HOW MUCH DO YOUR COWORKERS EXPECT OF YOU?: A MODEL OF COWORKERS' EXPECTATIONS OF EXTRA-ROLE BEHAVIORS

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ABSTRACT

HOW MUCH DO YOUR COWORKERS EXPCET OF YOU?: A MODEL OF COWORKERS' EXPECTATIONS OF EXTRA-ROLE BEHAIVIORS

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Extra-role behaviors (ERBs) refer to voluntarily going beyond the requirement. Despite a great amount of research on ERB, the majority of the existing ERB literature is ERB-giver focused and US-sample dominant, which has limitations in conceptualizing ERB across cultures. Using cross-national sample data, this dissertation offers a new lens through which to study ERB, viewing ERB from the perspective of potential ERB receivers by suggesting *coworkers' expectations of ERB* (CERB) in turn providing a more universal understanding of ERB. These attempts play a critical role in understanding why people engage in ERB in that coworkers can shape employees' ERB performance in social exchange relationships.

Based on my conceptualization of CERB, I explore what factors, at various levels, can affect CERB from various levels of factors. Drawing on Self-Categorization Theory (Turner, 1987) and Role Theory (Biddle & Thomas, 1966), I argue that there is variation in coworkers' expectations of employees' ERB based on the employees' seniority. As differentiated role behavior related to seniority is emphasized in Confucianism, I predict that Confucianism Orientation (CO) will moderate the relationship between CERB and employees' seniority. In addition, I suggest that CO is positively related to CERB in that it emphasizes the group interests and hard work ethics. Finally, I argue that employees of service organizations are more likely to expect their colleagues to engage in ERB than employees of manufacturing organizations because service organizations are likely to require employees to demonstrate high levels of ERB (Ariani, 2012; Raub, 2008).

419 participants were recruited from a group of white-collar employees of a South Korean multinational automobile company and a bank, both of which have South Korean and US sites. These participants were given a self-report survey. Findings from this study indicate that altruism and civic virtue are more likely to be regarded as in-role behaviors for seniors than for juniors. Results also indicate that there is a significant moderating effect of CO on variation only in expectation of courtesy based on a target employee's seniority. Employees of the bank are likely to expect their coworkers to demonstrate higher levels of ERB than are employees of the automobile company. Contrary to my hypothesis, respondents low in CO are more likely to expect their colleagues to engage in ERB than are respondents high in CO.

In summary, this dissertation contributes to enriching the ERB literature by suggesting the new construct *coworkers' expectations of ERB*. Findings from this study imply that coworkers' expectations of ERB can be influenced by target employees' seniority, Confucianism Orientation, and industry. As such, they offer implications for future research that explores what influences coworkers' expectations of employees' ERB across cultures. They also hold valuable implications for the practices that contribute to employees being willing to go beyond requirements and to helping managers and employees understand cultural influences on expectations of ERB in multi-national or multi-cultural teams and organizations.

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CHAPTER 1: INTRODUCTION

Extra-role behaviors (ERBs) indicate beneficial behaviors beyond the official job requirement that are conducted voluntarily by an employee's free-will (Organ, 1988). Research on ERB has flourished after Organ and his colleagues' work (Dekas, 2010, p.7; Podsakoff, Whiting, Podsakoff, & Blume, 2009), which suggested that the relationship between job satisfaction and performance is relatively strong when performance includes behaviors beyond in-role behaviors (Bateman & Organ, 1983; Organ, 1977, 1988; Smith, Organ, & Near, 1983). Since then, ERB has been an important research field in organizational behaviors (Organ, 1990) because it has been recognized as having positive effects in organizational performance (Deluga, 1994; Folger & Konovsky, 1989; Koys, 2001; Iaffaldano & Muchinsky, 1985; Organ, 1988; Vroom, 1964; Walz & Niehoff, 1996). As ERB is defined as behavior driven by individuals' free-will, scholars have paid attention mainly to ERB-givers' personal characteristics and contextual factors. Also, a significant amount of previous research on ERB has focused on predictors of ERB performance in US contexts (e.g., Mayer, Davis, & Schoorman, 1995; Murphy, Athanasou, & King., 2002; Schappe, 1998; Wech, Kennedy, & Schmelz, 2009). Using the sample data from global firms in the U.S. and South Korea, this dissertation addresses these gaps by conceptualizing a model of ERB from the perspective of ERB receivers (coworkers). This model explores how employees' seniority, industrial contexts, and Confucianism Orientation influence coworkers' expectations of ERB (CERB).

Overview of the Present Study

Based on review of research on ERB, I identified several gaps of the ERB literature: 1) ERB giver-focused perspectives; 2) little research on the linkage of seniority to ERB; 3)

Western/US sample dominant; and 4) little cross-industrial comparison of ERB. I elaborate on each of these gaps below.

First, compared to research on why individuals engage in ERB, influences of potential ERB receivers have been little examined, specifically the influences of coworkers (i.e., supervisors, peers, and subordinates). This gap is important to acknowledge in that ERB is performed in organizational contexts where employees interact with each other on a regular basis. Therefore, in addition to ERB givers' personal characteristics, *coworkers'* perceptions of ERB can also influence employees' engagement in ERB. Some scholars have acknowledged that employees are likely to engage in ERB because others expect them to do so or because the organization implicitly forces them to do so (e.g., Banki, 2010; Van Dyne, Graham, & Dienesch, 1994). In particular, arguing that ERB refers to interpersonal behaviors influenced by others rather than behaviors that are driven by personal attributes, Banki (2010, p.360) suggested that ERB research needs to pay attention to two parties of exchange: ERB givers and ERB receivers. Similarly, "Compulsory Citizenship Behavior (CCB)" suggested by Vigoda-Gadot (2006, 2007) contended that ERB may be implicitly forced by supervisors or management. This implies that potential ERB receivers—coworkers—may impact ERB givers' ERB performance. For example, in performance ratings, supervisors are likely to consider task performance and ERB performance to the same extent (Borman, White, & Dorsey, 1995). This suggests that coworkers have certain expectations of their colleagues' ERB, which may motivate colleagues to engage in ERB. Therefore, research on ERB needs to be conducted beyond the personal attributes of ERB givers, focusing more on ERB receivers' (coworkers') expectations of their colleagues' engagement in ERB.

Next, a specific workforce dynamic, particularly diversity of seniority, in the workforce

has called for researchers' attention to this issue and its influence on the workplace. Literature has shown that there are significant generational differences in work expectations of employees (Sudheimer, 2009; Yu & Miller, 2003), suggesting that there is a need for research on the relationship between coworkers' expectations of ERB (CERB) and target employees' seniority. In addition, in Asian contexts, seniority is a very important demographic factor in categorizing people (Tusi & Gutek, 1999). Moreover, coworkers' expectations of ERB may vary based on employees' seniority given that stereotypes are associated with seniority. Accordingly, employees' seniority may be a critical demographic factor which influences their coworkers' attitudes toward and perceptions of their behaviors. Despite the significance of seniority as related to ERB, little ERB research has paid attention to seniority (e.g., Kang, 2005).

Along with a lack of studies exploring seniority as a factor in coworkers' expectations of ERB, cross-cultural studies have primarily treated cultural characteristics as the main effect on ERB (e.g., Moorman & Blakely, 1995; Van Dyne, Vandewalle, Kostova, Latham, & Cummings, 2000), offering a limited perspective on the impact of cultural differences in perceptions of ERB. Given that seniority is a more critical demographic factor in Asian contexts influenced by Confucianism than in Western contexts, coworkers may have different expectations according to ERB givers' seniority across cultures. Confucian values such as the code of obedience to rank, respect for seniors, and differentiated role behaviors related to seniority may moderate coworkers' expectations of employees' seniority. For instance, as interpersonal relationships are based on seniority in Confucian cultures, juniors are more likely to engage in courtesy than seniors because respect for seniority is emphasized. Therefore, it is necessary to explore the moderating effect of Confucianism Orientation on coworkers' expectations of juniors' ERB versus seniors' ERB.

In addition, as increasingly globalized workforces have also highlighted the need for more research on ERB outside the U.S., further cross-cultural ERB research of coworkers' expectations is necessary. Unfortunately, most research on ERB has been conducted in Western contexts, primarily in the U.S. However, the existing ERB literature has suggested that cultural backgrounds may play a critical role in defining job-duty or work boundaries. For example, Blakely, Srivastava, and Moorman (2005) found that Chinese managers tend to perceive ERB as part of their tasks more than American managers do. In this light, it can be inferred that coworkers' expectations of ERB may be related to national cultures or contexts. For instance, in Confucian cultures, which place emphasis on in-group members' interests, harmony and solidarity, and work ethic more than on individuals' interests and autonomy (Hofstede & Bond, 1988), coworkers may expect higher levels of ERB than in individualistic cultures. Therefore, Confucianism Orientation might influence coworkers' expectations of ERB.

Finally, ERB indicates discretionary and beneficial behaviors nested in organizational contexts, which are influenced by internal organizational contexts as well as more macro-environments such as industry. Previous ERB studies have focused on lower-level analysis such as individuals, work groups or teams, and interpersonal relationships (i.e., leader-member exchanges, coworker-exchanges, etc.). However, levels of ERB or perceptions of ERB may be different across industries. As industries provide different types of products or services, each may have its own criteria of performance ratings, which are distinguished from those of other industries. For example, employees of the service industry are more likely to demonstrate high levels of ERB than are employees of the manufacturing industry because employees working in the service industry should meet continually changing customer needs by providing spontaneous service transactions (Chopra, Lovejoy, & Yano, 2004, p. 13). This implies that there may be

influences of industry on coworkers' expectations of ERB. However, industrial differences in ERB have not been a focus of the existing ERB literature.

To sum up, this study was designed to fill the gaps identified in the literature, particularly beyond ERB giver-focused and US-sample dominant studies. It addressed the limitations of the existing literature on ERB by 1) developing the construct "coworkers' expectations of ERB (CERB)," which means perceptions of employees' ERB commonly shared by potential ERB receivers (coworkers); 2) conceptualizing a model of coworkers' expectations of ERB, which incorporates the relationships between CERB and target workers' seniority, industrial difference (service organization vs. manufacturing organization), and Confucianism Orientation (CO); and 3) exploring the impact of CO on CERB in relation to seniority using data from global firms.

Theoretical and Practical Contributions

This study has significant implications for the ERB literature. First, this study provides a new lens through which to study ERB by suggesting the new construct "coworkers' expectations of ERB (CERB)," which emphasizes potential ERB receivers' perspective rather than the potential ERB givers'. This research contributes to filling the gaps of the existing literature on ERB which has mainly focused on ERB givers. Second, by conceptualizing a model of coworkers' expectation of ERB, this study offers insights into what factors can influence coworkers' expectation of ERB: potential ERB givers' seniority, industrial contexts, and Confucianism Orientation. Findings from this study will provide valuable information of variation in CERB. Third, this research explores the moderating effect of Confucianism Orientation on the relationship between coworkers' expectations and employees' seniority. ERB receivers' expectations toward juniors' ERB and toward seniors' ERB might be different across

cultures in that the importance of seniority has cultural variations. In this light, by the linkage of Confucianism Orientation to the expectation of ERB, this study contributes to the existing cultural studies of ERB, which have mainly focused on cultural differences in the level of ERB performance (e.g., Farh, Earley, & Lin, 1997; Moorman & Blakely, 1995) rather than on coworkers' expectation of ERB.

In addition, the findings from this research hold significant implications for the management and employees. First, the findings will call on HRM managers to set clear boundaries of in- and extra-role behaviors, depending on employees' seniority. If some dimensions of ERB are likely to be considered to be in-role behaviors for senior employees, the management could reduce conflicts between employees by providing more clear criteria of performance. Next, by exploring what ERB dimensions are regarded as in-role behaviors for juniors or seniors, the findings from this research also offer valuable insights into job stresses related to role-overload and suggest ways to help reduce them. This study will also offer insight into employees' perceptions of ERB in multinational contexts. Extra-role issues are coming to the forefront in many multinational or multi-cultural work groups, where there are cultural differences in the perceptions of in-role and extra-role behaviors. Findings from this study, then, will prove instrumental in developing cross-cultural management competencies. Finally, this study will provide information about which organizational contexts require employees to engage more in ERB in order to provide HR practices or polices that facilitate employees' willingness to go beyond what is required.

Outline of the Dissertation

Chapter II reviews the literature on ERB, which provides an overview of the ERB construct and summarizes the research on ERB antecedents. Based on this review, I discuss the

gaps of the existing literature on ERB and then suggest the objectives of this study. In Chapter III, from the perspective of coworkers (potential ERB receivers), I conceptualize the ERB construct. Drawing on Self-Categorization Theory (Turner, 1987) and Role Theory (Biddle, 1966), I provide the link between coworkers' expectations of ERB and employees' seniority and then propose the moderating effect of Confucianism Orientation (CO) on these relationships in that the importance of seniority varies across cultures. I also predict that CO influences coworkers' expectations of ERB. Finally, I propose a hypothesis that predicts industrial differences in coworkers' expectations of ERB. Chapter IV discusses research design, data collection, and measurement of variables. This chapter also includes some preliminary tests such as factor analyses and measurement invariance tests. Chapter V discusses missing value substitution and provides the results of hypothesis testing, acquired using Mixed Model analysis. Finally, Chapter VI discusses findings of the study, the theoretical and practical implications and limitations and then suggests future research directions.

CHAPTER 2: LITERATURE REVIEW

Organ (1988) defined ERB as "individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization" (p. 4). Since Organ and his colleagues' work (e.g, Bateman & Organ, 1983; Organ, 1977, 1988), much research has been conducted on ERB because ERB is perceived as contributing to organizational effectiveness (e.g., Lee, 1998; Organ, 1988; Organ, 1990; Podsdkoff, MacKenzie, Paine, & Barchrach, 2000). Despite the short history of ERB research, the existing ERB literature has enriched the scholarship on ERB (Dekas, 2010). However, most research has been conducted on psychological attributes of ERB givers using US-dominant samples. This study attempts to conceptualize a model of coworkers' expectations of ERB, which explores how potential ERB receivers (coworkers) might shape employees' ERB across cultures. Therefore, working from the assumption that coworkers can trigger potential ERB givers' ERB performance, in this chapter I provide an overview of the ERB construct and review primary trends of ERB research, focusing on antecedents. In reviewing the ERB literature, I categorize the antecedents into four types: psychological constructs, demographic factors, contextual factors, and cultural factors. After mapping the field of ERB research, I discuss gaps of existing ERB literature, concluding with the list of my own research objectives.

Overview of ERB

Research on ERB has flourished after Organ and his colleagues' work (Bateman & Organ, 1983; Organ, 1977, 1988; Smith et al., 1983). Pointing out that much remains to be understood between job satisfaction and job performance (Bateman & Organ, 1983; Organ, 1977), Organ and his colleagues suggested the necessity of the construct extra-role behaviors to explain this

relationship (Dekas, 2010). In other words, job satisfaction is not a sufficient predictor when performance includes the core of job duties alone. Organ and his colleagues suggested that the relationship between job satisfaction and performance is relatively strong when performance includes behaviors beyond in-role behaviors, which are formally described (Dekas, 2010, p. 6-7). This led to the necessity of the construct extra-role behavior, which is beyond an employee's formal job description, and much empirical evidence has provided support for their arguments (Organ, Podsakoff, & MacKenzie, 2006).

Since then, the function of ERB became the focus of organization researchers, which in turn caused research on ERB to blossom (Dekas, 2010). According to Ganesh and Gupta (2010), studies of ERB have been conducted mainly under the term Organizational Citizenship Behavior (OCB). However, ERB is considered a more appropriate label in that the key concept of OCB is to engage in extra-role behaviors voluntarily. Recently, research on citizenship behaviors has been conducted under the taxonomy ERB (e.g., Bowling, 2010; Ganesh & Gupta, 2010; Reychav & Sharkie, 2010; Wollan, de Luque, & Grünhagen, 2009; Yap, Bove, & Beverland, 2009). Therefore, I used the label of ERB rather than OCB in the current study.

