



BUSINESS PERSPECTIVES



LLC "CPC "Business Perspectives"  
Hryhorii Skovoroda lane, 10, Sumy,  
40022, Ukraine

[www.businessperspectives.org](http://www.businessperspectives.org)

**Received on:** 29<sup>th</sup> of October, 2018

**Accepted on:** 23<sup>rd</sup> of January, 2019

© Nikodemus Hans  
Setiadi Wijaya, 2019

Nikodemus Hans Setiadi Wijaya,  
Department of Management, YKPN  
School of Business (STIE YKPN),  
Yogyakarta, Indonesia.



This is an Open Access article,  
distributed under the terms of the  
[Creative Commons Attribution 4.0  
International license](https://creativecommons.org/licenses/by/4.0/), which permits  
unrestricted re-use, distribution,  
and reproduction in any medium,  
provided the original work is properly  
cited.

Nikodemus Hans Setiadi Wijaya (Indonesia)

# LINKING JOB DISSATISFACTION, LEARNING MOTIVATION, CREATIVE WORK INVOLVEMENT, AND PROACTIVE PERSONALITY

## Abstract

This study examines the links among job dissatisfaction, intrinsic and extrinsic learning motivation, and creative work involvement (CWI). It also investigates the moderating effect of proactive personality. The research data were obtained from two surveys conducted four months apart involving 271 employees. Negative impacts of job dissatisfaction on (1) intrinsic learning motivation and (2) CWI were discovered. Positive impacts of both intrinsic and extrinsic learning motivation on CWI were found. Intrinsic learning motivation mediated the relationship between job dissatisfaction and CWI. In addition, proactive personality played moderating roles in the relationships between job dissatisfaction and (1) intrinsic learning motivation, extrinsic learning motivation and (2) CWI.

## Keywords

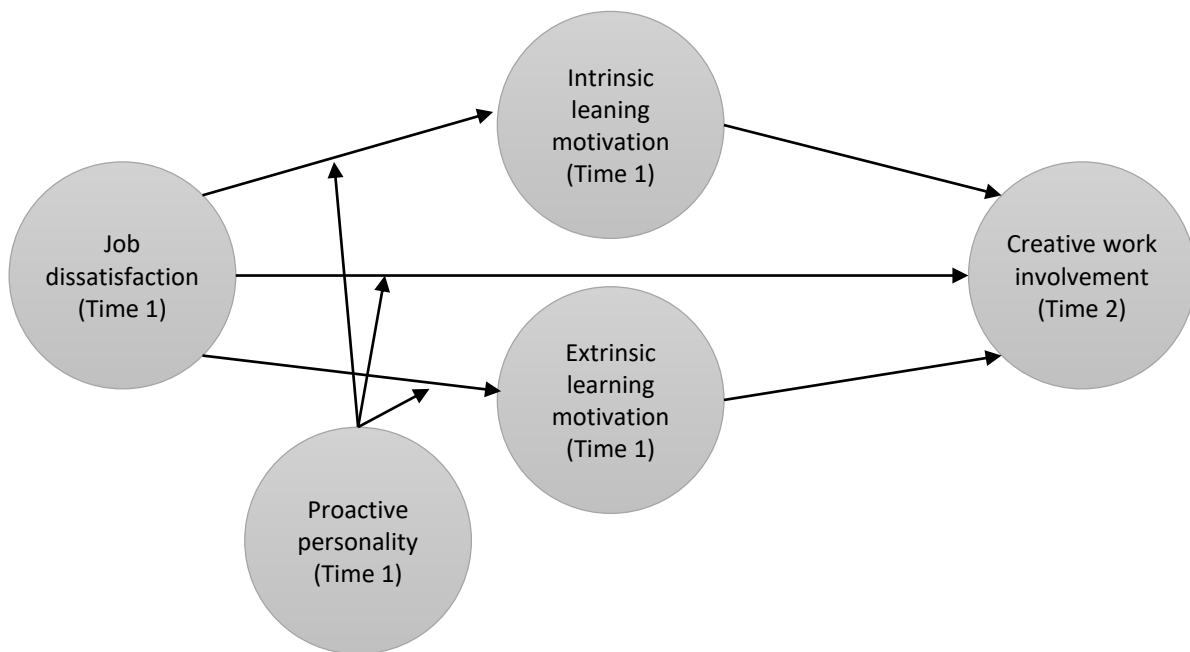
job dissatisfaction, learning motivation, creative work involvement (CWI), proactive personality

