Is the Relationship of Proactive Personalities to Creativity Mediated by Voice Behavior in Indonesian Marketing Employees?

Ayudia Popy Sesilia[a] and Debora Eflina Purba[b]

[a]*Faculty of Psychology, Universitas Indonesia, Depok, Indonesia;* [b] *Department of Industrial and Organizational Psychology, Faculty of Psychology, Universitas Indonesia, Depok, Indonesia*

*Corresponding author:
Debora Eflina Purba
Department of Industrial and Organizational Psychology
Faculty of Psychology, Universitas Indonesia
Jl. Lkr. Kampus Raya, Depok, Jawa Barat,
Indonesia, 16424
Tel.: +62 217270004
Email address: eflina@ui.ac.id

Is the Relationship of Proactive Personalities to Creativity Mediated by Voice Behavior in Indonesian Marketing Employees?

Abstract- Previous studies have found little indication of what moderates the magnitude of the relationship between proactive personality and employee creativity. This study investigates the mediating role of voice behavior in the relationship between proactive personality and employee creativity, using a theoretical approach to trait activation. A survey was conducted with 289 employees and 24 supervisors working in the marketing division of seven organizations (in manufacturing, banking, facilities services, and retail) in Indonesia. The results of the statistical analysis showed that the main effects of proactive personality on creativity were nonsignificant. Furthermore, voice behavior mediated the relationship between proactive personality and employee creativity; that is, the indirect effect of proactive personality on creativity through voice behavior was significant. The implications of the study are discussed.

Keywords: employee creativity, proactive personality, trait activation theory, voice behavior

Introduction

Creativity is a highly valued psychological construct in the social environment and is considered the source of innovation in organizations (García, Ferrando, Soto, Sainz, & Prieto, 2017) and is defined as the ability to produce creations, services, ideas, and a new and valuable processes (Amabile, 1996; Onofrei, Hunt, Siemienczuk, Touchette, & Middleton, 2004; Gong, Cheung, Wang, & Huang, 2012; Kim, Hon, & Crant, 2009). It is an important feature of employee behavior in organizations (Zhou and J. M. George, 2001).

It has been found that personality variables are important predictors for creativity. For example, three of the Big Five personality traits, namely, extraversion, openness to experience, and agreeableness, have been found to correlate with creative behaviors (Chen & Hou, 2016; George & Zhou, 2016; George & Zhou, 2001; Sung & Choi, 2009). Another personality variable that has been well studied in its relation to creativity is that of the proactive personality (Fuller & Marler, 2009; Hong, Tsai, Yang, Liu, & Hu, 2016; Gong et al., 2012; Jiang & Gu, 2015; Kim, Hon, & Lee, 2010; Seibert, Kraimer, & Crant, 2001). Proactive personality captures the individual's disposition to be active and take the initiative to influence the environment (Bateman & Crant, 1993) as well as the tendency to see opportunity and seek out information and practices (Gong et al., 2012; Kim et al., 2009; Turban, Moake, Wu, & Cheung, 2017). The proactive personality is also associated with the sense of obligation to find new ways to make meaningful changes and the extent to which someone feels responsible for ensuring performance by altering a given situation, developing new procedures, and correcting major problems (Fuller, Marler, & Hester, 2006). Previous results have shown that the correlation coefficients between proactive personality and creativity are relatively small, $r = 0.13$–0.20 (Gong et al., 2012; Kim et al., 2010; Seibert et al., 2001), indicating the presence of an underlying mechanism between the variables. Some studies have indeed found mediators

between proactivity and creativity. For instance, Gong (2012) found that information exchange and trust in supervisors, intrinsic motivation (Horng, Tsai, Yang, Liu, & Hu, 2016), and feeling responsible for change (Jiang, & Gu, 2015) as mediators for the relationship between proactive personality and creativity.

