

Gender Differences in Career Planning and Success

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Abstract

Purpose – The purpose of this paper is twofold. First, it attempts to examine how employees' career planning (CP) interacts with the quality of leader-member exchange (LMX) to explain subjective career success. Second, the authors investigate how the pattern of such interactions differs between male and female employees.

Design/methodology/approach – To increase the generalizability, the study tested hypotheses in two studies whose data were collected in different national settings. Study 1 was designed to analyze 144 Korean employees and Study 2 investigated 140 Japanese employees. Both groups of employees worked for privately owned firms.

Findings – The authors found a three-way interaction effect between gender, CP, and LMX quality in predicting subjective career success. As hypothesized, the positive relationship between quality of LMX and subjective career success was stronger for males with high CP, whereas for females such a stronger relationship was found for women with low CP.

Research limitations/implications – This study contributes to the literature in two ways. First, it extends career research by considering the interactive effects of individual and interpersonal factors on employees' subjective career success. Second, it combines the research streams of social exchange theory (LMX), career theory (the boundaryless career), and gender theory (agentic and communal personality traits). This suggests that the ideas of the three theories could serve together as a useful framework for explaining gender differences in subjective career success through setting career goals and building relationships with supervisors.

Practical implications – The findings have important practical implications for managers and leaders, who generally seek to motivate their employees toward career achievement.

Originality/value – This study is one of the first to provide a new perspective for understanding the process by which men and women perceive their subjective career success differently with regard to social exchange relations with their supervisors and CP.

Keywords: Gender, Leader-member exchange, Subjective career success, Career planning, Three-way interaction effect

Paper type: Research paper

Introduction

As organizations worldwide become more diverse, flexible, and complex in the face of fierce global competition, the role of *career planning* (CP) has become crucial for both employees and employers. CP refers to individuals setting career goals and devising strategies for achieving them (Gould, 1979). Traditionally, its meaning has been narrowly defined in that career goals are more internal and organization-based, and thus planning tends to be limited to that which occurs within organizational boundaries. In contrast to this traditional notion of the bounded career, a new career paradigm has arisen, the boundaryless career (Arthur and Rousseau, 1996). This emphasizes the importance of individuals' career-related self-management behaviors even across organizational boundaries (Arthur *et al.*, 2005; De Vos *et al.*, 2009).

From this new perspective, many career researchers have begun seeking exclusively strong predictors of employees' *subjective career success*—a measure that places a higher value on the individual's own internal criteria for job and career achievement, rather than on external measures, such as salary level or promotions attained within the organization (e.g., Armstrong and Ursel, 2009). Although such studies have examined various antecedents of subjective career success, including individual and interpersonal factors (e.g., Singh *et al.*, 2009), few have offered or empirically tested a comprehensive model explaining individuals' perceptions based on how these factors interact to lead to subjective career success (e.g., Bozionelos, 2009).

At the individual level, many studies have identified gender differences in career attitudes and behaviors as one of the most influential factors accounting for subjective career success (e.g., Abele and Spurk, 2009). At the interpersonal level, however, studies have often emphasized the link between the support of organizational leaders and individuals' career success (e.g., Harris *et al.*, 2009). Several studies have demonstrated that the quality of leader-member exchange (LMX) relationships is an important determining factor fostering

subordinates' subjective career success (e.g., Byrne *et al.*, 2008). But the mechanisms have yet to be explored by which men and women may perceive their career success differently in relation to their experiences of such social exchange relationships with supervisors as well as to their planning and achieving career goals.

To fill this important gap, this study sheds light on examining gender differences in the relationships between CP, LMX quality, and subjective career success. More specifically, the major purpose of this study is twofold. First, supplementing the CP literatures (e.g., Zikic and Klehe, 2006) with social exchange theory (Blau, 1964), this study attempts to examine how employees' CP interacts with LMX quality to explain subjective career success. According to Heslin (2005), subjective career success comprises multiple individual attitudes related to careers, including job and career satisfaction (e.g., Erdogan and Bauer, 2005) and career commitment (e.g., Bowling and Hammond, 2008). Second, combining the new career paradigm literature (e.g., Sullivan and Arthur, 2006) with the theory of agentic and communal personality traits (Bakan, 1966), we will investigate how the pattern of such interactions differs between male and female employees. To achieve these objectives, the study will adopt the constructive replication approach, empirically demonstrating our hypotheses in two different countries, Japan and Korea. This will help increase the generalizability of findings if we are able to observe any identical findings across different populations.

In exploring this issue, we contribute to the literature in two ways. First, this study extends career research by considering the interactive effects of individual and interpersonal factors on employees' subjective career success. This offers new guidelines for understanding the concepts of CP, which has been seen as a traditional career factor affecting mainly objective career success, by asserting whether it amplifies an expected positive relationship between LMX

and subjective career success. Second, this study will provide fresh insights into the process by which men and women perceive subjective career success differently, by testing the interactive effects of gender, CP, and LMX relationships on subjective career success. In doing so, we bind the research streams of social exchange theory (LMX), career theory (the boundaryless career), and gender theory (agentic and communal personality traits) within a single research framework. This suggests the possibility that the ideas of the three theories could serve together as a useful framework for understanding differences in the effects of CP and LMX relations on subjective career success of male and female employees.

Theory and hypotheses

LMX and subjective career success

One of the most important social support variables, LMX has been found to increase individuals' subjective career success (Byrne *et al.*, 2008). Developed from social exchange theory (Blau, 1964), the principal idea of LMX is that leaders develop relationships of varying quality with different employees, thus providing different formal and informal rewards. In response to receiving more benefits from their immediate leaders, employees perceived as in-group members by their supervisors are likely to have a higher commitment to them and, as a result, the two will build a high-quality dyadic exchange relationship (Erdogan and Enders, 2007).

Specifically, formal rewards provided to subordinates can lead to greater decision influence, empowerment, career advancement, and salary progress (Byrne *et al.*, 2008). The informal rewards subordinates receive include abundant communication with supervisors and frequent feedback, which makes them feel more satisfied with their immediate leaders, their

jobs/careers, and the organization in general (Byrne *et al.*, 2008). Therefore, once a high-quality relationship between a leader and a subordinate is established, the employee may develop a better sense of his own career success by enjoying the formal and informal rewards brought about by the resulting LMX. Therefore, this study proposes the following:

H1. LMX quality is positively related to an employee's subjective career success, including job satisfaction (H1a), career commitment (H1b), and career satisfaction (H1c).