## JEL Classification

J28, D91, O15

## INTRODUCTION

Creative work involvement (hereafter CWI), which refers to the involvement of employees in creative tasks, is necessary for improving organizational creativity (Kark & Carmeli, 2009). It is not surprising that scholars have been interested in researching determinants of CWI (Bang & Reio Jr., 2017; Carmeli, Reiter-Palmon, & Ziv, 2010; Carmeli & Schaubroeck, 2007; Kark & Carmeli, 2009). This paper focuses on the effects of job dissatisfaction and learning motivation. Job dissatisfaction, defined as a negative attitude toward job attributes, has been an important topic determined to influence employee motivation and performance (Bos, Donders, Schouteten, & Van der Gulden, 2013; Judge, Thoresen, Bono, & Patton, 2001). An optimistic view of job dissatisfaction which relates to creativity was studied by Zhou and George (2001) who discovered that employee dissatisfaction with some supportive factors may together encourage creativity. However, literature also suggests that job dissatisfaction may result in undesirable behavior (Oshagbemi, 1999). Four possible responses to job dissatisfaction have been discussed, which include exit, voice, loyalty, and neglect (Farrell, 1983). Farrell suggested that the neglect option is chosen when an employee responds to dissatisfaction in the form of lax and disinterested behavior. Furthermore, Zhou and George (2001) suggested that unsatisfied employees may neglect the situation by not trying to update the knowledge that will lead to improvement. Consistent with the notion, this study includes learning motivation as a mediator. Learning motivation refers to the desire to learn work



**Figure 1.** Research framework

contents (Major, Turner, & Fletcher, 2006), which may be influenced by attitudinal factors (Weissbein, Huang, Ford, & Schmidt, 2011). Prior literature on learning motivation has suggested that people can be intrinsically and extrinsically motivated to learn (Glynn & Koballa Jr., 2006). To offer a deeper insight into these relationships, this study uses both types of learning motivation. From a less optimistic point of view, whether job dissatisfaction will weaken learning motivation, in turn, CWI, may be an important research question, since the links among the variables have been unsubstantiated. This study also aims to investigate proactive personality as a moderator. Because proactive personality measures the extent to which persons may respond to their work environments in more positive ways (Fuller, Marler, & Hester, 2006), this study addresses whether there are any differences between degrees of proactivity among employees – according to their response to job dissatisfaction, as it relates to their motivation to learn and be creatively involved in their work. Overall, the relationships tested in the current study are depicted in Figure 1.

## 1. LITERATURE REVIEW

Prior research has explored the influence of learning orientation on employee creativity (Gong, Huang, & Farh, 2009; Hirst, Van Knippenberg, & Zhou, 2009). Learning motivation is, however, different from learning orientation. Learning orientation is a relatively stable personal characteristic (Godshalk & Sosik, 2003), whereas learning motivation can theoretically and literally be modified by either internal or external factors (Colquitt, LePine, & Noe, 2000; Major et al., 2006). Individuals are intrinsically motivated to learn, because they have a natural tendency to pursue their interests, to find personal satisfaction, and

to exercise their capabilities in a work context, or extrinsically motivated to learn, because they have to fulfill general job requirements, want to pursue more rewards or a better career, or wish to avoid negative consequences from employers (Glynn & Koballa Jr., 2006). Klein, Noe, and Chongwei (2006) found that highly satisfied student participants in learning situations had a higher degree of motivation to participate in learning processes and attained higher levels of achievement. Moreover, they suggested that learners may perceive learning situations as either barriers or enablers. When learners perceive a difficult situation as a barrier, they may feel frustrated, and their motivation to learn may decrease, and vice versa.

Since it is suggested that job dissatisfaction can be considered as a barrier for employees in this study, in such a situation, employees have less energy and self-motivation toward their job requirements. Job dissatisfaction may decrease their eagerness to improve their knowledge and skills (Bos et al., 2013). Further, the uncondusive contextual learning environment may hinder individual self-interest and the feeling of necessity to learn (Glynn & Koballa Jr., 2006). Job dissatisfaction is likely to exacerbate losses in individual learning motivation. Thus:

*H1: Job dissatisfaction will be negatively related to intrinsic learning motivation.*

*H2: Job dissatisfaction will be negatively related to extrinsic learning motivation.*

Amabile (1983) theorized that creative outputs may develop when members of a community put effort into creative tasks. Moreover, when organizations wish the creativity of members to flourish, these organizations have to enhance the positive feelings of the members (Atwater & Carmeli, 2009). Emotions offer evaluative information and supply energy for motivated behavior (Judge et al., 2001). When organizational members have a positive feeling about their work environment, they are more willing to engage in behavior-related creativity (Kark & Carmeli, 2009). Although scholars believe that job dissatisfaction may not always have negative consequences on organizational effectiveness (Farrell, 1983; Zhou & George, 2001), it is believed that job dissatisfaction alone may harm employee creativity. Supporting this idea, Ford (1996) argued that positive emotions of employees are one of important determinants encouraging individual creativity. Dissatisfied employees may ignore organizational efforts to improve creativity (Withey & Cooper, 1989; Zhou & George, 2001). Thus:

