author takes 18 items of Workplace aspects measurement in COPSQ to measure the work environment variable. The sample item is "I have enough time for my work tasks." Cronbach's

alpha for COPSOQ is 0.861. The scoring system for both measurements ranged from 1 = Strongly Disagree to 5 = Strongly Agree.

2.2.2. Mediating Variable

The mediating variable of this research is employee engagement. Employee engagement means a positive attitude and mindset toward the employee's job. Employees will feel happier and more motivated while doing their job if they are engaged. Not only that, but they will also feel like time is faster while doing their job, and they will not quit their job easier as they are engaged in the company goal and values. The author used UWES-9, the shortened version of Schaufeli et al. (2002), to measure employee engagement as the mediating variable. It contained nine items as the shortened version of UWES and can be used to measure employee engagement. One of the items is, "I get carried away when I am working." Cronbach's alpha for this measurement item was 0.874.

2.2.3. Dependent variable

The dependent variable of the study is burnout level. It is a mental and psychological depletion that is caused by excessive pressure. This research refers to the excessive pressure caused by work. Employees with high burnout levels will become lazy and unmotivated to do their work, which will be reflected negatively in the company's performance. If the employee is burned out, company performance will be harmful since the employee will not do their job correctly. The shortened version of MBI-GS Schaufeli et al. (2002) measured burnout. It consists of 9 items that measure all dimensions of burnout. The sample item for MBI-GS was "I feel used up at the end of the workday." All items were scaled based on the Likert Scale, from 1 = Strongly Disagree to 5 = Strongly Agree. Cronbach's alpha for MBI-GS was 0.792.

2.3. Statistical Analysis

The research model and hypotheses will be tested using Structural Equation Modelling (SEM) with Partial Least Squares (PLS) approach. Based on Hair et al. (2010), SEM is suitable for research with small sample sizes and is precise in analyzing latent variables. In this research, four latent variables were hypothesized. There are Work Environment, Team and Co-worker Relationships, Employee Engagement, and Burnout Levels. Therefore, the author chooses to use SEM. WarpPLS software version 3.0 is the software that will be used to analyze the data.

3. Results and Discussion

3.1. Results

3.1.1. Validity and Reliability Test

This study uses convergent and discriminant validity to test the construct validity. Factor loadings and Average Variance Extracted (AVE) were tested based on Hair et al. (2019) to assess the convergent validity. Table 2 shows the reliability, Cronbach alpha, and AVE for each variable, factor loadings, the mean and standard deviation for each measurement item, and overall mean and standard deviation.

Table 2 Reliability and convergent validity

Latent Variable	Mean	SD.	Loading
Employee Engagement - EE (composite reliability = 0,902 ; cronbach alpha = 0,874; AVE = 0,541)			
EE 1	3,704	0,931	(0,783)
EE 2	3,828	0,895	(0,802)
EE 3	4,142	0,856	(0,853)
EE 4	3,897	0,959	(0,782)
EE 5	3,789	1,133	(0,538)
EE 6	4,057	0,923	(0,663)
EE 7	4,311	0,835	(0,793)
EE 8	4,281	0,849	(0,612)
Overall Mean and SD	4,001	0,952	
Burnout Level (composite reliability = 0,858; Cronbach alpha = 0,792; AVE = 0,550)			
BO 1	3,184	1,107	(0,614)
BO 2	2,384	1,105	(0,790)
BO 3	2,858	1,124	(0,774)
BO 4	2,795	1,229	(0,833)
BO 5	2,266	1,254	(0,677)
Overall Mean and SD	2,697	1,213	
Team and Co-worker Relationship (composite reliability = 0,922; cronbach alpha = 0,906; AVE = 0,523)			
CW 1	4,190	0,832	(0,812)
CW 2	3,682	0,995	(0,649)
CW 3	3,184	1,071	(0,630)
CW 4	4,221	0,809	(0,778)
CW 5	3,891	0,920	(0,718)
CW 6	3,927	0,910	(0,739)
CW 7	3,749	1,014	(0,636)
CW 8	4,227	0,793	(0,769)
CW 9	3,900	0,977	(0,496)
CW 10	4,000	0,939	(0,830)
CW 11	4,178	0,834	(0,821)
Overall Mean and SD	3,923	0,968	
Work Environment (composite reliability= 0,887; cronbach alpha = 0,861; AVE = 0,400)			
WE 1	3,737	0,968	(0,529)
WE 2	4,118	0,914	(0,525)
WE 5	4,024	0,945	(0,509)
WE 6	3,927	0,897	(0,587)
WE 9	4,369	0,802	(0,686)
WE 10	4,366	0,806	(0,679)
WE 11	3,861	1,102	(0,748)
WE 12	4,012	0,858	(0,660)
WE 14	3,580	1,149	(0,612)
WE 15	4,060	0,898	(0,670)
WE 16	3,628	1,079	(0,586)
WE 18	4,099	0,865	(0,737)
Overall Mean and SD	3,982	0,977	