Career planning, LMX, and subjective career success

CP has long been defined as a deliberate process of becoming aware of self, opportunities, constraints, choices, and consequences (Gould, 1979). Early research on CP tended to look at the unemployed or student jobseekers only, rather than those already employed within organizations, despite the commonly accepted view that “career planning is not a once-in-a-lifetime but an ongoing activity” (Zikic and Klehe, 2006, p. 393). Recently, CP has been redefined as the activities undertaken by individuals to think ahead and to manage their careers (Zikic and Klehe, 2006); this contrasts with organizational CP, which refers to the way an organization plans and develops its employees. Relying on goal-setting theory (Locke and Latham, 2006), in which the degree of a goal's specificity determines its achievement, Zikic and Klehe (2006) explained that one's goals reflect one's efforts, suggesting that individuals who undertake well-defined, explicit CP will make an effort to achieve their career goals and consequently attain more successful careers than those who do not.

Drawing on social exchange theory (Blau, 1964), this study suggests that an employee's

CP should amplify the expected positive relationship between LMX quality and subjective career success. Specifically, a good social exchange relationship with supervisors may be an important device for the career progress of employees with explicit career goals within their organization. In other words, establishing better LMX relationships may be an integral part of CP within the organization for those with well-planned careers, thus leading to a greater sense of subjective career success. On the other hand, building a good relationship with supervisors has little to do with subjective career success for employees with poor CP, because they are typically “less” future- and goal-orientated (Gould, 1979; Zikic and Klehe, 2006). Since LMX signals a reciprocal, long-term, and goal-oriented relationship between supervisor and subordinate, those with poor CP may see the relationship as relatively independent from their careers. Therefore, we propose the following:

H2. CP moderates the positive relationship between LMX quality and subjective career success. Therefore, the relationships between LMX and job satisfaction (H2a), between LMX and career commitment (H2b), and between LMX and career satisfaction (H2c) are stronger among employees who report a high level of CP.

Gender differences in the relationships between career planning, LMX, and subjective career success

Many researchers have argued that males and females have different mechanisms of perception regarding career success. Our literature reviews on career and gender studies suggest that two theoretical explanations may be of great relevance to this point.

First, from the boundaryless career perspective, Sullivan and Arthur (2006) explained

that men's career orientation is directed towards physical, traditional career success, and thus tends to be bounded in a hierarchical organization. Women's career orientation is directed more towards psychological, nontraditional career success, so women tend to conform to the concept of the boundaryless career. Accordingly, CP focus seems to differ for men and women. Some career studies focusing on gender differences (Mainiero and Sullivan, 2005) suggest that men and women perceive success differently in terms of their view of how social exchange relationships with supervisors can be instrumental.

Specifically, male employees, who tend to have more traditional and bounded career orientations (Segers *et al.*, 2010), may consider their immediate supervisors to play key roles in enabling their career success. The more clearly men plan their careers, which by nature tend to be bounded within organizations, the stronger the quality of the exchange relationships they are likely to have with their immediate supervisors. This is because they expect high-quality LMX relationships, which can be instrumental in career success inside the organization, to provide abundant career opportunities. In contrast, female employees, who tend to hold more non-traditional and boundaryless career orientations (Sullivan and Arthur, 2006), are likely to be less dependent on their supervisors for career success and thus to have relatively lower-quality LMX relationships with their immediate supervisors. Because of the differences in career orientation and focus, female employees tend not to perceive high-quality LMX relationships with supervisors as an important tactic in achieving success, even if they have clear and explicit goals.

On the other hand, where CP is more ambiguous, the social exchange behaviors of both men and women tend to reflect their innate personality characteristics rather than their motivation to achieve career goals. The theory of agentic and communal personality traits

(Bakan, 1966) suggests that females can be characterized as having communal personality traits (more interpersonal and dependent than males), and males as having agentic personality characteristics (which tend to be self-directed and independent) (Seibert *et al.*, 1999). Thus, if female employees have relatively ambiguous and weak CP, they tend to satisfy their career success needs by seeking interpersonal support from their immediate supervisors. In contrast, male employees with ambiguous CP will be more likely to pursue career success by controlling the environment through their own efforts rather than relying on immediate supervisors' support.

Therefore, the boundaryless career perspective can explain gender differences in the relationship between LMX quality and subjective career success for employees with a high level of CP, whereas the theory of agentic and communal personality traits might perform the same function for employees with a low level of CP. Combining these arguments, we predict the following:

H3. There is a three-way interaction effect between gender, CP, and LMX quality in predicting subjective career success, including job satisfaction (H3a), career commitment (H3b), and career satisfaction (H3c). Specifically, for male employees, the positive relationships between LMX and job satisfaction (H3a), between LMX and career commitment (H3b), and between LMX and career satisfaction (H3c) are stronger for those who report a higher level of CP. On the other hand, for female employees, the relationships are stronger for those who report a lower level of CP.

We were unable to measure subjective career success in Korea and Japan with the same

multidimensional measures. Thus, in Study 1, using job satisfaction and career commitment as measures for subjective career success, we tested Hypotheses 1a-b, 2a-b, and 3a-b based on data from 144 Korean employees. In Study 2, using career satisfaction as a measure for subjective career success, we examined Hypotheses 1c, 2c, and 3c based on the data of 140 Japanese employees.

Study 1: Method

Sampling and data collection procedures

We administered questionnaire surveys in Korea to collect data as follows. First, one of the authors contacted HR managers at several companies in Korea and asked permission to conduct a survey of their employees. This study targeted seven companies in the manufacturing, wholesale, service, construction, and transportation industries, which allowed us to visit and conduct a survey of randomly selected full-time employees.

Second, we visited each company and distributed the survey questionnaires to a group of employees at each site. The random sampling in each job category at each company was done using employee ID numbers. In total, 144 out of 180 (80.0%) questionnaires were collected complete. The percentage of employees working for the manufacturing, wholesale, service, construction, and transportation industries were 29.9%, 22.2%, 20.1%, 13.9%, and 13.9%, respectively. Women constituted 22.2%; employees had on average worked in their current organizations for 6.8 years; and 79.2% had at least a college education.

Measures

The questionnaire items were originally constructed in English and then translated into

Korean by two bilingual professional translators. A back-translation process (Brislin, 1986) was then conducted in which the items were translated back to English by bilingual professional translators who had not participated in the previous English-to-Korean translation. Finally, the translations were checked by a third bilingual professional translator to ensure that English and Korean versions of the items were highly similar. A 7-point Likert-type scale was used (1=*strongly disagree*, 7=*strongly agree*) in the following measures.

LMX. LMX quality was assessed using the 12-item LMX-Multidimensional (LMX-MDM) scale developed by Liden and Maslyn (1998). Although four dimensions of LMX-MDM can be used (affect, professional respect, loyalty, and contribution), Liden and Maslyn (1998) found support for a higher order factor that allows for a composite of all items to be used as a measure of global LMX scale. To determine the factor structure for LMX-MDM in the current study, we conducted a principal component factor analysis (PCFA) of 12 items. In line with Liden and Maslyn's (1998) findings, this research found that all loaded above .70 on a single factor accounting for 71.16% of variance, with an eigenvalue of 8.54. This construct was not considered multidimensional in the present study. We therefore combined the 12 items into a single scale.

