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## The Influence of Proactivity on Creative Behavior, Organizational Commitment, and Job Performance: Evidence from a Korean Multinational

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# THE ROLE OF PROACTIVITY AND CONTEXTUAL FACTORS IN INFLUENCING CREATIVE BEHAVIOR, COMMITMENT, AND PERFORMANCE: EVIDENCE FROM A KOREAN MULTINATIONAL

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*Proactivity has emerged as an extremely important behavior in organizations and has been shown to correlate with very positive organizational and individual outcomes. Proactive personality has been identified as a stable personality attribute that is predictive of several positive work behaviors and outcomes. Utilizing a large sample from a world-renown and highly successful Korean multinational employer, this study investigated the influences of proactive personality on three key outcomes in the workplace, namely the level of employee creativity, level of organizational commitment, and in-role job performance. The study also examined whether the contextual factors of quality of leader-member exchange (LMX) and the level of job autonomy affected the outcomes and the influence of proactivity on the three employee outcomes. Interactive effects were also investigated. In the Korean sample, proactive personality was found to be highly correlated with creative behavior, organizational commitment, and in-role job performance. Overall, the results suggest that proactivity along with LMX quality and job autonomy accounted for 53%, 38%, and 23% of the observed variation in employee creativity, organizational commitment, and job performance respectively. In hierarchical multiple regression, proactive personality appeared most influential on variation in creativity and performance. LMX was shown to interact with proactivity on level of organizational commitment. LMX was also shown to interact with both proactivity and job autonomy in influencing in-role job performance. Theoretical and practical implications, limitations, and recommendations for future research are also presented.*

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Keywords: proactivity, job autonomy, leader-member exchange, organizational commitment, employee creativity, job performance

## INTRODUCTION

The complex, dynamic, and volatile business environment faced by modern organizations compels management and employees to not only adapt and adjust to major environmental demands, but also to proactively take initiative to influence and improve the nature of work, the organization and its strategy, and the environment in which they operate. Now, more than ever, the knowledge economy with its inherent ambiguity, novelty, and complexity has dictated that successful organizations and its most successful members must embrace a less structured organizational setting with stronger demands for empowerment, self-governance, opportunity recognition, personal initiative and capitalization, collaboration, and adaptation (Parker & Wang, 2015; Strauss, Griffin, Parker, & Mason, 2015; Wihler, Blickle, Ellen, Hochwarter, and Ferris, 2017). Today's employees are increasingly required to proactively and collaboratively deal with

complex and unexpected issues that are not anticipated nor prescribed in job descriptions or any other traditional pronouncements or top-down guidance.

Organizations need proactive employees who actively seek to “alter and improve their work environment” and seek to capitalize and “make things happen” that will lead to greater organizational outcomes (Parker and Wang, 2015; Ghitulescu, 2018; Wihler, et al., 2017). The most impactful employees are self-starting, forward-thinking, and willing to actively contribute (Schmitt, Den Hartog, & Belschak, 2016). Bateman & Crant (1993) introduced proactive personality as a dispositional construct that identifies differences among people to the extent that they take action to influence their environments. People are not able to simply be passive recipients of environmental constraints on their behavior and are no longer able to simply abide by job descriptions, policies and procedures, instructions and direction, and rules and routines. Rather, they must be able to intentionally engage and take initiative to directly change their current circumstances for the better (Crant, 2000; Grant & Ashford, 2008). Proactive behavior is influenced by one’s belief in their ability to overcome constraints by situational forces and the ability to affect positive and beneficial changes in the environment (Bateman & Crant, 1993; Thomas, Whitman, & Viswesvaran, 2010). Proactivity or proactive behavior by individuals refers to anticipatory, change-oriented, and self-initiated behavior in situations. Proactive behavior involves acting in advance of a future situation, rather than just reacting or adapting. It means making things happen rather than just watching things happen or waiting for something to happen. Proactive behavior can be contrasted with other work-related behaviors, such as proficiency, the fulfillment of predictable requirements of one’s job, or adaptability, the successful coping with and support of change initiated by others in the organization. Whereas adaptability is about responding to change, proactivity is about initiating change (Grant & Ashford, 2008; Parker, Bindl, & Strauss, 2010; Parker & Collins, 2010).

Proactive personality is a complex attribute of organizational members, distinct from other personality traits such as conscientiousness, openness to experience, tolerance for ambiguity, and extraversion, which has been shown over numerous studies to greatly influence a number of individual and organizational outcomes (Crant, 2000; Schmitt, et. al., 2016; Vough, Bindl, & Parker, 2017).