Table 2 shows the fixed measurement item loadings. Six items from the work environment questionnaire and four items from burnout were deleted due to their factor loadings being less than 0.4, and 1 item was deleted from Employee Engagement items to increase the AVE of EE to meet the excellent rule of thumb, which is above 0.5 (Hair et al., 2010). The indicators with loadings between 0.4 – 0.7 could be considered included (Sholihin & Ratmono, 2013). When the item with loading 0.4 – 0.7 is deleted, it could increase the AVE and the composite reliability of the variable. The author can delete it rather than keep the indicator just so the AVE and reliability meet the minimum standard. Nevertheless, if the item's deletion does not affect the AVE and reliability, the researcher is suggested to keep the indicator, not delete it. The other variables, AVE, were already above the minimum standards, above 0.5, except for the work environment.

The indicator was still included since the AVE and composite reliability of the variable is already good, so there is no need for this indicator deletion. For the other factor loadings, only five items from the work environment have loadings of 0.5. Other than that, the factor loadings are above 0.6. Sixteen items factor loadings were also at the number more than 0.7. The total measurement items are 8 for employee engagement, 5 for burnout level, 11 for team and co-worker relationship, and 12 to measure work environment. There are two components for reliability: composite reliability and Cronbach alpha. The value of these two should be higher than 0,7 (Sholihin & Ratmono, 2013). From the table above, all reliability components' values exceed the minimum standards. For Employee Engagement, the composite reliability is 0,902, and the Cronbach alpha is 0,874. The dependent variable, burnout level, has composite reliability of 0,858 and 0,792 for its Cronbach alpha. Team and co-worker relationship has composite reliability and Cronbach alpha of 0,922 and 0,906, respectively. Last but not least, for work environment variable has 0,887 for its composite reliability and Cronbach alpha of 0,861. All of them were already higher than 0,7, which means the measurement items were reliable enough.

The second way to test construct validity is by discriminant validity. Suppose the convergent validity is to test the positive relationship between related measurements and concepts. In that case, discriminant validity is used to test the opposite ways (to measure whether measurements that should be unrelated based on theories are truly unrelated).

Table 3 Discriminant validity

	CW	WE	EE	BO
Team and Co-worker Relationship	(0,723)			
Work Environment	0,758***	(0,632)		
Employee Engagement	0,656***	0,790***	(0,735)	
Burnout Level	-0,291***	-0,192***	-0,261***	(0,742)

Diagonal elements (in bold): square roots of AVE; off-diagonal: correlation between latent variables.

