

THE MEDIATING ROLE OF EMPLOYEE CREATIVITY IN THE EFFECT OF INTRINSIC MOTIVATION, COWORKER SUPPORT, AND SUPERVISOR SUPPORT ON EMPLOYEE ENGAGEMENT

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Abstract: *Employee engagement is one of many aspects that influence organizational performance, and sometimes within an organization there are still problems related to employee engagement. The purpose of this research is to understand the effect of intrinsic motivation, supervisor support, and co-worker support to employee engagement mediated by employee creativity. Data were collected from 124 full-time workers in the industrial sector. This study used cross sectional method and used SmartPLS software. The results of the study have shown that employee creativity could mediate the relation of intrinsic motivation and co-worker support to employee engagement, but employee creativity could not mediate the relationship of supervisor support to employee engagement. By understanding the results of this research, hopefully the executive of industrial sector can understand variables that effect employee engagement and adjust the internal activity of company in order to gain high employee engagement.*

Keywords: *Intrinsic Motivation, Supervisor Support, Coworker Support, Employee Engagement, Employee Creativity.*

Introduction

Along with the dynamic development of the times, every company engaged in any sector will always be required to have proper preparation in dealing with and adapting to the changes that occur (Bedarkar & Pandita, 2014). In human resource management, managing employees is very important because employee involvement is one of the keys to organizational success (Ghosh et al., 2020).

Employee engagement is defined as positive and satisfying work-related states and thoughts characterized by passion and dedication (Schaufeli et al., 2006). There is previous research that links the relationship between employee engagement and one of its important antecedents, intrinsic motivation (Baker, 2004). Intrinsic motivation is the motivation that arises in an employee when they are doing work. Besides that, intrinsic motivation is also associated with employee creativity (Zhang, 2010).

According to Self Determination Theory, intrinsic motivation will encourage employee creativity which in turn will also lead to increased employee engagement. Employees who have intrinsic motivation are also more likely to accept challenging jobs and enjoy new things and the need to use various skills (TM Amabile & Pratt, 2016). However, employee creativity has not been extensively studied in previous studies, in which this variable also concerns the relationship between intrinsic motivation and employee

engagement. Employee creativity has a major influence on the formation of intrinsic motivation in employee engagement. And when employees have high intrinsic motivation, they will usually tend to have high creativity and can ultimately increase employee engagement (Ghosh et al., 2020).

Apart from intrinsic motivation, supervisor support and coworker support are also very influential in maintaining the relationship between employee engagement and employee creativity. When an employee feels that their contribution is valued supported by supervisors, and have colleagues who can help each other in completing tasks, then they will show creative behavior and show high involvement in the organization (Peerayuth et al., 2016).

The industrial sector has a very important role and influence in the Indonesian economy. So that the government needs to pay more attention to the development of the industrial sector in Indonesia. Given the importance of the role of the industrial sector for the Indonesian economy, especially amidst the very fast developments that we are currently experiencing, a more in-depth analysis is needed regarding what factors influence employee engagement in order to maintain employee performance in various industrial sectors.

Literature Review

The Mediating Role Of Employee Creativity

Self-determination theory is often used to explain intrinsic motivation (Hon, 2011). Based on the SDT theory, a person's satisfaction with his work concerning autonomy, competence, and relatedness is the basis for understanding what and why a goal must be achieved. (Deci & Ryan, 2000). The need for autonomy is the authority to take a stand on the basis of one's own will (Niemic & Ryan, 2009). The need for competence is a situation in which a person feels competent and needed at work, so that his work takes place effectively (Niemic & Ryan, 2009). Finally, the need for relatedness is the feeling of being connected to other people to give each other attention and affection (Deci & Ryan, 2000). Motivated employees will always be eager to face new things and this will greatly affect their daily life (Deci et al., 1981).

Intrinsic motivation can encourage employee engagement because this fulfills the basic psychological needs of employees, namely autonomy, competence and connectedness (Ghosh et al., 2020). Engagement here refers to affective and cognitive states consisting of passion, dedication, and deepening of a job (Schaufeli et al., 2006), So that employees can determine for themselves what tasks to do and how to complete them. In other words, intrinsic motivation facilitates employees to create new ideas, coordinate and collaborate so that it has a major influence on the level of employee engagement (TM Amabile & Pratt, 2016). Motivated employees have a sense of doing something important and are attracted by challenges. By doing so, they will learn new skills and seek interesting insights to find creative ideas and find solutions to problems (T. Amabile, 1988).