The concept of creativity has intrigued both practitioners and researchers in the field of management and organizational psychology. Specifically, managers have aggressively sought ways to inspire, enhance, and increase creativity in their employees. From a practical perspective, creativity is one of the most critical contributions that employees today can make. In a highly competitive and volatile business environment, companies need to unleash their employees’ creative potential in order that their novel ideas can be used as building blocks for organizational innovation, change, and competitiveness (Amabile, 1988; Gong, Huang, & Farh, 2009; Hirst, Van Knippenberg, Zhou, Quintane, & Zhu, 2015; Woodman, Sawyer, & Griffin, 1993; Zhang & Bartol, 2010; Zhou & George, 2003). Creativity is useful novelty and is development of ideas about products, services, practices, processes, and procedures that are judged to be novel, and potentially useful (Amabile, 1996; Hirst, et al., 2015; Oldham & Cummings, 1996; Zhou & George, 2001; Zhou & Shalley, 2003). While creativity refers to the production of novel and useful ideas in any domain, innovation refers to the successful implementation of creative and valuable ideas within an organization (Scott & Bruce, 1994;

Shalley, Zhou, & Oldham, 2004; Van de Ven & Angle, 1989). The definition of creativity, the ability to produce novel and useful ideas different from what has been done before but highly appropriate for the current problem, seems to at least imply the necessity for proactive behavior (Baer, 2012; Gong, Cheung, Wang, & Huang, 2012; Zhang & Bartol, 2010). Proactive individuals are those actively seeking ideal settings in which they can exercise their creativity and overall “genius.”

The extensive body of literature on organizational commitment has produced various definitions of the construct and substantial discussion about its outcomes and measurement (e.g., Choi, Oh, and Colbert, 2015; Mayer & Allen, 1997; Morrow, 1993). According to Mowday, Steers, & Porter (1982), organizational commitment is defined as the relative strength of an individual’s identification with and involvement in a particular organization. It can also be viewed as a process by which the goals of the individual and those of the organization become integrated. Allen and Meyer (1996) distinguished among three different components of commitment: affective commitment, continuance commitment, and normative commitment. They defined affective commitment as an affective or emotional attachment to the organization such that the strongly committed individual identifies with, is involved in, and enjoys membership in the organization.

It is unclear the relationship between an employee’s level of proactivity and their level of organizational commitment. Over the years, commitment has been consistently linked to various positive outcomes such as turnover intentions (Meyer, Allen, & Smith, 1993) and actual turnover (Whitener & Walz, 1993), job performance (Meyer, Paunonen, Gellatly, Goffin, & Jackson, 1989), and other attitudes and behaviors. It would seem logical, however, that it takes a deeply committed individual to care enough and engage enough to go above and beyond their prescribed duties and directives to better the company. It would seemingly demand deep affective commitment to compel an individual to actively take extraordinary initiative to solve problems and improve the organization. On the flip side, we could also expect that proactive people are likely actively seeking meaningful environments in which they can become committed and make a difference.

In this study, the important outcome variable of performance is considered with in-role job performance used due to its utility in terms of operationalization. In-role performance is based on the activities related to formal tasks, duties, and responsibilities illustrated in the job description (Williams & Anderson, 1991). Extra-role performance stems from the behaviors also critical for achieving performance but discretionary in nature such as overall good-citizenship, acting politely, or helping others (Moorman, Niehoff, & Organ, 1993). While this study was limited to understanding the impact on traditional in-role performance, there is no question that extra-role performance such as citizenship, new idea generation, mentoring, and constructive criticism are important outcomes for future study. It seems logical that there would be a positive relationship between proactivity and in-role job performance.

This study attempts to build on previous literature by better understanding the integrated influence of personal and contextual factors on creativity, employee commitment, and job performance. Although there are a variety of antecedents affecting these outcome variables, proactivity (proactive personality) will be examined primarily in this study along with the

contextual factors of leader-member exchange quality (LMX) and the important job characteristic of job autonomy. The style of leadership behavior and job characteristics are commonly studied antecedents for various outcomes such as learning, satisfaction, innovation and creativity, performance, change, and sustainability not only for individuals, but also for groups and organizations (e.g. Erdogan, Liden, & Kraimer, 2006; Gerstner & Day, 1997; Hackman & Oldham, 1980; Pentareddy & Suganthi, 2015; Oldham & Cummings, 1996). While research on LMX has proliferated, studies about the relationship between LMX and subordinate performance have not reported uniformly positive results (Gerstner & Day, 1995; Martin, Guillaume, Thomas, Lee, & Epitropaki, 2016). There is not much research on the joint impacts of LMX and other job context factors, such as job autonomy, on employee performance. Job autonomy has been identified as one of the most important contextual factors (job characteristics) for producing creative and innovative solutions and generally good job performance, though the exact nature of the influence needs additional refinement (Martin, et al., 2016; Unsworth & Parker, 2003).

