Perceived Overqualification and Its Relationships with Job Crafting and Organizational Commitment: A Longitudinal Study

Jung-Eon Kwon¹, Hyung-Rok Woo²*

¹Department of Career and Vocational Consulting, JoongBu University
²Department of Business Administration, Mokpo National University

Abstract
This study was undertaken for identifying ways to positively resolve problems associated with perceived overqualification from the perspective of job crafting, which is highlighted as a social issue in the labor market. We hypothesized the mediating role of job crafting in order to uncover the questions regarding when and how perceived overqualification associates with an employee's organizational commitment. Autoregressive cross-lagged models were applied to the longitudinal data gathered from 263 full-time employees across 3 waves over 9 months. Our results demonstrate positive and significant cross-lagged effect of perceived overqualification on job crafting and organizational commitment. However, the cross-lagged effect of job crafting on perceived overqualification was found to be insignificant, but was significant for organizational commitment. There were no other indications of reverse causation effects. Our data indicates that job crafting longitudinally mediates the relation between perceived overqualification and organizational commitment. These findings offer a meaningful implication that employees who perceive themselves to be overqualified should be given an opportunity to craft their own jobs.

Keywords: Perceived Overqualification, Job Crafting, Organizational Commitment, Autoregressive Cross-Lagged Model, Longitudinal Study

요 약
본 연구의 목적은 근래에 노동시장에서 부각되고 있는 과잉자격 문제를, 직무설계 관점에서 긍정적으로 해소하는 방안을 모색하는 것이다. 과잉자격이란, 조직구성원이 보유한 기술, 지식, 교육 수준이 자신에게 부여된 업무에서 요구하는 자격요건 수준보다 상회하는 상태이다. 그동안 과잉자격의 부작용이 중점적으로 연구되어 왔지만, 본 연구는 이를 극복하는 돌파구로서 직무재창조에 초점을 두었다. 과잉자격에 대한 조직구성원의 인식이 직무재창조 활동을 촉발시키고, 나아가 조직몰입을 제고하는 과정을 자기회귀교차지연 모형으로 실증하였다. 3개월 간격으로 총 3차례에 걸쳐 반복측정하여 263명의 종단자료를 수집하였다. 연구 결과, 조직구성원의 인식된 과잉자격이 직무재창조와 조직몰입에 미치는 교차연관 효과는 유의미하게 나타났다. 그리고 이전 시기의 직무재창조는 다음 시기의 조직몰입에 긍정적인 영향을 미쳤으며, 다른 역인관계는 발견되지 않았다. 즉, 인식된 과잉자격과 조직몰입의 관계에서 직무재창조의 중단적 예측효과를 확인하였다. 이러한 결과를 토대로, 과잉자격을 각각하는 조직구성원이 자발적으로 직무재창조에 나설 수 있는 조직풍토를 조성할 것을 제언하고, 이를 추진할 수 있는 개입 방안을 논의하였다.

Keywords: Perceived Overqualification, Job Crafting, Organizational Commitment, Autoregressive Cross-Lagged Model, Longitudinal Study
1. Introduction

With growing shortages of job opportunities due to long-term economic downturn and rising unemployment rates on a global scale, there has been an increase in the number of job applicants with qualifications that go beyond the requirements of the job[1,2]. In terms of individual efforts to achieve success despite low employment rates, there are increasing tendencies to competitively obtain qualification levels beyond what is required in the workplace[3]. Therefore, it is possible that there has been a meaningful increase in the number of employees who consider themselves to be assigned to simple and menial tasks relative to their respective skill levels[4]. Academic studies have been done on this phenomenon, which has been termed "overqualification." Overqualification is a type of underemployment, which indicates low quality of employment[5]. It refers to situations wherein employees have capacities that exceed the levels of knowledge, experience, and education required for performing their job. According to studies conducted in the Canada, United States, and many countries in Western Europe, 1 in 3 employees are considered to be overqualified[6,7].

Aside from actual overqualification, the way to accept overqualification also significantly influence employee behavior[8]. Perceived overqualification (POQ), which results from individuals’ comparison of their tasks with their own abilities, is reported to have a diverse range of negative effects on the performance of both organizations and individuals[9,10]. POQ leads to boredom and reduces job engagement, which compromises desired attitudes and work satisfaction and can ultimately lead to the individuals leaving the organization[11]. A number of existing studies have found POQ to negatively impact work performance, organizational citizenship behavior, and organizational engagement[12], leading to undesirable results, including higher turnover intention[13] and counterproductive behavior[14,15].