***Significant at P <0.01

The diagonal elements (in bold) show the variable's square root of AVE. According to Fornell & Larcker (1981), the square root of the AVE of one latent variable should be higher than its correlation to the other variable in the same column as an indicator of appropriate discriminant validity. As shown in table 3, not all requirements are met. In the co-worker relationship column, the correlation between co-worker relationship and work environment is higher than the square root of AVE of co-worker relationship. Furthermore, the correlation between work environment and employee engagement is also higher than the square root of AVE of the work environment (0.790). It indicates that the discriminant validity for work environment measurement is low.

3.1.2. Descriptive Analysis

This study aims to test the direct effect of co-worker relationships and work environment on employee engagement and from employee engagement to burnout level. Table 4 shows that co-worker relationship (CW) and work environment (WE) were significantly and positively related to employee engagement (EE); each correlation is significant at $p < 0,01$. It can be proved from the table. The R-value of the correlation between CW and EE is 0,656 with $p < 0,01$, while the correlation between WE and EE has r of 0,79 with $p < 0,01$. In addition, the mediating variable (EE) is negatively and significantly related to the dependent variable (BO) with r of -0,261 and $p < 0,01$.

Table 4 Descriptive statistics

	Mean	Std Dev	CW	WE	EE	BO
Team and Co-worker Relationship	3,9	0,9	(0,723)			
Work Environment	3,9	0,9	0,758***	(0,632)		
Employee Engagement	4,0	0,9	0,656***	0,790***	(0,735)	
Burnout Level	2,6	1,2	-0,291***	-0,192***	-0,261***	(0,742)

3.1.3. Inferential Analysis

Direct Effect

In running the structural model analysis, the researcher first needs to test the direct effect between the team and co-worker relationship and the work environment on the burnout level. The researcher did not include the mediating variable (employee engagement) in the model to test the direct effect. This examination will determine whether the team and co-worker relationship and work environment directly affect burnout. The work environment significantly impacts burnout since its p-value is less than 0.01. Furthermore, the work environment is negatively related to burnout levels with $\beta = -0.29$. Then, the team and co-worker relationship is also significantly and negatively related to burnout because the p-value is less than 0.01, with a β of -0.33.

Mediating Effect

Figure 1 shows the Analysis of the whole research model to test the hypotheses. The researcher conducts the test by inserting employee engagement (EE) as a mediating variable between team and co-worker (CW) relationships and burnout and between work environment (WE) and burnout. In the figure below, we can conclude that the team and co-worker relationship significantly and positively affects employee engagement since its p-value is 0.02 (less than 0.05) with β of 0.13. The work environment also positively and significantly influences employee engagement ($p < 0.01$, $\beta = 0.69$). Thus, hypothesis 1 and 2 is supported. The model below also revealed that employee engagement (EE) affects burnout level (BO) significantly and negatively ($p < 0.01$, $\beta = -0.29$). Those revelations indicate support hypothesis three, which states that employee engagement is negatively related to burnout.