## HYPOTHESES

### A. Proactive Personality

As noted earlier in our discussion, proactive personality is a complex construct. People are not always passive recipients of environmental constraints on their behavior. They can certainly work actively to intentionally change their work environment. More proactive individuals have strong belief in their ability to overcome constraints by situational forces and the ability to initiate positive changes in the environment (Bateman & Crant, 1993). More specifically, proactive individuals actively look for opportunities and capitalize on them; showing initiative, taking action, and being persistent in successfully implementing change. Thompson (2005) argues that new employees can take a highly proactive role in their own socialization through feedback seeking (Ashford & Cummings, 1985), uncertainty reduction (Morrison, 1993), and behavioral self-management (Saks & Ashforth, 1996). More recently, a number of studies have reported a strong correlation between proactive behavior of employees and creation of new work approaches, building supportive work environments, cultivating positive employee relationships, encouraging supportive behavior, and various other positive cultural elements (Batistič, Černe, Kaše, & Zupic, 2016; Ghitulescu, 2018; Hong, Liao, Raub, & Han, 2016; Vough, et. al., 2017). Li, Fay, Frese, Harms, and Gao (2014) found that proactive personality exerted positive and beneficial influence on perceptions of job demands/constraints (less burdensome and stressful), job control, and supervisory support. Thomas, et. al. (2010) in a meta-analysis found positive relationships between proactivity and job performance, job satisfaction, affective organizational commitment, and social networking. Research on creativity has at least alluded to the positive relationship between all of these important workplace ingredients and employee creativity (Hirst, 2015; Zhang & Bartol, 2010). Thus, we hypothesize that proactive personality will be positively associated with levels of creativity, affective organizational commitment, and in-role job performance.

***Hypothesis 1a: Proactive personality is positively associated with creative behaviors.***

***Hypothesis 1b: Proactive personality is positively associated with organizational commitment.***

***Hypothesis 1c: Proactive personality is positively associated with in-role job performance.***

#### B. Leader-Member Exchange (LMX) Quality

LMX quality is defined as the quality of the interpersonal exchange relationship between an employee and his or her manager (Graen & Uhl-Bien, 1995). LMX quality between leader and members determines the amount of physical or cognitive effort, material resources, information, and social support that are exchanged between leader and follower (Liden, Sparrowe, & Wayne, 1997; Martin, et al., 2016; Wihler, et al., 2017). Thus, leaders in such relationships interact frequently with their subordinates and have the leaders' encouragement, support, and consideration, and the subordinates strives to achieve individual and work group goals beyond contractual or transactional expectations in their job description (Sparrowe & Liden, 1997; Wayne, Shore, & Liden, 1997). Studies have generally confirmed a positive relationship between a manager's LMX quality and various organizational outcomes such as organizational commitment, employee creativity, and job performance (Erdogan, Liden, & Kraimer, 2006; Liden, et al., 1997; Martin, et. al., 2016; Wayne, et al., 1997). Positive leadership sets the tone for a culture of opportunity recognition, positive interaction, positive competition, high standards, and encouragement (Martin, et al., 2016; Zhang and Bartol, 2010).

***Hypothesis 2a: LMX quality is positively associated with creative behaviors.***

***Hypothesis 2b: LMX quality is positively associated with organizational commitment.***

***Hypothesis 2c: LMX quality is positively associated with in-role job performance.***

#### C. Job Autonomy

One of the most important contextual factors likely to affect creativity and innovation is work design and positive job characteristics, particularly the amount of job autonomy (Batistič, et al. 2016; Gong, et al., 2009; Unsworth & Parker, 2003). Job design has long been considered to be an important contributor to employees' individual motivation, attitudes, and creative performance at work (Amabile, 1988; Hackman & Oldham, 1980; Shalley et al., 2004; West & Farr, 1990). According to Hackman and Oldham's (1980) job characteristics model, there are five dimensions: variety, identity, significance, autonomy, and feedback. Job autonomy refers to the degree to which the job gives the worker freedom and independence in scheduling work and determining how the work will be carried out (Hackman & Oldham, 1980). As noted earlier, organizations are shifting rapidly to the information-based organization, or self-governing units of knowledge specialists. Challenging and complex jobs are those that provide job incumbents with autonomy. Individuals are likely to be excited about their work activities and interested in

completing these activities in the absence of external controls or constraints (Baer, Oldham, & Cummings, 2003; Hackman & Oldham, 1980; Oldham & Cummings, 1996).

Previous studies examined why job autonomy is important to creativity and innovation. Ekvall and Tangeberg-Anderson (1986) stated that autonomy contributed to a creative climate which affected levels of innovation. Autonomy has been shown to increase felt responsibility (Oldham & Cummings, 1996; Hackman & Oldham, 1980). According to Amabile and Gryskiewicz (1987), 74% of scientists reported job autonomy as a major factor in successfully creative incidents while 48% mentioned a lack of job autonomy as being a major constraint in unsuccessful incidents. Gong and co-authors (2009) revealed the importance of creating an environment where employees are able to build “creative self-efficacy” which strongly involved autonomy, empowerment, and transformational leadership. Thus, job autonomy is believed to be an important ingredient to enhanced creativity as well as organizational commitment and job performance.

***Hypothesis 3a: Job autonomy is positively associated with creative behaviors.***

***Hypothesis 3b: Job autonomy is positively associated with organizational commitment.***

***Hypothesis 3c: Job autonomy is positively associated with in-role job performance.***

Therefore, the purpose of this study is to investigate the influences of proactive personality (personal factor), LMX quality (contextual factor), and job autonomy (contextual factor) on the outcomes of employee creativity, organizational commitment, and in-role job performance. The specific research questions are: (a) What are the relationships between the above factors (proactive personality, leader-member exchange, and job autonomy) and the three outcome variables (employee creativity, organizational commitment, and in-role job performance)? and (b) Do those factors jointly and interactively contribute toward explaining observed variation in the outcome variables?