The purpose of this study is to explore practical methods to reduce the negative effects of POQ on employees within an organization. In other words, this study aims to present human resources implications that can lead to healthy work environments for the employees and increased economic value through improving the quality of employment by resolving underemployment. Methods to mitigate the negative effects of POQ are twofold in direction and involve changing employees’ perception of POQ and improving job fit through job design. From this perspective, this study has assigned job crafting, which is the motivations of individuals to redesign proactively and alter meaning of one's work[16,17], as the mediating factor to study the impact of POQ on organizational commitment. There are very few studies that have verified job crafting, a subcategory of job design, as a factor that can reduce the negative effects of POQ[18,19]. Accordingly, this study seeks to provide insight into academic research on this subject.

2. Theoretical background

2.1 Perceived overqualification

Overqualification means a state in which employees have levels of competencies (e.g., skills, knowledge, abilities, education, and experience) that are higher than what is required to perform their jobs[20]. Overqualification has been studied as a type of underemployment. Underemployment refers to the state of being employed in an inadequate capacity or a low-quality job[5,7]. Studies on underemployment and overqualification have been conducted in the fields of industrial organizational psychology as well as economics and pedagogy. In
economics and pedagogy, the phenomenon in which individuals are unable to maximize their skills was studied using terms such as skill underutilization[21] and overeducation[22], wherein individuals have a higher level of education than what is required by their job[23].

Objective levels of overqualification can be measured by comparing the results of job analysis and individual competencies. However, about a decade ago, researchers began to realize the importance of the subjective overqualification, which led to the emergence of new terms such as perceived overqualification (POQ). Such perceptions of overqualification by individuals (i.e., how it is perceived and the degree to which it is perceived) are also very important[10,24]. This is because POQ affect directly individuals’ actual work behavior and mediate the relations between objective overqualification and outcomes[1,25]. The advantage of POQ over objective overqualification in predicting employee attitude is also being acknowledged in psychology and business administration[8,19,24]. Therefore, the majority of researchers studying overqualification have selected POQ, an individual’s subjective degree of overqualification, as a scale[26].

Johnson, Morrow, and Johnson[27] asserted two dimensions of POQ, that is, job-degree mismatch and perceived no growth. The former is “to possess surplus job qualifications,” the latter is “to limit opportunities to acquire and use new job related skill.” Furthermore, they developed a POQ scale that reflects the content of these two dimensions.

The negative impact of POQ can be explained through the equity theory[28,29]. If individuals feel that the amount of their inputs is larger than the outcomes they receive, then they reduce their level of inputs to make equal the ratio of their outcomes and inputs, which leads to negative job attitudes[30]. In situations wherein there is a mismatch and the individuals’ skills, knowledge, and experience are beyond the level that the job requires, they tend to see their inputs as higher. Higher POQ is associated with employees feeling helpless, as they are unable to maximize their knowledge and experience[8].

Although employees having more knowledge and experience may appear to be something positive, POQ leads to grievances and dissatisfaction for both the organization and the employee[31], which negatively affects job attitude in areas such as turnover intention, job satisfaction, and organizational commitment[15,32]. In terms of self-realization, employees place value on accomplishing challenging tasks (i.e., as opposed to simple, repetitive tasks), striving toward self-development, and contributing to the success of the organization.

To date, the effects of POQ have been studied from multiple perspectives; however, not enough practical studies have explored the factors that could mitigate these negative effects[33]. The methods to mitigate the negative impact of POQ are twofold in direction: changing employees’ perception of POQ and improving job fit through job design. From this perspective, the hypothetical research model applied in this study focuses on job crafting, which involves the autonomous redesign and giving a wholesome meaning to one’s work[16,17], as a breakthrough that overcomes the negative effects of POQ as well as a mediating factor that fosters organizational commitment.

2.2 Job crafting

Job crafting is a process in which employees craft their own jobs into another job within a pre-defined job context[34], and is defined as cognitive and physical changes autonomously formulated by employees, both inside and outside of their job. In the past, organizations have primarily focused on the top-down approach for effective employee job performance wherein the managers or the
human resource departments have designed jobs. However, in recent years, job crafting has been gaining attention as a bottom-up job design process that differs from the previous methods of job design, with employees directly driving change on the unit and nature of the jobs assigned to them.