Common dimensions of ERB. Organ and colleagues played a critical role in conceptualizing the ERB construct by defining ERB and identifying common dimensions of ERB (e.g., Bateman & Organ, 1983; Organ, 1977, 1988; Podsakoff, MacKenzie, Moorman, & Fetter, 1990; Smith et al., 1983). According to Organ's definition of ERB, the core of ERB is employees' voluntary behavior to go beyond the requirement without self-serving motives. By lubricating interpersonal relationships or relationships between employees and the workplace (Podsakoff, Ahearne, & MacKenzie, 1997, p. 263), ERB can contribute to organizational effectiveness (Borman & Motowidlo, 1993; Smith et al., 1983). As interest in ERB has increased,

the constructs of ERB have been further scrutinized, thus becoming expanded and diversified (Kim, 2006). However, the five-dimension model suggested by Organ (1988) is usually still accepted: altruism, courtesy, sportsmanship, conscientiousness, and civic virtue (Chahal & Mehta, 2010). The findings of LePine, Erez, and Johnson's (2002) meta-analysis suggested that measures of Organ's (1988) five dimensions can be best viewed as "equivalent indicators of OCB" and that "scholars begin to explicitly think of Organ's (1988) OCB as a latent construct" (p. 61). The common five constructs of ERB (which I apply to this study) are:

Altruism indicates behaviors helping another person at the workplace (Organ, 1988). As this dimension is targeted toward specific individuals, coupled with courtesy, it is labeled ERB-I (Williams & Anderson, 1991). Altruism includes not only behaviors that help coworkers with heavy workloads or coworkers who have been absent, but also sharing personal property with others (Konovsky & Organ, 1996).

Conscientiousness means doing the job well with meticulous attention to detail, obeying organizational rules, and being punctual (Organ, 1988). Unlike ERB dimensions targeted at a specific person, this dimension involves impersonal behaviors such as following basic principles of an organization, often labeled "generalized compliance" (LePine et al., 2002, p. 53). This dimension is targeted toward the organization rather than specific persons, which is called ERB-O (Williams & Anderson, 1991). Conscientiousness includes avoiding casual talks, not spending time on personal business, keeping the deadline, etc (Organ et al., 2006, p. 19).

Sportsmanship is defined as refraining from complaining about an inconvenience and trying to improve the organization, requiring patience (Organ, 1988). The essence of sportsmanship is to tolerate less ideal circumstance without complaint (Podsakoff et al., 1990, p. 115). This dimension includes avoiding finding what the management or the organization does

wrong, accepting changes the organization introduces, paying attention to others' work problems, etc. Also, Podsakoff et al. (2000, p. 517) expanded the boundary of sportsmanship by including maintaining positive thinking or stances even when employees need to sacrifice their personal interests or when their efforts are not recognized.

Courtesy refers to behaviors which prevent employees from having trouble with others (Organ, 1988). This type of discretionary behaviors involves etiquette which is required for employees in that it is related to treating others with good manners. Courtesy includes respecting others' rights and informing others before taking important actions (Konovsky & Organ, 1996). These behaviors involve helping others in ways that employees inform others who will be influenced by their decisions. Therefore, some scholars asserted that coupled with altruism, courtesy is included in helping behaviors in that it refers to discretionary behaviors targeted towards individuals rather than the organization (e.g., Podsakoff et al., 2000). Similarly, it is labeled ERB-I by Williams and Anderson (1991).

Civic virtue refers to behaviors participating and being involved in company or organizational affairs (Organ, 1988). The core of civic virtue is that employees voice themselves about certain organizational issues (Graham, 1986, 1991; Van Dyne et al., 1994). Similarly, Graham and Van Dyne (2006) asserted that civic virtue consists of "information gathering" and "exercising influence." This dimension includes keeping oneself informed about the matters that influence the organizations (LePine et al., 2002, p. 53), attending or participating in meetings, suggesting some ideas or opinions to improve the organizations, and so on.

Traditional directions in ERB studies. Since Organ and his colleagues' work (Bateman & Organ, 1983; Organ, 1977, 1988; Smith et al., 1983), early ERB studies have focused primarily on identifying dimensions of ERB (e.g., Borman & Motowidlo, 1993; Organ, 1988;

Podsakoff et al., 2000) as well as antecedents and outcomes of ERB (e.g., Niehoff & Moorman, 1993; Schappe, 1998; Yun, Takeuchi, & Liu, 2007). Compared with much research on the antecedents of ERB, there have been relatively few studies about ERB outcomes such as organizational performance (Bolino, Turnley, & Bloodgood, 2002). The available empirical research on ERB has provided evidence that ERB is associated with outcomes at multiple levels (e.g., Ehrhart, Bliese, & Thomas, 2006; Podsakoff et al., 2009; Podsakoff et al., 2000). For example, workers showing higher levels of ERB are more likely to have a successful career in an organization than those showing lower levels (Organ et al., 2006; Podsakoff et al., 2009). ERB is also inversely associated with turnover, turnover intensions, and absenteeism (Chughtai & Zafar, 2006; Khalid & Hassan, 2005; Podsakoff & Mackenzie, 1997). However, in order to facilitate employees' willingness to engage in ERB and have successful ERB outcomes, more research needs to be conducted on what makes people engage in ERB. In this light, pointing out that coworkers can contribute to shaping employees' ERB, this study suggests that potential ERB receivers'—coworkers'—expectations of ERB may be a significant antecedent of ERB. Therefore, I will further review the ERB literature, focusing on antecedents of ERB across levels.

Exploring Antecedents of ERB: Why and When Do Employees Engage in ERB?

Much ERB research has paid attention to figuring out why employees engage in ERB because ERB is considered to contribute to organizational effectiveness. Based on the ERB literature (e.g., Han & Altman, 2010, LePine et al., 2002; Organ, Podsakoff, & Podsakoff, 2011; Podsakoff et al., 2009; Raub, 2008), I identified four primary predictors of ERB: 1) psychological factors, which refer to intangible emotional and psychological states such as job satisfaction, personality, and impression management; 2) demographic factors, which include

gender, age, and race-ethnicity; 3) contextual factors, which involve inner-organizational contexts such as human resource management (HRM) variables as well as those less specific to the organization such as industrial characteristics; and 4) national cultures, which involve culture-related variables such as collectivism or individualism**.**

Psychological predictors. Personal psychological characteristics include employee attitudes (i.e., job satisfaction, perception of justice, & organizational commitment), dispositional attributes (i.e., personality, work ethics, growth needs, & cynicism), and employee role perceptions (i.e., job breadth). As the ERB construct is necessary for explaining the link between job satisfaction and performance (Smith et al., 1983; Organ, 1977, 1988), studies which have investigated psychological predictors of ERB have mainly focused on the relationship between job satisfaction and ERB performance (e.g., Bateman & Organ, 1983; Bolon, 1997; LePine et al., 2002; Moorman, 1993; Murphy et al., 2002; Organ & Ryan, 1995; Organ et al., 2006). For example, much research has reported that job satisfaction and perceptions of justice have positive effects on ERB performance (e.g., Nadiri & Tanova, 2009; Schappe, 1998; Chen & Francesco, 2003; Felfe, Yan, & Six, 2008; Organ et al., 2006) Similarly, employees who are more committed to organizations are likely to show higher levels of ERB (e.g., Snape, Chan, & Redman, 2006).

Also, meta-analyses of relationships between ERB and personality factors found that conscientiousness is significantly related to ERB (e.g., Borman, Penner, Allen, & Motowidlo, 2001; Organ & Ryan, 1995). Employees who define ERB as in-role are more likely to engage in ERB than employees who define ERB as extra-role (Coyle-Shapiro, & Kessler, 2002; Coyle-Shapiro, Kessler, & Purcell, 2004, p. 97; Kamdar, McAllister, & Turban, 2006; Zellars, Tepper, & Duffy, 2002). Impression management is also regarded as a psychological antecedent of ERB,

which has recently captured researchers' interests (e.g., Bolino, 1999). Considering that some people may engage in ERB in order to make a good impression (Fandt & Ferris, 1990; Ferris, Judge, Rowland, & Fitzgibbons, 1994), the motive of impression enhancement can function as an antecedent of ERB (Bolino, 1999).

While the previously discussed literature reviews psychological attributes resulting from individuals' characteristics, another category of psychological predictors of ERB involves psychological constructs resulting from interpersonal relationships within the workplace. For example, team-member exchange (TMX) and group cohesiveness are also important predictors of ERB performance (Organ et al., 2006; Han & Altman, 2010; Wech et al., 2009). Perceived organizational support (POS) and perceived team support (PTS) are positively related to ERB (e.g., Farh, Hackett, & Jian, 2007; Wayne, Shore, & Liden, 1997). Moreover, leader supportive behavior (LePine et al., 2002; Podsakoff et al., 2000; Smith et al., 1983), leader's monitoring (Niehoff & Moorman, 1993), interpersonal trust in leader (Podsakoff et al., 1990), and leader-member exchange (LMX) (Wayne et al., 1997) are positively related to ERB performance. Table 2.1 displays empirical studies about how psychological factors influence engagement in ERB.

Table 2.1

Research on relationships between psychological constructs and ERB

Category	Study	Sample	Findings
Job satisfaction	Bowling (2010)	209 employees from diverse organizations in the U.S. (snowballing method)	Job satisfaction was positively related to ERB (interpersonal helping behavior, individual initiative, and loyal boosterism).
	LePine et al. (2002)	Meta-analysis: 9,248 participants	Job satisfaction was positively related to ERB.

Table 2.1 (cont'd)

Category	Study	Sample	Findings
Job satisfaction	Murphy et al. (2002)	41 employees from a development facility in Australia	Job satisfaction was positively related to ERB.
	Organ & Ryan (1995)	Meta-analysis: 6,746 participants (28 studies)	Job satisfaction was positively related to ERB.
Organizational commitment	LePine et al. (2002)	Meta-analysis: 76 independent samples	Organizational commitment was positively related to ERB.
	Snape et al. (2006)	255 Chinese manufacturing employees	Organizational commitment was positively related to ERB.
Perception of fairness (justice)	Farh et al. (1997)	Study 2: 265 employees and 65 supervisors from eight firms in Taiwan	Organizational justice was positively related to ERB.
	LePine et al. (2002)	Meta-analysis: 2,228 participants	Perceptions of fairness were positively related to ERB.
	Nadiri & Tanova (2009)	208 employees and their managers of a hotel in North Cyprus	Distributional justice was more related to ERB than procedural justice.
Job perception (job breadth)	Coyle-Shapiro et al. (2004)	387 hospital employees	Employees perceiving ERBs as in-role were more likely to engage in ERB than employees perceiving ERBs as extra-role.
	Kamdar et al. (2006)	219 engineers and their supervisors from an oil refinery US company in India	Employees perceiving ERB as in-role are more likely to engage in ERB than employees perceiving ERB as extra-role.
Personality	LePine et al. (2002)	Meta-analysis: 619 participants	Conscientiousness was positively related to ERB.
	Miller, Griffin, & Hart (1999)	104 public sector employees in Australia	Conscientiousness was a significant predictor of ERB.

Table 2.1 (cont'd)

Category	Study	Sample	Findings
Personality	Organ & Ryan (1995)	Meta-analysis: 2,172 participants (11 studies) for conscientiousness; & 916 participants (6 studies) for agreeableness	Conscientiousness was positively related to altruism. Agreeableness had slightly positive relationships with altruism.
	Watrous-Rodgiguez (2010)	133 employed undergraduate students	Conscientiousness, agreeableness, extraversion, and emotional stability were positively related to ERB.
Team-member exchange (TMX)	Wech et al. (2009)	169 customer contact employees from 33 branches of a retail bank in the U.S.	TMX was positively related to ERB.
Leader-member exchange (LMX)	Zhong, Lam, & Chen (2011)	238 supervisor-subordinate dyads from two Chinese companies in China	LMX had a positive relationship with ERB.
Leadership	LePine et al. (2002)	Meta-analysis: 4,349 participants (41 studies)	Leader support was positively related to ERB.
	Organ & Ryan (1995)	Meta-analysis: 3.062 participants (8 studies)	Leader consideration was positively related to altruism.

As seen in Table 2.1, these studies typically focus on ERB givers to investigate motives of ERB. They have made contributions to the ERB literature by figuring out why or in what contexts employees demonstrate ERB. Based on social exchange theory (Blau, 1964) or the norm of reciprocity (Gouldner, 1960), employees who are more satisfied with job or committed to organizations are likely to engage in ERB to reciprocate what they are given. Similarly, employees who feel support from their leaders or team members tend to engage in ERB. Also, employees' perceptions of job or task influence engagement in ERB. Although some studies deal

with psychological factors related to interaction with others such as leaders or team members, they also look into ERB motives from the ERB-giver's side. Considering that ERB is shown in organizational contexts in which interaction with others happens on a regular basis, this approach has limitations in understanding why or how employees feel inclined to engage in ERB. In addition, as employees interact with supervisors as well as peer and subordinates within organizations, research focusing on interaction with one of them has a limited view of the influences of coworkers on engagement in ERB. Therefore, further research needs to be conducted from the perspective of potential ERB receivers, including peers, subordinates, and supervisors.

Demographic predictors. As predictors of ERB, demographic factors have recently captured researchers' attention. To be specific, there has been research on the relationship between gender and ERB (e.g., Allen & Rush, 2001; Chou & Pearson, 2011; Pulakos & Wexley, 1983; Pulakos, White, Oppler, & Borman, 1989; Swim, Borgida, Maruyama, & Myer, 1989). Based on gender-role theory, Kidder and McLean Parks (2001) suggested that altruism and courtesy are likely to be considered in-role for females while sportsmanship and civic virtue are likely to be regarded as in-role for males. Although some studies found that age and tenure is significantly related to ERB (e.g., Chou & Pearson, 2011), the majority of these studies indicate that there are non-significant relationships between gender and ERB (Allen & Rush, 2001). Research has also found that race-ethnicity is not significantly related to ERB (e.g., Allen, 2006; Aquino & Bommer, 2003; Bowler & Brass, 2006; Cohen, 2006; Detert & Burris, 2007; Treadway, Ferris, Duke, Adams, & Thatcher, 2007).

Compared with gender and race-ethnicity, there are a few studies of the age and ERB relationship (e.g., Chou & Pearson, 2011; Ng & Feldman, 2008; Wagner & Rush, 2000). Ng and

Feldman (2002) found that age is negatively and minimally related to overall ERB while it is positively related to ERB directed at individual persons, such as behavior tied to altruism and courtesy. However, they reported that these relationships were all non-significant. Similarly, Wagner and Rush (2000) showed that age was not correlated to altruistic behaviors. On the other hand, using an IT professional sample, Chou and Pearson (2011) found that age was positively related to ERB. Taken together, research on the relationship between age and ERB has provided inconsistent results. Table 2.2 presents empirical research on the relationships between demographic factors and ERB.

Table 2.2

Research on the relationships between demography and ERB

Demography	Study	Type	Sample	Findings & Arguments
Age	Chou & Pearson (2011)	Empirical	85 IT professionals from various industries in the U.S.	Age was positively related to ERB.
	Ng & Feldman (2008)	Meta-analysis	380 empirical studies: 438 independent samples	Age had non-significant effect on ERB performance.
	Wagner & Rush (2000)	Empirical	96 US nurses	Age was not related to altruistic behaviors.
Gender	Kidder & McLean Parks (2001)	Theoretical	NA	Altruism and courtesy are more likely to be regarded as in-role for females than males. Sportsmanship and civic virtue are more likely to be regarded as in-role for males than females.
	Chou & Pearson (2011)	Empirical	85 IT professionals from various industries in the U.S.	Gender was non-significantly related to ERB.