The real potential contributions of this study lie in its integrative approach encompassing both personal and contextual factors. While some studies examined LMX quality and job autonomy as the antecedents of commitment, creativity, and performance (Gerstner & Day, 1997), no research has investigated the role of proactivity along with these specific contextual factors on employee outcomes. This study can also provide significant value for managers and HR/OD practitioners who seek to improve employees’ creativity, commitment, and performance in their organizations. Finally, the relevant theories and models noted in our review have been developed primarily in Western cultures. There is great need for research conducted in other nations outside the Western world. It is highly instructive and valuable to investigate whether the hypothesized relationship exist in a very different cultural setting such as Korea. This study is a very strong effort to respond to this mandate, looking at a large sample of professional employees in a world-renown and highly successful Korean multinational employer.

## D. Interactive Effects

A very important contribution of this study is to investigate the interactive effects among these important antecedents (personal factors and contextual factors). Proactive employees do not operate in a social vacuum (Thompson, 2005). As this is an integrative study, we sought to identify potential interactive effects in addition to the main effects. Researchers, for example, have suggested a link between social capital and proactivity (Bolino, Turnley, & Bloodgood, 2002). These authors investigated ways in which new employees adopt a proactive role in their own socialization through feedback seeking (Ashford & Cummings, 1985), uncertainty reduction (Morrison, 1993), behavioral self-management (Saks & Ashforth, 1996), and network building (Wanberg & Kammeyer-Mueller, 2000). Positive leadership exchange is described as a facilitating factor, providing not only resources but also opportunity, encouragement, challenge, and feedback (Gong, et al., 2009; Hirst, et al., 2015; Hong, et al., 2016). In addition, the important element of autonomy is believed to be critical for proactive employees as they attempt to exercise creativity and in building environments for high performance and high commitment (Hong, et al., 2016; Parker and Wang, 2015). Thus, it seems likely that such proactive behavior would have even greater association with the outcome variables in environments with very strong LMX quality and with job autonomy. In other words, the influence of proactive behavior on the outcome variables would thus be greater in environments with strong LMX quality and strong job autonomy. Finally, we view the important elements of LMX quality and autonomy as being highly interactive in influencing important outcomes such as creativity, commitment, and performance (Schmitt, et al., 2016).

***Hypothesis 4:* There will be a significant positive interaction effect of proactivity and LMX on: (a) organizational commitment, (b) creative behaviors, and (c) in-role job performance.**

***Hypothesis 5:* There will be a significant positive interaction effect of proactivity and job autonomy on: (a) organizational commitment, (b) creative behaviors, and (c) in-role job performance.**

***Hypothesis 6:* There will be a significant positive interaction effect of LMX and job autonomy on: (a) organizational commitment, (b) creative behaviors, and (c) in-role job performance.**

## METHODS

### A. Sample and Demographic Information

One very interesting and potentially valuable contribution of this study is the selected sample of professionals from a world-renown South Korean Fortune Global 500 multinational enterprise. South Korea has been very successful recently in global markets for consumer and industrial goods. South Korean firms have proven to be quite adept in such areas as innovation, aggressive product introduction, and competitive and marketing aggressiveness. Korean culture, however, have been shown to be quite different from Western cultures where the majority of the research on proactivity, creative job behavior, commitment, job performance, autonomy, and



LMX has been conducted (Hofstede, 1983). It has been established that Koreans have much higher power distance than Americans and other Westerners, potentially influencing the level of individual proactivity on the job. Koreans are much more collectivistic, which has been shown to enhance long-term organizational commitment and could potentially influence views on autonomy, leader behavior, and the desire for exercising proactive behavior. Koreans score much higher on uncertainty avoidance which could certainly impact one's willingness to engage in proactive, creative, and autonomous tasks. Finally, Koreans have been shown to have a very long-term orientation which influences commitment and may potentially influence proactivity, creativity, and perhaps other factors. So it is very interesting and valuable that this study applied the extant research in these key organizational behavior areas to a large sample of Korean professionals, with a very interesting outcome being whether the expected relationships hold up in the highly educated and professional Korean sample.

Participants were South Korean employees who had participated in extensive company training programs. A self-administered Internet-based survey was used to obtain individual perceptions from the participants. Of the 600 members who participated in the training programs, usable responses were received from 293 employees, yielding a response rate of 49%. The demographic variables included (a) gender, (b) age, (c) education level, (d) hierarchical level, (e) the type of job, and (f) the length of a leader-follower relationship. Most respondents were male (88%) in their 30's (95%) in manager or assistant manager positions (98%). As for their educational level, 44% of the respondents had a bachelor's degree and 34% had additionally obtained graduate degrees. The length of the respondents' relationships with their current supervisor was evenly distributed across the categories: less than one year (21%), between one year to two years (24%), between two to three years (16%), between three to five years (20%), and over five years (19%). Classification by job type were as follows: 8% in marketing and sales, 13% in production, 9% in engineering, 37% in research and development, 18% in information technology, 6% in supporting functions such as finance, HR, and legal, and 9% in others.