According to Wrzesniewski and Dutton[35] who first proposed it, job crafting is the behavior of transforming the boundaries of specific tasks or work within a job. Job crafting is perfunctorily based on the job redesign; however, it includes the proactive changes initiated by employees to improve aspects of their work as well as the shifting of perceptions in seeking the meaning of their work, as opposed to a top-down approach[36]. In other words, it refers to employees’ proactive and voluntary efforts to seek change in their work, which is in contrast with the reactive attitude of merely performing one’s job according to the guidelines.

Wrzesniewski and Dutton[35] classify the constructs of job crafting as task crafting, relational crafting, and cognitive crafting[37]. First, task crafting means the behaviours connected with improving the processes and methods of tasks by changing either the amount or boundaries of the tasks. Second, relational crafting means altering the level of interactions with people relevant to executing a job in terms of their scope, frequency, and degree. Third, cognitive crafting refers to activities that involve reinterpreting and redefining one’s job, which leads to create more job meaning.

Unlike the work of Wrzesniewski and Dutton[35], some studies[17] treat job crafting as a single dimension. This is because the lower dimensions of job crafting are expressed in complex ways. However, there seems to be an academic consensus that job crafting is a concept where employees proactively redefine the traits of their work and reassess its meaning, which results in an improved fit between the individuals and their jobs.

Job crafting, where employees proactively fit their sense of what the job should be, has a positive influence on individuals and organizations[38–40]. Job crafting has been found to raise work engagement [41,42], job performance[43], and organizational commitment[44]. Furthermore, it was found to have a positive effect on employees’ psychological flexibility, emotional satisfaction, and mental health.

In general, employees who perceive themselves to be overqualified have greater potential than those who do not, and when faced with situations wherein they can demonstrate their skills, they also tend to use their extra skills at the workplace. These situations lead to innovative activities or job crafting to improve the content of their work[26,45]. In other words, employees with POQ have surplus education, experience, and skills, and are likely to engage in job crafting, which transforms their work in new ways[18,46].

2.3 Organizational commitment
Organizational commitment is the attitude of employees, which involves the acceptance of the objectives and values of the organization, eagerness to improve organizational performance, and desire to remain as a part of the organization[47]. Accordingly, it is considered as a central element in explaining the concept of work attitude and organizational behavior. Organizational commitment also refers to the degree of attachment and commitment of a member of an organization toward the said organization, and is defined as employees’ propensity to identify themselves with their organization.

Allen and Meyer[48] developed a multidimensional model of organizational commitment, which consists of affective commitment, continuance commitment, and
normative commitment dimensions[49]. Affective
commitment pertains to the degree to which
employees feel psychologically attached to and
feel a sense of unity with an organization.
Continuance commitment refers to the
employees’ level of preference for their current
organization based on a profit-and-loss
relationship. This is the tendency of employees
to remain in the organization due to the
significant costs and burdens they could
potentially face if they leave the organization or
the potential rewards that they have received so
far, which they have to sacrifice, rather than
their emotional concerns. Therefore, continuance
commitment involves weighing the personal
benefits required to commit to an organization
from in terms of the costs associated with
turnover. On the other hand, normative
commitment refers to the moral obligation of
employees to fulfill their duties to their
organization[50].

The study hypothesized that employees
become willing to accept their organization’s
values and goals if they become attached to the
organization through job crafting activities.
Through job crafting, employees can change the
way they engage with their work as well as
receive information and the social support from
their colleagues or supervisors that they need to
effectively carry out their jobs[18,51].
Furthermore, they can begin to believe that their
jobs are important to the organization with
respect to the conservation or procurement of
resources. Employees with high levels of job
crafting are able to acquire more resources than
those without, resulting in higher emotional
attachment and a stronger sense of unity with
the organization [19,52]. Ultimately, job crafting
creates a relationship of social exchange that
allows employees to productively utilize their
abilities at the workplace, strengthening
organizational commitment [43,53].

The impact of POQ, which facilitates job
crafting, can be used to predict the positive
mediating effects of job crafting on
organizational commitment. In other words, job
crafting activities that provide reliable
resolutions and promote organizational
commitment can be a process of overcoming
POQ positively. In this vein, this study developed
a hypothetical research model, shown in Fig. 1,
which assumes a series of relations connecting
POQ, job crafting, and organizational
commitment.