Table 2.2 (cont'd)

Demography	Study	Type	Sample	Findings & Arguments
Tenure	Chou & Pearson (2011)	Empirical	85 IT professionals from various industries in the U.S.	Job tenure was positively related to ERB.
Race-ethnicity[(a)]	Aquino & Bommer (2003)	Empirical	418 US manufacturing employees	White employees demonstrated higher levels of ERB than did African American.
	Cohen (2006)	Empirical	291 Jewish & 278 Arab teachers	Race-ethnicity was non-significantly related to altruistic ERB.
	Detert & Burris (2007)	Empirical	3,149 restaurant employees & 223 restaurant managers	Ethnicity variables were non-significant antecedents of voice behavior.
	Miceli & Mulvey (2000)	Empirical	250 US union members & manufacturing employees	Race had non-significant effect on ERB.
	Treadway et al. (2007)	Empirical	126 employees of two retail service organizations	Race had non-significant effect on ERB

(a) Source: Organ et al., 2011, p.311-312)

As seen in Table 2.2, relationships between demographic factors and ERB have been under-examined. However, like research on psychological predictors of ERB, research on influences of demography has been conducted from the perspective of ERB-giver. Also, while the existing literature has tended to focus more on age as a demographic factor of influence, seniority or tenure seem like more important factors to consider in organizational contexts. Another limitation of the existing ERB research on demography is that ERB raters are typically immediate supervisors or managers (e.g., Detert & Burris, 2007). This may be because this approach pays little attention to ERB receivers in general. In addition to managers, peers and

subordinates could be ERB raters within the workplace because peers and subordinates can place pressure on employees, thereby influencing employees' engagement in ERB (Van Dyne et al., 1994). This implies that much research calls for potential ERB receivers' perceptions of ERB.

Contextual predictors. Some studies have explored the contextual predictors of ERB (e.g. Detert & Burris, 2007; Zhang, Wan, & Jia, 2008). Context refers to "the surrounding associated with phenomena which help to illuminate that phenomena" in the organizational behavior literature (Cappelli & Shere, 1991, p. 56). This implies that for individual members, internal organizational characteristics become context while external environment becomes context for organizations (Johns, 2006). Typically, external environment means a society or country to which the organization belongs. However, in this study, instead of including cultures, industry is included in context because some empirical studies have demonstrated industrial difference in ERB (e.g., Ariani, 2012; Chiang & Hsieh, 2012; Raub, 2008). Moreover, some scholars have asserted that there is within-country variation in cultural values (e.g., Triandis, 1995). In other words, there is an individual level of culture as well as a country-level of culture, suggesting that culture is a more inclusive category. Therefore, I separate culture from context and explore cultural influences on ERB after reviewing contextual predictors of ERB.

The contextual predictors of ERB involve organizational characteristics which are related to internal HRM practices or policies as well as industrial features. For example, employees who have job security are more likely to engage in ERB than those whose jobs are insecure (Han & Altman, 2010). The extent of participation in decision-making, career planning, and advancement opportunities are positively related to ERB (Detert & Burris, 2007; Gong & Chang, 2008; Organ et al., 2006; Zhang et al., 2008). Incentive reward or profit-sharing benefits are also significant predictors of ERB (Organ et al., 2006; Zhang et al., 2008). The levels of contingent

pay on performance are negatively related to ERB in Western contexts, while they are positively associated with ERB in Asian contexts (Gong & Chang, 2008; Zhang et al., 2008).

Moreover, there may be industrial variation in ERB performance because some industries require higher levels of ERB than others. For example, as the service industry, particularly hospitality and tourism, contact customers more frequently and directly, employees of the service industry are likely to be required to engage more in ERB than employees of other industries, particularly manufacturing industries (Chiang & Hsieh, 2012; Ma & Qu, 2011). Similarly, Borman and Motowildlo (1993) argued that traditionally defined ERB dimensions are not sufficient for the service industry in that it requires employees to engage in ERB related to customers. Moreover, Bettencourt and Brown (1997) suggested three dimensions of ERB for service-oriented organizations (p. 41-42): 1) *extra-role customer service*, which means discretionary behaviors of employees who are in charge of customer service; 2) *role-prescribed customer service*, which refers to in-role behaviors required for employees, and 3) *cooperation*, which means contact employees' helping behaviors toward coworkers. Bettencourt, Gwinner, and Meuter (2001) provided support for the notion that more research on service-oriented ERB is needed. This implies that there may be industry-specific dimensions of ERB, which suggests that industry may be a significant predictor of ERB. However, little empirical cross-industrial ERB research has attempted to explore variation in levels of employees' ERB performance.

Cultural predictors of ERB. The final primary antecedents of ERB are culture-related variables. Some scholars have suggested that individuals' differences in definition of in- and extra-role behavior are associated with "social clues" (Morrison, 1994) as well as cultural values and norms (Erez, 1997; Kwantes, 2003; Kwantes, Karam, Kuo, & Towson, 2008). Cultural contexts play a critical role in ERB as antecedents or moderators (George & Jones, 1997) in that

they have the potential to affect the extent to which employees demonstrate ERB (Paine & Organ, 2000). Pointing out that national culture might contribute to understanding antecedents of ERB, several authors have studied how culture is related to ERB performance (e.g., Moorman & Blakely, 1995; Van Dyne et al., 2000). The findings of these studies imply that employees' cultural backgrounds can contribute to affecting the amount or levels of their ERB performance. The primary research trends in the linkage of culture to ERB can be classified into three categories (Dimitriades, 2007, p. 471): 1) the applicability of the construct validity of ERB based on Western/U.S. contexts (e.g., Choi, 1994; Gautam, Van Dick, Wagner, Upadhyay, & Davis, 2005; Lam, Hui, & Law, 1999); 2) the differences in the level of ERB performance (e.g. Farh et al., 1997; Moorman & Blakely, 1995; Van Dyne et a., 2000); and 3) the strengths of the relationships between ERB and its antecedents and outcomes. I will discuss differences in dimensions of ERB between Western/US contexts and other contexts, particularly Asian/South Korean contexts and then how cultural values influence the extent to which employees engage in ERB.

Cultural differences in dimensions of ERB. Researchers have provided evidence that cultural contexts can influence perceptions of ERB, which can in turn lead to cultural differences in the dimensions of ERB (e.g., Moorman & Blakely, 1995; Van Dyne et al., 2000; Varela, Salgado, & Lasio, 2010). For instance, as collectivistic cultures emphasize harmony and reciprocity among in-group members more than individualistic cultures do (Moorman & Blakely, 1995), helping behaviors and conflict-avoiding behaviors are likely to be considered in-role behaviors for group members. In other words, while individualistic cultures may define a given behavior as an extra-role behavior, collectivistic ones may take the same behavior for granted because they are likely to define workers' responsibility more broadly (Choi, 1994). Similarly,

ERB is more likely to be considered in-role in Asian contexts than in Western/US contexts (Blakely, Srivastava, & Moorman, 2005; Choi, 1994; Chang & Hackett, 2007; Li & Wan, 2007) because Asian contexts are more likely to emphasize "group harmony and duty to the group" than are Western/US contexts (Brewer & Chen, 2007, p. 136; Hofstede & Bond, 1988).

In this light, mentioning that the five-construct model of ERB "appears to demonstrate values specific to Western individualistic cultures" (e.g., Gautman et al., 2005, p. 307), some scholars have attempted to test the applicability of the ERB dimensions based on Western/U.S. contexts to other cultural contexts, particularly Asian contexts. For example, Lam et al. (1999) found that Japanese and Hong Kong employees are more likely than Australian and U.S. employees to consider courtesy and sportsmanship as in-role behavior. Farh et al. (1997) also reported that Taiwanese employees do not define these constructs of ERB as extra-role behavior. Similarly, Choi (1994) and Lee (1998) found that courtesy and sportsmanship are considered in-role behavior in South Korea. Supporting later claims that 'relationship harmony' and 'self-development' are constructs of ERB uniquely important in Asian contexts (e.g., Farh et al., 1997), Choi (1994) found these two dimensions of ERB to be important in South Korea. According to him, 'relationship harmony' indicates behaviors that try to maintain a good interpersonal relationship with coworkers, including peer, supervisors, and subordinates (p. 25). 'Self-development' is defined as enhancing knowledge and working skills such as learning foreign languages and computer literacy as well as keeping in good health (Choi, 1994, p. 25-26). George and his colleagues (George & Brief, 1992; George & Jones, 1997) also defined a self-development dimension in US contexts, but Choi's self-development includes "keeping healthy" in Korean settings, which is more inclusive than that proposed by George and her colleagues.

Considering this, the Korean dimension of self-development may be different from its Western counterpart.

Similarly, Farh et al. (1997) identified additional constructs of ERB in the Chinese setting: 'interpersonal harmony' and 'protecting company resources.' 'Interpersonal harmony' refers to employees' discretionary behavior for maintaining a good relationship with others and the organization, rather than pursuing personal power (p. 429), and 'protecting company resources' is defined as "discretionary behaviors that do not abuse company policies and resources for personal use (p. 429)." Farh, Zhong, and Organ (2004) also found additional dimensions of ERB unique to the Chinese context: a) 'self-training', which means developing an employee's knowledge or working skill; b) 'social welfare participation', which means participating activities in public welfare; c) 'protecting company resources' and 'interpersonal harmony,' which are developed by Farh et al. (1997); and d) 'keeping the workplace clean.' Choi (1994) and Farh et al. (1997; 2004) suggested similar dimensions of ERB: Choi's relationship harmony can be compared with Farh et al.'s (1997) interpersonal harmony, and Choi's self-development activity can be paralleled with Farh et al.'s (2004) self-training.

As demonstrated by the similarities in dimensions of ERB in Choi's (1994) and Farh et al.'s (1997, 2004) research, there are distinct dimensions of ERB in Asian countries, which are beyond the concept of the Western-based ERB. Although some ERB dimensions such as altruism and conscientiousness have been found to be equally applicable across different socio-cultural contexts (Gautam et al., 2005), there are cultural differences in dimensionality of ERB (Choi, 1994; Farh et al., 1997, Farh et al., 2004). Table 2.3 displays what are considered to be the different constructs of ERB between Western/U.S. contexts and Asian/Korean contexts. This implies that research on ERBs need to be conducted in contexts beyond the U.S.

Table 2.3

ERB dimensions between Western/U.S. and Asian/Korean contexts

Study	Context	Sample	Findings
Choi (1994)	South Korean	308 employees from various firms in South Korea	Courtesy and sportsmanship were regarded as in-role behaviors rather than ERB while altruism was regarded as ERB. Three new constructs of ERB were found: relationship harmony, information collection, and self-development.
Farh et al. (1997)	Chinese (Taiwan)	Study 1: 109 MBA students and part-time MBA students of a university in Taiwan	Courtesy and sportsmanship were regarded as in-role rather than ERB while altruism and civic virtue were regarded as ERB. Two new constructs of ERB were founded: interpersonal harmony and protecting company resources.
Farh et al. (2004)	Chinese	158 Chinese employees from 72 companies	Five constructs of ERB were found: self-training, social welfare participation, protecting & saving company resources, keeping the workplace clean, and interpersonal harmony.
Gautam et al. (2005)	Nepalese	450 employees of five firms in Nepal	Altruism and conscientiousness were found to be equally applicable in Nepalese contexts.
Lam et al. (1999)	US & Asian	431 tellers & supervisors in four national branches (US, Australia, Japan, & Hong Kong) of a large multinational bank	Altruism, courtesy, conscientiousness, and sportsmanship were ERB in US and Australian contexts while courtesy and sportsmanship were in-role in Hong Kong and Japanese contexts.

Table 2.3 (cont'd)

Study	Context	Sample	Findings
Varela et al. (2010)	South American (Venezuela, Colombia, & Ecuador)	1,022 employees of Venezuela, Colombia, & Ecuador (3 organizations in the public sector & 2 organizations in the private sector)	ERB targeted at individual coworkers were likely to be regarded as in-role rather than ERB in collectivistic cultures.

As seen in Table 2.3, there are several studies about cultural differences in the dimensionality of ERB. By exploring dimensions of ERB in non-US contexts, these studies contribute to indentifying which dimensions of ERB are universally applicable across cultures. However, testing dimensionality of ERB in Asian contexts has typically been based on Chinese contexts (e.g., Farh et al., 1997; Farh et al., 2004; Lam et al., 199). In terms of investigating ERB in Asian contexts, it is necessary to conduct research in non-Chinese contexts.

Cultural differences in the level of ERB performance. Another research thread on the cultural effects of ERB has focused on the differences in the level of ERB performance. The findings of these studies imply that employees' cultural backgrounds can contribute to affecting the amount or levels of their ERB performance. For example, some studies have demonstrated that employees of collectivistic cultures are more likely to display ERB than are those of individualistic cultures (e.g., Farh et al., 1997; Moorman & Blakely, 1995; Van Dyne et al., 2000). Such results are expected given that collectivists emphasize group well-being, cohesiveness, and group goals (Van Dyne et al., 2000) and are more likely to help group members than are individualists (Earley, 1989). Collectivists are likely to expect higher levels of ERB because of social norms and values highlighting groups' interests over individuals' (Gautam et al., 2005). As a result, Korean employees, coming from Confucian culture, may tend

to demonstrate a greater level of ERB (Kim, 2006). As Confucianism emphasizes interpersonal relations, harmony, and cooperation, helping coworkers would be as important as achieving better work performance (Kim, 2006). Therefore, employees in Confucianism cultures would show relatively higher levels of ERB than those in individualism contexts—characterized by "reward systems based on individual performance in relation to demanding and specific goals" (Paine & Organ, 2000, p. 47).

In addition, there are some cross-cultural ERB studies that are conducted at a national level of measurement and analysis (e.g., Euwema, Wendt, & van Emmerik, 2007; Turnipseed & Murkison, 2000; Varela et al., 2010). Turnipseed and Murkison (2002) found that there are significant differences in ERB between the Romanian manufacturing employees and their US counterparts, indicating that national cultures influence ERB. Hui, Lee, and Rousseau (2004a) explored the relationship between national context and ERB with the assumption that Chinese culture is based on collectivism (Bond, 1996; Hofstede, 1984). Also, using individual employee data from three South American countries (Venezuela, Colombia, and Ecuador), Varela et al. (2010) found the overlap between ERB toward individuals (ERB-I) and task (in-role behaviors). They implied that in collectivistic and high power distance settings, employees are more likely to engage in ERB-I than in individualistic and low power distance settings. However, other than Euwema et al. (2007), these studies used nationality as a proxy of culture, meaning that they did not measure cultural difference. Despite not measuring actual cultural differences, they concluded that people are likely to engage in ERB more frequently in collectivistic cultures than in individualistic cultures.

Also, some studies have provided empirical evidence that cultural influences are non-significant on ERB performance (e.g., Euwema et al., 2007; Kirkman, Chen, Farh, Chen, &

Lowe, 2009). Using data of team managers and their team members in 33 countries, Euwema et al. (2007) found that there were non-significant direct relationships between collectivism and ERB as well as between power distance and ERB. Similarly, using Chinese and US sample data, Kirkman et al. (2009) found that power distance was a non-significant predictor of ERB. Table 2.4 displays cultural differences in levels of engagement in ERB.

Table 2.4

Cultural differences in levels of ERB

Study	Measures of cultural level	Sample	Cultural values	Findings
Cohen (2006)	individual	291 Jewish and 278 Arab teachers	Individualism & Power distance	Collectivism was positively related to ERB. Power distance was negatively related to conscientiousness.
Euwema et al. (2007)	country	20,336 managers and their 95,893 subordinates from 33 countries	Individualism & Power distance	Individualism and power distance were found to be non-significantly related to ERB at group level.
Kirkman et al., (2009)	individual	US vs. Chinese (part-time MBA students and employees) - US: 278 subordinates and 74 supervisors - Chinese: 282 subordinates and 100 supervisors	Power distance	Power distance was non-significantly related to ERB.
Moorman & Blakely	individual	210 employees from financial service organizations in the US	Collectivism	Collectivism was positively related to altruism

Table 2.4 (cont'd)

Study	Measures of cultural level	Sample	Cultural values	Findings
Turnipseed & Murkison (2002)	country (nationality)	US vs. Chinese - US: 106 employees of a manufacturing - Romanian: 101 employees of a state-owned firm	-	US employees were more likely to engage in ERB than were Romanian employees.
Van Dyne et al. (2000)	individual	cooperative housing members (non-working organizations)	Collectivism	Collectivism was positively related to helping behaviors.
Varela et al. (2010)	country (nationality)	1,022 employees of Venezuela, Colombia, and Ecuador (3 organizations in the public sector and 2 organizations in the private sector)	Collectivism-Individualism & Power distance	ERB targeted at individuals (i.e., altruism) was likely to be regarded as in-role rather than ERB in collectivistic cultures.