Other researchers have used trait activation theory to explain the relationship between proactive personality and creativity (Horng et al., 2016; Jiang & Gu, 2015). In the present study, we use trait activation theory to determine our approach to examining the relationship between proactive personality and creativity. Through trait activation, individuals activate their traits or characteristics when presented with certain situational cues (employment, social, and organizational characteristics) (Tett & Burnett, 2003). Trait activation theory holds that a specific trait requires a relevant job to be expressed in behaviors that are relevant to that trait. For example, a marketing department requires that employees be active and creative to produce ideas and sales strategy plans (Jiang & Gu, 2015; Mu, Bao, Sekhon, Qi & Love, 2018). For this reason, marketing employees must exhibit creativity in their design of new products to attract a client's attention (Mu et al., 2018). When employees come up with an idea to address work problems, they must express themselves (Gal, 2015). Voice behavior, or acts of voicing ideas or opinions without coercion and sharing with others ways to enable better progress and conditions (Wong, Laschinger, & Cumming, 2010) allows employees' ideas to be heard by their supervisors (Greguras, & Diefendorff, 2010). Proactive employees will voice their opinions (Ristig, 2008) than other employees are (non-proactive/reactive). Employees who demonstrate voice behavior in the work environment are considered creative individuals by their supervisors, especially when their opinions are new, unique, or original (Chen & Hou, 2016). Therefore, in marketing, voice behavior is needed action.

Applying this theory to our model, we argue that the relationship between proactive personality and creativity is mediated by voice behavior. Employees who exhibit voice behavior in organization are often considered creative by their supervisors, especially when their opinions judged to be valuable and beneficial to the organization (Zhou & George, 2001; Chen & Hou, 2016; Ng & Feldman, 2012). Voice behavior is a good way for ideas to be conveyed. Previous studies have shown that voice behavior is positively correlated with creativity (Zhou & George, 2001; Chen & Hou, 2016; Hu, Wang, & Dong, 2013; Song, Wu, & Gu, 2017) and proactive personality (Ristig, 2008; Kanten, & Ulker, 2012; Lian & Tang, 2010).

The contribution of this study includes support for the role of voice behavior as a mechanism that relates proactive personality to creativity. Although we are not the first to use trait activation theory to explain proactive relationship between personality and creativity, we are one of the first to isolate voice behavior as an underlying mechanism. In addition, studies on creativity have mostly been conducted in Western contexts, so this study adds to knowledge of the predictors of creativity in a non-Western context. Indonesia has a collectivistic culture with high values of power distance, where voice behavior might not be appreciated. In collectivistic cultures with high power distance, people tend to conform with their groups and avoid voicing their opinions in public (Mellahi, Budhwar, & Li, 2010). Marketing departments require employees with active and creative personalities to produce new ideas and create sales strategies

to adapt to increasingly complex and fast-changing market environments (Mu et al., 2018). Thus, performing voice behavior should be appreciated more in marketing environments than elsewhere. When proactive employees are comfortable with voicing their opinions in an organization, they may contribute to the innovation of the organization by modifying old procedures, even where their ideas are opposed and rejected (Carmeli, Reiter-Palmon, & Ziv, 2010). As a result, employees who speak up are highly rated on creativity by their supervisors. Therefore, we form the following hypothesis.

Hypothesis: Proactive personality has an indirect effect on employee creativity through voice behavior.

Methods

Participants and Procedures

We collected data using a paper and pencil survey. The participants are employees in the marketing departments of seven companies. In all, we collected data from 289 employees and 24 supervisors in those companies (working in manufacturing, banking, facilities servicing, and retail). We collected data with a survey by using self-report questionnaires to measure proactivity and voice behavior and using supervisor ratings to measure the creativity. We asked supervisors and employees to provide the employees' initials and birth dates as unique survey codes. These codes were assigned to match the supervisor and employee questionnaires on completion. All participants were guaranteed the anonymity and confidentiality of the data. We used various sources as an effort to avoid common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003) and administered the survey in Indonesian. We distributed the questionnaires to 468 employees, and 383 questionnaires were returned, for a response rate of 84.9%. After removing questionnaires due to incomplete answers and demographic data, only 289 questionnaires were retained for further analysis. All participants were between 19 and 53 years old (M = 29.49, SD = 5.32); most were male (N = 194, 67%). Only high school was completed by 34% of participants, and 65% had bachelor's to master's degrees. The participants had between 1 and 19 years of work experience (M= 3. 41, SD = 3.20), and 99% have never lived abroad.

Table I. Demographic Characteristics of Participants

	N	%
Gender		
Female	95	33.9%
Male	194	67.1%
Age		
36–55 years old	34	11.7%
26–35 years old	202	69.8%
<26 years	53	18.3%
Employment tenure		
<2 years	75	25.9%
2–10 years	198	68.5%
>10 years	16	5.5%
Educational level		
Bachelor to master's degree	189	65.3%
High school to college degree	100	34.6%

Measures

Creativity

The creativity questionnaire used is an adaptation of that used by Tierney, Farmer, and Graen (1999) consisted of four items. The supervisor rating score was given by the supervisor to rate the creativity of the given employee on a 6-point scale (1 = strongly disagree and 6 = strongly agree). Each supervisor rated three to five employees in response to a set of item statements: one such statement is "This employee tries new ideas or methods first." Higher scores indicate higher creativity. The reliability coefficient of this scale is 0.84.