SDT shows that employee creativity as a result of intrinsic motivation promotes employee engagement through creativity. Creative employees are more likely to fully support and participate in creative work, because they find it fun and interesting (T. Amabile, 1988) and this leads to the development of the strength dimensions of employee engagement. Creative activities often evoke positive emotions, ranging from feelings of joy to pride to excitement (TM Amabile et al., 2005).

H1: Employee creativity mediates the relationship between intrinsic motivation and employee engagement.

The Mediating Role Of Coworker Support

Every organization certainly wants its employees to be able to support each other in achieving common goals. Coworker support is defined as the extent to which a coworker is willing to help, can be relied on when needed, and accepts various problems in his work (Menguc & Boichuk, 2012). In particular, emotional support and attention from colleagues can significantly help employees relieve fatigue and reduce depression (Peerayuth et al., 2016). Communication can also help buffer negative feelings employees experience in their jobs (Beehr et al., 2000).

Support provided by co-workers tends to provide peace of mind to employees and increase their creativity. In addition, the support obtained from colleagues will also serve as a source of ideas in completing work (Madjar, 2005). There is research evidence that shows there is a positive influence between peer support and creativity (Marasabessy & Santoso, 2014). As explained in the previous hypothesis, high creativity activities generate positive emotions, thus supporting the formation of employee engagement (TM Amabile et al., 2005).

H2: Employee creativity mediates the relationship between coworker support and employee engagement.

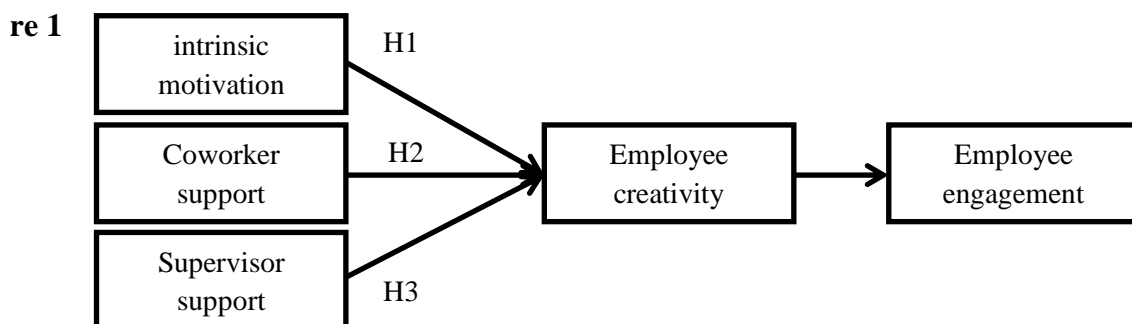
The Mediating Role Of Coworker Support

Supervisors have a great influence on the attitudes and behavior of employees because they play an important role in creating work designs for employees (Liaw et al., 2010). Supervisor support for employee welfare will show that the quality of the relationship between superiors and subordinates tends to predict the level of trust, liking, and support that subordinates receive from superiors (Peerayuth et al., 2016).

Supervisor support is often associated with employee creativity, When employees feel that their contributions are valued and supported by supervisors, they may exhibit creative behavior (Zhang, 2010). Supervisory support is also significantly related to employee welfare, including their physical and mental health, so that when they feel prosperous at work, they will provide feedback according to what they get, one of which is creative behavior (Zhang, 2010). And then, as explained in the previous hypothesis, high creative activities generate positive emotions, thereby supporting the formation of employee engagement (TM Amabile et al., 2005).

H3 : Employee creativity mediates the relationship between supervisor support and employee engagement

Figure 1



Method

Research Design

This study uses a cross-sectional study method, which is a study in which data is collected in only one timeframe to answer research questions (Now, 2016)

Data Collection Technique

This study uses probability sampling in which all included in the population of this study have the same opportunity to be used as a sample. The population of this study are industrial sector employees who are domiciled in Central Java province. From the distribution of the questionnaire obtained 124 respondents.

The questionnaire in this study was based on similar previous studies. To measure intrinsic motivation, this study uses a six-item scale developed by (Warr et al., 1979), employee engagement, this study used the 7 item version of the Utrecht Work Engagement scale (Schaufeli et al., 2006), Coworker Support is assessed on a four-item scale developed by (Podsakoff et al., 1996), supervisor support and employee creativity assessed with a four-item scale developed by (Scott et al., 1994). All items were measured on a five-point Likert scale.