As seen in Table 2.4, drawing mainly on Hofstede's framework, the cultural impact on levels of ERB has been studied, particularly the individualism-collectivism construct (e.g., Euwema et al, 2007; Cohen, 2006; Moorman, & Blakely, 1995). However, in terms of studying cultural influence on ERB in Asian contexts, particularly South Korea, China, and Taiwan, Confucianism would be more appropriate than the individualism-collectivism construct. Another weakness is that some studies use country (nationality) as proxy of cultural orientation (e.g., Turnipseed & Murkison, 2002; Varela et al., 2010). Some researchers have argued that such an approach is not appropriate for cultural or cross-cultural research because there is within-country variation in cultural orientation (e.g., Dorfman & Howell, 1988; Strauss & Quinn, 1997; Triandis, 1995). Moreover, it is difficult to view country as a liable representation of theoretical predictors

that explain differences in values, behaviors, or belief at the individual level (Lam, Schaubroeck, & Aryee, 2002, p. 14). These limitations of the existing cultural ERB call for further research on the influence of culture on ERB.

Cultural differences in the strengths of the relationships between ERB and variables of interest. Some studies suggest that culture-related variables may be indirectly related to ERB (e.g., Dimitriades, 2007), meaning that culture may moderate the relationship between ERB and its antecedents and outcomes. For example, Farh et al. (1997) found that for employees low in traditionality, the relationship between fairness and ERB is stronger than for employees high in traditionality. Similarly, Farh et al. (2007) found that power distance and traditionality were likely to moderate the relationship between ERB (altruism and conscientiousness) and perceived organizational support (POS). However, little research has been done on the moderating effects of cultural values on the relationships between ERB and other variables of interests. Table 2.5 displays cultural influences in the strengths of the relationships between ERB and its antecedents and outcomes.

Table 2.5

Cultural differences in the strengths of the relationship between ERB and variables

Study	Measures of cultural level	Sample	Cultural values	Findings
Farh et al. (1997)	individual	Study 1: 109 MBA students and part-time MBA students of a university in Taiwan	Traditionality (Chinese traditional values)	The relationship between fairness and ERB were moderated by traditionality.
Farh et al. (2007)	individual	163 supervisor-subordinate dyads	Power distance & Traditionality	Power distance was negatively related to conscientiousness while it was non-significantly related to altruism and voice.

Table 2.5 (cont'd)

Study	Measures of cultural level	Sample	Cultural values	Findings
Hui et al. (2004a)	individual	605 employees and their supervisors from a state-owned firm in China	Traditionality (traditional Chinese values)	More-traditional Chinese were likely to engage more in ERB than were less-traditional Chinese

These types of studies investigate the moderating effects of culture on the relationship between ERB and variables of interest. Compared to cultural research on ERB in which culture is treated as a main effect, relatively fewer researchers paid attention to the role of culture as a moderator. Moderating effects imply the need to consider cultural contexts in order to understand people's behaviors, values, and beliefs, indicating that human resource management (HRM) practices should be contingent on culture (Kirkman, Lowe, & Gibson, 2006, p. 303). In this light, further research needs to be conducted on the moderating effects of culture on ERB. Also, as the existing ERB studies dealing with culture as a moderator have typically been based on Chinese sample data, findings from these studies may have limited applicability. Therefore, further research needs to be conducted to test whether variance in ERB can be additionally explained by culture.

Gaps of the Existing ERB Literature

As seen in the discussion above, the existing literature on ERB suggests that much research has contributed to why and when employees are willing to go beyond the requirement. Despite the efforts of many ERB scholars, much remains to be known about what leads people to engage in ERB. Based on my review of the existing research on ERB, I summarized gaps of the existing ERB literature into five types: 1) ERB giver-focused research; 2) little research on

demographics-ERB links; 3) little cross-industrial comparison of ERB; 4) US context-dominant studies; and 5) little cross-national ERB research using global firms. I will further discuss each of these gaps in detail and then suggest the objectives of this study.

ERB giver-focused view. Despite a great amount of research on ERB, the majority of the existing ERB literature is ERB-giver focused and US sample dominant. Recently, there have been a few studies that call for the influence of ERB receivers on potential ERB givers' ERB performance (e.g., Banki, 2010; Koser & Sander, 2006). For example, Koser and Sanders (2006) suggested that ERB in social exchange contexts needs to be considered by nature as reciprocal behaviors. This implies employees can be potential ERB receivers as well as ERB givers. These studies imply that people may engage in ERB involuntarily by external forces such as strong pressures from coworkers. However, the ERB giver-focused research has offered only a limited understanding of ERB. Given that ERB is nested within organizational contexts, coworkers play a critical role in explaining why people engage in ERB. Similarly, some studies have suggested that people engage in ERB because they meet others' expectations of their ERB performance (e.g., Van Dyne et al., 1994). In particular, these studies imply that potential ERB receivers' expectations could influence ERB givers' ERB performance. However, despite the necessity of ERB receivers, little research has been conducted on ERB receivers, specifically ERB receivers' expectations.

Furthermore, research on ERB as self-serving behavior has primarily paid attention to the relationship between supervisor and subordinate (Banki, 2010), which has been the main focus of interpersonal relationships in organization research. This approach provides an insufficient view of understanding peoples' motives in performing ERB given that employees interact with people beyond just their supervisors on a regular basis. Therefore, research needs to include

potential ERB receivers: supervisors, peers, and subordinates. The attention to a wider base of potential ERB receivers is an important shift because ERB receivers can shape ERB givers' ERB performance.

Little research on the linkages of age or seniority to ERB. Compared to other demographic factors, the relationship between age-related variables and ERB has been minimally studied (e.g, Ng & Feldman, 2008; Wagner & Rush, 2000). However, the literature has stated that employees have different behaviors and attitudes towards their coworkers related to age or seniority in the workplace (e.g., McCann & Giles, 2006). Particularly, in Confucian cultures, which emphasize differentiated role behaviors by seniority, coworkers have different expectations of in-and extra-role behaviors related to employees' seniority. In addition, given that the importance of age varies across cultures (Tsui & Gutek, 1999), the age-related variables have become important in increasingly globalized workforce, specifically multi-cultural or multinational work groups. However, the current US-dominant ERB studies are not sufficient to explain such relationships. Therefore, research needs to be conducted on the linkage of seniority to coworkers' expectations of ERB on global firm samples.

Little cross-industrial comparison of ERB. Cross-industrial ERB studies of coworkers' expectations of ERB are necessary in that there are industrial differences in ERB performance. Assuming that four-level analysis—individual, group, organization, and culture—is theoretically sufficient for ERB, the current ERB studies have not paid attention to industrial variation in perceptions of ERB. However, compared to product-oriented organizations, service-oriented organizations are likely to set a broader scope of job duty (Chiang & Hsieh 2012; Raub, 2008), which implies that employees are expected to engage more in ERB in the service industry than in non-service industries. Likewise, it can be inferred that compared to employees of other

industries, employees of service organizations may expect their coworkers to engage more extensively in ERB. Despite the effect of industry on ERB, little research has attempted to empirically investigate it. Therefore, it is necessary to empirically compare ERB of service-oriented organizations to that of product-oriented organizations such as manufacturing organizations.

Western/US-dominant studies. Despite the fact that research on ERBs generated in the U.S. has offered a limited perspective, much ERB research has assumed that US-based behavioral theories could be applied to other countries and cultures (Adler, Doktor, & Redding, 1986; Boyacigiller & Alder, 1991; Chhokar, Zhuplev, Fok, & Hartman, 2001; Gelfand, Erex, & Aycan, 2007; Randal, 1993). However, the definition of in- and extra-role behaviors may vary across cultures (Kwantes, 2003; Paine & Organ, 2000). As the U.S. is based on individualism, job descriptions are likely to be clearly specified and employees are likely to be evaluated on individual performance (Choi, 1994, p. 17). Therefore, existing literature on ERB may be insufficient for other countries, especially Asian countries like South Korea, which are based on collectivism and Confucianism.

After all, ERB scholars have provided empirical evidence showing that in collectivistic and high power distance cultures, some dimensions of ERB are considered in-role behaviors rather than extra-role behaviors (e.g., Choi, 1994; Farh et al., 1997; Varela et al., 2010). Similarly, in Confucian cultures employees may tend to demonstrate a greater level of ERB (Kim, 2006). Along this line, the extent to which others' expectations influence one's ERB performance is more significant in Asian contexts than in Western/US contexts (Chakrabarty, 2009; Hitt, Franklin, & Zhu, 2006; Kitayama, Snibbe, Markus, & Suzuki, 2004). This suggests that there are some cultural differences in the impact of ERB receivers' expectations in the extent

to which ERB givers engage in ERB. For example, contexts defined by Confucian and collectivistic cultures are likely to have more robust expectations of role behaviors than contexts defined by individualistic cultures (Farh, Tsui, Xin, & Cheng, 1998; Levy & Langer, 1994). This implies that more research needs to be conducted on non-US contexts. Pointing out cultural variation in ERB, some scholars have investigated cultural influence on ERB (e.g., Moorman & Blakely, 1995; Van Dyne et al., 2000). However, there are few empirical studies that explore the impacts of culture-related variables in the performance of ERB (Kwantes et al., 2008, p. 231). Moreover, these studies are based primarily on Hofstede's cultural framework and treat culture as a main effect on ERB.

Cultural ERB studies focused on Hofstede's culture framework. The current cross-cultural ERB studies have focused primarily on Hofstede's cultural value framework, especially the collectivism-individualism construct (e.g., Euwema et al, 2007; Cohen, 2006; Moorman, & Blakely, 1995; Van Dyne et al., 2000; Varela et al., 2010) or power distance construct (e.g., Cohen, 2006; Euwema et al, 2007; Kirkman et al., 2009; Varela et al., 2010). Recently, cross-cultural research has called for the necessity of other cultural constructs in that Hofstede's constructs are not sufficient for dividing cultures (Gelfand et al., 2007). Moreover, given that Asian cultures are defined as Confucian based on collectivism (Laulusa, 2008; Rhee, Cho, & Cho, 2004), Confucianism may be substituted for Hofstede's cultural value construct in studies which compare Asian countries and the US. As Confucianism emphasizes age or seniority more than other cultures (Tsui & Gutek, 1999), it may be more appropriate for research investigating cultural effects of these demographic variables on employees' attitudes and behaviors than other cultural values.

Little cross-cultural ERB research on cultural values as a moderating effect. In addition, the existing cultural ERB studies have regarded culture as a main effect of ERB, based on Hofstede's culture framework such as the collectivism-individualism or power distance constructs (e.g., Boreman et al., 2001; Euwema et al., 2007; Moorman & Blakely, 1995; Van Dyne et al., 2000). However, studies have provided evidence that culture is a significant moderator of relationships between ERB and other variables (e.g., Euwema et al., 2007; Farh et al., 1997). This implies that culture may indirectly influence individuals' behaviors or attitudes in a society, rather than directly impact them. In particular, the strength of the relationship between role behaviors and seniority or age-related variables may vary across cultures in that the importance of demographics is different from culture to culture (Tsui & Gutek, 1999). However, little research has been conducted on the moderating effect of culture on relationships between ERB and other variables.

Objectives of the Present Study

To summarize, the current US-based or ERB giver-focused studies are insufficient to explain ERB receivers' perceptions, the link of seniority to ERB, ERB in non-US contexts, and industrial differences in ERB, etc. These limitations in the existing literature on ERB have called for further research on ERB receivers' expectations and how cultural differences affect coworkers' expectations. Thus, this study aims to fill in the gaps of existing research on ERB, by suggesting the new construct "coworkers' expectations of ERB," which means ERB perceptions commonly shared by potential ERB receivers. To be specific, using data from global firms, this study aims to 1) develop the construct "coworkers' expectations of ERB (CERB)" and 2) provide a model of CERB by exploring the relationships between CERB and target employees' seniority

(seniors vs. juniors), industrial characteristics (service organizations vs. manufacturing organizations), Confucianism Orientation, and the influence of Confucianism Orientation on CERB in relation to seniority.

CHAPTER III: A MODEL OF COWORKERS' EXPECTATIONS OF EXTRA-ROLE BEHAVIORS

The review of existing ERB literature suggests the necessity of research which focuses on potential ERB receivers' perceptions, namely *coworkers' expectations of ERBs*. I attempt to explore what influences coworkers' expectations of ERB. Given that role stereotyping related to demographics is pervasive, employees may have different perceptions or expectations for their colleagues' extra-role behaviors (Kidder & McLean Parks, 2001). In particular, coworkers' expectations of ERB may be linked to potential ERB givers' seniority, which is a primary demographic clue that people use when categorizing and perceiving others in organizational contexts (Perry & Parlamis, 2006). Moreover, given that the importance of seniority is different from culture to culture, the extent to which coworkers' expectations of ERB are linked to potential ERB givers' seniority may vary across cultures. Also, there are industrial differences in the extent to which employees are required to engage in ERB (Chiang & Hsieh, 2012; Raub, 2008). This implies that workers may have different expectations of their colleagues' ERB, depending on industry. I will provide a model of coworkers' expectations of ERB to conceptualize ERB. This model provides a better understanding of what factors influence coworkers' expectations of ERB. I will also define the construct "coworkers' expectations of ERB (CERB)," which is a new construct proposed by this study, and then suggest hypotheses that predict coworkers' expectations of ERB.

Conceptualization of Coworkers' Expectations of ERB

ERB refers to individual employees' discretionary behaviors targeted toward specific individuals or organizations, which may be influenced by cultural contexts (Paine & Organ, 2000). However, the existing literature which is ERB giver-focused and US dominant has

offered limited perspectives of what makes employees engage in ERB, particularly leaving gaps for the role of coworkers (potential ERB receivers). As ERB is behavior nested within organizational contexts, it is targeted towards specific objectives such as coworkers and the organization. This implies that potential ERB receivers should be considered in order to conceptualize ERB, which is consistent with some scholars' argument that people may engage in ERB to meet the implicit pressure of others' expectations (e.g., Bolino, Turnley, Gilstrap, & Suazo, 2010; Van Dyne et al., 1994; Vigodat-Godat, 2006, 2007).

However, as little research has paid attention to potential ERB receivers, much has remained unknown about the perspective of ERB receivers, namely "coworkers' expectations of ERB (CERB)." To provide an understanding of this construct, it is necessary to investigate what factors influence CERB at various levels, including the level of the individual (i.e., ERB givers' characteristics), organizational contexts (i.e., industry), and country (i.e., culture). Existing research has found that ERB is significantly related to various factors across levels (Organ et al., 2006). As a pioneer study about ERB receivers, this study explores the link of CERB to ERB givers' seniority, moderating effects of Confucianism Orientation (CO) on this link, and influences of CO and industry in CERB. *Figure* 3.1 displays a model of moderating effects of CO on CERB.