Career planning. This study measured CP using the six-item CP scale developed by Gould (1979), which has been widely used (e.g., Abele and Wiese, 2008). To determine the factor structure for CP in the current study, we conducted a PCFA of six items, which confirmed that all six loaded highly on a single factor accounting for 61.21% of variance. All loaded above .55, with an eigenvalue of 3.67. We therefore combined the six items into a single scale.

Gender. Gender was measured with a dummy variable coded 0 for women or 1 for men.

Subjective career success. Many studies on subjective career success have assessed it

using proxy variables, such as job satisfaction and career commitment (e.g., Bowling and Hammond, 2008; Harris *et al.*, 2007). We used these same two variables. We measured job satisfaction using the three-item scale developed by Cammann *et al.* (1983). PCFA confirmed that the three items loaded highly on a single factor that accounted for 84.18% of variance. The three items loaded above .90, with an eigenvalue of 1.68. To assess career commitment, we adapted the six-item scale for career commitment from the scales developed by Meyer *et al.* (1993). PCFA confirmed that the six items loaded highly on a single factor that accounted for 69.82% of variance. The six items loaded above .55, with an eigenvalue of 4.19. We combined the six items into a single scale.

Control variables. This study controlled for several variables to avoid potential confounding effects on our dependent variables (Van Dyne and Lepine, 1998): age, length of time working with leader, education level, firm size, and position. Also, firms in the sample were drawn from five different industries (i.e., manufacturing, construction, transportation, wholesale, and service), which face different conditions. This study therefore created four dummy-coded variables with service as the omitted industry and controlled for them in the regression analyses. Table 1 shows the correlations among the variables for the Korean sample.

== **Insert Table 1 about here** ==

Study 1: Results

Confirmatory factor analyses

Before testing the hypotheses, we performed a confirmatory factor analysis (CFA) to examine the distinctiveness of each construct used in the study, because they might be conceptually similar to some degree. The CFA of a hypothesized four-factor model, including

two independent variables (LMX and CP) and two dependent variables (job satisfaction and career commitment), yielded fit indexes within an acceptable fit ($\chi^2=961.22$, $df=318$, $IFI=.95$, $CFI=.95$). We compared these results with those of two alternative models: (a) a one-factor model in which all four measures were combined into one overall factor, and (b) a null model in which all measures were assumed to have variances but no relation with one another. The one-factor model ($\chi^2=2103.64$, $df=324$, $IFI=.86$, $CFI=.86$) and the null model ($\chi^2=13423.27$, $df=378$, $IFI=.00$, $CFI=.00$) showed significantly poorer fit than the hypothesized four-factor model. Furthermore, nested chi-square difference tests indicated that the hypothesized four-factor model was a better fit than both the one-factor model ($\Delta\chi^2=1142.42$, $\Delta df=6$, $p<.001$) and the null model ($\Delta\chi^2=12462.05$, $\Delta df=60$, $p<.001$). These results verified the examination of four variables (i.e., LMX, CP, job satisfaction, and career commitment) as distinct constructs.

Tests of hypotheses

We investigated Hypothesis 1 postulating the direct effect of LMX on subjective career success using a hierarchical multiple regression analysis (HMRA). As shown in Models 1a and 2a of Table 2, LMX was significantly and positively related to job satisfaction ($\beta=.33$, $p<.001$) and career commitment ($\beta=.34$, $p<.001$). These findings support Hypotheses 1a and 1b.

As shown in Table 2, we analyzed the moderation hypotheses with HMRA and entered controls (i.e., age, length of working with leader, educational background, position, industries, and firm size) with gender in Step 1, LMX in Step 2, and CP in Step 3. To test Hypotheses 2a and 2b, we entered only a focal, hypothesized, two-way interactive term (LMX \times CP) in Step 4 of each regression model of Models 1b and 2b. To test Hypotheses 3a and 3b, which necessitated a statistical test of three-way interactive effects (Gender \times LMX \times CP), we controlled for all two-way

interaction effects of each component of the focal three-way interaction in Step 4 (i.e., Gender×LMX, Gender×CP, and LMX×CP). Finally, we entered the three-way interaction effects in Step 5. The test of these three-way interactions was based on regression Models 1c and 2c in Table 2.

== Insert Table 2 about here ==

As can be seen in Models 1b and 2b of Table 2, the results show a significant and positive two-way interaction effect between LMX and CP on job satisfaction ($\beta=.17, p<.05$), but not on career commitment ($\beta=.07, p>.10$). Following the recommended method of plotting an interaction term (Aiken and West, 1991; Jaccard and Turrisi, 2003), we graphed the above significant interaction effect as shown in Figure 1. The cut-off values of high and low LMX and CP scores were one standard deviation above and below the means, respectively. As hypothesized, the slope of the high CP group was found to be steeper than that of the low CP group. Therefore, the findings support Hypothesis 2a, but not Hypothesis 2b.

Next, the results revealed, as shown in Models 1c and 2c of Table 2, significant and positive three-way interaction effects between LMX, CP, and gender on both job satisfaction ($\beta=.27, p<.01$) and career commitment ($\beta=.17, p<.05$). To determine the extent to which the forms of the interactions for female and male employees matched, we illustrated the results presented in Models 1c and 2c with four figures. Figures 2 and 3 show the interactive relationships between LMX and subjective career success, namely job satisfaction and career commitment, with two lines representing employees with low and high levels of CP in the Male and Female groups, respectively. As shown in Figure 2, the positive relationship between LMX and job satisfaction was stronger among males with a high level of CP. Conversely, Figure 2

shows the relationship was stronger among females with a low level of CP. Similar trends relating to the relationship between LMX and career commitment are also found in Figure 3. These findings consistently support Hypotheses 3a and 3b.

== Insert Figures 1, 2, 3 about here ==

Post-hoc analyses

To check the salience of common method variance, we undertook partial correlation analysis using a marker variable. This technique attempts to control for common method variance by including a measure of the assumed source of method variance as a covariate in the statistical analysis. Application of this technique requires inclusion of a variable that is theoretically unrelated to at least one of the focal variables. The correlation observed between the marker variable and the theoretically unrelated variable is interpreted as an estimate of common method variance (Lindell and Whitney, 2001). Simultaneously, this is assumed to be the extent of common method variance contaminating every correlation in the study. Consequently, partialling out the correlation of the marker variable results in correlation values uncontaminated by common method variance (Lindell and Whitney, 2001). Following previous studies (e.g., Krishnan *et al.*, 2006), we chose the “position rank” of the respondent as the marker variable. As shown in Table 3, the differences between the original correlations (i.e., zero-order correlations) and the corrected correlations after removing common method variance (i.e., partial correlations) were not significant. This suggests that common method bias was not a serious problem in the current study (Lindell and Whitney, 2001).