Proactive Personality

The proactive personality questionnaire used is an adaptation of that used by Seibert et al. (2001), which is a short version of Bateman and Crant (1993) consisted of 10 items. Employees judged themselves (self-rating) on a 7-point scale for a number of items (1 = strongly disagree and 7 = strongly agree). One such item is "I am constantly on the lookout for new ways to improve my life." Higher scores indicate more proactive personalities. The reliability coefficient of this scale is 0.88.

Voice Behavior

The scale for voice behavior used is that developed by Van Dyne and LePine (1998), with six items. Employees judged themselves (self-rating) on a 7-point scale (1 = strongly disagree to 7 = strongly agree). A sample item is "I speak up in my group with ideas for new projects or changes." Higher scores indicate that the participants express their opinions to others. The reliability coefficient of the voice behavior scale is 0.85.

Control Variables

In examination of the effects of proactive personality and employee creativity mediated voice behavior, we controlled for gender (male/female), age (years), education (high school, bachelor, master, doctorate), and organizational tenure (years). Previous studies suggest that demographic characteristics influence perceptions of desirability (Gong et al., 2012; George & Zhou, 2001; Tierney et al., 1999). Moreover, we controlled for level of education because education level may affect domain-relevant knowledge or expertise, which are is important for creativity (Amabile, 1996; Tierney et al., 1999), age, tenure, and relationship with supervisor, which is also related to previous research on voice (Van Dyne, & LePine, 1998; Detert, & Burris, 2007; McClean, Burris, & Detert, 2013) and creativity (Gong et al., 2012; Tierney et al., 1999). Previous studies have indicated that gender, level of education, and age were significantly related to employee creativity. Male and less educated employees have shown to be less creative than female and well educated employees (Da Costa, Páez, Sánchez, Garaigordobil, & Gondim, 2015). Age was also found to be negatively correlated with creativity (Da Costa et al., 2015). This shows that the more that people connected are others, the more often the transfer of information and ideas can lead to creativity. Therefore, control variables should be considered when data collection and analysis are going forward.

Confirmatory Factor Analysis

Anderson and Gerbing (1988) recommended that the discriminant validity of constructs used in studies be examined using confirmatory factor analysis (CFA) with LISREL. Alternative models were also used to assess what measurement model would be the best fit for our data. We compared two alternative measurement models, namely a three-factor solution in which the three latent variables proactive personality, voice behavior, and creativity appeared and a one-factor solution in which one general factor was found. The results of the overall CFA showed that the three-factor solution has an acceptable fit with the data ($\chi 2$ (167) = 496.48; RMSEA = 0.08; CFI = 0.92; NFI = 0.90; SRMR: 0.080), and the one-factor solution has a worse fit ($\chi 2$ (170) = 1802.73; RMSEA = 0.183; CFI = 0.70; NFI = 0.67; RMR: 0.16). Thus, in the subsequent hypothesis testing, we use the three-factor solution.

Data Analysis

The data analysis technique tests the mediation effect of voice behavior on proactive personality and employee creativity uses Hayes' PROCESS macro on SPSS program. We controlled for age, gender, tenure, and education by including them in the regression analysis in the first step before including our study variables.

Results

Descriptive Statistics

Means, standard deviations, correlations, and reliabilities for all measures are given in Table 2. The reliability coefficients of study variables reported in Table 2 indicate strong the internal consistency of all study variables. Before we tested the hypothesis, we saw correlations among demographic variables and our study variables. As shown in Table II, age was not significantly related to creativity but was positively related to proactive personality and voice behavior (r = .20, $p < .01$ and r = .17, $p < .01$, respectively). Tenure was positively related to voice behavior (r = .25, $p < .01$) but was not significantly related to proactive personality or creativity. Educational level was not significantly related to creativity, proactive personality, or voice behavior. Voice behavior was positively and significantly related to proactive personality (r = .460, $p < .01$) and employee creativity (r = .15, $p < .05$).