In *Figure* 3.1, *coworkers' expectations of ERB* (CERB) refers to perceptions of ERB commonly shared by members within organizational contexts, which can be influenced by various factors. In this study, I paid attention to three important factors: potential ERB givers' seniority, industry, and CO. Seniority is an important demographic clue at the workplace, which brings up certain stereotypes of behaviors or attitudes (Tsui & Gutek, 1999). Based on potential ERB givers' seniority, coworkers will have certain expectations of potential ERB givers'

behavior. Such a linkage of seniority to CERB is also moderated by CO in that seniority is a more critical demography in Confucian contexts, which emphasize differentiated role behaviors related to seniority. Also, CO may be positively related to coworkers' expectations of ERB in that it highlights strong working ethic and group interest over self interest. ERB is beneficiary behavior targeted towards coworkers or the organization, which supports the collective interests rather than individual interests (Williams & Anderson, 1991). Therefore, expectations of ERB may be likely to be higher for people high in CO than people low in CO. Finally, industry may also affect CERB. Unlike product-oriented manufacturing organization, service organizations provide customers intangible products through customer-employee exchange (Pfeffer, 1994). As such, employees of service organizations should demonstrate high level of ERB for customers' satisfaction (Bettencourt & Brown, 1997). This implies that there may be higher expectations of colleagues' ERB in the service industry than in the manufacturing industry. To further explain these relationships between CERB and the variables of interest (seniority, industry, and Confucianism Orientation), I will begin the discussion of how coworker can influence employees' ERB.

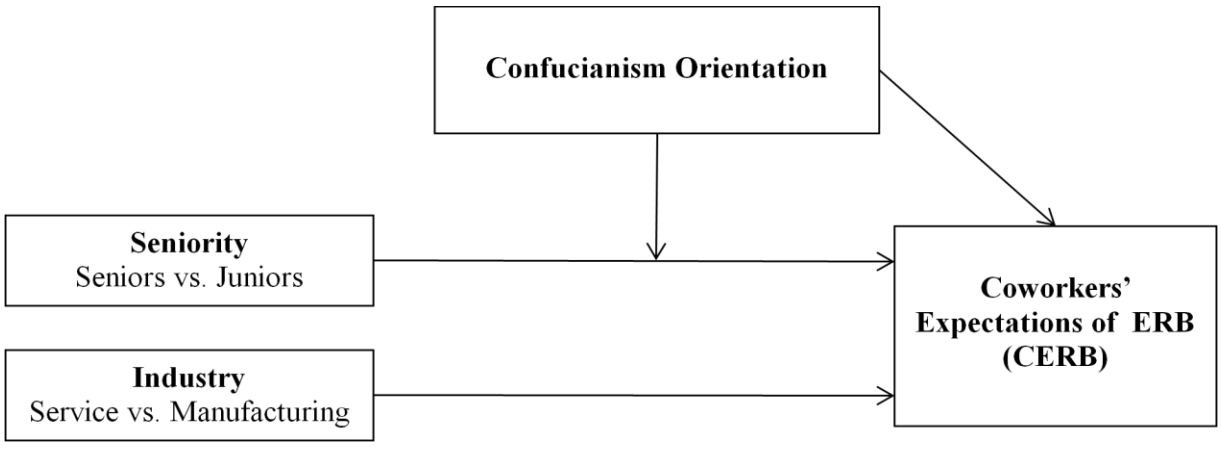

Figure 3.1 A model of coworkers' expectations of ERB (CERB)

Influence of coworkers on employees' engagement in ERB. Influences of coworkers on employees' ERB can be considered in social exchange contexts. ERB is a kind of reciprocal behavior (Koser & Sanders, 2006), meaning that potential ERB receivers can shape employees' ERB performance. Based on Koser and Sander's (2006) approach, Banki (2010) suggested that research on ERB needs to pay attention to two parties of exchange—givers and receivers—and the situational characteristics of the exchange that occurs. She addressed that ERB need to be considered "interpersonal behaviors that are influenced by others," rather than behaviors that are driven by personal choice or disposition (p. 360). She posited that people tend to engage in ERB to reciprocate the benefit given by others or organization. For instance, employees with higher level of organizational support are more likely to engage in ERB to reciprocate benefits provided by their employer. Similarly, when supervisors exhibit supportive leadership, their subordinates are likely to engage more in ERB to reciprocate leaders' support (e.g., Podsakoff, MacKenzie, & Bommer, 1996; Schnake, Cochran, & Dumler, 1995; Schnake, Dumler, & Cochran, 1993). Although Banki's (2010) work still focused more on ERB givers' motive to engage in ERB, it suggests that ERB receivers can play a critical role in the ERB performance of potential ERB givers.

Literature on Compulsory Citizenship Behaviors (CCB: Vigoda-Gadot, 2006, 2007) provides more cause for inquiry into the role of ERB receivers in shaping employees' ERB. CCB refers to involuntary extra-role behaviors to meet expectations implicitly forced by supervisors or management. It is difficult to be aware of motives to engage in ERB or CCB; therefore, CCB may be seen as ERB. Also, Bolino and his colleagues (2010) provided similar results to those of Vigoda-Gadot's (2007). They suggested the concept "citizenship pressure", which is defined as "a specific job demand in which an employee feels pressured to perform ERBs" (p. 836).

Citizenship pressure involves the coercion that individuals feel to engage in ERB which is assumed to be discretionary behavior (p. 837). This implies that employees may engage in ERB by implicit pressures from contexts surrounding them, which includes other employees. Similarly, Hui, Lee, Tinsley, and Yang (2004b) contended that group member expectations can lead to individual members' involvement in the group. This suggests that individuals' ERB performance is influenced by potential ERB beneficiary's expectations.

Employees could be more concerned about their supervisors' expectations of ERB than peers and subordinates because supervisors tend to put the same weight on subordinates' ERB performance as the formal task in performance rating (Borman, 1987; Mackenzie, Podsakoff, & Fetter, 1991; Podsakoff, & Mackenzie, 1994; Werner, 1994). However, in general, employees' ERB is just as likely to be influenced by expectations of peers and subordinates in social exchange contexts (Banki, 2010; Koser & Sanders, 2006). In particular, employees are influenced by expectations and implicit pressure from their coworkers (e.g., citizenship pressure and CCB), which implies that expectations of ERB receivers may implicitly influence ERB givers' involvement in ERB. Therefore, potential ERB receivers can play a critical role in the ERB performance of ERB givers.

Definition of coworkers' expectations of ERB. *Coworkers' expectations of ERB* (CERB) can be defined as coworkers' expectations that particular ERB is considered to be in-role behavior or duty for their colleagues. CERB describes the extent to which employees perceive a certain ERB as an in-role behavior for their colleagues. In other words, CERB focuses on the potential ERB receivers' view—the coworkers' perspective—rather than potential ERB givers' viewpoint. However, this does not mean that people expect their colleagues to be good organizational citizens. Rather, CERB suggests employees' perceptions of the boundary of the

job or duty of their colleagues. These perceptions of boundaries can be influenced by multi-level variables in that ERB is an individual's beneficial behavior nested in organizational contexts within a society. Therefore, consistent with the ERB literature, CERB is also influenced by individual variables such as demographics of potential ERB givers, contextual variables (i.e., job/task, organizational cultures, etc.), industrial settings, and cultures. To sum up, CERB deals with the perception of the extent to which ERB can be considered in-role behavior and how this perception is influenced by factors at various levels.

Along this line, CERB is distinguishable from other constructs that seem related. Particularly, it is a different construct from both *OCB culture* and *OCB climate*. A *culture of OCB* is regarded as an organizational culture that facilitates employees' engagement in extra-role behaviors by providing organizational support for employees' needs and increasing perceived fairness and job satisfaction (Chen, 2008). Some scholars have used the term *OCB climate* in order to discuss instances in which employees agree that individuals within an organization tend to engage in high levels of extra-role behaviors (e.g., Tepper, Duffy, Hoobler, & Ensley, 2004). However, CERB presumes that workers have different expectations of their coworkers' ERB, which may depend on their colleagues' social categories such as seniority (seniors vs. juniors), gender (females vs. males), employment type (regular workers vs. irregular workers), and so on. Also, CERB is related to contextual factors, industry, and cultures. Although CERB and *OCB climate* are related in that CERB can contribute to the *OCB climate*, these constructs are conceptually different. After all, CERB does not refer to organizational climate or culture which stimulates workers to engage in ERB, but instead deals with the extent to which people perceive their colleagues' ERB to be "in-role behaviors".

CERB is also different from *OCB norms*. As *group norms* means agreement implicitly shared by group members (Cialdini & Trost, 1998; Kozlowski & Klein, 2000), *OCB norms* indicates how much ERB is regarded as in-role behavior and as desirable behavior within an organization or a group (Ehrhart & Naumann, 2004, p. 964). To some extent, CERB is similar to *descriptive OCB norms* proposed by Ehrhart and Naumann (2004). *Descriptive OCB norms* refers to "an individual's perceptions of the overall group's performance of OCB" at unit-level (Ehrhart & Naumann, 2004: p. 962). It involves the extent to which an individual recognizes that his or her coworkers engage in ERB rather than that they want him/her to engage in ERB. Therefore, according to Ehrhart and Naumann (2004, p. 962), *descriptive OCB norms* is measured by the extent to which an individual perceives his or her colleagues' ERB performance (e.g., "my group members help fellow coworkers when needed"). However, CERB refers to ERB receivers' perceptions that a certain ERB is perceived as the in-role behavior of their colleagues. In other words, it refers to the link between the target employee category's attributes and boundaries of in-role and extra-role behaviors, as perceived by coworkers. Accordingly, CERB is measured by how much an individual thinks that his or her colleagues should engage in ERB (e.g., "I think that my colleagues should help their fellow coworkers when needed"[1]). Although *descriptive OCB* norms may be a predictor of CERB, they are conceptually different.

CERB is also distinctive from *subjective OCB norms* suggested by Ehrhart and Naumann (2004). *Subjective OCB norms* means the extent to which individuals feel or perceive that their coworkers want them to perform ERB (as cited in Bolino et al., 2010, p. 837). However, unlike *subjective OCB norms*, CERB does not imply that the workers become good organizational

[1] This example was modified from an example of the *descriptive OCB norms* measure, which is provided by Ehrhart and Naumann (2004, p. 962): "my group members help fellow coworkers when needed."

citizens by sensing coworkers' expectations. In this light, CERB does not focus on ERB givers' internal forces (i.e., disposition, personality, attitudes, etc.) that drive ERB performance. Instead, CERB emphasizes the coworkers' perceptions (the ERB receivers' view). Both s*ubjective* and *descriptive OCB norms* explain why some workers engage more in ERB than others and what contextual factors stimulate workers to perform more ERB. However, CERB focuses on the degree to which a certain ERB is considered colleagues' in-role behaviors from the perspective of ERB receivers.

Taken as a whole, CERB is both different from *OCB norms* and a culture or climate that facilitates ERB. CERB refers to perceptions commonly shared by organizational members that ERB is considered to be in-role behavior or duty for their colleagues. Therefore, it is measured by the extent to which organizational members think that a particular ERB or overall ERB is regarded as in-role for their colleagues.

Linkage of Seniority to Coworkers' Expectations of ERB

Self-Categorization Theory (SCT: Turner, 1985, 1987) and Role Theory (Biddle, 1986; Biddle & Thomas, 1966) provide theoretical support for the linkage of coworkers' expectations of ERB (CERB) to employees' seniority. According to SCT, people tend to use demographic characteristics to classify both themselves and others into social categories (Riordan & Shore, 1997, p. 343; Tajfel & Turner, 1986; Tsui, Egan, & O'Reilly, 1992). Demographic attributes involve age, education, tenure, race, gender, religion, occupational membership, and so on (Tsui et al., 1992). In particular, gender and age have been considered primary social categories (Linton, 1942).

Grouping people into social categories leads to simplifying them into stereotypes associated with members of that group (Tsui & Gutek, 1999, p.48). The social category of the target person leads to individuals perceiving stereotypes about a target person's likely attitudes, behavior, beliefs, and actions, which means that categorization process precedes stereotyping (Tsui & Gutek, 1999, p. 48). Stereotypes refer to beliefs shared by most people in a particular society that members of a specific category have the same characteristics (Tsui & Gutek, 1999, p. 48), which in turn serves as criteria that distinguish the group from others. Stereotypes are likely to be formed by demographic attributes (Tsui & Gutek, 1999, p. 48). Although demography may not be a primary factor accounting for systematic differences in basic features such as behaviors and values, it is likely to trigger inferences regarding those features (Elizabeth & Magret, 2005, p. 41). Therefore, demographic clues can provide employees with information concerning appropriate, inappropriate, and required behaviors which they should or should not perform.

Furthermore, SCT suggests that seniority may be a salient demographic category in organizations. In general, seniority is positively related to tenure and hierarchical level, which is an important social category in the organizational context. This implies that seniority is a useful social category in that it maximizes the similarities and differences between employees. Age-related clues also play a critical role in organizational contexts when people make decision or judgment, producing several age-related stereotypes in organizations (Perry & Parlamis, 2006). Age is a primary demographic factor that people use when categorizing and perceiving others (Brewer, 1988). The age-related clues are mainly used to categorize people from early childhood (Montepare & Zebrowitz, 1998) and make distinctions among people (Keith, 1982). Similarly, according to Wood (1971), age-grading usually refers to differential behavioral expectations for different age groups. She implied that as there are age-differences in roles that individuals are

expected to fulfill, behaviors considered appropriate are different across age groups. For example, senior employees are perceived to be more truthful, have greater interpersonal skills, have more useful experience, and be more loyal (Smith, 2001).

Also, Role Theory supports the relationship between coworkers' expectations of ERB (CERB) and employees' seniority. A role indicates a pattern of behaviors that are shaped in a context (Biddle, 1979), which are commonly shared by occupants of the role. Therefore, those who take the same role are likely to show similar patterns of behaviors, forming expectations or norms of role-specific behaviors which are shared by members within a context (Dekas, 2010). Such expectations can be implicit and normative pressures that play a critical role in perceiving what behaviors are appropriate or less appropriate for certain roles (Biddle, 1986).

In organizational as well as cultural contexts, roles are linked to individuals' demographics such as age, gender, job position, and so on (Biddle, 1986). In this light, CERB can be related to the seniority category of potential ERB givers. Employees have roles associated with their statuses or positions within an organization, and these roles create expectations for certain behaviors (Katz & Kahn, 1978; Welboume, Johson, & Erez, 1998) to be performed depending on employees' seniority. ERB receivers could have different expectations of ERB toward junior and senior coworkers. For example, junior workers may be more likely to put up with inconvenience than seniors because they are usually in lower positions than their counterparts. Considering these trends, it can be inferred that senior employees usually have different roles than those of their junior counterparts within organizations. This means that seniority can be a significant demographic clue to provide information regarding role-behaviors within organizations, which in turn influences CERB. Both SCT and Role Theory state that there are expectations of role behaviors linked to demographics. ERB is behavior nested within

organizations, which means that the organization's members have some expectations or norms of ERB related to ERB givers' demographics. Thus, it is predicted that coworkers' expectations of ERBs will be associated with the seniority of the target employee.

Seniority in organizations. Before exploring the linkage of seniority and expectations of ERB, seniority needs to be defined in the organizational context. This study aims to investigate this linkage within organizations; although age is also a visible indicator of seniority, job position and tenure are more emphasized than age in defining employees' seniority. Also, behavioral expectations are primarily influenced by achieved roles rather than ascribed roles, which means that societal expectations of role behaviors are seldom determined by a target person's age alone, but rather by a combination of the person's demographic factors such as work, education, and so on (Wood, 1971, p.74). In addition, seniority can also be defined in terms of relative condition (Gosseries, 2004). For example, at the same position, older workers or workers with longer tenure at the position are regarded as seniors. Similarly, Gosseries (2004) suggested that seniority has both absolute (i.e., age) and relative meaning (i.e., job position). As expectations of role behaviors regarding seniority need to be separated from those of job position in this study, a same or similar position needs to be assumed in the definition of seniority. Therefore, I used tenure as a measure of seniority in this study.