Data Analysis Technique

In testing the validity, there are two things tested, convergent validity and discriminant validity (Hair et al, 2014). Convergent validity is measured by performing the PLS Algorithm in the Smart PLS software. Meanwhile, discriminant validity is measured by comparing various constructs and indicators to ascertain whether they are different and unique (Hair et al, 2014). To test the reliability in this study using the Smart PLS software by looking at the Composite Reliability value. An indicator is declared reliable or has good reliability if the Composite Reliability (CR) value is > 0.70 and AVE is more than equal to 0.5 (Hair et al, 2014).

To test the model, this study uses the Structural Equation Model (SEM) model test method with the help of Smart PLS software. Evaluation of the structural model (inner model) is used in this study to predict causality or causal relationships between latent variables through the PLS Algorithm test, bootstrapping test and Blindfolding test. The inner model is analyzed by looking at the percentage variance value by looking at the R Square value (Hair et al, 2014). And to test the hypothesis, this study uses the Structural Equation Model (SEM) model testing method with the help of Smart PLS software. Structural Equation Model is a multivariate technique that collaborates aspects of multiple regression and factor analysis to estimate a series of simultaneous dependency relationships (Hair et al, 2010). Hypothesis testing was carried out using bootstrapping in the Smart PLS software, then comparing the T-table values with T-statistics. The hypothesis can be accepted if the T-statistics value is higher than the T-table value (1.96) with a significance level of 5% (Hair et al, 2014).

Result and Discussion

In testing the outer model, we first conduct a convergent validity test or convergent validity test. This test relates to the principle that the measures of a construct should be highly correlated.

Table I
Loading Factor Value

	Coworker support	Employee creativity	Employee engagement	intrinsic motivation	Supervisor support
cs1	0.835				
cs3	0.855				

cs4	0.77			
cs2	0.812			
ec1		0.807		
ec2		0.853		
ec3		0.769		
ec4		0.83		
ec5		0.858		
eg1			0.906	
eg2			0.922	
eg3			0.889	
im1				0.798
im3				0.711
im4				0.726
im5				0.741
im6				0.827
sp1				0.707
sp2				0.904
sp3				0.857
sp4				0.873
sp5				0.816

Source: Processed Primary Data, 2023

Based on table 1 it shows that the loading factor value for each variable is > 0.7 , meaning that the indicator is said to be convergently valid, so there are no problems in the convergent validity test.

Next, the Average Variance Extracted (AVE) test was carried out. Expected AVE value > 0.5 . The following are the results of the Average Variance Extracted (AVE) test listed in table 2 :

Table 2
Average Variance Extracted (AVE) Value

	Average variance extracted (AVE)
Coworker support	0.67
Employee creativity	0.679
Employee engagement	0.82
intrinsic motivation	0.581
Supervisor support	0.696

Source: Processed Primary Data, 2023

Based on table 2, it shows that the Average Variance Extracted (AVE) values of all variables are > 0.5 , it can be concluded that the convergent validity of the constructs used has been fulfilled.

Then a discriminant validity test. This test was assessed based on the cross loading measurement of each indicator with its construct. The following results are listed in table :

Table 3

Cross Loading Value

	Coworker support	Employee creativity	Employee engagement	intrinsic motivation	Supervisor support
cs1	0.835	0.613	0.422	0.619	0.512
cs3	0.855	0.622	0.477	0.633	0.539
cs4	0.77	0.546	0.48	0.531	0.54
cs2	0.812	0.64	0.382	0.601	0.482
ec1	0.624	0.807	0.515	0.623	0.379
ec2	0.638	0.853	0.525	0.707	0.564
ec3	0.517	0.769	0.442	0.558	0.372
ec4	0.615	0.83	0.514	0.628	0.49
ec5	0.648	0.858	0.529	0.693	0.499
eg1	0.514	0.565	0.906	0.63	0.495
eg2	0.452	0.551	0.922	0.619	0.492
eg3	0.488	0.553	0.889	0.565	0.5
im1	0.718	0.708	0.57	0.798	0.645
im3	0.456	0.506	0.344	0.711	0.446
im4	0.448	0.475	0.442	0.726	0.437
im5	0.463	0.496	0.519	0.741	0.423
im6	0.622	0.717	0.622	0.827	0.552
sp1	0.393	0.331	0.31	0.445	0.707
sp2	0.545	0.495	0.418	0.608	0.904
sp3	0.523	0.496	0.542	0.607	0.857
sp4	0.561	0.506	0.559	0.554	0.873
sp5	0.587	0.49	0.419	0.564	0.816

Source: Processed Primary Data, 2023

Based on the data in table 3, we can see that the correlation of each indicator with the construct is higher than the other constructs. Based on the results of the analysis it can be concluded that the questionnaire used in this study has good discriminant validity.