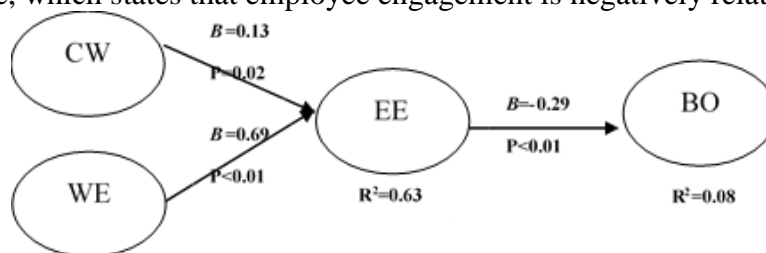


Figure 1 Hypothesized model

To test the mediating effect of employee engagement, the researcher used the VAF method, as Hair et al. (2013) suggested. Based on Fornell and Larcker (1981), this method is deemed the most appropriate for SEM-PLS rather than the Sobels test method. The procedure for mediation testing is as follows; first, the direct effect between the independent and dependent variable (without the mediating variable) should be significant. This step is already fulfilled, as mentioned above. After the insertion of the mediating variable, the indirect effect (independent of mediating and mediating to dependent) should be significant too. After that, Variance Accounted For (VAF) is needed to test the mediating effect of the variable. The variable fully mediates the model if the VAF value exceeds 80%. VAF ranging from 20% to 80% means a partial mediating effect, and VAF below 20% means no mediating effect. Conducting a further analysis to test the mediating role of employee engagement, the researcher introduced employee engagement as the mediating variable between work environment and burnout level. As the insertion of EE as a mediating variable, the indirect effect between work environment and employee engagement and the indirect effect between employee engagement and burnout level is significant ($p < 0.01$ and $p = 0.01$). VAF of this model is 31%, which means EE has a partial mediating effect in the relationship between work environment and burnout level. Thus, hypothesis 4 is supported.

Furthermore, employee engagement mediates between team and co-worker relationships and burnout. The indirect effect between the variables is still significant ($p < 0.01$ and $p = 0.03$), so the next step can be conducted. The VAF for this model is 23%. Employee engagement partially mediates the effect of team and co-worker relationships on burnout. Hence, hypothesis 5 is supported.

Table 5 PLS result

Variable	Path to	
	Employee Engagement	Burnout Level
Direct		
Work Environment		-0.29***
R ²		0.08
Team and Co-worker Relationship		-0.33***
R ²		0.11
Mediating		
Work Environment	0.79***	0.18
Employee Engagement		-0.17***
R ²	0.63	
Team and Co-worker Relationship	0.66***	-0.24***
Employee Engagement		-0.15**
R ²	0.43	0.12
Full Model		
Work Environment	0.69***	
Team and Co-worker Relationship	0.13**	
Employee Engagement		-0.29***
R ²	0.63	0.08

Significant at $P < 0.05$, *Significant at $P < 0.01$

Table 6 The Indirect, direct, and total effect

Indirect Effect (WE – EE – BO)	0.79 x -0.17	-0.13
Direct Effect		-0.29
Total Effect		-0.42
VAF for WE – EE – BO	-0.13 / -0.42	0.31
Indirect Effect (CW – EE – BO)	0.66 x -0.15	-0.10
Direct Effect		-0.33
Total Effect		-0.43
VAF for CW – EE – BO	-0.10 / -0.43	0.23

3.2. Discussion

This study examines and introduces employee engagement as the mediating variable between work environment and burnout level, as well as between team and co-worker relationship and burnout level. However, this study was deficient regarding the measurement. The measurement item for measuring the work environment has a low discriminant validity, which means there is an indicator(s) in the measurement with strong loadings to more than one latent variable. It could happen since the work environment comprises several aspects of the employee's workplace (May et al., 2004; Rich et al., 2010; Vera et al., 2016). Team and co-workers are also part of the work environment that employees work in daily. The researcher found that work environment and team and co-worker relationships positively affected employee engagement. This result aligns with much previous research, such as the research (May et al., 2004; Rich et al., 2010). Employee engagement has also proved to be significantly and negatively related to burnout levels. This study has shown that employees will feel more engaged with a supportive co-worker and team. This result means that a healthy relationship between team members is needed to increase employee engagement with the company. If employees are engaged, they are willing to invest themselves in work, eventually increasing their performance too (Macey & Schneider, 2008; Rich et al., 2010). Hence, teamwork and interpersonal friendship at work are essential to increase employee engagement.