Tenure is usually defined as years on the current job or years with tenure at the current organization; however, since 1983 organizational tenure has been considered job tenure (Huang, Hallam, Orazem, & Paterno, 1998, p. 130). Gordon and Fitzgibbons (1982) also provided an operational definition of seniority in terms of employment within the current organization: (a) total organizational tenure at the current company and (b) job tenure at the previous position. ERB means beneficiary behavior as an organizational member rather than as a job holder. Hunt

(2002, p. 153) addressed that the effectiveness of ERB relies on the extent to which ERB is appropriate for spot opportunities where the ERB is displayed. This implies that experience with the current organization plays a more critical role in displaying ERB than experience with the current job. Even studies using professional sample data such as teachers, nurses, and restaurant employees have used organizational tenure (e.g., Altuntas & Baykal, 2010; Stamper & Van Dyne, 2001). Therefore, for this study, as a measure of seniority, organizational tenure is more appropriate than job tenure.

Thus, with the assumption of similar positions, organizational seniority is defined as tenure in the current organization. Seniors (or juniors) are defined as workers who have longer (or less) tenure in the current organization at similar positions.

Differences in coworkers' expectations of ERB for seniors versus juniors. As previously discussed, employees are likely to have different roles according to their demography in workplace settings. This implies that relationships between employees' seniority and coworkers' expectations of ERB (CERB) may be different across the dimensions of ERB. For instance, senior employees are expected to perform more altruistic and civic virtue ERB than juniors while juniors are more expected to show courtesy and sportsmanship than seniors. However, conscientiousness is excluded in exploring the relationship between coworkers' expectations of ERB and target employees' seniority. There is disagreement on whether conscientiousness is an extra-role behavior (Kidder & McLean Parks, 2001): some scholars consider it in-role rather than extra-role (e.g., Graham, 1991; McLean Parks & Kidder, 1994; Morrison, 1994; Van Dyne, Cummings, & McLean Parks, 1995) while others regard it as more extra-role than in in-role (e.g., Borman & Motowoidlo, 1993; Organ, 1988; Podsakoff et al., 2000). Conscientiousness refers to the general compliance to rules or procedures, which is a

basic principle for every employee regardless of seniority. Increasing global competition requires employees to show conscientious behaviors (Kidder & McLean Parks, 2001). Therefore, there may be a non-significant difference in coworkers' expectations of conscientiousness for seniors versus juniors.

Coworkers' expectations for seniors. Among ERB dimensions, altruism and civic virtue may be regarded as in-role behaviors for senior employees. Altruism means "voluntarily helping other people with, or preventing the occurrence of, [an] organizationally relevant problem" (Organ et al., 2006, p. 308). In general, seniors have higher levels of position and greater organizational tenure and life experience. In this light, they may be expected to have more behavioral choices in the workplace, rather than simply the norm of reciprocity (Caspi & Bem, 1990; Kanugo & Conger, 1993). In contrast, younger employees are more likely than their older counterparts to place great value on the norm of reciprocity (Caspi & Bem, 1990; Kanugo & Conger, 1993). Empirical evidence has also supported that senior workers are less likely to have needs for achievement than junior workers while seniors tend to have higher needs for attachment than their counterparts (Doering, Rhodes, & Schuster, 1983).

Also, seniors should take care of juniors while juniors should respect and obey seniors, particularly in Confucian cultures (Hofstede, 1991; Yum, 1988). For instance, like mentors, seniors are expected to give juniors advice or tips about socialization in organizations because they are generally considered to be more reliable and stable given their level of experience (Perry & Parlamis, 2006; Smith, 2001). Likewise, senior employees' altruistic ERB is viewed as socially desirable behavior in individualistic cultures (Kanungo & Conger, 1993). Based on the age norm literature, Wood (1971) summarized some of the age norms for older age groups: expressive behaviors such as "compatibility and emotional support" are considered to be

appropriate. In other words, seniors' helping behaviors are seen as socially desirable, which may be caused by "a socially responsible norm of benevolence" (as cited in Wagner & Rush, 2000; Kanungo & Conger, 1993). This does not mean that juniors would not be altruistic. Rather, seniors are relatively more expected to engage in helping behaviors than juniors are. Therefore, altruistic behaviors are perceived as in-role behaviors for seniors rather than juniors.

Similarly, senior employees are expected to engage more in *civic virtue* than juniors are. Civic virtue refers to behaviors that suggest engagement in or commitment to the organization (Podsakoff et al., 2000, p. 525). It includes attending meetings, participating in policy debates, or expressing opinion about organizational strategies. Those behaviors are related to employee *voice behavior*, which means speaking out and challenging the status quo (Kidder & McLean Parks, 2001; Krefting & Powers, 1998; LePine & Van Dyne, 1998; Van Dyne et al., 1994). In this light, civic virtue is reoriented as *voice behavior* in the workplace (Graham, 1991; Van Dyne et al., 1994). It is a kind of challenging behavior, which focuses on ideas and issues rather than relationships, and is change-oriented, resulting in harm to relationships (Kidder & McLean Parks, 2001; LePine & Van Dyne, 1998). Conway (1996) argues that civic virtue is expected to be more in-role behavior for managers than for non-managers. This means that civic virtue is more likely to be considered in-role for seniors rather than juniors.

Moreover, Graham and Van Dyne (2006) provided support that civic virtue is more related to senior employees. They defined civic virtue as 1) "information gathering," which involves "participation in meetings and reading materials providing information related to the company and 2) "exercising influence," which refers to change-oriented-behavior such as voice behaviors and offering suggestions (p. 92). They asserted that these two behaviors are positively related to more work experience and higher job positions. Compared to junior employees,

seniors are likely to have more work experience. Also, even assuming similar job positions, more tenure refers to relatively higher positions in workplace settings in that tenure is an important demographic factor. Therefore, civic virtue is more likely to be regarded as in-role behavior for seniors than for juniors.

To summarize, there are some social stereotypes that suggest helping behaviors and voice behaviors are socially desirable for seniors. This suggests that senior employees are more likely to be expected to engage in altruism and civic virtue than junior employees. Thus, I hypothesize:

Hypothesis 1a: *Altruism* is more likely to be regarded as seniors' in-role than juniors'.

Hypothesis 1b: *Civic virtue* is more likely to be regarded as seniors' in-role than juniors'.

Coworkers' expectations for juniors. On the other hand, expectations of courtesy and sportsmanship are more related to in-role for junior employees. Courtesy involves behaviors which contribute to preventing an individual from getting into trouble with others (Organ, 1988; Podsakoff et al., 1990). According to Organ et al. (2006), the key concept of courtesy citizenship is to "avoid practices that make other people's work harder" (p. 24). For example, they noted that courtesy might involve leaving copiers or printers in at least as good a condition as one found them. It also refers to citizenship behaviors that give enough notice to those who are affected by some initiatives or decisions (p. 24). As juniors are usually younger and have lower levels of position, they are more expected to treat others with good manners and to avoid conflict with others. In contrast, seniors are older and have a higher position level, so they may be relatively less concerned about courtesy behaviors. Along these lines, juniors, rather than seniors, are more likely to engage in courtesy.

Communication Accommodation Theory (CAT, Giles, Coupland, & Coupland, 1991) also suggests that employees' communicative behaviors are influenced by social stereotypes related to age. MaCann and Giles (2006) found that juniors are likely to accommodate when communicating with seniors because of obligations to be respectful. On the other hand, seniors are less likely to accommodate in communication. This implies that juniors are more expected to show courtesy behaviors than seniors when interacting with others. As previously mentioned, the basic principle of courtesy is to avoid getting in trouble with others (Organ et al., 2006). Therefore, juniors are likely to be expected to engage more in courtesy than seniors are.

Sportsmanship refers to behaviors aimed at trying to improve the organization and to the avoidance of complaints about inconvenience (Organ, 1988). It is usually described as accepting less-than-desirable situations or changes without grievance (Ahamdi, Ahmadi, & Tavreh, 2011, p. 274). Such undesirable changes might ask some employees to take on more burden or inconvenience than others (Organ et al., 2006), which in turn requires employees' sportsmanship. When considered in this light, sportsmanship might function as supervisors' favorite ERB dimension in that it can lead to subordinates taking occasional inconvenience without petty grievance (Ahamdi et al., 2011, p. 274). This also implies that junior employees are more expected than seniors to engage in sportsmanship. As junior employees are at relatively lower status than seniors, they may be more powerless than seniors. Even though juniors do not want to engage in sportsmanship, they have to accept an occasional inconvenience because they lack power compared to seniors. Similarly, some studies found that organizational tenure is negatively related to sportsmanship (e.g., Rego, Ribeiro, &Cunha, 2010). Therefore, sportsmanship is viewed as in-role behavior for juniors rather than for seniors.

To sum up, there are some social stereotypes that demonstrating good manners and tolerating less-than-ideal circumstances are socially desirable behaviors for junior employees. This suggests that junior employees are more likely to be expected to engage in courtesy and sportsmanship than senior employees. Thus, I suggest:

Hypothesis 1c: *Courtesy* is more likely to be regarded as juniors' in-role than seniors'.

Hypothesis 1d: *Sportsmanship* is more likely to be regarded as juniors' in-role than seniors'.

Moderating Effects of Confucianism on the Relationship between CERB and Seniority

The relationship between coworkers' expectations of ERB (CERB) and employees' seniority may vary across cultures. Cultural context may play a critical role in making a particular demographic factor more salient (Tsui & Gutek, 1999, p. 136). For example, although age is regarded as an important demographic factor in any social setting, it may be differently interpreted across cultures (Tsui & Gutek, 1999, p. 136). As Confucian values emphasize obedience to or respect for seniority and rank in interpersonal relationships, age is, rather than just a demographic factor, an important indicator that reflects hierarchical order between individuals. However, age is less likely to symbolize one's hierarchical order in interpersonal relationships within individualistic cultures. Research has provided evidence that age norm is more salient in Confucian or collectivist cultures than in other cultures (e.g., Farh et al., 1998; Levy & Langer, 1994). In this light, moderating effects of cultural values on the relationship between coworkers' expectations of ERB and their colleagues' seniority needs to be considered, particularly the moderating effect of Confucianism.

Similarly, according to Tsui and Gutek (1999), in Confucian culture individuals regard themselves as interdependent with others (p. 121). They addressed that "the emphasis on

differentiated relationships" leads to classifying people into social categories and dealing with them accordingly (p. 121). Similarly, King (1991) addressed that Confucianism highlights the differentiated role relationship between individuals in order to maintain social order and stability (as cited in Tsui & Gutek, 1999, p. 120). Differentiated role relationship is reflected by the Five Codes of Ethics, "which regulate the five basic dyadic role relations: loyalty between king and subject, closeness between father and son, distinction in duty between husband and wife, obedience to order between elders and youngers, and mutual faith between friends" (Yum, 1988, p. 376). Confucianism emphasizes particularism in interpersonal relationships. Similarly, Confucianism emphasizes particularism, which means that different behavior rules are applied in judging individuals' behaviors, based on their social status or position at the workplace (Yum, 1988). This is in the same line with the Five Codes of Ethics in that both particularism and the Five Codes assume that individuals' role behaviors are different depending on their status at work, in family, or in society.

Confucian values have been reflected in HRM policies of companies in Confucian cultures (Kim, 2006). Employees are also treated differently according to their seniority and rank in organizations. Seniors tend to be more highly esteemed if all other conditions are the same. For example, individuals' age and tenure in an organization are more likely than their competencies and abilities to be considered to influence their rewards and promotion. In other words, obedience to or respect for seniority and rank is emphasized in interpersonal relationships as well as in management. Considering the evidence for the importance of seniority in Confucianism, an individual's social categorization is likely to be defined by age or seniority in a Confucian culture.

In addition, conflict avoidance is sought for harmony and social stability in Confucian cultures while conflict is used for social improvement in Western contexts (Laulusa, 2008, p. 4). This implies that people are more likely to preserve differentiated roles in Confucian contexts than in individualistic cultures. Therefore, differentiated role relationships and role-behaviors responding to them are more salient in Confucian cultures than in individualistic cultures. Therefore,, it can be inferred that seniority plays a more critical role in social categorization and stereotyping in organizations rooted in Confucian values. Consequently, the cultural context or setting plays a critical role in understanding the demographic effect (Tsui & Gutek, 1999). The relationship between CERB and seniority is moderated by cultures: the relationship will be stronger for employees oriented to Confucianism than employees oriented to non-Confucianism, particularly individualism. I further discuss the influence of Confucianism on coworkers' expectations of ERB for seniors versus juniors in the following. I label an individual-level construct of Confucianism as *Confucianism Orientation* (CO) to distinguish it from Confucianism at the country-level (see Kirkman et al., 2009, p. 745).

Hofstede (1991) mentioned that in a society based on Confucianism, junior members are obliged to respect and obey senior members and seniors are expected to take care of juniors. The Five Codes of Ethics implies that differentiated role behaviors are perceived as being important in Confucian cultures: for example, "Act as King does, act as Subject does." The Five Codes require individual persons to engage in different behaviors according to their roles. In social contexts such as organizations, the primary message of the Five Codes is to imply that seniors take care of juniors as supervisors or mentors and that juniors respect seniors and protect their dignity or face as subordinates and mentees. Benevolence is a socially desirable value for seniors while respect and obedience are behaviors expected for juniors (Laulusa, 2008, p. 6). For

instance, it is rare for a boss and subordinates to ‘go Dutch’ for dinner or drinks; usually bosses are expected to take care of the bills. However, individualism implies that employees are likely to allocate their resources in a way that will more directly benefit themselves (Euwema et al., 2007). This implies that compared to individualism-oriented persons, Confucianism-oriented persons are more likely to consider altruistic behaviors to be in-role for seniors more than for juniors.

Similarly, it is less common that juniors engage in voice behaviors in Confucian contexts. Confucianism emphasizes order of rank between supervisor and subordinate, top-down communication, and authoritative leadership (e.g., Kim, 2004; Lee, 1999; Shin, 1984). In addition, harmony, solidarity, and conflict-avoidance are important values in Confucian cultures, thus bringing a lack of creativity, constructive criticism, and confrontation (Lee, 1999). In this light, voice behaviors may be less likely to be considered positive in Confucian cultures. In particular, as juniors should respect and obey seniors, civic virtue seems to be a less desirable behavior for employees at lower levels of the hierarchy in the workplace. For example, in Confucian cultures, subordinates may be less likely to raise questions during a meeting when their direct superior or seniors attend the meeting to protect the face of their superiors (Laulusa, 2008). On the other hand, seniors are expected to take care of juniors as mentors or advisors and to voice certain issues because they are usually regarded as decision makers. However, in individualistic cultures the differentiated role is weaker because every individual is assumed to be equally important in an individualistic cultures, seniority will have less influence on participation than it would in a Confucian context where voice behaviors are regarded as “in-role” for seniors. This suggests that the connection of civic virtue to seniors’ in-role behaviors will be stronger for employees high in Confucianism than for employees low in Confucianism. To

summarize, the linkage of coworkers' expectations of altruism and civic virtue to seniors will be stronger for coworkers more oriented to Confucianism. Thus, I hypothesize:

Hypothesis 2a: For workers high in Confucianism Orientation, *altruism* is much more likely to be regarded as in-role for seniors than juniors.

Hypothesis 2b: For workers high in Confucianism Orientation, *civic virtue* is much more likely to be regarded as in-role for seniors than juniors.

As previously mentioned, Confucianism emphasizes the differentiated role behaviors, which are related to an individual's relative position in dyadic relationships such as "king and subject" or "father and son." Such differentiated role behaviors contribute to establishing organizational cultures such as downward communication in the workplace in Confucian cultures (Kim, 2004; Lee, 1999; Shin, 1984). Courtesy involves etiquette or propriety in that it means avoiding trouble with others in the workplace. From the perspective of Confucianism, courtesy is more likely to be in-role behavior for juniors than seniors because respect for seniority is emphasized. Moreover, as vertical interpersonal relationships are based on seniority in Confucian cultures, juniors are more likely to engage in courtesy than seniors. In particular, differences in courtesy behaviors between juniors and seniors are apparent in communication style. Similarly, MaCann and Giles (2006) asserted that junior employees are more likely to be accommodating when communicating with seniors while senior employees are less likely to be accommodating when communicating with juniors in Asian contexts. However, assuming horizontal relationships between individuals, individualism is likely to consider etiquette and propriety to be a basic principle of interpersonal relationships. Therefore, the connection of

courtesy to juniors' in-role behaviors will be stronger for employees high in Confucianism than for employees low in Confucianism.