Hypothesis Testing

To test for the mediating effect of voice behavior on the relationship of proactive personality to employee creativity, we used the Hayes's (2013) PROCESS macro in SPSS. This macro was developed to accommodate simple to complex models involving mediators and moderators. Hayes (2013) recommended the use of the bootstrapping method (available in PROCESS) to calculate the indirect effects to avoid limitations of a single test and a causal effect model by Baron and Kenny's method. PROCESS allows one to produce output for indirect effects (a*b), including confidence intervals and effect sizes.

We used hierarchical regression to examine the mediating effect of voice behavior in the proactive personality and employee creativity relationship. We controlled for age, gender,

tenure, and education by including them in the regression analysis at the first step before the study variables were included.

Table II. Report of Means, Standard Deviations, Correlations, and Reliability Coefficients

	M	SD	1	2	3	4	5	6	7
1. Gender	NA	NA	NA						
2. Age	29,49	5.32	-.20**	NA					
3. Tenure	3.41	3.20	-.04	.62**	NA				
4. Education	2.38	0.91	.12	.18**	.56	NA			
5. Proactive personality	5.64	0.73	-.05	.20**	.20	.03	(0.88)		
6. Voice behavior	5.19	0.93	-.09	.17**	.25**	.10	.46 **	(0.85)	
7. Employee creativity	4.37	0.81	-.05	-.07	-.08	-.002	.019	.15*	(0.84)

^{a.} N = 289. Gender was coded (1 = female, 2 = male). Education was coded (1 = completed high school, 2 = bachelor's to master's degree). Tenure was measure in years. Cronbach's alphas coefficients are reported in parentheses. *p <.05; **p <.01 (two-tailed). NA: not applicable.

Table III. Hierarchical Regression Results

	Voice behavior				Employee creativity					
	Model 1		Model 2		Model 1		Model 2		Model 3	
	b	SE	b	SE	b	SE	b	SE	b	SE
Gender	-.07	.05	-.07	.05	-.05	.05	-.05	.05	-.04	.05
Age	.06	.07	-.02	.06	-.04	.06	-.04	.06	-.04	.06
Tenure	.09	.07	.10	.06	-.03	.06	-.03	.06	-.05	.06
Education	.09	.05	.09	.05	.00	.05	-.00	.05	-.01	.05
Proactive personality			.57***	.06			.01	.06	-.07	.07
Voice behavior									.16**	.05
R^2	.04		.23		.01		.01		.03	
R^2 change	.04**		.19***		.01		.00		.02**	
F	3.48**		17.69**		.72		.59		1.80	
F change	3.48**		71.12***		.72		.06		7.80**	

^{a.} **Note.** *p < 0.05; **p < 0.01; ***p < 0.001

Table IV. Mediation Analysis Result

Effects	b	LLCI	ULCI
Effect of proactive personality on voice behavior (a)	0.57	0.43	0.70
Effect of voice behavior on employee creativity (b)	0.17	0.05	0.29
Direct effect of	-0.05	-0.21	0.97

Effects	b	LLCI	ULCI
proactive personality on employee creativity (c')			
Indirect effect of relationship of proactive personality to voice behavior on employee creativity (c)	0.09	0.03	0.17
Total effect of proactive personality on employee creativity	0.04	-0.09	0.18

In our analysis, it is shown that the predictor is proactive personality, the mediating variable is voice behavior, and the outcome variable is employee creativity. Mediation analysis, using Hayes's simple mediation model indicates that proactive personality affects voice behavior positively and significantly ($b = 0.57$, $p < 0.01$), and voice behavior positively and significantly affects employee creativity ($b = 0.17$, $p < 0.01$). Further, the mediation is significant, as the low levels and high levels of the confidence interval (CI) do not include zero (95% CI [0.03, 0.17]). Moreover, a significant indirect effect of proactive personality is found on employee creativity via voice behavior. The results show that voice behavior plays the role of a full mediator, as the total and direct effects of proactive personality and employee creativity are not significant. Thus, our hypothesis was supported.

Discussion

Summary of Findings
The present study examines the mediating effect of voice behavior on the relationship of proactive personality to employee creativity. Voice behavior was found to play a mediating role in the relationship of proactive personality to employee creativity, supporting our hypothesis. We contribute to the literature by confirming that the relationship between proactive personality and creativity is indeed indirect (Gong et al., 2012; Horng et al., 2016; Kim et al., 2010).