As revealed in this study, a good working environment can motivate employees to feel engaged. Such a preferable work environment incorporates both an emotionally and physically safe environment that could lead the employee to be engaged Anitha (2014). The study has shown that employees perceive their workplace and role in the organization are essential and will boost their loyalty and engagement to the work and hence their performance. Holbeche and Springett also argue that employees are likely to leave if they find no meaning in their work or tasks. Therefore, the more engaged the employee perceives their work environment as suitable and desirable. Employee engagement has been proven to affect employee burnout negatively. This study shares the same result as Schaufeli et al. (2002); Schaufeli and Salanova (2011), as they have mentioned that burnout and engagement are indeed an antipode that is negatively related. This result indicates that if the employee is happily engaged in their work, they will be less likely to feel exhausted and demotivated during their work, hence lowering the burnout level. Furthermore, the employee engagement introduced to the model as a mediating variable acts as a partial mediator in the relationship between work environment and burnout level with a VAF of 31%. On the other hand, employee engagement is also found to partially mediate the relationship between team and co-worker relationship and burnout level (VAF of 23%).

The result found that a good and supportive team and co-workers will lower the burnout level of the employee by boosting employee engagement. If the employee's co-worker is supportive and friendly, the employees will feel much more comfortable than being in a team with a rude co-worker. It will lead the employee to work happier and be willing to work harder to achieve the company's goals. Hence he/ she will not be burned out from the work tasks since he/ she does it voluntarily. As illustrated by the preceding study, the work environment also indirectly influences employee burnout via employee engagement, which is the mediating variable. A positive work environment increases staff engagement and reduces employee burnout. Therefore, if a person finds their job enjoyable and desirable, they will likely experience less fatigue even if they work long hours in the company.

4. Conclusion

This research introduced and examined employee engagement as the mediator between work environment and burnout level; and between team and co-worker relationship and burnout level amongst employees who work in a public company in Jakarta, Indonesia. This study's sample included all employees working in public companies in Indonesia, especially in Jakarta. After a month of collecting data, the research has found that an excellent and conducive work environment will trigger the engaged feeling of the employee, as well a supportive team and co-workers of one will increase employee engagement. This study also revealed that the employee would feel less 'burned out' with high engagement. On the other hand, the mediating testing resulted in employee engagement as a partial mediator between team and co-worker relationships and burnout levels. It indicates that the team and co-worker relationship has a negative, indirect effect on employee burnout through employee engagement as its partial mediator. At the same time, the researcher's hypotheses, which stated that employee engagement act as the mediator between work environment and burnout level, had been proven as employee engagement act as a partial mediator between the indirect relationship between work environment and burnout level.

This study contributes to the number of research done in Indonesia to explore factors of employee burnout and will lead to managerial implications in the Indonesian workplace. By adding the knowledge of what could cause burnout (in this research, team and co-worker relationship), managers can decide on a work plan that consists of actions to build a good team relationship in order to increase the engagement of his/ her subordinates and also to create a desirable work environment to avoid the employees from being exhausted by their work and increasing the employee engagement.

Like any other research, the researcher acknowledged that this study also has limitations, which should be accentuated in this study result. First, the questionnaire items used to measure work environment have low validity. The AVE of work environment measurement needed to meet its standard, as discussed in chapter IV. Many factors, such as the respondents and else, could cause it. Therefore, the researcher suggests that the next researcher study this in another occupation area, such as family business or KAP. Next, researchers can also study this in more areas in Indonesia, not only Jakarta, to broaden the result. Second, it has been revealed that between independent variables (work environment and team and co-worker relationship) and burnout level, employee engagement has been proved to be the partial mediator. Partially mediating means that there is a possibility that another variable could be the mediator between this indirect relationship (between work environment, team and co-worker relationship, and burnout level). The author suggested next researcher explore more about what other variables could be the other mediator.