*H3: Job dissatisfaction will be negatively related to creative work involvement.*

Learning theory describes how people obtain knowledge, interpret, and utilize useful knowledge in relevant contexts. Creativity is defined as the generation of new ideas, products and procedures (Amabile, 1983) and involves learning processes (Hirst et al., 2009). Prior literature has

theorized that the amount of relevant knowledge corresponds with individual creativity (Amabile, 1983). With more knowledge, people are more confident about engaging in creative tasks (Bang & Reio Jr., 2017; Gong et al., 2009). Individual learning motivation may improve creativity, because it encourages engagement in active behaviors related to knowledge acquisition such as asking questions, seeking feedback and discussing errors (Edmondson, 1999; Major et al., 2006). It also indicates people's enthusiasm to solicit and use absorbed feedback and knowledge to improve their skills and creativity related to work activities (Cohen & Levinthal, 1990; Hirst et al., 2009). Taken together, the more people feel learning is interesting (i.e., intrinsic learning motivation) or is required to adapt to their job demands (i.e., extrinsic learning motivation), the more they desire to elaborate on their acquired knowledge particularly in creative tasks (Amabile, 1983). Thus:

*H4: Intrinsic learning motivation will be positively related to creative work involvement.*

*H5: Extrinsic learning motivation will be positively related to creative work involvement.*

It is suggested that job dissatisfaction may hinder motivation to learn, which in turn will influence the willingness to involve in creative works. As previously discussed, job dissatisfaction can produce ineffective behavior (Bos et al., 2013; Farrell, 1983), where in such situations, employees tend to be reluctant to learn (Colquitt & Simmering, 1998). Dissatisfied employees may choose to remain with an organization, but will exert less time and effort toward their work tasks (Withey & Cooper, 1989). They might pay less attention to finding new knowledge and skills that will help them execute their work requirements (Farrell, 1983; Zhou & George, 2001). Since motivation to learn is essential for improving employees' knowledge and skills (Major et al., 2006), it may also influence their eagerness to undertake creative tasks (Gong et al., 2009). The degree of job dissatisfaction affecting employees' intrinsic and extrinsic learning motivation may in turn influence CWI. Thus:

*H6: Intrinsic learning motivation will mediate the relationship between job dissatisfaction and creative work involvement.*

*H7: Extrinsic learning motivation will mediate the relationship between job dissatisfaction and creative work involvement.*

Proactive personality, a stable personal characteristic, measures the extent to which an individual is relatively unconstrained by situational forces and the degree to which there are environmental changes (Bateman & Crant, 1993). In most situations, proactive personalities will scan for opportunities, show initiatives, take actions, and preserve meaningful changes (Crant, 2000). A recent study found that job stress developed self-efficacy (i.e, with regard to capturing their perceived capability) in individuals with high proactive personality (Zhao, Zhou, Liu, & Kang, 2016). In such a situation, it is posited that proactive employees are more able to create environments conducive to their overall performance and creativity (Gong, Cheung, Wang, & Huang, 2012) and their motivation to learn (Major et al., 2006). Even when proactive employees are unhappy with their jobs, they may have greater self-esteem (Liao, 2015) and self-efficacy and personality-driven motivation related to carrying out a broader and more proactive set of work responsibilities (Parker, 1998). They may also have better learning motivation and creativity. Thus:

*H8: Proactive personality will moderate the relationship between job dissatisfaction and intrinsic learning motivation. The negative impact of job dissatisfaction will be weaker for highly proactive employees as compared to less proactive employees.*

*H9: Proactive personality will moderate the relationship between job dissatisfaction and extrinsic learning motivation. The negative impact of job dissatisfaction will be weaker for highly proactive employees as compared to less proactive employees.*

*H10: Proactive personality will moderate the relationship between job dissatisfaction and creative work involvement. The negative impact of job dissatisfaction will be weaker for highly proactive employees as compared to less proactive employees.*

## 2. METHOD

### 2.1. Research participants and procedure

An online survey was distributed to the alumni of two colleges under a foundation in Indonesia. All of them were working as employees in various organizations. Two surveys were conducted four months apart. Initially, a total of 949 selected alumni were involved. They completed job dissatisfaction, learning motivation (intrinsic and extrinsic), and proactive personality scales. Four hundred and twenty responses were collected, showing a 44% response rate. At Time 2, those participants were requested to complete a CWI scale. A 5-point scale ranging from strongly disagree (1) to strongly agree (5) was used for all scales. Finally, a total of 271 responses from Time 2 were collected. Participants' names and/or initials were used to match the data obtained from both surveys. All matched responses from the surveys were usable.