We found that proactive personality significantly affected voice behavior, and this result was found to support those of previous studies (Ristig, 2008; Kanten, & Ulker, 2012; Liang & Tang, 2010). The pattern is also in line with Crant's (2000) finding that proactive personality is more strongly related to speaking up than other personality constructs, such as the Big Five personality traits. This finding suggests that proactive employees who tend to initiate change actively seek solutions to overcome organizational problems, by voicing ideas and opinions, expressing disagreement and complaint, and seeking information or solutions related to problems that may have negative implications for organizational effectiveness.

Our result also showed that voice behavior significantly affects employee creativity. This empirical evidence supports published studies (Zhou & George, 2001; Chen & Hou, 2016; Hu et al., 2013; Song et al., 2017)]. Our finding is in accordance with Ng and Feldman's (2012) argument that voice behavior is an important behavior in organization. Employees who actively exhibit voice behavior in organizations receive more positive feedback from their supervisors

and coworkers in the form of praise, recognition, appreciation, respect, and positive performance appraisals than employees who do not show voice behavior (Crant, 2000; Stamper & Van Dyne, 2001). This in turn leads to self-confidence (Fuller, Barnett, Hester, Relyea, & Frey, 2007). Accordingly, creative cognitive processes are triggered. Employees dare to take risks to produce creative ideas and behaviors. As usual, employees who contribute their ideas and solutions more often are more likely to be considered creative by their supervisors than more passive employees (Ng & Feldman, 2012).

Implications for Theory and Practice

This study makes some contributions to the literature. First, our report of this study constitutes a reply to the work of Gong and Tai in examining the mechanisms relating the proactive personality to creativity (Gong et al., 2012; Shin & Zhou, 2003). by examining voice as the underlying mechanism. We argue that voice behavior is discretionary communication of ideas that leads from proactivity to employee creativity. Prior research has examined the mediator variable of creativity by primarily focusing on contextual factors (Kim et al., 2010; Shin & Zhou, 2003). This study extends such research by considering individual characteristics and their engagement in creative action as well. Our findings are in accordance with the meta-analysis conducted by Ng and Fieldman (2012), who found that voice behavior significantly predicted employee creativity. Thus, our study captures and increases prior studies on the underlying mechanisms of the relationship of proactive personality to employee creativity by introducing voice behavior as a mediating factor. We believe that voice behavior plays an important role as enabling communication between supervisors or managers and subordinates. Gong (2012), in a study set in Taiwan, found that proactive personality was related to creativity, but communication (sharing information) occurs as well, between employees and their coworkers. Boeis, Fiset, and Gill (2016), in their study, which took place in Canada, found that communication unlocked the leader–creativity relationship. Thus, in two countries and cultures, it has been found that communication is important for explaining how personality affects employee creativity through voice behavior.

Second, this study provides a new basis, using trait activation theory, for explaining the importance of voice behavior in the relationship of personality to creativity and offers insight for the development of theory. This study's results support the trait activation theory, which emphasizes that voice behavior and creativity are more likely occur when proactive individuals are triggered in a situation. In this sense, the working conditions of a marketing employee allows them to be more effective (Bateman & Crant, 1993; Fuller et al., 2006). When individuals feel comfortable expressing their ideas, they are better prepared to create, make constructive changes, and recommend modifications of outdated procedures by presenting an imaginative approach to problem solving, even where coworkers refuse (Van Dyne & LePine, 1998). Daring to speak up is key for people involved in improving creative ideas (Van Dyne & LePine, 1998; Crant, 2000). This is line with previous work showing that individual creativity is related to proactive behavior (voice behavior) (Seibert et al., 2001; Boies, Fiset, & Gill, 2015) and that voicing opinions increases the creative engagement of employees (Rank, Pace, & Frese, 2004).

Third, almost all work on proactive the relationship between personality and creativity has been done in Western countries with Western samples. We add to the literature by presenting results from Indonesia, a non-Western country with different patterns of attitudes and behaviors at work. Specifically, we found that proactive employees tend to engage in voice behavior and in turn, their creativity is rated highly by their supervisors. Our results challenge the concept of a culture of collectivism with a high power distance, in which voicing can be seen as inappropriate conduct at work (Binnewies, Ohly, & Sonnentag, 2007; Thomas & Au, 2002). Last, in several previous studies, creativity has been measured by self-report (Chen, 2015). We added supervisors' ratings of creativity, following Ng and Fieldman (2012), who argued that creativity is better measured through other sources.