Furthermore, the Composite Reliability test. Composite reliability was considered better in estimating the internal consistency of a construct. The following results are listed in table:

Table 4
Composite Reliability Value

	Composite reliability
Coworker support	0839

Employee creativity	0.886
Employee engagement	0.89
intrinsic motivation	0.841
Supervisor support	0.903

Source: Processed Primary Data, 2023

Based on table 4, it is shown that the Composite Reliability value for all variables is > 0.7 , so it can be said that the construct measurement or questionnaire for all variables has good reliability.

Furthermore, to complete the reliability test, a reliability test was carried out with Cronbach's alpha, which measures the consistency of the answers for each indicator. The following results are listed in table :

Table 5
Cronbach Alpha Value

	Cronbach's alpha
Coworker support	0.836
Employee creativity	0.882
Employee engagement	0.89
intrinsic motivation	0.822
Supervisor support	0.89

Source: Processed Primary Data, 2023

Based on table 5, it shows that the Cronbach Alpha values for all variables are > 0.7 , so it can be said that the construct or questionnaire used in this study is reliable.

Next, the R-Square test. The goodness of fit of the model is measured using the R-square, which is to find out how much the ability of the independent variable explains the dependent variable. In (Hair et al, 2014) it is said that there are three categories to determine the results of R Square : $0.67 = \text{Good}$, $0.33 = \text{Moderate}$, and $0.19 = \text{Weak}$.

The following are the results of the R square test listed in table VI:

Table 6
R-Square Value

Variable	R-square	Category
Employee creativity	0.674	Good
Employee engagement	0.377	Moderate

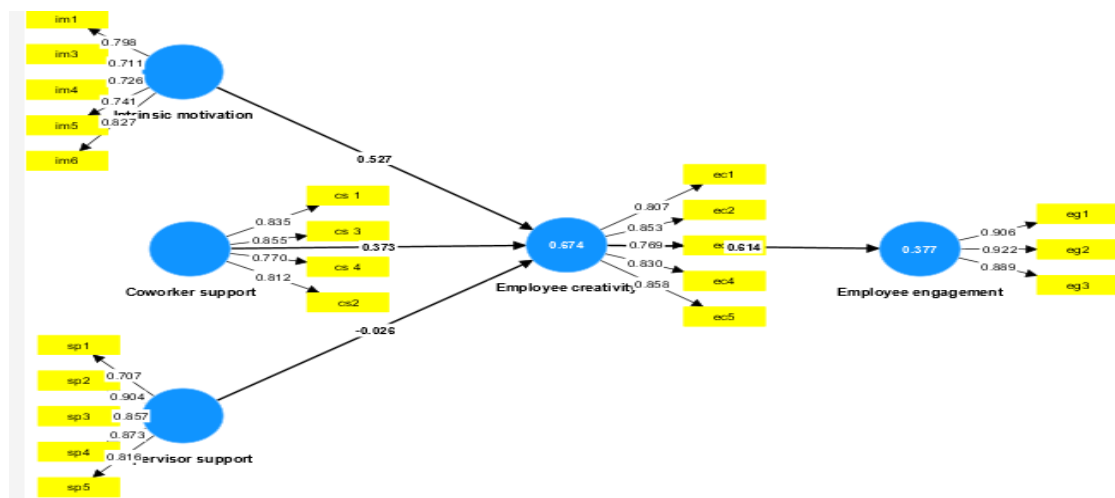
Source: Processed Primary Data, 2023

Based on the table above it can be seen that the r squared value for Intrinsic Motivation, Supervisor Support, and Coworker Support is able to explain Employee Creativity is 67.4% and the rest is explained by other variables outside of this study. Whereas for Intrinsic

Motivation, Supervisor Support, Coworker Support, and Employee Creativity are able to explain Employee Engagement of 37.7% and the rest is explained by other variables outside of this study.