== Insert Table 3 about here ==

Study 2: Method

Sampling and data collection procedures

To increase the generalizability of the proposed hypothesized relationships, we carried out Study 2 using data collected from Japanese samples. Although Study 1 supported most of the working hypotheses in Korea, we wanted to provide additional evidence about whether these hypotheses would be further supported by data from other geographical locations in East Asia.

We conducted the Study 2 survey using a private company specializing in online survey administration in Japan. This study targeted randomly selected samples of full-time employees aged 20–49. In particular, to rule out the varying effects of the different conditions in different industries on individuals' subjective career success, we drew the firms in the sample from the manufacturing industry. In total, we collected 140 Japanese surveys. Women represented 30.7% of the sample. Average tenure with their current organization was 12.6 years. Almost two-thirds (69.3%) had at least a college education.

Measures

In accordance with Study 1, we employed LMX, CP, and subjective career success. Because the questionnaire items were originally constructed in English, we performed translation and back-translation (Brislin, 1986) to assure equivalence of the measures in Japanese and English, as above. A 7-point Likert-type scale was used (1=*strongly disagree*, 7=*strongly agree*) in the following measures, except LMX.

LMX. The respondents were asked to assess the quality of their LMX relationships using Graen and Uhl-Bien's (1995) LMX-7 scale. LMX-7 comprises seven items characterizing the overall effectiveness of the supervisor-subordinate relationship, and has been used in

previous studies (e.g., Golden and Veiga, 2008; Harris *et al.*, 2009; Hooper and Martin, 2008) and has strong compatibility with Liden and Maslyn's (1998) LMX-MDM scale that was used in Study 1. Following Graen and Uhl-Bien's (1995) recommendation, we applied a 5-point Likert-type scale ranging from 1 to 5 to each question. To determine the factor structure for LMX-7, we conducted a PCFA of seven items. The results showed that all loaded above .60 on a single factor that accounted for 63.22 % of variance, with an eigenvalue of 4.43. We therefore combined the seven items into a single scale.

Career planning. CP was assessed using the six-item CP scale developed by Gould (1979). PCFA was utilized to determine the factor structure for CP items. This CP scale was found to be a single construct in Study 1 based on the Korean sample, whereas Study 2 found that a two-factor structure converged after three iterations using a Varimax rotation method. In particular, although one negatively worded item (i.e., "I change my career objectives frequently") represented ambiguous CP, it was found to reflect clear CP in the current study. Moreover, two other negatively worded items that loaded on the second factor were inconsistent with the CP structure. Thus, we used the three highest-loading items of the six-item CP scale, excluding the three negatively worded items that probably confused respondents.

Gender. Gender was measured with a dummy variable coded 0 for women or 1 for men.

Subjective career success. Career satisfaction has been measured as a proxy variable for subjective career success as frequently as job satisfaction and career commitment (e.g., Singh *et al.*, 2009; Todd *et al.*, 2009). Accordingly, in Study 2, we used the five-item career satisfaction scale developed by Greenhaus *et al.* (1990). PCFA confirmed that all five items loaded highly and positively on a single factor that accounted for 77.24% of variance. All loaded above .80, with an eigenvalue of 3.86. We thus combined the five items into a single scale.

Control variables. In Study 2, we controlled for several variables to avoid potential confounding effects on the dependent variable (Van Dyne and Lepine, 1998): age, length of time working with leader, education level, firm size, and position. Although Study 2 sampled employees in one industry (manufacturing), the sample consisted of five different manufacturing sub-groups (i.e., chemical and allied products; electrical machinery, equipment, and supplies; electronic parts, devices, and electronic circuits; transportation equipment; and food) facing different conditions. Therefore, this study created four dummy-coded variables with manufacture of food as the omitted industry, and controlled for them in the regression analyses. Table 4 shows the correlations among the variables for the Japanese sample.

== **Insert Table 4 about here** ==

Study 2: Results

Confirmatory factor analyses

We performed CFA to examine the distinctiveness of each construct used, because they might be conceptually similar to some degree. The CFA of a hypothesized three-factor model, including two independent variables (LMX and CP) and one dependent variable (career satisfaction), yielded fit indexes within an acceptable fit ($\chi^2=147.74$, $df=87$, IFI=.96, CFI=.96). We compared these results with those of two alternative models: (a) a one-factor model in which all three measures were combined into one overall factor, and (b) a null model in which all measures were assumed to have variances but no relations with one another. The one-factor model ($\chi^2=864.70$, $df=90$, IFI=.47, CFI=.47) and the null model ($\chi^2=1551.47$, $df=105$, IFI=.00, CFI=.00) showed a significantly poorer fit than the hypothesized three-factor model. Furthermore, nested chi-square difference tests indicated that the hypothesized three-factor

model was a better fit than the one-factor model ($\Delta\chi^2=716.96$, $\Delta df=3$, $p<.001$) and the null model ($\Delta\chi^2=1403.73$, $\Delta df=18$, $p<.001$). Thus, these results verified the examination of three variables (i.e., LMX, CP, and career satisfaction) as distinct constructs.

Tests of hypotheses

Table 5 shows the HMRA results on which we tested Hypotheses 1c, 2c, and 3c using the Japanese employee data.

First, we investigated Hypothesis 1c postulating the direct effect of LMX on career satisfaction. As shown in Model 1 of Table 5, LMX was significantly and positively related to career satisfaction ($\beta=.33$, $p<.001$). This indicates that LMX directly influences career satisfaction, supporting Hypothesis 1c.

Second, regarding the expected moderating effect of CP on career satisfaction Hypothesis 2c (seen in Model 2 of Table 5), the results showed no significant two-way interaction effect between LMX and CP on career satisfaction ($\beta=-.08$, $p>.10$), unlike in Study 1. Therefore, Study 2 does not support Hypothesis 2c.

== Insert Table 5 about here ==

Third, we tested Hypothesis 3c's prediction that the interaction effect of LMX and CP on career satisfaction would differ between male and female employees. The results revealed, as shown in Model 3 of Table 5, significant and positive three-way interaction effects between LMX, CP, and gender on career satisfaction ($\beta=.25$, $p<.01$). Figure 4 graphically displays that significant interaction. The positive relationship between LMX and subjective career success was stronger among males with a high level of CP. Conversely, as presented in Figure 4, the

relationship was stronger among females with a low level of CP. These findings, which are consistent with Study 1, support Hypothesis 3c.