Among possible practical implications, we suggest that organizations include individuals' proactive personality inventory in their selection process, as individuals who are developed along these lines can help organizations improve their performance and innovate. Proactive personalities can be developed in individuals (Kaufman & Baer, 2004), so organizations can invest in training and development to increase proactiveness among their employees. They can also devise fora or programs to help employees voice their opinion about work. By helping employees in this way, the organization may gain information, ideas, and knowledge of concerns regarding the organization (Mensmann & Frese, 2016).

Limitations and Future Research Directions

The strength of this study is that its data of our study were obtained from two different sources on the same subject, thus minimizing common method variance (Podsakoff et al., 2003). However, the study is not without limitations.

The first of these regards the sample. Our samples are from several organizations in Indonesia, which may increase the variance in our study variables, which in turn may limit the predictive validity of our findings. In addition, cultural and organizational differences might influence employee attitudes and behaviors. Future research should replicate our research model, using single-organization and cross-culture samples, because the level of creativity and voice behavior may differ between public and private companies.

Second, although our results are consistent with the theoretical predictions, our data of our study were all obtained through questionnaires in a cross-sectional study. Such a design limits our ability to determine causal relationships between variables. Subsequent research should use the more robust designs such as a longitudinal design, measuring variables across time to examine whether they are consistent over time.

Third, in this study, we only examine the antecedents of creativity using individual factors, while contextual factors (e.g., the marketing department) were controlled by limiting our participants to marketing employees. We did not measure whether marketing employees working in a large company would be assessed differently from those working in small companies. We suggest that future studies should measure contextual factors to examine interactions between individual and contextual factors in predicting employee behaviors.

Fourth, we examine the relationships of our variables only on the individual level. It would be plausible for supervisors to exert a influence the relationship between voice behavior and creativity. Some supervisors would welcome their employees' voice and expression, while some may find this irritating or even a challenge. This would then affect their assessment of their employees. We suggest that future studies conduct robust multi-level analysis.

Conclusion

Our results show that voice behavior mediated the relationship between proactive personality and creativity. Trait activation theory enables us to contribute the finding to the literature that voice behavior is an underlying mechanism of the relationship between proactive personality and creativity. We suggest that future investigation be undertaken on this relationship through multi-level analyses to indicate whether the influence of team differences appears in the relationship between voice behavior and creativity.

References

Amabile, T. M. (2018). *Creativity in context: Update to the social psychology of creativity*. New York: Routledge.

Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, *103*(3), 411–423. doi: 10.1037/0033-2909.103.3.411.

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. doi: 10.1002/job.4030140202.

Binnewies, C., Ohly, S., & Sonnentag, S. (2007). Taking personal initiative and communicating about ideas: What is important for the creative process and for idea creativity? *European Journal of Work and Organizational Psychology*, *16*(4), 432–455. doi: 10.1080/13594320701514728.

Boies, K., Fiset, J., & Gill, H. (2015). Communication and trust are key: Unlocking the relationship between leadership and team performance and creativity. *Leadership Quarterly*, *26*(6), 1080–1094. doi: 10.1016/j.leaqua.2015.07.007.

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.

Chen, A. S., & Hou, Y. H. (2016). The effects of ethical leadership, voice behavior and climates for innovation on creativity: A moderated mediation examination. *Leadership Quarterly*, *27*(1), 1–13. doi: 10.1016/j.leaqua.2015.10.007.

Crant, J. M. (2000). Proactive behavior in organizations. *Journal of Management*, *26*(3), 435–462. doi: 10.1177/014920630002600304.

Da Costa, S., Páez, D., Sánchez, F., Garaigordobil, M., & Gondim, S. (2015). Personal factors of creativity: A second order meta-analysis. *Revista de Psicología Del Trabajo y de las Organizaciones*, *31*(3), 165–173. doi: 10.1016/j.rpto.2015.06.002.

Detert, J. R., & Burris, E. R. (2007). Leadership behavior and employee voice: Is the door really open? *Academy of Management Journal*, *50*(4), 869–884. doi: 10.5465/amj.2007.26279183.

Ferrándiz, C., Ferrando, M., Soto, G., Sáinz, M., & Prieto, M. D. (2017). Divergent thinking and its dimensions: what we talk about and what we evaluate?. *Anales de Psicología*, *33*(1), 40-47.

Fuller, B., & Marler, L. E. (2009). Change driven by nature: A meta-analytic review of the proactive personality literature. *Journal of Vocational Behavior*, *75*(3), 329–345. doi: 10.1016/j.jvb.2009.05.008.