## B. Measures

All constructs used multi-item scales that have been developed and used in the United States. All scales were translated and back-translated to Korean. With a 5-point Likert scale, the survey questionnaire responses ranged from 1 (strongly disagree) to 5 (strongly agree).

**Proactive personality.** The self-report measure of proactivity was a 10-item scale of the proactive personality survey (PPS) (Seibert, Crant, & Kraimer, 1999), a shortened version of the instrument originally developed by Bateman and Crant (1993). The reliability coefficient of the 10-item scale was .86, which was similar to that of the full version (.88). The internal consistency reliability of nine items was .85 in this study. A sample item was: "I excel at identifying opportunities."

**LMX quality.** To measure LMX quality, we used the 7-item LMX scale developed by Scandura and Graen (1984). It assessed the degree to which managers and subordinates have mutual respect for each other's capabilities, feel a deepening sense of reciprocal trust, and have a strong sense of obligation to one another (Scandura & Graen, 1984). The authors reported .86 and .84 reliability coefficient alphas at two different times in the same study. The internal

consistency reliability was .87 in this study. A sample item was: “My manager understands my job problems and personal needs very well.”

**Job autonomy.** We adopted three items to measure job autonomy from the Job Diagnostic Survey (JDS) (Hackman & Oldham, 1980) used to assess the extent of challenges and complexity of employees' jobs. The median alpha of the job characteristics measures in Oldham and Cummings' (1996) study was .68. The internal reliability of job autonomy in this study was .71. A sample item was: “The job gives me considerable opportunity for independence and freedom in how I do the work.”

**Organizational commitment.** Affective organizational commitment was measured with the 6-item affective commitment scale (Meyer, Allen, & Smith, 1993). According to Allen and Meyer (1996), the median reliability in a number of research efforts was .85. In this study, the internal consistency reliability was .84. A sample item is: “I would be very happy to spend the rest of my career with this organization.”

**Creative behavior.** To measure creativity, we used a 13-item scale ( $\alpha = .96$ ) developed by Zhou and George (2001). The coefficient alpha in a previous Korean study was .95 (Shin & Zhou, 2003). In this study, the internal consistency reliability was .94. A sample item was: “I often suggest new ways to achieve goals or objectives.”

**In-role job performance.** We measured in-role job performance using Podsakoff and MacKenzie's (1989) five-item scale. The respondent indicated the extent to which they agreed or disagreed with five statements about the quality and quantity of the respondents' in-role activities. The reliability coefficient was .85 in an earlier study (Janssen & Van Yperen, 2004), while the reliability was .83 in this study. A sample item was: “I always complete the duties specified in the job description.”

## RESULTS

The results of the study are reported in four parts. First, the construct validity of each measurement model is examined by confirmatory factor analysis (CFA). Second, the descriptive statistics, correlations, and reliabilities of the reduced measurement model analyses are reported. Third, the hierarchical multiple regression model is tested and the results of the hypothesis testing are addressed. Confirmatory factor analysis was based on the covariance matrix and used maximum likelihood estimation as implemented in LISREL 8.8. Descriptive statistics, correlations, reliabilities, and hierarchical multiple regression analysis were conducted, using SPSS 16.0.

### A. Confirmatory Factor Analysis

Confirmatory factor analysis (CFA) was conducted to estimate the quality of the factor structure and designated factor loadings by statistically testing the fit between a proposed measurement model and the data. CFA was used to estimate convergent and discriminant validity of indicators of the six constructs: proactivity, LMX quality, job autonomy, organizational commitment, creative behavior, and in-role job performance. The purpose of assessing a model's

overall fit is to determine the degree to which the model is consistent with the empirical data (Diamantopoulos & Siguaw, 2000). The goodness-of-fit indices used in this study include:  $\chi^2$  (Chi-square), RMSEA (Root Mean Square Error of Approximation), NNFI (Non-Normed Fit Index), CFI (Comparative Fit Index), and SRMR (Standardized Root Mean Square Residual). As a result of CFA, the overall measurement model indicated an acceptable fit to the data ( $\chi^2 [1924] = 4685.37$ ;  $p = .00$ ; RMSEA = .069; NNFI = .93; CFI = .94; SRMR = .073).

## B. Descriptive Statistics, Correlations, and Reliabilities

Table 1 presents the correlations among the constructs and the reliabilities. Overall, most correlations showed moderate and positive relationships among the six constructs. The correlation coefficients for LMX and Proactivity, LMX and creative behavior, and LMX and in-role job performance were significant but modest ( $r = .15 - .16$ ). The relationship between proactive personality and creative behavior was the highest ( $r = .66$ ). All measures demonstrated adequate levels of reliability (.71 - .93). As the result of correlation analysis, the first 9 hypotheses (H1a through H3c) were supported and we were able to conclude that proactive personality was positively associated with creative behavior, organizational commitment, and in-role job performance. LMX was positively associated with creative behavior, organizational commitment, and in-role job performance. Finally, job autonomy was positively associated with the three outcome variables as well. Of course, hierarchical multiple regression is necessary to show relationships controlling for the influence of other variables.