Furthermore, to test the hypothesis is done by using bootstrapping in the Smart PLS software, then comparing the T-table values with T-statistics. The hypothesis can be accepted if the T-statistics value is higher than the T-table value (1.96) with a significance level of 5% (two tailed). The results of the analysis of the model can be seen in the following figure:

Figure 2



The results of testing the path coefficients using smartpls can be seen in the table below:

Table 7
Value of Path Coefficients

	Specific indirect effects
Coworker support -> Employee creativity -> Employee engagement	0.229
Supervisor support -> Employee creativity -> Employee engagement	-0.016
Intrinsic motivation -> Employee creativity -> Employee engagement	0.324

Source: Processed Primary Data, 2023

From the calculation results, it is shown that employee creativity is able to mediate the relationship between intrinsic motivation and employee engagement, so this statement supports hypothesis 1. Furthermore, the calculation results also show that coworker support is able to mediate the relationship between intrinsic motivation and employee engagement, so this statement supports hypothesis 2. And what Finally, the calculation results show that supervisor support is not really able to mediate the relationship between intrinsic motivation and employee engagement, so this statement rejects hypothesis 3.

Conclusion

Based on the results of this study, it can be concluded that employee creativity is able to mediate the relationship between intrinsic motivation on employee engagement and co-worker support on employee engagement. Meanwhile, the relationship between supervisor

support and employee engagement cannot be mediated by employee creativity. The practical implication of this research is that management in the industrial sector can find out which variables can increase the employee engagement of its employees, so that the company's internal programs can be made effective in order to obtain a high level of engagement. Theoretical implications of this research, it is hoped that the results of this research can become one of the references or literature for academics to develop further research in the field of human resources.

Limitation

This research is limited to industrial sector employees who live in Central Java only. So it is hoped that for further research, it can be carried out in other industrial sectors or further expand the scope of research. This research also shows the inability of employee creativity to mediate the relationship between supervisor support and employee engagement. As for suggestions for further research, research could be conducted again whether supervisor support has a direct impact on employee engagement, without the need for a mediating variable.

References

- Amabile, T. (1988). Amabile A Model of Creativity Org.Beh v10 pp123-167.pdf. In *Research in Organizational Behavior* (Vol. 10, pp. 123–167).
- Amabile, T. M., Barsade, S. G., Mueller, J. S., & Staw, B. M. (2005). Affect and creativity at work. *Administrative Science Quarterly*, 50(3), 367–403. <https://doi.org/10.2189/asqu.2005.50.3.367>
- Amabile, T. M., & Pratt, M. G. (2016). The dynamic componential model of creativity and innovation in organizations: Making progress, making meaning. *Research in Organizational Behavior*, 36, 157–183. <https://doi.org/10.1016/j.riob.2016.10.001>
- Baker, S. R. (2004). Orientations : Their Role in University. *Learning*, 23(3), 189–202.
- Bedarkar, M., & Pandita, D. (2014). A Study on the Drivers of Employee Engagement Impacting Employee Performance. *Procedia - Social and Behavioral Sciences*, 133, 106–115. <https://doi.org/10.1016/j.sbspro.2014.04.174>
- Beehr, T. A., Jex, S. M., Stacy, B. A., & Murray, M. A. (2000). Work stressors and coworker support as predictors of individual strain and job performance. *Journal of Organizational Behavior*, 21(4), 391–405. [https://doi.org/10.1002/\(SICI\)1099-1379\(200006\)21:4<391::AID-JOB15>3.0.CO;2-9](https://doi.org/10.1002/(SICI)1099-1379(200006)21:4<391::AID-JOB15>3.0.CO;2-9)
- Deci, E. L., Nezlek, J., & Sheinman, L. (1981). Characteristics of the rewarder and intrinsic motivation of the rewardee. *Journal of Personality and Social Psychology*, 40(1), 1–10. <https://doi.org/10.1037//0022-3514.40.1.1>
- Deci, E. L., & Ryan, R. M. (2000). Kk Verildi Dışsal Ing Kaynak. *Psychological Inquiry*, 11(4), 227–268. <https://doi.org/10.1207/S15327965PLI1104>
- Ghosh, D., Sekiguchi, T., & Fujimoto, Y. (2020). Psychological detachment: A creativity perspective on the link between intrinsic motivation and employee engagement. *Personnel Review*, 49(9), 1789–1804. <https://doi.org/10.1108/PR-12-2018-0480>
- Hair, J. F., Black, W. C., Babin, B. J., & A. R. E. (2014). *Multivariate Data Analysis*. In *Polymers* (Seventh Ed, Vol. 12, Issue 12). Pearson Education. <https://doi.org/10.3390/polym12123016>
- Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R. E. (2010). *Multivariate Data Analysis* (7th Editio). Pearson.