Likewise, for individuals oriented to Confucianism, sportsmanship is more likely to be in-role for juniors than seniors. Sportsmanship refers to not focusing on what the organization or the management does wrong (Kidder & McLean Parks, 2001, p. 945), requiring patience without complaint. Assuming respect to hierarchy which is related to authority, age, and seniority (Laulusa, 2008), Confucianism considers that junior employees are at a lower position than senior employees. As such, it is considered natural that juniors take inconvenience within Confucian cultures. However, as individualism emphasizes individual rights, there may be less difference in expectations of juniors' sportsmanship versus seniors'. Therefore, sportsmanship is more likely to be considered juniors' in-role behaviors than it is to be seniors' for Confucianism-oriented coworkers. Taken together, the linkage of coworkers' expectations of courtesy and sportsmanship to juniors will be stronger for coworkers more oriented to Confucianism. Thus, I hypothesize:

Hypothesis 2c: For workers high in Confucianism Orientation, courtesy is much more likely to be regarded as in-role for juniors than seniors.

Hypothesis 2d: For workers high in Confucianism Orientation, sportsmanship is much more likely to be regarded as in-role for juniors than seniors.

The Influence of Confucianism Orientation on Coworkers' Expectations of ERB

A general relationship between Confucianism Orientation (CO) and coworkers' expectations of ERB (CERB) could be supported by the literature on cultural studies of ERB. As reviewed in the previous chapter, cultural values influence employees' ERB performance (e.g.,

Farh et al., 1997; Moorman & Blakely, 1995; Paine & Organ, 2000; Van Dyne et al., 2000). Although research has shown inconsistent results of cultural influences on ERB, many scholars have asserted and provided empirical evidence that cultural backgrounds are likely to affect ERB by using Hofstedes' collectivism and individualism construct (e.g. Moorman & Blakely, 1995; Van Dyne et al., 2000). Likewise, Confucianism Orientation influences coworkers' expectations of ERB in that, like collectivism, Confucianism emphasizes the group's interests over self-interest.

The primary principles of Confucianism, which show Confucian philosophy and values, consists of 1) *jen* (humanism), which means human feeling between people and compassion for the human being and 2) *i* (faithfulness), which means loyalty, or righteousness (Cho, 1997; Laulusa, 2008; Yum, 1988; p. 377). These features of Confucianism have influenced interpersonal relationships in the workplace (Yum, 1988). In particular, *i* implies that human beings should seek to keep faith with others or pursue good will rather than immediate profits and monetary rewards (Yum, 1988). ERB is likely to support the collective interests rather than individual interests in that ERB usually refers to beneficiary behaviors targeted toward coworkers and the organization (Williams & Anderson, 1991). This suggests that Confucians are more likely to engage in ERB than others, particularly individualists.

Given a positive relationship between CO and ERB, the relationship between CO and CERB could be supported. The two principles of Confucianism are based on the assumption of reciprocity, which requires a long-term relationship between individuals or individuals and the organization (Yum, 1988; Cho, 1997). Confucians implicitly believe that they would receive help from others and give others help someday although such reciprocity is not immediate (Yum, 1988). Assuming "reciprocity" based on long-term relationships (Cho, 1997; Laulusa, 2008;

Yum, 1988), Confucianism requires group members to consider in-group members' interests as much as or more than self-interests. ERB indicates cooperative and promotional behaviors toward colleagues and the organizations (Williams & Anderson, 1991). Moreover, as Confucian values emphasize "loyalty and faithfulness," Confucians cannot move in and out of groups very freely. Individuals' loyalty to groups in which they are involved is more likely to be stronger in Confucian cultures than in individualistic cultures (Yum, 1988). This implies that membership is permanent and long rather than transient or temporary. Some scholars have asserted that ERB is positively related to loyalty (e.g. Oran et al., 2006; Podsakoff et al., 2000). This implies that Confucianism-oriented employees are more likely to expect their colleagues to engage in ERB than others.

Also, the link between CO and CERB could be supported by Confucian traits such as strong work ethic (Hofstede & Bond, 1988). Some scholars have asserted that Confucians' hard work ethics played a critical role in the economic growth of some Asian countries (e.g. Hofstede & Bond, 1988), and in Confucian cultures such as Japan, Hong Kong, and Taiwan, sportsmanship and courtesy are found to be in-role behaviors (Farh et al., 1997; Lam et al., 1999). This implies that Confucianism-oriented employees are likely to take it for granted that their colleagues display sportsmanship and courtesy.

Taken together, employees high in Confucianism could expect their colleagues to go beyond the requirement more than could employees low in Confucianism. Therefore, I predict that CO has a positive relationship with CERB. Thus, I suggest:

Hypothesis 3: Confucianism Orientation is positively related to coworkers' expectations of ERB.

Industrial Differences in Coworkers' Expectations of ERB

Research seems to support the industrial differences in the extent to which employees engage in ERB (Raub, 2008, p.181). To be specific, service organizations are likely to require higher levels of ERB (e.g., Ariani, 2012; Chiang & Hsieh, 2012; Raub, 2008). As service organizations provide intangible service products, the uncertainty created by customers' requests may often require employees to provide a dynamic and emergent quality (Ashforth & Humphrey, 1993, p. 90). Also, service transactions are likely to involve face-to-face interactions between service agents and customers. As service organizations provide intangible products through "constant customer-employee exchange" (Ma & Qu, 2011, p. 680), it is hard to measure service quality and to make inventory of products (Nayyar, 1992). As it is difficult to inventory intangible services, service transactions are likely to feature simultaneous production (Chopra, Lovejoy, & Yano, 2004, p. 13).

Such features of service organizations are likely to distinguish them from product-oriented manufacturing organizations. For example, compared to manufacturing organizations, service organizations are more likely to invest in human resources (Terpstra & Rozell, 1993). Also, employees of the service organization are likely to display higher levels of emotional involvement than are employees of the manufacturing organization (Ashforth & Humphrey, 1993). Although customer orientation is considered to be important for all types of companies, service organizations are more likely to be concerned about customer orientation (Hartline, Maxham, & McKee, 2000; Kelley, 1992) because their employees are likely to more directly contact with the customer than are employees in manufacturing organizations.

In particular, employees of service organizations are more likely to demonstrate higher levels of ERB than are employees of manufacturing organizations because of their business

features. Manufacturing companies typically allocate more organizational resources into tangible products, which are their core competitive advantages (Bettencourt & Brown, 1997). However, for service organizations, as the core product is to provide intangible service through "constant customer-employee exchange," the core competitive advantages come from contact employees who make this "constant customer-employee exchange" possible (Pfeffer, 1994). For customer satisfaction, employees are required to "go beyond the call of duty for customers" in service organizations (Bettencourt & Brown, 1997). Therefore, there is an additional dimension of ERB unique to service organizations: extra-role behavior targeted at the customer (ERB-C, Bettencourt & Brown, 1997; Bettencourt et al., 2001), which is conceptually different from ERB targeted at the individual (ERB-I) and ERB targeted at the organization (ERB-O). In addition to universal ERB dimensions across industries, employees are required to engage in extra-role customer service in the service industry (Bettencourt & Brown, 1997; Bettencourt et al., 2001).

Moreover, customer needs are variant and continually changing. These studies suggest that employees in the service organization are likely to have wider expectations of their job duty to meet customer satisfaction than are employees in the manufacturing organization. This implies that employees may expect a broader scope of in-role behaviors, which in turn requires employees to go beyond their prescribed duties in the service organization. As high levels of service quality are required, service industries such as hospitality and tourism are more likely to require their employees to engage in ERB than other industries (Raub, 2008). Ariani (2012) also provided evidence supporting differences in ERB between industries in that bank teller staff showed higher levels of engagement in ERB than university academic staff in Indonesian contexts. Such differences should also be apparent between the service industry and the manufacturing industry.

Similarly, coworkers' expectations of ERB may differ across industries. Considering that service organizations are likely to require employees to demonstrate higher levels of ERB than are manufacturing organizations, coworkers could expect employees to display ERB in service organizations more than in manufacturing organizations. Considering that ERB plays a critical role in lubricating interactions between individuals (Organ, 1988), it is expected that the service industry provide "spontaneous service with extra attention" to generate positive emotional responses in the customer by going beyond job-duty (Bettencourt & Brown, 1997, p. 41). Therefore, employees of service organizations are more likely to be trained for engaging in helpful and discretionary behaviors. However, compared to service organizations, manufacturing organizations are less likely to emphasize such behaviors in that they focus more on tangible products, which may not require levels of ERB as high as those of service organizations.

As employees of service organizations should demonstrate higher levels of ERB in the workplace (Chiang & Heish, 2012), they are likely to expect their colleagues to exhibit higher levels of ERB. In addition, given that employees interact with each other in service organizations in the process of customer service (Ma & Qu, 2011), employees of service organizations may be expected to engage more in ERB than employees of manufacturing organizations. In this light, it can be inferred that coworkers' expectations of ERB will be higher in service organizations than in manufacturing organizations. Therefore, compared to manufacturing organizations, coworkers' expectations of ERB should be relatively high in service organizations. Thus, I suggest:

Hypothesis 4: Coworkers' expectations of ERB are likely to be higher in service organizations than in manufacturing organizations.

Taken together, I provide a model of CERB, which presents the relationships between CERB and employees' seniority, Confucianism Orientation, and industry. *Figure* 3.2 displays the hypothesized relationships in this study.

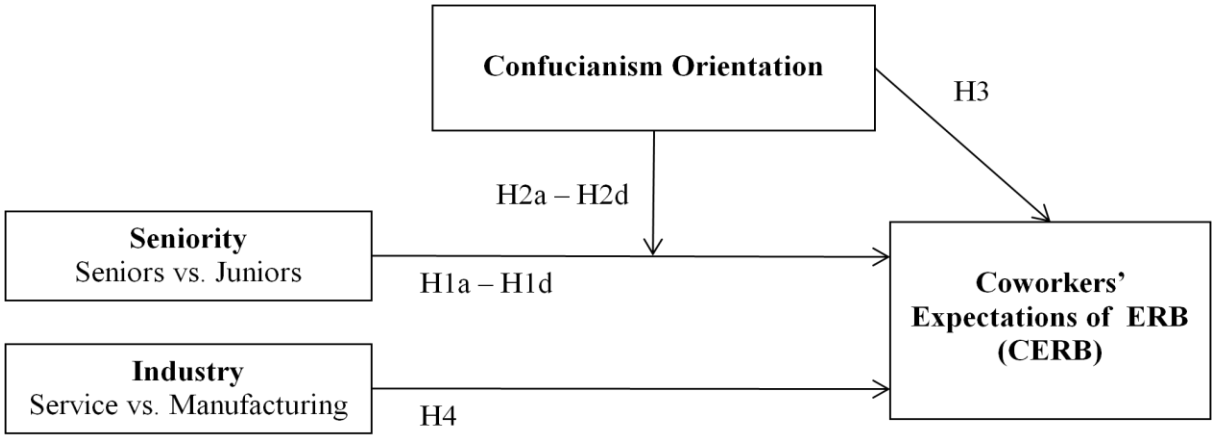

Figure 3.2 A model of coworkers' expectations of ERB & hypotheses

CHAPTER IV: METHOD

This study explores specific influences on coworkers' expectations of ERB (CERB) in light of employees' seniority, industry, and Confucianism Orientation (CO). To this end, this study used survey methodology and a random sample of white-collar employees at two South Korean multinational companies headquartered in Seoul, South Korea, but with additional US sites. The sample, survey design and procedure, and measurements of variables are presented below. This chapter also includes some preliminary tests for testing hypotheses such as exploratory and confirmatory factor analyses and measurement invariance tests.

Sample

Data was collected from white-collar employees of South Korean sites and US sites of a large South Korean multinational automobile company and three US branches of a South Korean bank. The company and the bank both agreed to participate in this study under the condition that I share the results with them.

The automobile company is a large automobile firm that is headquartered in South Korea. It has around 56,000 employees as of December, 2011. It has four main business divisions in the U.S: 1) the US headquarters, which involves marketing, sales, product development, and administrative services; 2) the R&D division, which involves technical development; 3) the Operating Division, which is the facility for automobile production; 4) the Financial Service Division, which involves the leasing and financing. I collected data from employees over diverse business divisions (Operating, R&D, Sales & Marketing, & Planning/Management Support) in South Korea while I collected data from employees of the US headquarters and the R&D division in the U.S.

Another business participating in the survey was a large bank with 892 branches in South Korea, which deals with both corporate and retail banking services. It has 16 branches in six states in the US, which focus on retail banking services, including savings and transactional accounts, personal loans, debit cards, etc. I contacted the HR department of the bank in South Korea to collect data from South Korean branches, but it declined to participate in the survey. Therefore, I collected the bank data from employees of three US branches.

The overall sample used in this study consists of 1) the South Korean sample, which consisted of employees of the automobile firm; and 2) the US sample, which comprised employees working in US sites of the bank or the automobile firm. In South Korean sites, 450 copies of the survey were distributed and 292 were returned; therefore, the response rate was 58.4%. In US sites, 263 copies of the survey were distributed and 127 were returned; therefore, the response rate was 48.3%. Thus, the size of the overall sample was 419. The demographics of each sample are displayed in Table 4.1.

In Table 4.1, business department means a business function, not occupation. Participants were recruited from white-collar workers, who generally do paperwork rather than manage floor workers. For example, participants of the "Operating" department did not mean line-managers. In terms of job level, job titles with "manager" do not necessarily indicate that they are supervisor positions. Typically, South Korean organizations are likely to classify job positions into five hierarchies (levels): "Entry-Level Staff," "Assistant Manager," "Manager," "General Deputy Manager," and "General Manager." In South Korean businesses, a team typically consists of employees at each level, and the General Manager is a team leader. As a supervisor, the main roles of General Managers are to assign tasks to team members as well as evaluate their performance. As middle managers, Managers and General Deputy Managers are in charge of

completing assigned tasks and supervising tasks of employees at positions of Entry-Level Staff and Assistant Manager. Although Managers and General Deputy Managers take supervisory positions, they are actually team members rather than supervisors because they do not have the authority to make major decisions about job performance and promotion. Employees at the lowest two job positions usually support the middle managers, doing the groundwork for the middle managers' tasks. Subordinates are less likely to communicate with their supervisors directly to discuss conducting assigned tasks, without going through middle managers.

In the overall sample, there were 338 (81.4%) males and 77 females (18.6%). Ages ranged from 21 to 59 years old, with a mean age of 37.7 years (*SD* = 7.6); 81.4% of the participants were male; 2.7% had a high school degree; 8.3% had a 2-year college degree; 69.2% had a 4-year university degree; and 19.9% had a Masters or higher degree. Participants had been employed in the current companies from 1 to 390 months, with a mean tenure of 108.7 months (*SD* = 85.4). There were 55 (13.3%) participants from the Operating Department, 104 (25.1%) from the R&D Department, 131 (31.6%) from the Sales & Marketing Department, and 125 (30.1%) from the Planning/Mgt. Support Department. For education level, 11 participants (2.7%) had a high school or lower degree, 34 (8.3%) had a 2-year college degree, 285 (69.2%) had a 4-year university degree, and 82 (19.9%) had a Masters or higher degree. The overall sample contained 84 (20.4%) entry-level positions, 98 (23.8%) Assistant Managers, 137 (33.3%) Managers, 66 (16.1%) Deputy Managers, and 26 (6.3%) General Managers (usually, team leaders). There were 412 (98.3%) regular full-time workers, three (0.7%) regular part-time workers, and four (1.0%) irregular full-time workers. The overall sample consisted of 52 (12.5%) supervisors (team leaders) and 365 (87.5%) non-supervisors. For nationality, there were 331 South Koreans (79.0%), 76 Americans (18.1%), and 12 others (2.9%).