Table 1. Descriptive Statistics, Correlations, and Reliabilities

Variable	<i>M</i>	<i>s.d.</i>	1	2	3	4	5	6
1. Proactive Personality	3.64	.50	(.85)					
2. Leader-Member Exchange Quality	3.26	.68	.15*	(.87)				
3. Job Autonomy	3.76	.65	.34**	.37**	(.71)			
4. Organizational Commitment	3.27	.76	.29**	.55**	.43**	(.84)		
5. Creative Behavior	3.60	.57	.66**	.16**	.50**	.37**	(.93)	
6. In-Role Job Performance	3.91	.56	.43**	.15*	.35**	.22**	.38**	(.83)

Note:  $N = 293$ , \*  $p < .05$ ; \*\*  $p < .01$ ; Cronbach's alphas are in the diagonal.

### C. Hierarchical Multiple Regression Analysis

Table 2 illustrates the results of hierarchical multiple regressions for organizational commitment, creative behavior, and in-role job performance. Specifically, at steps 1 through 4, we entered the control variables, proactive personality, contextual variables (LMX quality and job autonomy), and the interactions between proactivity and LMX quality, between proactivity and job autonomy, and between LMX and job autonomy, respectively. Overall, the demographic variables, personality factor (proactive personality), contextual factors (LMX quality and job autonomy), and the interaction variables explained 38% of the variance in organizational commitment, 53% of the variance in creative behavior, and 23% of the variance in in-role job performance.

With regards to the effect size (changes of  $R^2$ ), the total variation in employee creativity was much better explained by the individual measure of proactive personality ( $\Delta R^2 = .41$ ) than by the combined contextual variables, LMX and job autonomy ( $\Delta R^2 = .10$ ). The effect of employing proactive personnel seemingly trumped the importance of LMX and autonomy in influencing creativity levels. In the regression model containing both the contextual factors of LMX and job autonomy AND proactive personality, the regression coefficient associated with proactive personality was significant and exhibited a larger effect size compared to the regression coefficients associated with the contextual factors. The contextual influence of LMX and job autonomy ( $\Delta R^2 = .29$ ), however, was stronger than that of the personality variable (proactive personality) ( $\Delta R^2 = .06$ ) in accounting for variation in organizational commitment. While proactive employees generally exercise more creativity, the relationship with commitment may be more tenuous. For in-role job performance, the explanatory influence of proactive personality ( $\Delta R^2 = .17$ ) was stronger than that of LMX and job autonomy ( $\Delta R^2 = .05$ ). Overall, it was clear in the Korean sample that proactive personality was much more influential on creative behavior and in-role job performance (relative to the contextual factors) than it was on organizational commitment.

We also examined the interactive effects among the three predictors (see Figure 1, 2, and 3). We found significant interaction (at the .05 level) for proactivity and LMX in influencing commitment (Figure 1). We also found significant interaction between proactivity and LMX in influencing performance (Figure 2). Finally, we found significant interaction between job autonomy and LMX in influencing performance. We wanted to uncover whether the influence of one variable on the outcomes was higher given higher levels of the other variable, controlling for the demographic variables and the main effects. LMX and proactivity were shown to have a significant interactive effect on organizational commitment. While proactivity itself had a somewhat tenuous relationship with commitment, it interacted with LMX in a way that suggested that positive leader-member exchange enhances the commitment levels of proactive individuals. The results indicate that positive LMX is beneficial to both highly proactive and less proactive individuals, and also indicates that proactivity is positive in both high LMX setting and low LMX settings. LMX and proactivity were also found to be interactive in its influence on job performance. Interestingly, proactivity was much more beneficial to performance in settings lacking quality LMX, whereas performance was actually slightly lower among low proactivity respondents in a high quality LMX environment. Perhaps proactivity plays a much more critical role in performance absent high quality leadership, although performance was quite high across

the proactivity spectrum in a high LMX environment. LMX and job autonomy were also found to have a significant interactive effect on in-role job performance. In a low autonomy environment, high LMX respondents actually reported slightly lower performance, although clearly high autonomy was beneficial to performance for both high LMX and low LMX respondents. The results are elaborated further.

*Table 2. Hierarchical Multiple Regression Results: Organizational Commitment, Creative Behavior, and Job Performance*