![Fig. 1. Conceptual relationship between POQ, job
crafting, and organizational commitment](image)

### 3. Research method

Cross-sectional studies have limitations in
adequately testing the actual relations between
cause and effect[54]. Furthermore, since this
study collected data through a questionnaire tool
for employees, common method bias could
occur. There is also a possibility that employees
with high organizational commitment would
actively pursue job crafting. To verify these
causal directional arguments, an autoregressive
cross-lagged model was utilized to attempt a
more accurate analysis. To collect longitudinal
data, this study empirically verified the clear
causal relationships by repeating measurement
three times at 3-month intervals from April 2019
to December 2019.

This study collected data from Korean office
workers in three telecommunications firms
through an online survey system and all
procedures were in compliance with research
ethics. In particular, the participants of this study
were employees whose job responsibilities changed due to joining a company or moving to different positions within their organizations in the last 6 months. This study placed such restrictions on the participants, as employees were likely to perceive overqualification prior to entering a new workplace or starting new jobs.

The measurement tools for the major variables are as follows: POQ was measured using the 9 items developed by Maynard et al.[55]. This scale assesses the presence of POQ from the perspectives of education, experience, knowledge, skills, and ability. With respect to job crafting, this study utilizes 15 questions developed by Slemp and Vella-Brodrick[56], which reflect the three constructs proposed by Wrzesniewski and Dutton[35]. This questionnaire measures task crafting, relational crafting, and cognitive crafting with 5 questions each. Organizational commitment, which was assigned as the dependent variable, was measured using the 15 questions proposed by Meyer et al.(1993). These major variables were measured using a 6-point scale ranging from 1("strongly disagree") to 6("strongly agree").

The longitudinal data analysis of this study was completed through an autoregressive cross-lagged model and a multivariate latent growth model. Mplus was used as the statistical analysis tool of this study, as it made the analysis flexible. First, the autoregressive cross-lagged model was used to empirically verify the longitudinal causal relationships between the variables over time. Next, the latent growth model was verified—where trends of change in the major variables were divided into initial values and the rates of change and path coefficients were estimated—and the relationships between each latent growth model were analyzed using the multivariate latent growth model. The multivariate latent growth model simultaneously considers the influence of all preceding variables by reflecting time-varying information. Also known as parallel process latent growth modeling, it is considered as a sophisticated technique to identify the relationship between the direct and indirect factors that bring about differences between individuals[57,58]. Through this process, this study was able to identify the impact of all preceding variables that change over time in the relationship between POQ, job crafting, and organizational commitment.

4. Research results

At the first wave, 291 employees participated in our survey. Of these, 263 participants completed the survey at the third wave. Their average age was 31.9 years and 185(70.3%) were females; 197(74.9%) held undergraduate degree and 48(18.3%) held a postgraduate degree.

Table 1 presents the results of the descriptive statistics and analysis of correlation for POQ, job crafting, and organizational commitment for each of the three points in time. The mean values of POQ at each time point were
Fig. 2. Final model (dotted arrow is insignificant effect)

4.26(SD=0.81), 4.18(SD=1.04), and 4.23(SD=0.94); and the mean difference, as confirmed by one-way ANOVA, was insignificant. The mean values of job crafting at each time point were 4.28(SD=0.96), 3.99(SD=0.96), and 4.08(SD=1.05); and the mean difference, as confirmed by one-way ANOVA, was insignificant. The mean values of organizational commitment at each time point were 4.71(SD=0.96), 4.86(SD=1.03), and 4.92(SD=1.10); and the mean difference, as confirmed by one-way ANOVA, was insignificant.

To verify the structural model, this study first verified the validity of the measurement model[59]. To verify the longitudinal model, measurement invariance, path invariance, and error invariance were examined based on the stages of analysis of the autoregressive cross-lagged model[60]. As there is a nested relation between the models, this study sequentially compared the models based on simplicity and fit, and then selected the final model. Fig. 2 presents the relationships among perceived overqualification, job crafting, and organizational commitment, which showed a good fit to the data (CFI=.93, TLI=.92, RMSEA=.034).