References

- Al-Ali, W., Ameen, A., Osama Isaac, K., G. S. A., & Shibami, A. H. (2019). The mediating effect of job happiness on the relationship between job satisfaction and employee performance and turnover intentions: A case study on the oil and gas industry in the United Arab Emirates. *Journal of Business & Retail Management Research*, 13(04). <https://doi.org/10.24052/JBRMR/V13IS04/ART-09>
- Anitha, J. (2014). Determinants of employee engagement and their impact on employee performance. *International Journal of Productivity and Performance Management*, 63(3), 308–323. <https://doi.org/10.1108/IJPPM-01-2013-0008>
- Anthony-McMann, P. E., Ellinger, A. D., Astakhova, M., & Halbesleben, J. R. B. (2017). Exploring Different operationalizations of employee engagement and their relationships with workplace stress and burnout: Exploring different operationalizations of employee engagement. *Human Resource Development Quarterly*, 28(2), 163–195. <https://doi.org/10.1002/hrdq.21276>
- Bailey, C., Madden, A., Alfes, K., & Fletcher, L. (2017). The meaning, antecedents and outcomes of employee engagement: A narrative synthesis: Employee engagement. *International Journal of Management Reviews*, 19(1), 31–53. <https://doi.org/10.1111/ijmr.12077>
- Bakker, A. B., & Leiter, M. P. (Eds.). (2010). *Work engagement: A handbook of essential theory and research*. Psychology Press.
- Bhui, K. S., Dinos, S., Stansfeld, S. A., & White, P. D. (2012). A synthesis of the evidence for managing stress at work: A review of the reviews reporting on anxiety, depression, and absenteeism. *Journal of Environmental and Public Health*, 2012, 1–21. <https://doi.org/10.1155/2012/515874>
- Borritz, M., Rugulies, R., Bjorner, J. B., Villadsen, E., Mikkelsen, O. A., & Kristensen, T. S. (2006). Burnout among employees in human service work: Design and baseline findings of the PUMA study. *Scandinavian Journal of Public Health*, 34(1), 49–58. <https://doi.org/10.1080/14034940510032275>
- Bria, M., Spănu, F., Băban, A., & Dumitrașcu, D. L. (2014). Maslach burnout inventory – general survey: Factorial validity and invariance among Romanian healthcare professionals. *Burnout Research*, 1(3), 103–111. <https://doi.org/10.1016/j.burn.2014.09.001>
- Bunk, J. A., & Magley, V. J. (2011). Sensitivity to interpersonal treatment in the workplace: Scale development and initial validation: Sensitivity to interpersonal treatment. *Journal of Occupational and Organizational Psychology*, 84(2), 395–402. <https://doi.org/10.1348/096317910X488626>
- Caniëls, M. C. J., Semeijn, J. H., & Renders, I. H. M. (2018). Mind the mindset! The interaction of proactive personality, transformational leadership and growth mindset for engagement at work. *Career Development International*, 23(1), 48–66. <https://doi.org/10.1108/CDI-11-2016-0194>
- Dhir, S., & Shukla, A. (2019). Role of organizational image in employee engagement and performance. *Benchmarking: An International Journal*, 26(3), 971–989. <https://doi.org/10.1108/BIJ-04-2018-0094>
- Eldor, L. (2018). Public Service Sector: The compassionate workplace—The effect of compassion and stress on employee engagement, burnout, and performance. *Journal of Public Administration Research and Theory*, 28(1), 86–103. <https://doi.org/10.1093/jopart/mux028>
- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research*, 18(3), 382–388. <https://doi.org/10.1177/002224378101800313>