== Insert Figure 4 about here ==

Post-hoc analyses

To address the common method variance issue, we conducted the marker variable technique in Study 2 as in Study 1. Study 2 used the length of time working with leader as the marker variable. Table 6 shows that the differences between the original correlations and the corrected correlations after removing common method variance were not major, suggesting that common method bias was not a serious problem (Lindell and Whitney, 2001).

== Insert Table 6 about here ==

Discussion

Theoretical contributions and practical implications

Overall, this study has documented how an employee's CP interacts with LMX quality to explain subjective career success as well as gender differences in the relationships between these factors. In particular, based on the social exchange, boundaryless career, and agentic-and-communal personality theories, we assumed that male and female employees behave differently in pursuing intrinsic career success. The findings of Study 1 and Study 2 provide consistent support for this gender-as-a-moderation-hypothesis, thereby making several theoretical and practical contributions.

First, the findings of the two-way interaction effects of LMX and CP on subjective career success were partially supported, since we found a hypothesized significant effect on job

satisfaction, but not on career commitment or career satisfaction. The interaction plots of the moderating effect of CP on the relationship between LMX quality and job satisfaction indicate that employees who engaged in more explicit CP tended to display a stronger positive relationship between LMX and job satisfaction. As discussed above, this result suggests that individuals need to set clear career goals and strategies to achieve them in order to gain greater subjective career success, even if they are supported by their supervisors in a high-quality LMX relationship. In particular, the result provides new evidence for how CP is related to subjective career success, since previous career studies have considered CP as a traditional career factor affecting mainly objective career success. Therefore, this study extends career studies that have made simple observations on the effects of organizational or social support factors and/or individual factors on career success by showing how an employee's CP and LMX quality mutually interact to influence subjective career success.

Second, this research provides new evidence for career studies by proposing and testing a broader model that incorporates the interactions of individuals (such as gender differences and CP) with social support (such as LMX) factors to influence subjective career success. In doing so, it combines the research streams of social exchange theory (LMX), career theory (the boundaryless career), and gender theory (agentic and communal personality traits). This suggests that the ideas of the three theories could serve together as a useful framework for explaining gender differences in subjective career success through setting career goals and building relationships with supervisors. Specifically, the findings show that when male employees have well-defined, clear career plans, the positive relationship between LMX and subjective career success is stronger than for males with more ambiguous career plans, whereas the opposite is true for female employees. That is to say, for females with less CP clarity, the relationships are

stronger than for females who do have explicit goals. These results suggest that where both men and women have explicit career plans, their LMX behaviors tend to adhere to male-bounded and female-boundaryless career prediction (Sullivan and Arthur, 2006). On the other hand, when both sexes have unclear plans, their respective LMX behaviors seem to be reflected in male-agentic and female-communal personality traits (Bakan, 1966).

Finally, the findings of this study also have important practical implications for managers and leaders, who generally seek to motivate their male and female employees towards career achievement. In particular, if a manager has a female employee with an ambiguous career plan, it will be especially important to provide her with career support by building a high-quality LMX relationship in order to increase her sense of career success (i.e., female communal personality traits). On the other hand, an organization may encourage male employees with unclear career plans to explore suitable career paths within the organization by providing various career development workshops and programs that would help and guide them to active career self-management (Briscoe and Hall, 2006; King, 2004).

Cultural considerations

Since our study sought to contribute to the general theories described above, we adopted a constructive replication approach to examine our hypotheses using two national groups of samples in a two-study format; that is, Korean and Japanese samples in Studies 1 and 2, respectively. Although empirical tests from the multiple samples gave consistent support to the hypotheses we constructed from the Western-driven research theories, it would be valuable to discuss how the findings obtained from these Asian samples could be extended to other cultural settings.

Korea and Japan share a common cultural root in Confucian culture (Hofstede and Bond, 1988). However, when it comes to the values relevant to gender roles, these two countries seem to vary to a considerable degree, particularly along the cultural dimension of “masculinity—femininity” (Hofstede, 2001). According to Hofstede’s ordering of nations in terms of masculinity index scores, Japan is one of the most masculine societies in the world (i.e. ranked 1st out of 53 countries surveyed), whereas Korea is closer to the feminine end of the continuum (i.e. ranked 41st out of 53) (Hofstede, 2001). In a masculine culture, the role of men is related to “tough values like assertiveness, performance, success and competition” (Hofstede, 1993, p. 90), whereas women’s roles are reflected in “tender values like the quality of life, maintaining warm personal relationships, service, care for the weak, and solidarity” (Hofstede, 1993, p. 90). Males and females from a masculine culture are predisposed to behave in such ways so as to reflect socially prescribed gender roles, such as male-breadwinner and female-homemaker (Hofstede, 2001). The very different degrees to which masculine cultural values are dominant in Japan and Korea, according to Hofstede’s study, may therefore mean that Japan should have more traditional gender-role orientations than Korea.

In this study, we hypothesized, from the theories of social exchange, boundaryless career, and agentic-and-communal personality, that when men and women set a clear CP, their social exchange behaviors would follow their innate career orientations (i.e., a male-bounded and a female-boundaryless career). From the masculinity-femininity perspective, this hypothesis might be more applicable in masculine societies, because it seems to connote the salience of different social and family roles for men and women employees. If this is the case, our Studies 1 and 2, which use Korean and Japanese samples respectively, might yield different findings. For example, there is the possibility that Study 2, which was carried out in the context of a highly

masculine Japanese culture, would reflect more “gendered” career orientations, and so should present much stronger interaction effects of gender on the relationships among CP, LMX, and intrinsic career success than Study 1, which was carried out in the context of a much more weakly masculine Korean culture. However, the present findings in fact reveal virtually identical patterns of interactions in both Korea and Japan. This may serve as partial evidence that masculinity—femininity cultural differences do not distort our predicted psychological mechanisms of how gender affects the relationships among CP, LMX, and intrinsic career success. In short, our findings, which are explained by the general theories of social exchange, boundaryless careers, and agentic-and-communal personality, could be extended to other cultures that embed differential degrees of masculinity—femininity values in society. However, it would be worthwhile to replicate our proposed model particularly in countries with a high degree of femininity (e.g., Sweden, Norway) to further increase the generalizability of the present findings.

Limitations and future research

First, there is the possibility of a common method bias resulting from self-report measures, as with most research surveys (Podsakoff *et al.*, 2003). Because of the constructs of the research, which asked for individuals’ perceptions of the exchange relationships with their supervisors, CP, and subjective career success within the organization, self-reported data were appropriate for this study. But for future research, it will be valuable to clarify how LMX quality and CP interactively influence both subjective and objective measures of career success by adding actual pay increases and the speed of promotions (Graen *et al.*, 2006).