The results of the analysis indicate that POQ (β=.81 from T1 to T2; β=.82 from T2 to T3), job crafting (β=.54 from T1 to T2; β=.45 from T2 to T3), and organizational commitment (β=.67 from T1 to T2; β=.66 from T2 to T3) all had continuous positive influences on all points of time.

The cross-lagged effect of POQ on job crafting (β=.12 from T1 to T2; β=.13 from T2 to T3) and organizational commitment (β=.05 from T1 to T2; β=.04 from T2 to T3) were found to be positive and significant. The cross-lagged effect of job crafting on POQ was insignificant; however, the effect on organizational commitment was significant. The cross-lagged effect of organizational commitment on POQ and job crafting were insignificant. In other words, higher POQ at a previous point of time led to higher job crafting; and higher job crafting at a previous point of time led to higher organizational commitment at a later period.

In addition, indirect effects were analyzed to gain a better understanding of the mediating role of job crafting in the relationship between POQ and organizational commitment. The standard error was calculated using the bootstrap method. The indirect effect of POQ on job commitment via job crafting was 0.015 with a 95% confidence interval [0.008, 0.023], indicating that job crafting was mediating the relationship between POQ and organizational commitment.

5. Discussion

This study verified the potential of job crafting as a path to overcome POQ as well as its influence on organizational commitment. As the global economy slows, the quality of jobs falls; however, the readiness of the jobseekers is strengthened, resulting in higher levels of qualification and education among jobseekers. Due to this imbalance, overqualification—which refers to situations wherein employees have capacities that exceed the levels of knowledge, skill, experience, and education that are required for performing their jobs—is becoming a serious issue. Organizations are increasingly facing issues
with employees’ overqualification and their tendency to engage in counterproductive behavior, resulting in repercussions such as decreased organizational commitment.

Aside from the psychological consequences faced by the employees, organizations also suffer due to lower productivity rates. In light of this, the study sought out a positive solution to alleviate the negative impact of POQ on employees and improve organizational commitment.

The academic significance of this study is as follows: First, this study found that POQ has a positive effect on job crafting, in which employees voluntarily take part in re-designing their job. While previous studies have focused on the causal effects of POQ on negative behavior such as turnover intention[13] and counterproductive behavior[14.15], this study interpreted POQ caused by the person-job misfit as a driver for job crafting and then examined the positive impact of POQ. The relationship between POQ and job crafting identified in this study could be a stepping-stone to further research in the future.

Second, this study applied the autoregressive cross-lagged model to a series of three repeated measurements, verifying a robust causal relationship among POQ, job crafting, and organizational commitment. Cross-sectional studies have limitations relating to endogeneity in revealing the actual causal relationships. Furthermore, since this study collected data through a questionnaire tool for employees, common method bias could occur. Accordingly, this study conducted a longitudinal study to overcome these issues. In particular, the subjects of this study were employees whose jobs changed as they began new jobs in organizations or in different departments. This study empirically verified the changes in job crafting and organizational commitment in employees who have experienced POQ in the process of adapting to their new jobs and workplaces.

The results of this study offer practical implications for developing human resource management interventions that could resolve the issue of underemployment. The practical implications of this study are as follows: The relationship wherein POQ triggers job crafting behavior to enhance organizational commitment was confirmed. This provides a practical direction for organizations that are striving to foster organizational commitment among employees with POQ as to identifying the type of environment that must be constructed. When POQ is high, it is important to provide employees with challenging tasks or autonomy so that they are able to maximize their capabilities within the organization.

Furthermore, these results indicate that excluding highly educated applicants suspected of overqualification from the hiring process is not always the best decision. In reality, reports indicate that applicants with higher qualifications than what is required for the job are often eliminated from the selection process[11]. However, if individuals were able to engage in job crafting, then they would be able to overcome such perceptions of overqualification even if they do occur during the early, adapting stage. Organizations are also able to design hiring processes around preceding factors of job crafting and develop methods in bolstering job crafting in coaching and mentoring programs for employees.

The limitations in this study and suggestions for future research are as follows: First, this study only verified job crafting as a variable to explore the positive effects of POQ. However, employees who strongly feel POQ have more surplus resources in terms of education, experience and abilities: as such, they possess other significant potential(e.g., creativity, knowledge-sharing behavior, and organizational citizenship behavior) aside from job crafting. Therefore, future studies should explore the relationships between POQ...
and various latent competencies. Second, when POQ reaches extreme levels, it could counteract activities that lead to job crafting and organizational commitment. The level of POQ is relatively low in a six-point scale. Therefore, it would be necessary to explore a more significant control variable or closely examine the quadratic effect of POQ.