- Gander, F., Gaitzsch, I., & Ruch, W. (2020). The relationships of team role- and character strengths-balance with individual and team-level satisfaction and performance. *Frontiers in Psychology, 11*, 566222. <https://doi.org/10.3389/fpsyg.2020.566222>
- Hain, C. A. (2005). *Co-worker relationships: Using a new measure to predict health related outcomes*.
- Hair, J., Anderson, R., Black, B., & Babin, B. (2010). *Multivariate data analysis* (Seventh). Pearson, Prentice Hall.
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review, 31*(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hanaysha, J. (2016). Testing the effects of employee engagement, work environment, and organizational learning on organizational commitment. *Procedia - Social and Behavioral Sciences, 229*, 289–297. <https://doi.org/10.1016/j.sbspro.2016.07.139>
- Harter, J. K., Schmidt, F. L., & Keyes, C. L. M. (2003). Well-being in the workplace and its relationship to business outcomes: A review of the Gallup studies. In C. L. M. Keyes & J. Haidt (Eds.), *Flourishing: Positive psychology and the life well-lived*. (pp. 205–224). American Psychological Association. <https://doi.org/10.1037/10594-009>
- Josef, A. K., Richter, D., Samanez-Larkin, G. R., Wagner, G. G., Hertwig, R., & Mata, R. (2016). Stability and change in risk-taking propensity across the adult life span. *Journal of Personality and Social Psychology, 111*(3), 430–450. <https://doi.org/10.1037/pspp0000090>
- Kristensen, T. S., Hannerz, H., Høgh, A., & Borg, V. (2005). The Copenhagen Psychosocial Questionnaire-a tool for the assessment and improvement of the psychosocial work environment. *Scandinavian Journal of Work, Environment & Health, 31*(6), 438–449.
- Macey, W. H., & Schneider, B. (2008). The meaning of employee engagement. *Industrial and Organizational Psychology, 1*(1), 3–30. <https://doi.org/10.1111/j.1754-9434.2007.0002.x>
- May, D. R., Gilson, R. L., & Harter, L. M. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of Occupational and Organizational Psychology, 77*(1), 11–37. <https://doi.org/10.1348/096317904322915892>
- O'Mahony, N. (2011). Nurse burnout and the working environment: Nuria O'Mahony asks whether greater teamwork and the introduction of Magnet hospitals can reduce stress and exhaustion among emergency nurses. *Emergency Nurse, 19*(5), 30–37. <https://doi.org/10.7748/en2011.09.19.5.30.c8704>
- Rich, B. L., Lepine, J. A., & Crawford, E. R. (2010). Job engagement: Antecedents and effects on job performance. *Academy of Management Journal, 53*(3), 617–635. <https://doi.org/10.5465/amj.2010.51468988>
- Schaufeli, W. B., Salanova, M., González-romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies, 3*(1), 71–92. <https://doi.org/10.1023/A:1015630930326>
- Schaufeli, W., & Salanova, M. (2011). Work engagement: On how to better catch a slippery concept. *European Journal of Work and Organizational Psychology, 20*(1), 39–46. <https://doi.org/10.1080/1359432X.2010.515981>
- Schmidt, M. E., Marks, J. L., & Derrico, L. (2004). What a difference mentoring makes: Service learning and engagement for college students. *Mentoring & Tutoring: Partnership in Learning, 12*(2), 205–217. <https://doi.org/10.1080/1361126042000239947>

- Shmailan, A. S. B. (2016). The relationship between job satisfaction, job performance and employee engagement: An explorative study. *Issues in Business Management and Economics*, 4(1).
- Sholihin, M., & Ratmono, D. (2013). *Analysis of SEM-PLS with WarpPLS 3.0 for Non-Linear Relationships in Social and Business Research*. ANDI.
- Shuck, B., Ghosh, R., Zigarmi, D., & Nimon, K. (2013). The jingle jangle of employee engagement: Further exploration of the emerging construct and implications for workplace learning and performance. *Human Resource Development Review*, 12(1), 11–35. <https://doi.org/10.1177/1534484312463921>
- Vera, M., Martínez, I. M., Lorente, L., & Chambel, M. J. (2016). The role of co-worker and supervisor support in the relationship between job autonomy and work engagement among Portuguese nurses: A multilevel study. *Social Indicators Research*, 126(3), 1143–1156. <https://doi.org/10.1007/s11205-015-0931-8>
- Wickramasinghe, V., & Widyaratne, R. (2012). Effects of interpersonal trust, team leader support, rewards, and knowledge sharing mechanisms on knowledge sharing in project teams. *VINE*, 42(2), 214–236. <https://doi.org/10.1108/03055721211227255>