	Organizational Commitment				Creative Behavior				In-Role Job Performance			
	M1	M2	M3	M4	M1	M2	M3	M4	M1	M2	M3	M4
Step 1												
- Gender	.03	.06	.09 <sup>†</sup>	.09 <sup>†</sup>	-.04	.01	.00	.00	-.01	.03	.02	.02
- Age	.12*	.11*	.06	.07	-.01	-.02	-.04	-.03	-.04	-.05	-.07	-.09
- Education	-.04	-.05	-.08	-.06	.08	.05	-.00	.01	.07	.05	.02	.02
- Hierarchical level	.04	.04	.04	.04	.11 <sup>†</sup>	.10*	.09*	.09*	.02	.02	.00	-.02
- Job Type	-.06	-.02	-.05	-.05	-.15*	-.05	-.06	-.07	.04	.11 <sup>†</sup>	.10 <sup>†</sup>	.09
- Tenure	.02	.04	-.03	-.02	-.06	-.02	-.01	.00	-.03	.01	.00	.02
Step 2												
- Proactive personality (PP)		<b>.27**</b>	.14	.45		<b>.65**</b>	<b>.54**</b>	.05		<b>.42**</b>	<b>.34**</b>	<b>.89**</b>
Step 3												
- LMXquality (LMX)			<b>.44**</b>	1.82**			<b>-.06</b>	-.03			<b>.04</b>	.21
- Job autonomy (JA)			<b>.21**</b>	-.44			<b>.35**</b>	-.05			<b>.23**</b>	-.72
Step 4												
- PP x LMX				<b>-1.67**</b>					<b>.12</b>			<b>1.46*</b>
- PP x JA				<b>1.00<sup>†</sup></b>					<b>.80<sup>†</sup></b>			<b>.29</b>
- LMX x JA				<b>-.08</b>					<b>-.27</b>			<b>1.45**</b>
F-value	1.37	4.05**	17.41**	14.56**	1.88 <sup>†</sup>	30.03**	34.53**	26.28**	.52	8.16**	13.67**	12.05**
R <sup>2</sup>	.03	.10	.38	.41	.04	.44	.54	.55	.01	.18	.23	.27
Adjusted R <sup>2</sup>	.01	.07	.36	.38	.02	.43	.53	.53	-.01	.16	.21	.23
ΔR <sup>2</sup>	-	.06	.29	.02	-	.41	.10	.00	-	.17	.05	.02

Note:  $N = 293$ ,  $^{\dagger} p < .10$ ;  $* p < .05$ ;  $** p < .01$ .

Figure 1. Interaction Effect of LMX and Proactivity on Organizational Commitment

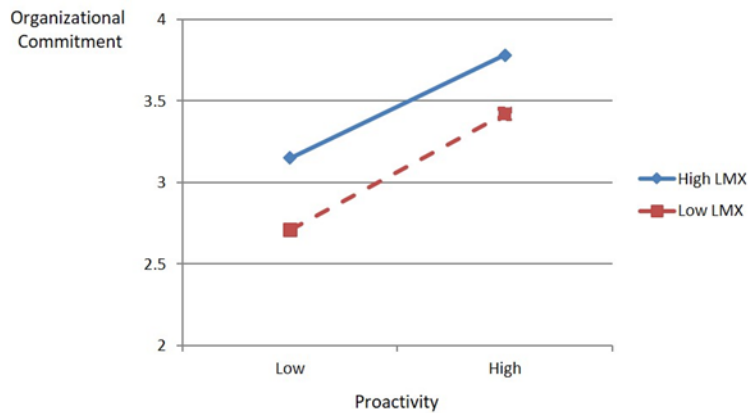


Figure 2. Interaction Effect of LMX and Proactivity on In-Role Job Performance

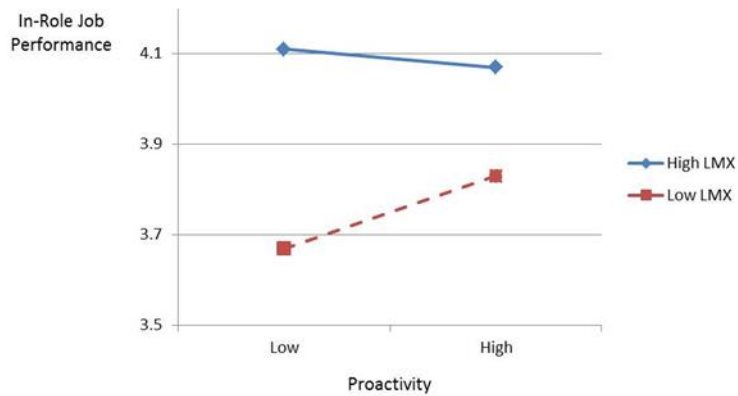
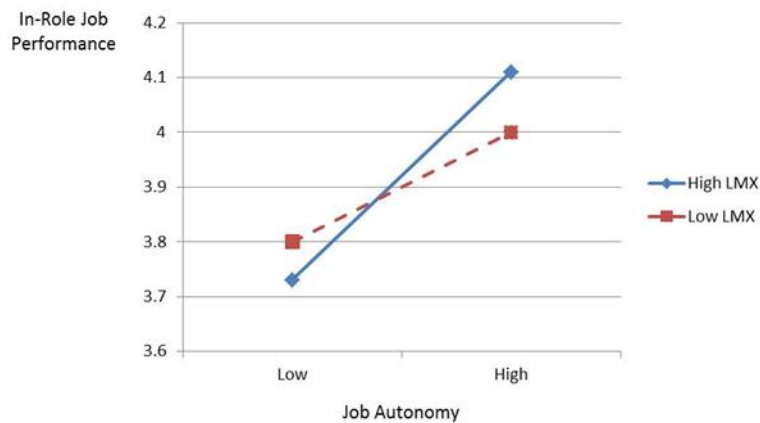


Figure 3. Interaction Effect of LMX and Job Autonomy on In-Role Job Performance



To summarize the major findings of this study, proactive personality correlated positively to employee creativity, organizational commitment, and in-role job performance. Employees with higher proactive personality measures reported more creative behaviors, higher organizational commitment, better performance, and they perceived better relationships with

their managers and reported higher job autonomy. Of course, the correlational portion of the study can certainly be criticized for “common method variance,” with the argument that employees self-reporting these cross-sectional measures (all from the same instrument) would certainly lead to correlation (Lindell & Whitney, 2001). But on the other hand, the correlations between the major variables of interest in this study, proactive personality and creativity, organizational commitment, and in-role job performance were all quite robust (especially with creativity and job performance) and beyond the threshold of correlation associated with common method variance (Lindell and Whitney, 2001). Of interest in this study is that the large Korean sample from a world-renown global industrial leader responded in line with expectations hypothesized based on Western organizational behavior literature.