Fuller, J. B., Barnett, T., Hester, K., Relyea, C., & Frey, L. (2007). An exploratory examination of voice behavior from an impression management perspective. *Journal of Managerial Issues, 19*(1), 134-151.

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. doi: 10.1002/job.408.

George, J. M., & Zhou, J. (2001). When openness to experience and conscientiousness are related to creative behavior: an interactional approach. *Journal of Applied Psychology*, *86*(3), 513–524. doi: 10.1037/0021-9010.86.3.513.

Gong, Y., Cheung, S., Wang, M., & Huang, J. (2012). Unfolding the proactive process for creativity. *Journal of Management*, *38*(5), 1611–1633. doi: 10.1177/0149206310380250.

Greguras, G. J., & Diefendorff, J. M. (2010). Why does proactive personality predict employee life satisfaction and work behaviors? A field investigation of the mediating role of the self-concordance model. *Personnel Psychology*, *63*(3), 539–560. doi: 10.1111/j.1744-6570.2010.01180.x.

Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York: Guilford Publications.

Horng, J. S., Tsai, C. Y., Yang, T. C., Liu, C. H., & Hu, D. C. (2016). Exploring the relationship between proactive personality, work environment and employee creativity among tourism and hospitality employees. *International Journal of Hospitality Management*, *54*, 25–34. doi: 10.1016/j.ijhm.2016.01.004.

Hu, B., Wang, Z. X., & Dong, Q. C. (2013). A novel context-aware modeling and reasoning method based on OWL. *Journal of Computers*, *8*(4), 943–950. doi: 10.4304/jcp.8.4.943-950.

Jiang, W., & Gu, Q. (2015). A moderated mediation examination of proactive personality on employee creativity. *Journal of Organizational Change Management*, *28*(3), 393–410. doi: 10.1108/JOCM-05-2014-0088.

Kanten, P., & Ulker, F. E. (2012). A relational approach Among perceived organizational support, proactive personality and voice behaviour. *Procedia-Social and Behavioral Sciences*, *62*, 1016–1022. doi: 10.1016/j.sbspro.2012.09.173.

Kaufman, J. C., & Baer, J. (2004). Sure, I'm creative—but not in mathematics!: Self-reported creativity in diverse domains. *Empirical Studies of the Arts*, *22*(2), 143–155. doi: 10.2190/26HQ-VHE8-GTLN-BJJM.

Kim, T. Y., Hon, A. H. Y., & Crant, J. M. (2009). Proactive personality, employee creativity, and newcomer outcomes: A longitudinal study. *Journal of Business and Psychology*, *24*(1), 93–103. doi: 10.1007/s10869-009-9094-4.

Kim, T. Y., Hon, A. H. Y., & Lee, D. R. (2010). Proactive personality and employee creativity: The effects of job creativity requirement and supervisor support for creativity. *Creativity Research Journal, 22*(1), 37–45. doi: 10.1080/10400410903579536.

Liang, J., & Tang, J. (2010). A multi-level study on employee voice: Evidence from a chain of retail stores. *Frontiers of Business Research in China*, *4*(4), 541–561. doi: 10.1007/s11782-010-0110-3.

Luria, G., Gal, I., & Yagil, D. (2009). Employees' willingness to report service complaints. *Journal of Service Research*, *12*(2), 156-174.

McClean, E. J., Burris, E. R., & Detert, J. R. (2013). When does voice lead to exit? It depends on leadership. *Academy of Management Journal, 56*(2), 525–548. doi: 10.5465/amj.2011.0041.

Mellahi, K., Budhwar, P. S., & Baibing Li, B. (2010). A study of the relationship between exit, voice, loyalty and neglect and commitment in India. *Human Relations*, *63*(3), 349–369. doi: 10.1177/0018726709348932.

Mensmann, M., & Frese, M. (2016). Proactive behavior training: Theory, design, and future directions. In S. K. Parker & U. K. Bindl (Eds.), *Proactivity at Work: Making Things Happen in Organizations*. New York: Taylor & Francis.

Morrison, E. W. (2011). Employee voice behavior: Integration and directions for future research. *Academy of Management Annals*, *5*(1), 373–412.

Mu, J., Bao, Y. K., Sekhon, T., Qi, J., & Love, E. (2018). Outside-in marketing capability and firm performance. *Industrial Marketing Management*, *75*, 37–54. doi: 10.1016/j.indmarman.2018.03.010.