### 2.2. Research measurements

#### 2.2.1. Job dissatisfaction

Following Zhou and George (2001), job dissatisfaction was assessed by a 3-item scale from the Michigan Organizational Assessment Questionnaire. A sample item is "In general, I don't like my job". The alpha was .80.

#### 2.2.2. Learning motivation

A 10-item scale assessing learning motivation was taken from Glynn and Koballa Jr. (2006). The scale consists of 5 items, each intended to measure both intrinsic and extrinsic learning motivation. The original items were modified in order to be appropriately used in a work context. The alphas were .85 and .83, respectively, for intrinsic and extrinsic learning motivation. Because this version was first used, a discriminant validity test was conducted. As shown in Table 1, all items are well loaded in their respective factors, representing discriminant evidence of the factors.

#### 2.2.3. Proactive personality

Proactive personality was assessed using the 10-item scale version validated by Seibert et al.

(1999), which is a shorter version of the original one consisting of 17 items (Bateman & Crant, 1993). The shortened version has been used in numerous studies (e.g., Chan, 2006). A sample item is “I am constantly on the lookout for new ways to improve my life.” The alpha was .88.

**2.2.4. Creative work involvement**

A 9-item scale from Carmeli and Schaubroeck (2007) was used to assess CWI. A sample item is “I demonstrated originality at my work”. The alpha was .89.

**Table 1.** Discriminant validity for intrinsic and extrinsic learning motivation

Item	Loadings	
	ILM	ELM
I enjoy learning	.74	
What I learn is more important to me than the reward I receive	.79	
I find learning to be interesting	.80	
I like something that challenges me	.73	
Understanding a new thing gives me a sense of accomplishment	.66	
I like to do better than other employees in the workplace		.65
Earning a good reward from learning is important to me		.54
I think about how learning a new thing can help me get a good job		.84
I think about how learning will affect my overall performance		.86
I think about how learning a new thing can help my career		.77

Note: ILM = intrinsic learning motivation, ELM = extrinsic learning motivation. Rotation method: Varimax.

**2.3. Analytic strategy**

A two-step modelling approach of confirmatory analysis (Anderson & Gerbing, 1988) was performed in AMOS statistical program to evaluate both convergent and discriminant validity of the measures. A sequential chi-square difference test comparing several measurement models was conducted to evaluate whether the baseline measurement model is better than others. A SEM analysis was also conducted to examine the hypothesized structural model. Specifically, this study used the Baron and Kenny’s (1986) method to evaluate the mediating effects of intrinsic and extrinsic learning motivation. In order to investigate the moderating effects, all data were split into two sets of data

based on the mean score for proactive personality (coded 1 for higher proactive employees and 0 for lower ones). Hair et al. (2010) suggested that before testing the moderating effect, a measurement invariance test should be conducted to evaluate the equality of the two groups (Milfont & Fischer, 2010). The equality of two groups is achieved when the *p*-value is insignificant (Kline, 2005). The moderating effects of proactive personality were judged by comparing the standardized estimates of both groups.

**3. RESULTS**

Table 1 displays the means, standard deviations, and bivariate correlations among the variables. With the exception of the correlation between job dissatisfaction and extrinsic motivation, all correlations were significant at *p* < .01.

**Table 2.** Means, standard deviations, and correlations

No.	Variable	M	SD	1	2	3	4	5
1	Job dissatisfaction	2.05	.69	(.80)	–	–	–	–
2	Intrinsic learning motivation	4.34	.51	-.17**	(.85)	–	–	–
3	Extrinsic learning motivation	4.14	.51	-.05	.59**	(.83)	–	–
4	Proactive personality	4.03	.49	-.17**	.53**	.56**	(.88)	–
5	Creative work involvement	3.94	.49	-.26**	.55**	.48**	.58**	(.89)

Note: *N* = 271; \**p* < .05, two-tailed; \*\**p* < .01, two-tailed; Cronbach’s alphas are shown in the parentheses.

A test of a four-factor measurement model that consists of job dissatisfaction, intrinsic and extrinsic learning motivation, and CWI showed that each item was adequately related to its respective factor with standardized estimates ranging from .36 to .92, and all were found to be significant at *p* < .001. The goodness-of-fit statistics for the four-factor model were  $\chi^2/df = 2.20$ , GFI = .87, CFI = .92, RMSEA = .04, demonstrating acceptable fit indices (Kline, 2005). Three alternative measurement models were also tested. A three-factor model was to merge intrinsic and extrinsic learning motivation into one factor. A two factor model was also to merge the two factors (learning motivation and job dissatisfaction). A one-factor model was

to merge all items in a single factor. The baseline measurement model was significantly better than the independent model and the three alternatives at  $p < .001$  (Table 3). Reliability, convergent and discriminant validity of the research instruments were thus demonstrated.