In hierarchical multiple regression, proactive personality was shown to positively influence the level of creative behavior, organizational commitment, and in-role job performance. On the other hand, proactive personality seemed much more influential in explaining variation in creative behavior and in-role job performance while the contextual factors of LMX and job autonomy were shown to be more influential in explaining variation in organizational commitment. Proactive personality was especially influential in creative behavior and job performance in a model controlling for all of the demographic factors as well as the contextual variables. The main effect of proactive personality on organizational commitment was insignificant controlling for the contextual factors of LMX and job autonomy. In the model containing both proactivity and the contextual variables, LMX was influential on organizational commitment but its influence was insignificant on creative behavior and in-role job performance. In the model containing all main effects, job autonomy was found to significantly influence all three outcome variables (creativity, organizational commitment, and job performance).

Although the quality of LMX played a pivotal role in predicting organizational commitment, its main effect on creative behavior and in-role job performance were relatively weak. Through assessment of interaction, however, LMX was found to be a strong moderator. First, LMX quality moderated the relationship between proactive personality and organizational commitment. Those reporting high LMX who also were high in proactive personality indicated a much higher level of organizational commitment (see Figure 1). In general, LMX enhanced proactivity and proactivity enhanced LMX in influencing organizational commitment. Next, as shown in Figure 2, the high LMX group indicated a relatively high level of perceived job performance regardless of the level of proactivity. On the other hand, we found that proactivity mattered greatly in predicting job performance in the low LMX group, perhaps indicating that LMX (while beneficial overall) is much more important in less proactive individuals and perhaps not nearly as critical for highly proactive individuals. Highly proactive individuals actually performed slightly (minimally) lower in the high LMX setting. Finally, job autonomy appears to greatly improve perceived job performance among all respondents but appears especially critical among high LMX respondents (Figure 3). In other words, the level of job autonomy was positively related to job performance overall, but the influence was greater among respondents reporting high LMX quality. High LMX respondents actually performed slightly (again minimally) lower than low LMX respondents in the low job autonomy environment.

#### D. Implications and Limitations

This study managed to integrate research on proactive personality, leadership, performance, creativity, and organizational commitment. Supporting previous research, this study found that it takes positive aspects at the job level (job autonomy) as well as at the interpersonal or group level (LMX quality) and individual level (proactivity) in order to generate positive organizational outcomes. We were able to show the importance of proactive personality in influencing employee creativity, job performance and to a lesser extent organizational commitment (given high LMX levels). Only a limited amount of research has explored how proactivity serves as an antecedent for the three criterion variables. The strong positive main effect of proactivity on creative behavior (controlling for the contextual variables of LMX and job autonomy) was especially instructive. This study attempted an interactional approach. The interactionist theories suggest that employees' attitudes and behaviors are the results of the continuous interactions between person and contextual or situational factors (Ostroff & Schulte, 2007). Of special interest and importance was that LMX was found to greatly enhance the positive impact of proactivity on commitment and performance, while LMX was also shown to enhance the value of autonomy in influencing performance.

This study was conducted in an international context, based on Korean respondents from a global industrial giant, and more broadly in an East Asian (non-Western) cultural context. Hypotheses were built utilizing primarily Western-based literature and expectations based on previous Western studies. Interestingly, we found very similar correlations and findings in this large Korean sample. Organizational commitment, creativity, and in-role performance in the international context needs indigenous research in which researchers focus their attention on identifying and uncovering unique the unique factors enhancing or inhibiting these outcomes embedded in a non-Western context. In this research, findings were in keeping with the predictions based on previous research conducted in Western environments. The results seem to indicate that despite cultural propensities and tendencies (quite different from Western culture), the variables studied seem to relate to one another and behave in at least a similar fashion. Researchers should delve more deeply into the dynamics of organizational behavior in Korea to better uncover the dynamics and causal forces influencing these various measures. Additional studies should also look at these variables in other cultural settings.

The primary limitation of this study was that data was gathered using a single collection tool in a single organization in a single cultural setting. Common methods variance was certainly at play and no doubt influenced the correlation among factors. It is also very likely that the results are limited somewhat by the fact that the vast majority of respondents were well-educated male managers in their 30's. Perhaps it is the heavy influence of education, training, experience, and global awareness among these young managers of a global super-corporation that compels these results in a Korean cultural setting to so closely mirror findings in Western settings. No doubt future research should study multiple companies and more varied respondents in general.



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