Ng, T. W. H., & Feldman, D. C. (2012). Employee voice behavior: A meta-analytic test of the conservation of resources framework. *Journal of Organizational Behavior*, *33*(2), 216–234. doi: 10.1002/job.754.

Onofrei, M., Hunt, J., Siemienczuk, J., Touchette, D. R., & Middleton, B. (2004). A first step towards translating evidence into practice: Heart failure in a community practice-based research network. *Informatics in Primary Care*, *12*(3), 139–145. doi: 10.14236/jhi.v12i3.119. PubMed: 15606986.

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*(5), 879–903. doi: 10.1037/0021-9010.88.5.879.

Rank, J., Pace, V. L., & Frese, M. (2004). Three avenues for future research on creativity, innovation, and initiative. *Applied Psychology*, *53*(4), 518–528. doi: 10.1111/j.1464-0597.2004.00185.x.

Ristig, K. (2008). An empirical investigation of the relationship between trust, voice, and proactive personality. *Methodology*, *14*.

Seibert, S. E., Kraimer, M. L., & Crant, J. M. (2001). What do proactive people do? A longitudinal model linking proactive personality and career success. *Personnel Psychology*, *54*(4), 845–874. doi: 10.1111/j.1744-6570.2001.tb00234.x.

Shin, S. J., & Zhou, J. (2003). Transformational leadership, conservation, and creativity: Evidence from Korea. *Academy of Management Journal*, *46*(6), 703–714. doi: 10.5465/30040662.

Song, J., Wu, J., & Gu, J. (2017). Voice behavior and creative performance moderated by stressors. *Journal of Managerial Psychology*, *32*(2), 177–192. doi: 10.1108/JMP-03-2016-0078.

Stamper, C. L., & Van Dyne, L. V. (2001). Work status and organizational citizenship behavior: A field study of restaurant employees. *Journal of Organizational Behavior*, *22*(5), 517–536. doi: 10.1002/job.100.

Sung, S. Y., & Choi, J. N. (2009). Do big Five personality factors affect individual creativity? The moderating role of extrinsic motivation. *Social Behavior and Personality: An International Journal*, *37*(7), 941–956. doi: 10.2224/sbp.2009.37.7.941.

Tai, H. T., & Mai, N. Q. (2016). Proactive personality, organizational context, employee creativity and innovative capability. *International Journal of Organizational Analysis*, *24*(3), 370–389. doi: 10.1108/IJOA-04-2015-0857.

Tett, R. P., & Burnett, D. D. (2003). A personality trait-based interactionist model of job performance. *Journal of Applied Psychology*, *88*(*3*), 500–517. doi: 10.1037/0021-9010.88.3.500.

Thomas, D. C., & Au, K. (2002). The effect of cultural differences on behavioral responses to low job satisfaction. *Journal of International Business Studies*, *33*(2), 309–326. doi: 10.1057/palgrave.jibs.8491018.

Tierney, P., Farmer, S. M., & Graen, G. B. (1999). An examination of leadership and employee creativity: the relevance of traits and relationships. *Personnel Psychology*, *52*(3), 591–620. doi: 10.1111/j.1744-6570.1999.tb00173.x.

Turban, D. B., Moake, T. R., Wu, S. Y. H., & Cheung, Y. H. (2017). Linking extroversion and proactive personality to career success: The role of mentoring received and knowledge. *Journal of Career Development*, *44*(1), 20-33.

Van Dyne, L., & LePine, J. A. (1998). Helping and voice extra-role behaviors: Evidence of construct and predictive validity. *Academy of Management journal*, *41*(1), 108-119.

Wei, X., Zhang, Z. X., & Chen, X. P. (2015). I will speak up if my voice is socially desirable: A moderated mediating process of promotive versus prohibitive voice. *Journal of Applied Psychology*, *100*(5), 1641.

Wong, C. A., Spence Laschinger, H. K., & Cummings, G. G. (2010). Authentic leadership and nurses' voice behaviour and perceptions of care quality. *Journal of Nursing Management*, *18*(8), 889–900. doi: 10.1111/j.1365-2834.2010.01113.x.

Yang, F., & Chau, R. (2016). Proactive personality and career success. *Journal of Managerial Psychology*, *31*(2), 467–482. doi: 10.1108/JMP-04-2014-0139.

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.