The fit of the proposed structural model was evaluated. As shown in Table 3, the partially mediated model demonstrated acceptable fit indices. An alternative model (i.e., the path of job dissatisfaction-CWI was eliminated) was also assessed. The proposed model was significantly better than the alternative ( $\Delta\chi^2 = 9.43$ ,  $\Delta df = 1$ ,  $p < .01$ ), thus validating the study model.

**Table 3.** Model comparison

Model	Fit indices			
	$\chi^2/df$	GFI	CFI	RMSEA
Independent model	13.32	–	–	–
Baseline measurement model (a four-factor model)	2.20	.87	.92	.07
A three-factor measurement model	3.24	.78	.84	.09
A two-factor measurement model	4.47	.74	.75	.11
A one-factor measurement model	6.28	.63	.61	.14
Hypothesized structural model (partially mediated model)	2.41	.88	.91	.07
Alternative structural model (fully mediated model)	2.45	.88	.90	.07

Table 4 (column “All data”) displays the results for the standardized regression weights and significances of the hypothesized paths. As hypothesized, job dissatisfaction had a negative effect on intrinsic learning motivation ( $\beta = -.24$ ,  $p < .01$ ). The result supported *H1*. Job dissatisfaction had a negative impact on extrinsic learning motivation, but insignificant ( $\beta = -.11$ ,  $p > .05$ ). *H2* was unsup-

ported. *H3* suggested a negative effect of job dissatisfaction on CWI. A negative effect of job dissatisfaction on CWI was found ( $\beta = -.20$ ,  $p < .01$ ). The result supported *H3*. The results showed a positive impact of intrinsic learning motivation on CWI ( $\beta = .45$ ,  $p < .001$ ). *H4* was therefore supported. As hypothesized, a positive effect of extrinsic learning motivation on CWI was found ( $\beta = .27$ ,  $p < .001$ ). *H5* was also supported. The job dissatisfaction  $\rightarrow$  CWI path was significant. The job dissatisfaction  $\rightarrow$  intrinsic learning motivation  $\rightarrow$  CWI paths were also significant. The results showed a partial mediating effect of intrinsic learning motivation (see Baron & Kenny, 1986 for a further review). A significant extrinsic learning motivation  $\rightarrow$  CWI path was found. However, an insignificant job dissatisfaction  $\rightarrow$  extrinsic learning motivation path was demonstrated. Not as expected, the results failed to demonstrate the mediating role of extrinsic learning motivation. Thus, *H6* was supported, but the results did not support *H7*.

A partial measurement invariance test was conducted. The test demonstrated that the two groups were equal ( $\chi^2 = 8.36$ ,  $df = 7$ ,  $p = .302$ ) (Kline, 2005). A SEM analysis indicated that the effect of job dissatisfaction on intrinsic learning motivation for Group 1 (highly proactive group) was  $\beta = .00$  (insignificant) and for Group 2 (low proactive group) was  $\beta = .32$ ,  $p < .01$ . The effect of job dissatisfaction on extrinsic learning motivation for Group 1 was  $\beta = .07$  (insignificant) and for Group 2 was  $\beta = -.18$ ,  $p < .1$ . The effect of job dissatisfaction on CWI for Group 1 was  $\beta = -.10$  (insignificant) and for Group 2 was  $\beta = -.29$ ,  $p < .05$ . The negative impacts of job dissatisfaction were weaker for the highly proactive personality group. Therefore, *H8*, *H9*, and *H10* were all supported.

**Table 4.** Moderating effects of proactive personality

Path	Estimate (significance)		
	All data (N = 271)	Highly proactive personality (N = 112)	Low proactive personality (N = 159)
JDS $\rightarrow$ ILM	-.24 (.001)	.00 (.969)	-.32 (.004)
JDS $\rightarrow$ ELM	-.11 (.111)	.07 (.455)	-.18 (.058)
JDS $\rightarrow$ CWI	-.20 (.003)	-.10 (.359)	-.29 (.010)
ILM $\rightarrow$ CWI	.45 (***)	.36 (***)	.32 (.005)
ELM $\rightarrow$ CWI	.27 (***)	.42 (***)	.02 (.801)

Note: \*\*\* $p < .001$ . ILM = intrinsic leaning motivation, ELM = extrinsic learning motivation, JDS = job dissatisfaction, CWI = creative work involvement.

## 4. DISCUSSION

The current study proposes to investigate a sequential link among job dissatisfaction, intrinsic and extrinsic learning motivation, and creative work involvement. This study included proactive personality as a moderator. In a highly demanding and pressured workplace environment, the level of employee job dissatisfaction is likely to increase (Bos et al., 2013). However, the extant literature has put less attention on researching job dissatisfaction than it has on job satisfaction, as one factor that may influence employee work behavior. To adapt to intensively competitive and turbulent business environments, organizations are required to improve their learning capability and creativity, which can enhance their survival and competitive advantage (Ford, 1996).