Second, the survey design whereby all data were collected at one time may not fully capture the dynamic nature of career progress and success within an organization as related to

LMX and CP. In future studies, it would be useful to test the interactive effects of LMX and CP on career success measures based on a longitudinal survey design.

Third, the same proxies for subjective career success were not available for the two samples. In this study, we design to use multiple subjective career success measures, following the suggestion by Gunz and Heslin (2005) who noted: “[c]areer scholars have focused on a broader range of subjective career success criteria, guided by career theory” (p. 107). For example, subjective career success has been operationalized as career satisfaction (e.g., Abele and Spurk, 2009), job satisfaction (e.g., Bowling and Hammond, 2008), career commitment (e.g., Bowling and Hammond, 2008), perceived employability (e.g., De Vos and Soens, 2008) and so on. On the other hand, this measurement inconsistency in subjective career success has limited the applicability of subjective career (Gunz and Heslin, 2005). In this study, we found similar interactive effects of gender differences, CP, and LMX on multiple measurements of subjective career success in two samples. Our findings, therefore, may have provided partial evidence of a compatibility of multiple career success scales, including career and job satisfaction, and career commitment for measurement of subjective career success.

Finally, when constructing our hypotheses, we relied on a mechanism that we did not measure directly. We presumed that in the potential career orientation (i.e., the boundaryless career orientation) differences between male and female employees would influence LMX behaviors. We did not, however, measure the extent to which these differences between males and females affected subjective career success. Therefore, future research should include various career orientations (e.g., boundaryless career or protean career). Moreover, future studies are encouraged to consider other situational variables, particularly from the perspective of different levels of analysis (i.e., the organizational or group level) to offer a more comprehensive model of

CP and success.

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Table I.

Correlation matrix for all the variables used in the study 1

Variables	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 Gender	.78	.41	–													
2 Age	1.91	.84	.31 ***	–												
3 Length of working with leader	2.99	3.96	.19 *	.37 ***	–											
4 Educational background	.87	.34	-.41 ***	-.18 *	-.01	–										
5 Position	.64	.66	.38 ***	.62 ***	.58 ***	-.03	–									
6 Industry 1 (Manufacturing)	.70	.46	-.05	.40 ***	.22 **	.19 *	.19 *	–								
7 Industry 2 (Construction)	.86	.35	-.16	-.04	-.22 **	.02	-.36 ***	-.26 **	–							
8 Industry 3 (Transportation)	.86	.35	.03	.20 *	.10	-.12	.32 ***	-.26 **	-.16	–						
9 Industry 4 (Wholesale)	.78	.42	.05	.00	-.25 **	-.28 **	-.16	-.35 ***	-.21 *	-.21 *	–					
10 Firm size	.52	.50	-.09	.09	-.31 ***	-.21 *	-.23 **	-.25 **	.15	-.35 ***	.86 ***	–				
11 Leader-member exchange (LMX)	4.50	1.09	-.04	-.04	-.10	-.19 *	-.04	-.23 **	.25 **	-.03	.09	.21 *	(.96)			
12 Career planning (CP)	3.87	.41	.05	.16	.14	.05	.08	.09	.07	-.05	-.09	-.02	-.01	(.87)		
13 Job satisfaction	4.69	1.27	.14	.24 **	-.07	-.19 *	.10	-.12	.24 **	-.03	.21 *	.33 ***	.42 ***	.01	(.81)	
14 Career commitment	4.91	1.14	.03	.27 **	-.07	-.12	.12	-.10	.27 **	.02	.21 *	.37 ***	.43 ***	-.05	.89 ***	(.91)

Notes: *n* = 144. Gender (0 = “female,” 1 = “male”), age (0 = “10s,” 1 = “20s,” 2 = “30s,” 3 = “40s,” 4 = “50s”), length of time working with leader (self-reported in years), education level (0 = “high school,” 1 = “undergraduate degree or higher”), firm size (0 = “less than 300 employees,” 1 = “300 or more employees”), and position (0 = “non-managerial employee,” 1 = “lower middle manager,” 2 = “middle manager”), industry (four dummy-coded variables that indicated membership in the manufacturing, construction, transportation, and wholesale industries (with service as the omitted industry)). LMX, CP, job satisfaction, and career commitment were on seven-point Likert scales. Cronbach's alpha in a brackets on the diagonal. * *p* < .05, ** *p* < .01, *** *p* < .001.

Table II.

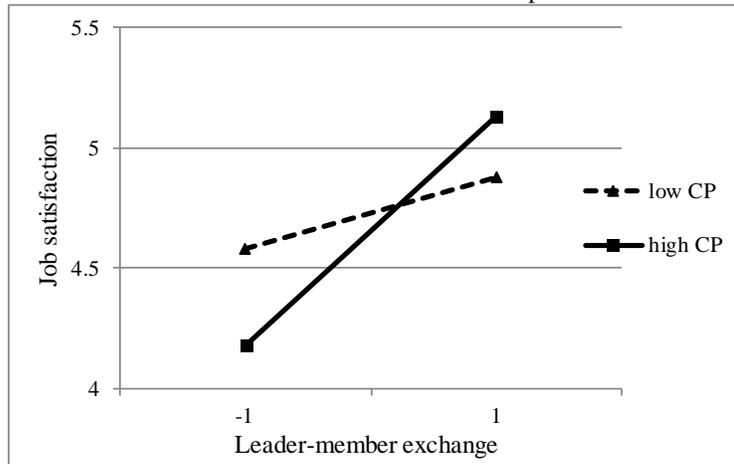
The regression results for job satisfaction and career commitment based on Korean sample in Study 1