- Hon, A. H. Y. (2011). Enhancing employee creativity in the Chinese context: The mediating role of employee self-concordance. *International Journal of Hospitality Management*, 30(2), 375–384. <https://doi.org/10.1016/j.ijhm.2010.06.002>
- Liaw, Y. J., Chi, N. W., & Chuang, A. (2010). Examining the mechanisms linking transformational leadership, employee customer orientation, and service performance: The mediating roles of perceived supervisor and coworker support. *Journal of Business and Psychology*, 25(3), 477–492. <https://doi.org/10.1007/s10869-009-9145-x>
- Madjar, N. (2005). The Contributions of Different Groups of Individuals to Employees' Creativity. *Advances in Developing Human Resources*, 7(2), 182–206. <https://doi.org/10.1177/1523422305274525>
- Marasabessy, Z. A., & Santoso, B. (2014). Pengaruh dukungan rekan kerja pada kreativitas karyawan dengan autonomi kerja dan efikasi-diri kreatif sebagai pemoderasi. *Jurnal Siasat Bisnis*, 18(1), 32–44. <https://doi.org/10.20885/jsb.vol18.iss1.art4>
- Menguc, B., & Boichuk, J. P. (2012). Customer orientation dissimilarity, sales unit identification, and customer-directed extra-role behaviors: Understanding the contingency role of coworker support. *Journal of Business Research*, 65(9), 1357–1363. <https://doi.org/10.1016/j.jbusres.2011.09.023>
- Niemiec, C. P., & Ryan, R. M. (2009). Autonomy, competence, and relatedness in the classroom: Applying self-determination theory to educational practice. *Theory and Research in Education*, 7(2), 133–144. <https://doi.org/10.1177/1477878509104318>
- Peerayuth Charoensukmongkol, Murad Moqbel, S. G.-W. (2016). The role of co-worker and supervisor support on job burnout and job satisfaction. *Journal of Advances in Management Research*, Vol. 13(01), 4–22.
- Podsakoff, P. M., MacKenzie, S. B., & Bommer, W. H. (1996). Transformational leader behaviors and substitutes for leadership as determinants of employee satisfaction, commitment, trust, and organizational citizenship. *Journal of Management*, 22(2), 259–298. [https://doi.org/10.1016/S0149-2063\(96\)90049-5](https://doi.org/10.1016/S0149-2063(96)90049-5)
- Prasetyo, E., Riadi, F., Rinawati, N., & Resawati, R. (2021). Pengaruh Motivasi Dan Disiplin Kerja Terhadap Kinerja Karyawan. *Acman: Accounting and Management Journal*, 1(2), 61–66. <https://doi.org/10.55208/aj.v1i2.20>
- Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and Psychological Measurement*, 66(4), 701–716. <https://doi.org/10.1177/0013164405282471>
- Scott, S. G., Bruce, R. A., Scott, S. G., & Bruce, R. A. (1994). The birth of a century: early color photographs of America. *Choice Reviews Online*, 32(03), 32-1325-32–1325. <https://doi.org/10.5860/choice.32-1325>
- Sekaran, Uma and Roger Bougie. (2016). Research Methods for Business: A Skill-Building Approach. In *Leadership & Organization Development Journal* (7th editio, Vol. 34, Issue 7). <https://doi.org/10.1108/lodj-06-2013-0079>
- Warr, P., Cook, J., & Wall, T. (1979). Scales for the measurement of some work attitudes and aspects of psychological well-being Peter War, John Cook and Toby Wall *Journal of Occupational Psychology*, 1979, 52, 129-148.pdf. *Journal of Occupational Psychology*, 129–148.
- Zhang, X. (2010). Linking empowering leadership and employee creativity: The influence of psychological empowerment, intrinsic motivation, and creative process engagement. *Development and Learning in Organizations: An International Journal*, 24(5), 4–9. <https://doi.org/10.1108/dlo.2010.08124ead.007>

Zhou, J., & George, J. M. (2001). When job dissatisfaction leads to creativity: Encouraging the expression of voice. *Academy of Management Journal*, 44(4), 682–696.
<https://doi.org/10.2307/3069410>