This study discovered a negative impact of job dissatisfaction on intrinsic leaning motivation. It is likely that job dissatisfaction will decrease employees' feelings of enjoyment and their interest into learning. Not as expected, a negative but insignificant effect of job dissatisfaction on extrinsic learning motivation was found. A reasonable explanation for this finding, perhaps, is that in a situation where there is job dissatisfaction, employees may be a bit motivated to adjust their own knowledge and skills, just for the sake of meeting job requirements assigned (Glynn & Koballa Jr., 2006). This study also discovered a negative influence of job dissatisfaction on CWI. This finding is consistent with prior findings suggesting that CWI will flourish more when the positive feelings of employees are maintained (Atwater & Carmeli, 2009; Kark & Carmeli, 2009). In situations where there is a lack of satisfaction, employees tend to have less energy, which in turn decreases their willingness to undertake creative involvement (Withey & Cooper, 1989). The study results suggest the positive influences of both intrinsic and extrinsic learning motivation on CWI. These findings were rational. It is argued that no matter what the drivers of learning are, intrinsic or extrinsic, motivation will improve acquisition of knowledge and skills. Prior works have suggested that learning motivation improves people's engagement in development activities (Major et al., 2006). Furthermore, acquired knowledge and skills may improve their self-competence and capability to perform creative works

effectively (Hirst et al., 2009). The mediating role of intrinsic learning motivation on the job dissatisfaction-CWI relationship may suggest that less satisfied employees tend to have less intrinsic motivation to learn (Klein et al., 2006), which in turn influences the level of their intrinsic motivation as well as their willingness to be involved in creative works (see Gong et al., 2009). The moderating effects of proactive personality were exhibited. Different patterns of relationships across the high and low proactive groups were discovered. The negative effects of job dissatisfaction on both learning motivation and CWI were stronger for the low proactive group. This finding is in line with prior works which suggested that proactive individuals are more able to adapt in positive ways and perform desirable behaviors in any workplace situations (Fuller et al., 2006; Randolph & Dahling, 2013).

This study contributes to theory. For theoretical developments, first, this study proposes an integrative model of job dissatisfaction, learning motivation, and CWI. This study discloses the direct impacts of job dissatisfaction on individual learning motivation and a specific work outcome, i.e., CWI. Second, this study provides empirical evidence about how the levels of proactive personality may distinguish employees' responses to job dissatisfaction related to their learning motivation and CWI. Management practices may also benefit from the findings. They need to be more cautious about the problems raised by a high level of job dissatisfaction, particularly when organizations endeavor to encourage members' motivation to learn and be engaged in creative works. Organizations may wish to conduct surveys to investigate members' job dissatisfaction that allow them to implement suitable recovery programs leading to better work conditions (Jansen, Kant, van Amelsvoort, Nijhuis, & van den Brandt, 2003). Different patterns of the impact of job dissatisfaction across highly/low proactive employees were found. Therefore, organizations should put this personality type into consideration particularly in efforts to promote organizational learning and creativity. Managers should be aware that proactive employees may deal with dissatisfying work situations better than the less proactive ones. Therefore, organizations may wish to include some proactive attributes in their employee selection

process. However, managers should also develop some supportive work conditions (e.g., coworker helping and support) (see Zhou & George, 2001), because they might interact with job dissatisfaction into advantageous factors for creative behavior of both higher and lower proactive employees.

At least, three limitations should be listed. First, this study used a general measure to assess job dissatisfaction. There was no other choice because the target research participants had various occupations. However, this choice could restrict participants in regard to measuring the levels of job dissatisfaction. Future research may replicate this study while trying to use more specific measures that are suitable for occupational

characteristics (Oshagbemi, 1999). Second, only a small number of the participants held top positions in the organizational hierarchy. Differing patterns of relationships might be found if a greater proportion of middle or top managers were to be included. Future research could focus on researching higher levels of employees. Lastly, the job dissatisfaction-intrinsic learning motivation and job dissatisfaction-extrinsic learning motivation were found significant for highly proactive employees. Whereas, for low proactive personality, only the job dissatisfaction-extrinsic learning motivation was significant. Since the links were not hypothesized in this work, future research may also conceptualize and investigate the interesting phenomenon.

---

## CONCLUSION

This study investigates a model integrating job dissatisfaction, learning motivation (intrinsic and extrinsic), CWI, and proactive personality. It is found that job dissatisfaction negatively affected intrinsic learning motivation and CWI; both intrinsic and extrinsic learning motivation negatively affected CWI; intrinsic learning motivation mediated the relationship between job dissatisfaction and CWI; and, finally, proactive personality moderated the effects of job dissatisfaction. With regard to the theory, this study has generated new evidences of the hypothesized relationships. This study also gives new insights into how organizations can improve employee creativity.