	Job satisfaction						Career commitment					
	Model 1a		Model 1b		Model 1c		Model 2a		Model 2b		Model 2c	
	β	(S.E.) t	β	(S.E.) t	β	(S.E.) t	β	(S.E.) t	β	(S.E.) t	β	(S.E.) t
Step 1												
Gender	.14	(.34)	.18	(.34)	.16	(.33)	.04	(.28)	.06	(.29)	.04	(.29)
Age	.07	(.25)	.09	(.25)	.07	(.24)	.05	(.21)	.07	(.22)	.06	(.22)
Length of working with leader	-.06	(.03)	-.06	(.03)	-.06	(.03)	-.07	(.03)	-.06	(.03)	-.06	(.03)
Educational background	.02	(.27)	.06	(.28)	.06	(.27)	.06	(.23)	.08	(.23)	.09	(.23)
Position	.16	(.12)	.12	(.12)	.12	(.11)	.24	(.10)	.22	(.10)	.22	(.10)
Industry 1 (Manufacturing)	.09	(.46)	.06	(.46)	.09	(.45)	.17	(.39)	.15	(.40)	.17	(.40)
Industry 2 (Construction)	.26	(.61)	.22	(.61)	.25	(.59)	.33	(.52) *	.31	(.52) *	.33	(.52) *
Industry 3 (Transportation)	.09	(.46)	.10	(.45)	.14	(.45)	.18	(.39)	.19	(.39)	.21	(.39)
Industry 4 (Wholesale)	.12	(.86)	.02	(.86)	.02	(.84)	.16	(.73)	.10	(.74)	.10	(.74)
Firm size	.19	(.20)	.26	(.20)	.30	(.19)	.25	(.17)	.29	(.17)	.31	(.17)
R^2_1	.24	***	.24	***	.24	***	.29	***	.29	***	.29	***
Step 2												
Leader-member exchange (LMX)	.33	(.10) ***	.32	(.10) ***	.26	(.10) **	.34	(.08) ***	.33	(.08) ***	.29	(.08) ***
R^2_2	.33	***	.33	***	.33	***	.38	***	.38	***	.38	***
$\Delta R^2_{(1-2)}$	.09	***	.09	***	.09	***	.09	***	.09	***	.09	***
Step 3												
Career planning (CP)			-.04	(.24)	-.03	(.24)			-.09	(.20)	-.08	(.21)
R^2_3			.33	***	.33	***			.39	***	.39	***
$\Delta R^2_{(2-3)}$			.00		.00				.01		.01	
Step 4												
LMX \times CP			.17	(.09) *	.06	(.10)			.07	(.07)	.00	(.08)
Gender \times LMX					.02	(.10)					.04	(.09)
Gender \times CP					-.06	(.12)					-.03	(.10)
R^2_4			.36	***	.36	***			.39	***	.39	***
$\Delta R^2_{(3-4)}$			.03	*	.03				.00		.01	
Step 5												
Gender \times LMX \times CP					.27	(.13) **					.17	(.11) *
R^2_5					.41	***					.41	***
$\Delta R^2_{(4-5)}$					.05	**					.02	*

Notes: $n=144$. * $p<.05$, ** $p<.01$, *** $p<.001$.

Figure 1.

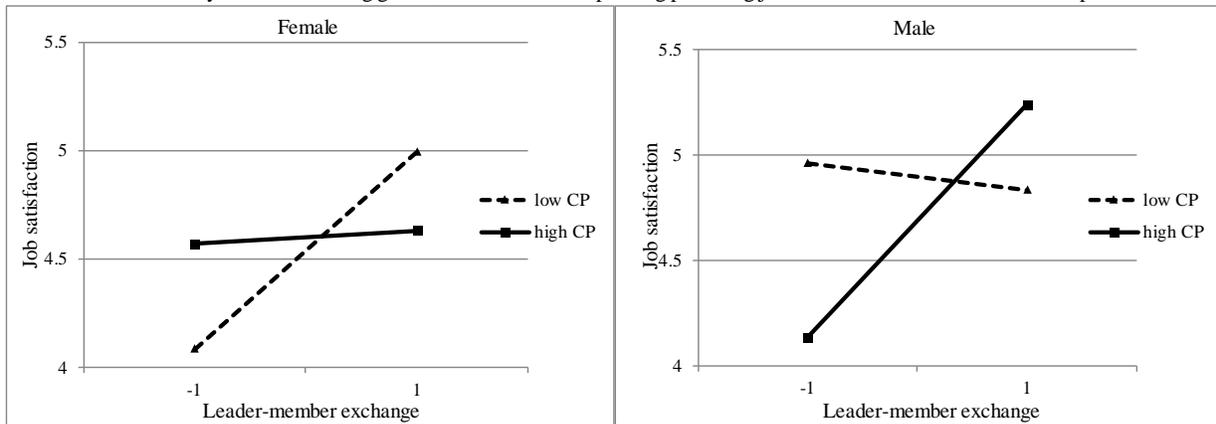
Two-way interaction between LMX and career planning predicting job satisfaction based on Korean samples



Note: CP = Career planning

Figure 2.

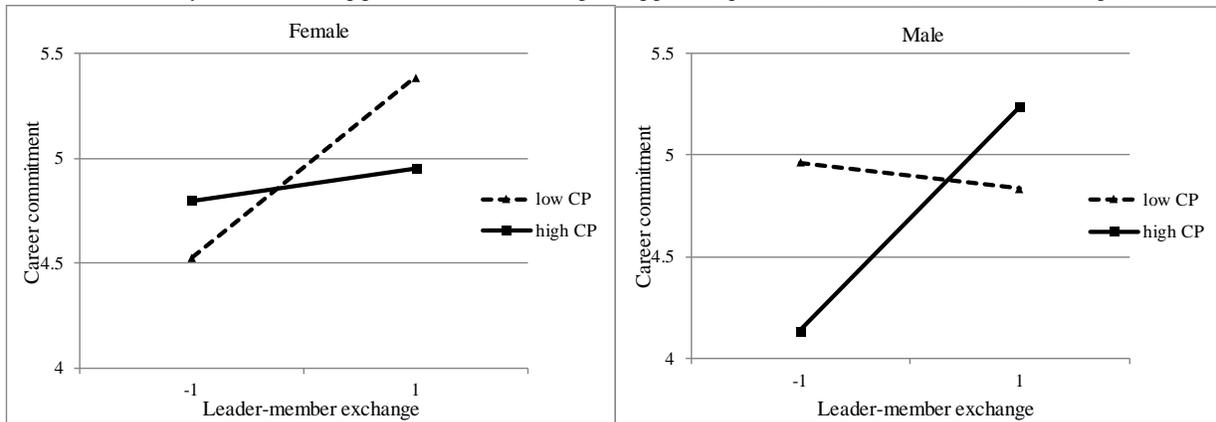
Three-way interaction among gender, LMX and career planning predicting job satisfaction based on Korean sample



Note: CP = Career planning

Figure 3.

Three-way interaction among gender, LMX and career planning predicting career commitment based on Korean sample



Note: CP = Career planning

Table III.

Assessment of common method variance in Study 1

	Original r^b	Corrected r^c
LMX–Job satisfaction	.42 ***	.42 ***
LMX–Career commitment	.43 ***	.41 ***
LMX–Career planning	-.01	.03
Career planning–Job satisfaction	.01	.01
Career planning–Career commitment	-.05	-.05

Notes: $n = 144$. Original r denotes zero-order correlation coefficients, whereas Corrected r denotes partial correlation coefficients. * $p < .05$, ** $p < .01$, *** $p < .001$.

Table IV.