References

DOI: https://doi.org/10.1002/job.2054

DOI: https://doi.org/10.1080/0003684042000229532

DOI: https://doi.org/10.1002/job.4030160708

DOI: https://doi.org/10.1177/1086991411408877

DOI: https://doi.org/10.1111/iop.12006


DOI: https://doi.org/10.1257/mac.20160220

DOI: https://doi.org/10.1080/00223980009598235

DOI: https://doi.org/10.1080/09585190701799937

DOI: https://doi.org/10.1177/0149206316668237

DOI: https://doi.org/10.1111/j.1754-9434.2011.01330.x


DOI: https://doi.org/10.1108/ER-11-2016-0213

DOI: https://doi.org/10.1002/job.1979

DOI: https://doi.org/10.1177/0022398011425659


DOI: https://doi.org/10.4102/sajip.v36i2.841

DOI: https://doi.org/10.1177/1059727719857174

[19] H. Sesen, S. S. Ertan, “Perceived Overqualification and
DOI: https://doi.org/10.1002/job.2024

DOI: https://doi.org/10.5762/KAIS.2019.20.6.169

DOI: https://doi.org/10.1080/00036846.2015.1083080

DOI: https://doi.org/10.20525/jirbs.v8i6.531

DOI: https://doi.org/10.5762/KAIS.2017.18.10.611

DOI: https://doi.org/10.5465/amr.2001.4378011

DOI: https://doi.org/10.1002/job.645

DOI: https://doi.org/10.5762/KAIS.2017.18.9.167

DOI: https://doi.org/10.1177/0033294119839032

G. A. Laurence, Y. Fried, W. Yan, J. Li, "Enjoyment of Work and Driven to Work as Motivations of Job Crafting: Evidence from Japan and China", Japanese
Perceived Overqualification and Its Relationships with Job Crafting and Organizational Commitment: A Longitudinal Study

DOI: https://doi.org/10.1111/prp.12239

DOI: https://doi.org/10.1186/s13612-015-0034-y

DOI: https://doi.org/10.1002/job.1783

DOI: https://doi.org/10.1016/j.jvb.2016.07.001

DOI: https://doi.org/10.1177/001872671243471


DOI: https://doi.org/10.1177/00461520.2016.1207175

DOI: https://doi.org/10.1007/s10869-019-09625-y

DOI: https://doi.org/10.1006/jvbe.2001.1842

DOI: https://doi.org/10.10111/104-8535.1990.tb00506.x


DOI: https://doi.org/10.1006/jvbe.1995.1553

DOI: https://doi.org/10.2224/sbp.7552

DOI: https://doi.org/10.5465/AMBPP.2019.10194abstract

DOI: https://doi.org/10.1016/j.jvb.2018.12.005

DOI: https://doi.org/10.1037/1082-989X.12.1.23

DOI: https://doi.org/10.1002/job.389

DOI: https://doi.org/10.5502/ijw.v3i2.1

DOI: https://doi.org/10.1207/s15327906mbr2904_1

DOI: https://doi.org/10.1080/00461520.2016.1207175

DOI: https://doi.org/10.1037/0033-2909.103.3.411

DOI: [https://doi.org/10.1086/209528](https://doi.org/10.1086/209528)

**Jung-Eon Kwon** [Regular member]

- Feb. 2002: Ewha Womans Univ., Educational Technology, MA
- Aug. 2011: Chung-Ang Univ., Human Resource Development, PhD
- Mar. 2012 ~ current: JoongBu Univ., Dept. of Career and Vocational Consulting, Professor

*Research Interests*
Creativity, Career Development

**Hyung-Rok Woo** [Regular member]

- Feb. 2009: Korea Univ., Business Administration, MS
- Feb. 2013: Hanyang Univ., Business Administration, PhD
- Mar. 2018 ~ Aug. 2019: Kyonggi Univ., Interdisciplinary Industrial Studies, Professor
- Sep. 2019 ~ current: Mokpo National Univ., Dept. of Business Administration, Professor

*Research Interests*
Strategic Management, Organizational Development, Human Resource Management