---

## REFERENCES

- Amabile, T. M. (1983). The social psychology of creativity: A componential conceptualization. *Journal of Personality and Social Psychology*, 45(2), 357-376. <https://psycnet.apa.org/doi/10.1037/0022-3514.45.2.357>
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(4), 411-423. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.540.4887&rep=rep1&type=pdf>
- Atwater, L., & Carmeli, A. (2009). Leader – member exchange, feelings of energy, and involvement in creative work. *The Leadership Quarterly*, 20(3), 264-275. <https://doi.org/10.1016/j.leaqua.2007.07.009>
- Bang, H., & Reio Jr., T. G. (2017). Personal accomplishment, mentoring, and creative self-efficacy as predictors of creative work involvement: The moderating role of positive and negative affect. *Journal of Psychology*, 151(2), 148-170. <https://doi.org/10.1080/00223980.2016.1248808>
- Baron, R. M., & Kenny, D. A. (1986). The moderator – mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/3806354>
- Bateman, T. S., & Crant, J. M. (1993). The proactive component of organizational behavior: A measure and correlates. *Journal of Organizational Behavior*, 14(2), 103-118. <https://doi.org/10.1002/job.4030140202>
- Bos, J. T., Donders, N., Schouteten, R. L. J., & Van der Gulden, J. W. J. (2013). Age as a moderator in the relationship between work-related characteristics, job dissatisfaction and need for recovery. *Ergonomics*, 56(6), 992-1005. <https://doi.org/10.1080/00140139.2013.789553>
- Carmeli, A., & Schaubroeck, J. (2007). The influence of leaders' and other referents' normative expectations on individual involvement in creative work. *The Leadership Quarterly*, 18(1), 35-48.
- Carmeli, A., Reiter-Palmon, R., & Ziv, E. (2010). Inclusive leadership and employee involvement in creative tasks in the workplace: The mediating role of psychological safety. *Creativity Research Journal*, 22(3), 250-260. <http://dx.doi.org/10.1080/10400419.2010.504654>