Correlation matrix for all the variables used in the Study 2

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1 Gender	.69	.46	–												
2 Age	2.26	1.21	-.14	–											
3 Length of working with leader	2.79	2.72	-.08	-.02	–										
4 Educational background	.78	.42	.09	.02	-.20 *	–									
5 Position	.48	.59	.13	.55 ***	-.07	.23 **	–								
6 Industry 1 (Chemical and applied products)	.22	.42	.22 **	-.06	-.18 *	.07	.12	–							
7 Industry 2 (Electrical machinery)	.22	.42	-.25 **	.17 *	.16	-.03	-.03	-.28 **	–						
8 Industry 3 (Electronic parts)	.21	.41	.20 *	.06	-.04	.01	.19 *	-.28 **	-.28 **	–					
9 Industry 4 (Transportation equipment)	.22	.42	.02	-.09	.10	-.04	-.16	-.28 **	-.28 **	-.28 **	–				
10 Firm size	.90	.30	.08	.04	.02	.13	.04	-.29 ***	.06	-.02	.29 ***	–			
11 Leader-member exchange (LMX)	2.85	.80	.02	.01	.02	.06	.18 *	.02	-.07	.02	.09	-.07	(.90)		
12 Career planning (CP)	3.55	1.14	.15	.06	-.02	.04	.12	.15	-.02	.08	-.16	-.18 *	-.04	(.87)	
13 Career satisfaction	3.70	1.03	.10	.19 *	-.11	.17 *	.27 **	.00	.03	.07	-.04	.03	.35 ***	.12	(.93)

Notes: $n = 140$. Gender (0 = “female,” 1 = “male”), age (0 = “10s,” 1 = “20s,” 2 = “30s,” 3 = “40s,” 4 = “50s”), length of time working with leader (self-reported in years), education level (0 = “high school,” 1 = “undergraduate degree or higher”), firm size (0 = “less than 300 employees,” 1 = “300 or more employees”), and position (0 = “non-managerial employee,” 1 = “lower middle manager,” 2 = “middle manager”), industry (four dummy-coded variables that indicated membership in the chemical and applied products, electrical machinery, electronic parts, transportation equipment (with manufacture of food as the omitted industry)). LMX was on a five-point Likert scale. CP and career satisfaction were on seven-point Likert scales. Cronbach's alpha in brackets on the diagonal. * $p < .05$, ** $p < .01$, *** $p < .001$.

Table V.

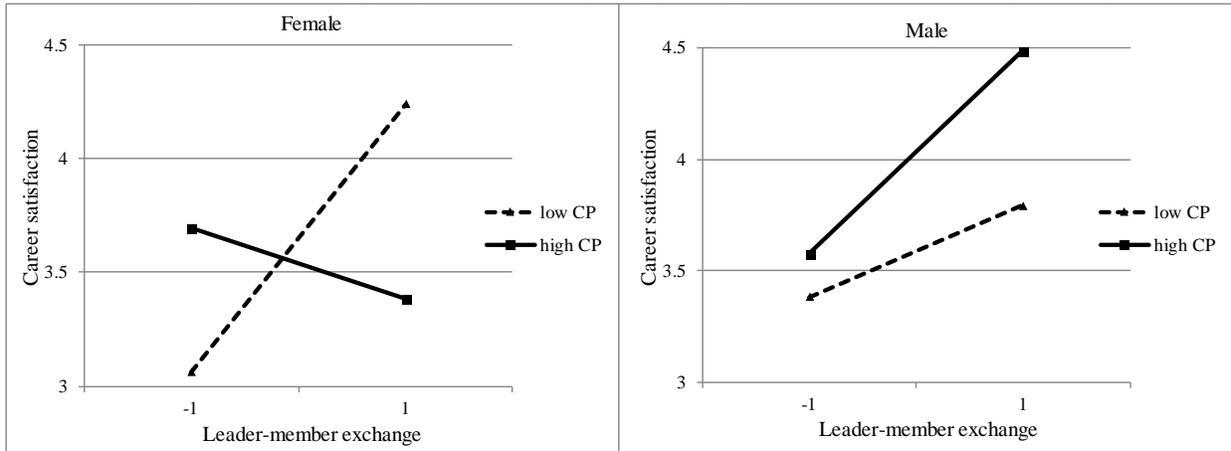
The regression results for career satisfaction based on Japanese sample in Study 2

	Career satisfaction								
	Model 1			Model 2			Model 3		
	β	(S.E.)	t	β	(S.E.)	t	β	(S.E.)	t
Step 1									
Gender	.10	(.09)		.08	(.10)		.11	(.09)	
Age	.13	(.07)		.12	(.07)		.07	(.07)	
Length of working with leader	-.09	(.00)		-.09	(.00)		-.06	(.00)	
Educational background	.10	(.06)		.10	(.06)		.13	(.06)	
Position	.09	(.08)		.09	(.08)		.13	(.08)	
Industry 1 (Chemical and applied products)	-.03	(.32)		-.04	(.32)		.01	(.31)	
Industry 2 (Electrical machinery)	.06	(.30)		.05	(.30)		.12	(.31)	
Industry 3 (Electronic parts)	.01	(.31)		.01	(.31)		.06	(.31)	
Industry 4 (Transportation equipment)	-.03	(.31)		-.03	(.31)		.06	(.32)	
Firm size	.02	(.02)		.05	(.02)		.01	(.02)	
R^2_1	.10			.10			.10		
Step 2									
Leader-member exchange (LMX)	.33	(.11)	***	.30	(.12)	**	.27	(.11)	**
R^2_2	.20			.20			.20		
$\Delta R^2_{(1-2)}$	.10			.10			.10		
Step 3									
Career planning (CP)				.10 (.08)			.08 (.07)		
R^2_3				.21			.21		
$\Delta R^2_{(2-3)}$				.01			.01		
Step 4									
LMX \times CP				-.08 (.07)			-.12 (.07)		
Gender \times LMX							.06 (.08)		
Gender \times CP							.14 (.09)		
R^2_4				.22			.23		
$\Delta R^2_{(3-4)}$				.01			.02		
Step 5									
Gender \times LMX \times CP							.25 (.08) **		
R^2_5							.27 ***		
$\Delta R^2_{(4-5)}$							.05 **		

Notes: n=140. * p<.05, ** p<.01, *** p<.001.

Figure 4.

Three-way interaction among gender, LMX and career planning predicting career satisfaction based on Japanese sample



Note: CP = Career planning

Table VI.

Assessment of common method variance in Study 2

	Original r^b	Corrected r^c
LMX—Subjective career success	.35 ***	.35 ***
LMX—Career planning	-.04	-.05
Career planning—Career satisfaction	.12	.13

Notes: $n = 140$. Original r denotes zero-order correlation coefficients, whereas corrected r denotes partial correlation coefficients. * $p < .05$, ** $p < .01$, *** $p < .001$.