10. Chan, D. (2006). Interactive effects of situational judgment effectiveness and proactive personality on work perceptions and work outcomes. *Journal of Applied Psychology*, 91(2), 475-481. <https://doi.org/10.1037/0021-9010.91.2.475>
11. Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, 35(1), 128-152. <https://doi.org/10.2307/2393553>
12. Colquitt, J. A., & Simmering, M. J. (1998). Conscientiousness, goal orientation, and motivation to learn during the learning process: A longitudinal study. *Journal of Applied Psychology*, 83(4), 654-665. <http://dx.doi.org/10.1037/0021-9010.83.4.654>
13. Colquitt, J. A., LePine, J. A., & Noe, R. A. (2000). Toward an integrative theory of training motivation: A meta-analytic path analysis of 20 years of research. *Journal of Applied Psychology*, 85(5), 678-707. <https://doi.org/10.1037//0021-9010.85.5.678>
14. Crant, J. M. (2000). Proactive behavior in organizations. *Journal of Management*, 26(3), 435-462. <https://doi.org/10.1177%2F014920630002600304>
15. Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44(2), 350-383. <https://doi.org/10.2307%2F2666999>
16. Farrell, D. (1983). Exit, voice, loyalty, and neglect as responses to job dissatisfaction: A multidimensional scaling study. *Academy of Management Journal*, 26(4), 596-607. <https://doi.org/10.5465/255909>
17. Ford, C. M. (1996). A theory of individual creative action in multiple social domains. *The Academy of Management Review*, 21(4), 1112-1142. <https://doi.org/10.2307/259166>
18. Fuller, J. B., Marler, L. E., & Hester, K. (2006). Promoting felt responsibility for constructive change and proactive behavior: Exploring aspects of an elaborated model of work design. *Journal of Organizational Behavior*, 27(8), 1089-1120. <https://doi.org/10.1002/job.408>
19. Glynn, S. M., & Koballa Jr., T. R. (2006). Motivation to learn in college science. In Joel J. Mintzes & William H. Leonard (Eds.), *Handbook of College Science Teaching* (pp. 25-32). Arlington: National Science Teachers Association.
20. Godshalk, V. M., & Sosik, J. J. (2003). Aiming for career success: The role of learning goal orientation in mentoring relationships. *Journal of Vocational Behavior*, 63(3), 417-437. [https://doi.org/10.1016/S0001-8791\(02\)00038-6](https://doi.org/10.1016/S0001-8791(02)00038-6)
21. Gong, Y., Cheung, S.-Y., Wang, M., & Huang, J.-C. (2012). Unfolding the proactive process for creativity: Integration of the employee proactivity, information exchange, and psychological safety perspectives. *Journal of Management*, 38(5), 1611-1633. <https://doi.org/10.1177%2F0149206310380250>
22. Gong, Y., Huang, J.-C., & Farh, J.-L. (2009). Employee learning orientation, transformational leadership, and employee creativity: The mediating role of employee creative self-efficacy. *Academy of Management Journal*, 52(4), 765-778. <https://doi.org/10.5465/amj.2009.43670890>
23. Hair, J. F., Jr., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis: A Global Perspective* (7th ed.). New Jersey: Prentice Hall.
24. Hirst, G., Van Knippenberg, D., & Zhou, J. (2009). A cross-level perspective on employee creativity: Goal orientation, team learning behavior, and individual creativity. *Academy of Management Journal*, 52(2), 280-293. Retrieved from [https://www.jstor.org/stable/40390288?seq=1#page\\_scan\\_tab\\_contents](https://www.jstor.org/stable/40390288?seq=1#page_scan_tab_contents)
25. Jansen, N., Kant, I., van Amelsvoort, L., Nijhuis, F., & van den Brandt, P. (2003). Need for recovery from work: evaluating short-term effects of working hours, patterns and schedules. *Ergonomics*, 46(7), 664-680. <https://doi.org/10.1080/0014013031000085662>
26. Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction – job performance relationship: A qualitative and quantitative review. *Psychological Bulletin*, 127(3), 376-407. Retrieved from <https://psycnet.apa.org/doi/10.1037/0033-2909.127.3.376>
27. Kark, R., & Carmeli, A. (2009). Alive and creating: The mediating role of vitality and aliveness in the relationship between psychological safety and creative work involvement. *Journal of Organizational Behavior*, 30(6), 785-804. <http://dx.doi.org/10.1002/job.571>
28. Klein, H. J., Noe, R. A., & Chongwei, W. (2006). Motivation to learn and course outcomes: The impact of delivery mode, learning goal orientation, and perceived barriers and enablers. *Personnel Psychology*, 59(3), 665-702. <https://doi.org/10.1111/j.1744-6570.2006.00050.x>
29. Kline, R. B. (2005). *Principles and Practice of Structural Equation Modeling* (2nd ed.). London: The Guilford Press.
30. Liao, P.-Y. (2015). The role of self-concept in the mechanism linking proactive personality to employee work outcomes. *Applied Psychology*, 64(2), 421-443. <https://doi.org/10.1111/apps.12003>
31. Major, D. A., Turner, J. E., & Fletcher, T. D. (2006). Linking proactive personality and the Big Five to motivation to learn and development activity. *Journal of Applied Psychology*, 91(4), 927-935. <https://doi.org/10.1037/0021-9010.91.4.927>
32. Milfont, T. L., & Fischer, R. (2010). Testing measurement invariance across groups: Applications in cross-cultural research. *International Journal of Psychological Research*,

- 3(1), 111-121. <https://doi.org/10.21500/20112084.857>
33. Oshagbemi, T. (1999). Overall job satisfaction: How good are single versus multiple-item measures? *Journal of Management Psychology*, 14(5), 388-403. <http://dx.doi.org/10.1108/02683949910277148>
34. Parker, S. K. (1998). Enhancing role breadth self-efficacy: The roles of job enrichment and other organizational interventions. *Journal of Applied Psychology*, 83(6), 835-852. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/9885197>
35. Randolph, K. L., & Dahling, J. J. (2013). Interactive effects of proactive personality and display rules on emotional labor in organizations. *Journal of Applied Social Psychology*, 43(12), 2350-2359. <https://doi.org/10.1111/jasp.12184>
36. Seibert, S. E., Crant, J. M., & Kraimer, M. L. (1999). Proactive personality and career success. *Journal of Applied Psychology*, 84(3), 416-427. <https://www.ncbi.nlm.nih.gov/pubmed/10380421>
37. Weissbein, D., Huang, J., Ford, J. K., & Schmidt, A. (2011). Influencing learning states to enhance trainee motivation and improve training transfer. *Journal of Business and Psychology*, 26(4), 423-435. <https://link.springer.com/article/10.1007/s10869-010-9198-x>
38. Withey, M. J., & Cooper, W. H. (1989). Predicting exit, voice, loyalty, and neglect. *Administrative Science Quarterly*, 34(4), 521-539. <https://doi.org/10.2307/2393565>
39. Zhao, X., Zhou, M., Liu, Q., & Kang, H. (2016). Proactive personality as a moderator between work stress and employees' internal growth. *Social Behavior and Personality*, 44(4), 603-618. <https://doi.org/10.2224/sbp.2016.44.4.603>
40. 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/10.5465/3069410>