The size of the Korean sample was 292. In the Korean sample, there were 254 (87.3%) males and 37 females (12.7%). The age of this sample ranged from 21 to 55 with a mean of 36.9 (*SD* = 7.14): the number of 20s, 30s, 40s, and 50s or more was 51 (18.1%), 117 (41.6%), 101 (35.9%), and 12 (4.3%), respectively. The average tenure was 127.9 months (*SD* = 88). There were 50 (17.1%) participants from the Operating Department, 61 (20.9%) from the R&D Department, 101 (34.6%) from the Sales & Marketing Department, and 80 (27.4%) from the Planning/Mgt. Support Department. 10 participants (3.5%) had a high school or lower degree, 28 (9.7%) had a 2-year college degree, 198 (68.8%) had a 4-year university degree, and 52 (18.1%) had a Masters or higher degree. The South Korean sample contained 59 (20.4%) entry-level positions, 64 (22.1%) Assistant Managers, 84 (29.1%) Managers, 61 (21.1%) Deputy Managers, and 21 (7.3%) General Managers (usually, team leaders). There were 288 (98.6%) regular full-time workers, two (0.7%) regular part-time workers, and two (0.7%) irregular full-time workers. The South Korean sample consisted of 16 (5.5%) supervisors (team leaders) and 275 (94.5%) non-supervisors.

The size of the US sample was 127. In the US sample, there were 84 males (67.7%) and 40 females (12.7%). The age of this sample ranged from 21 to 59 with a mean of 39.5 (*SD* = 8.4): the number of 20s, 30s, 40s, and 50s or more was 13 (11.4%), 46 (40.4%), 38 (33.3%), and 17 (14.9%), respectively. The average tenure was 66.6 months (*SD* = 61.5). There were five (4.1%) participants from the Operating Department, 43 (35.0%) from the R&D Department, 30 (24.4%) from the Sales & Marketing Department, and 45 (36.6%) from the Planning/Mgt. Support Department. One participant (0.8%) had a high school or lower degree, six (4.8%) had a 2-year college degree, 87 (70.2%) had a 4-year university degree, and 30 (24.2%) had a Masters or higher degree. The US sample contained 25 (20.5%) entry-level positions, 34 (27.9%) Assistant

Mnagers, 53 (43.4%) Managers, five (4.1%) Deputy Managers, and five (4.1%) General Managers (usually, team leaders). There were 124 (97.6%) regular full-time workers, one (0.8%) regular part-time workers, and two (1.6%) irregular full-time workers. The US sample consisted of 36 (5.5%) supervisors (team leaders) and 90 (94.5%) non-supervisors. For nationality, there were 39 (30.7%) South Koreans, 76 (59.8%) Americans, and 12 (9.4%) others.

Table 4.1

Demographic breakdown of the sample

	South Korea (*n* = 292)		US (*n* = 127)		Overall (N = 419)	
	#	%	#	%	#	%
Age (# of missing: South Korea = 11; US =13)						
20s	51	18.1	13	11.4	64	16.2
30s	117	41.6	46	40.4	163	41.3
40s	101	35.9	38	33.3	139	35.2
50s or more	12	4.3	17	14.9	29	7.3
Average (yrs.)	36.9 (*SD* = 7.1)		39.5 (*SD* = 8.4)		37.7 (*SD* = 7.6)	
Gender (# of missing: South Korea = 1; US = 3)						
Male	254	87.3	84	67.7	338	81.4
Female	37	12.7	40	32.3	77	18.6
Education level (# of missing: South Korea = 4; US = 1)						
High school or lower	10	3.5	1	0.8	11	2.7
2-year college	28	9.7	6	4.8	34	8.3
4-year university	198	68.8	87	70.2	285	69.2
Masters or higher	52	18.1	30	24.2	82	19.9
Business Department (# of missing: South Korea = 0; US = 4)						
Operating	50	17.1	5	4.1	55	13.3
R&D	61	20.9	43	35	104	25.1
Marketing & Sales	101	34.6	30	24.4	131	31.6
Planning/Mgt. Support	80	27.4	45	36.6	125	30.1

Table 4.1 (cont'd)

	South Korea (*n* = 292)		US (*n* = 127)		Overall (N = 419)	
	#	%	#	%	#	%
Average Tenure (months)	127.9 (*SD* = 88)		66.6 (*SD* = 61.5)		108.7 (*SD* = 85.4)	
Job Position (# of missing: South Korea = 1; US = 1)						
Supervisor	16	5.5	36	28.6	52	12.5
Non-supervisor	275	94.5	90	71.4	365	87.5
Job Level (# of missing: South Korea = 3; US = 5)						
Entry level	59	20.4	25	20.5	84	20.4
Assist. Manager	64	22.1	34	27.9	98	23.8
Manager	84	29.1	53	43.4	137	33.3
Deputy Manager	61	21.1	5	4.1	66	16.1
General Manager	21	7.3	5	4.1	26	6.3
Employment type						
Regular full-time	288	98.6	124	97.6	412	98.3
Regular part-time	2	.7	1	.8	3	0.7
Irregular full-time	2	.7	2	1.6	4	1.0
Nationality						
South Korea	292	100	39	30.7	331	79.0
US	-	-	76	59.8	76	18.1
Others	-	-	12	9.4	12	2.9

In terms of cross-national studies, different samples need to be comparable (Brislin, Lonner, & Thomdike, 1973). However, the South Korean sample and the US sample were not matched in terms of some demographics: They were significantly different in age (p = .002), gender (p < .001), tenure (p < .001), business department (p < .001), and nationality (p < .001). Similarly, for Confucianism Orientation, the South Korean mean (M = 39.9, SD = 7.14) was significantly higher than the US mean (M = 39.5, SD = 8.43), $t(417) = -5.88$, p <.001. On the hand, the South Korean sample and the US sample were not significantly different on education

(p = .09), employment type (p = .69), and job level (p = .51). Taken together, the two samples were not perfectly matched to each other, which may result in unstable estimates of comparisons between the two samples.

Survey Design and Procedure

The survey was designed to investigate coworkers' expectations of ERB for senior employees and juniors as well as their Confucianism Orientation by using a multiple-item 7-point Likert scales. The full survey measure—the English version—are provided in Appendix 6. I discussed survey types and procedure with the HR managers who supported this study as the representative of the companies. The managers and I agreed to use paper-pencil survey for two reasons: 1) its response rate is relatively higher than other survey types; and 2) it is easy to promote participation because it is simple to complete. Participants were requested to complete the questionnaire at work during working hours (i.e., lunch), which took approximately 15-20 minutes.

Survey item development and testing. *Coworkers' expectations of ERB* (CERB) is a new construct that was developed for this study. This dissertation is a pioneer study of ERB from the perspective of potential ERB receivers. I aim to explore whether CERB exists rather than to develop new measurement of CERB. To this end, it seemed more appropriate to use a scale of ERB whose validity has already been proven. Therefore, I used existing ERB scales to measure CERB.

I modified Konovsky and Organ's (1996) ERB scale: altruism, courtesy, sportsmanship, conscientiousness, and civic virtue. For example, "Always does more than he/she is required to do" was modified to "I think that a certain category of workers should always do more than they

are required to do." As the current study focuses on coworkers' expectations of ERB associated with seniority, I modified the scales as follows: "Is able to tolerate occasional inconvenience when it arises" to "I think that senior/junior coworkers should be able to tolerate occasional inconvenience when it arises."

However, Konovsky and Organ (1996) used negatively worded items for measuring sportsmanship such as "complain a lot about trivial matters" and "always find fault with what the organization is doing." These items were reverse-coded for analyses in Konovsky and Organ (1996). Although the sportsmanship measures have usually been reverse-coded, such negatively worded items might be hard to answer in this study in that it investigates expectation of ERB. Therefore, I changed the sportsmanship measures into positively worded items.

I pre-tested the full set of 36 items of CERB with 30 employees of a large South Korean construction company. They were asked to respond to each item using a 7-Likert scale and give comments on the survey items. However, most of the participants in the pre-test complained that the full set was long. Therefore, based on the results of Konovsky and Organ (1996), I eliminated items that had been unclear and double-loaded on two or more factors, in turn attaining the revised set of 21 ERB items for the survey.

Measures translation. The survey questionnaire had two language versions: the English version for US employees and the Korean version for Korean employees. Based on the procedure recommended by Brislin (1986), the survey questionnaires were initially written in English and translated into Korean. None of the translators knew the proposed study's hypotheses, and two bilinguals separately translated the survey from English to Korean and from Korean to English. I checked the degree to which the two translators agree on word choice and expression. The translators agreed on 90% of wording and expression of the survey. A third

bilingual individual then translated the Korean survey back to English. Then, the Korean survey was proof-read by three Korean employees: one from a large construction company, another from a small HR agency, and the other from a large travel agency. Based on their comments, I revised items which were unclear or difficult to understand, without making major changes to any of the items. As explained above, the Korean survey was pre-tested with around 30 employees of a large construction firm (i.e., Schaubroeck, Lam, & Cha, 2007). Participants were also asked to give comments on any item that was ambiguous or tricky to understand. Their comments resulted in only minor changes to any of the items.

Participant recruitment. Participants were recruited by the HR department of the participating companies. Participants were not given any incentives. For the automobile company, I sent the cover-letter and electronic copies of the survey (Korean and English versions), along with the consent form, to the HR department of the automobile MNC in South Korea. The HR department distributed to South Korean sites and US sites. A survey invitation letter was not included in the soft copy because the consent form contained a brief survey invitation and the survey initiative. Participants were given a consent form and survey questionnaire. For the South Korean sites, a total of 460 survey copies were distributed. 300 copies of the survey were distributed to the Sales & Marketing Department and the Planning/Mgt. Support Department. As the Operating Department and the R&D Department consisted primarily of floor workers (machine operators & technicians) and engineers, their proportions of the white-collar workers are smaller than the Sales & Marketing and the Planning/Mgt. Support. Accordingly, 160 surveys were distributed to two departments. In US sites, the R&D division and the Sales & Marketing division (US headquarters) participated in the survey. The Operating division and the Financing Service division were reluctant to participate in the survey because

they had been over-surveyed just before my survey was started. A total of 160 English surveys were distributed and 86 were returned. Therefore, the response rate was 53.8%.

For the bank, the South Korean headquarters declined to participate in the survey. Therefore, to collect data from the bank, I contacted one branch in New York and one branch in New Jersey. The US branches I contacted requested soft copies of the Korean and English survey, and I sent them to branch managers. As the majority of the bank customers are South Korean immigrants, there are many Korean employees. Some of them were naturalized in U.S. or have been given green cards (granted permanent residency in U.S.). In this study, such employees were identified as Koreans because their ethnicity is Korean, they can read and speak in Korean, and they lived in South Korea until entering college. They were given the Korean version of the survey. Based on their work site location, I processed them with the US data. However, I classified them as South Korean in nationality within the US data. The New York branch that I contacted distributed 20 copies of the English survey and 30 copies of the Korean survey to two branches in New York and 27 were returned. The New Jersey branch that I contacted has only 14 Korean employees and all of them participated in the survey. Overall, the response rate of the bank was 64%. Tables 4.2 and 4.3 display the response rate and the ratio of each sample to the overall company.

Table 4.2

The response rate of the survey

Sample	Company		# of survey	# of participants	response rate (%)
South Korean	Automobile	Operating	80	50	62.5
		R&D	80	61	76.3
		Sales & Marketing	150	101	67.3
		Planning/Mgt. Support	150	80	53.5

Table 4.2 (cont'd)

Sample	Company		# of survey	# of participants	response rate (%)
US	Automobile	R&D	80	41	51.3
		Sales & Marketing	80	49	56.3
	Bank		64	41	64.1
Total			684	419	61.3

Table 4.3

The ratio of the Korean sample and the US sample to the overall Company

Sample	Company		# of white-collar employees (the overall company)	# of participants	ratio of sample to the overall company
South Korean	Automobile		22,450	292	1.3%
US	Automobile	(R&D)	277	41	14.8%
		(Sales & Marketing)	600	45	7.5%
	Bank		228	41	18.0%

Variable Measures

This study includes three independent variables (target employees' seniority, industry, and Confucianism Orientation), one moderating variable (interaction of Confucianism Orientation and target employees' seniority), and one outcome variable (coworkers' expectations of ERB). Also, there are two main covariates (country and supervisory positions). For each item, the ratings were on a seven-point Likert scale ranging from (1) *strongly disagree* to (7) *strongly agree*. All individual scales are also described below.

Coworkers' expectations of ERB. Coworkers' e*xpectation of ERB* (CERB) is measured by the extent to which a particular ERB is considered by coworkers to be the in-role behaviors of

their colleagues. As mentioned above, I modified Konovosky and Organ (1996)'s 21 items: altruism (5 items), courtesy (4 items), conscientiousness (4 items), sportsmanship (5 items), and civic virtue (3 items). The phrase "I think that my colleagues should" can be added to each item of ERB. For example, as this study investigates differences between *coworkers' expectations of ERB* toward seniors (SrCERB) and toward juniors (JrCERB), items included "I think that senior/junior coworkers should be able to tolerate occasional inconvenience when they arise," "I think that senior/junior coworkers should always follow the rules of the company and the department," and "I think that senior/junior coworkers should learn foreign languages diligently." Higher scores on the SrCERB and JrCERB indicate a higher extent of coworkers' expectations of ERB attached to senior employees and junior employees, respectively. For instance, higher values of CERB of seniors' altruism than those of juniors indicate that altruism is more likely to be regarded as in-role behavior for seniors than for juniors.

Confucianism Orientation. *Confucianism Orientation* (CO) refers to the individual-level construct of Confucianism. It was measured by the past/present-orientation of Robertson's (2000) Confucian Dynamism (CD) scale, which is based on Hofstede and Bond (1988). CD has two dimensions (Hofstede & Bond, 1988, p. 16): 1) future-orientation, which refers to "a dynamic, future-oriented mentality and 2) past/present-orientation, which refers to "a more static and tradition-oriented mentality." In other words, CD is a bipolar construct: the future-orientation on the positive pole and the past/present orientation on the negative pole (Hofstede & Bond, 1988, p. 16). The future-orientation emphasizes values of "persistence, hierarchical relationship, thrift, and having a sense of shame" while the past/present-orientation strengthens values of "personal steadiness and stability, saving face, respect for tradition, and reciprocation of greetings, favors, and gifts" (Robertson, 2000, p. 256-257). However, I will use only the

average score on the past/present orientation dimension in that it shows more divergence between people of non-traditional Confucian cultures and those of traditional Confucian cultures (Robertson, 2000). Western cultures based on individualism are also likely to show high scores on the future-orientation dimension.

The scale of past/present orientation of Confucian Dynamism includes four items as follows: "Personal stability is not critical to success in business," "Respect for tradition hampers performance," "The exchange of favors and gifts is not necessary to excel," and "Upholding one's personal image makes little difference in goal achievement." As higher scores of the past/present orientation indicate less Confucianism-orientation, they were reverse-coded for easy interpretation.

Seniority. In this study, under the assumption of similar positions, seniority is defined as tenure in the current organization. At similar positions, seniors (or juniors) are defined as workers who have longer (or less) tenure in the current organization. Seniority was dummy-coded (0 = *juniors*, 1 = *seniors*).

Industry. I collected sample data from an automobile company and a bank. The automobile refers to the manufacturing industry and the bank refers to the service industry; therefore, they were dummy-coded (0 = *manufacturing organization*, 1 = *service organization*).

Control variables. To include demographics as control variables, the relations between demographic factors and variables of interest need to be considered (Spector & Brannick, 2011, p. 297). This means that demographics should be theoretically or conceptually related to variables of interest. Moreover, Spector and Brannick (2011) addressed that reasonable evidence to use control variables should be presented, beyond suggesting theoretical backgrounds or empirical evidence among control variables and interested relationships (p. 296). For instance, if

demographic variables share little relationship with variables of interests, they do not need to be included as control variables (p. 301).

In this light, job position needs to be controlled in that supervisors are likely to perceive ERB as in-role behavior as well as consider ERB performance and task performance to the same extent in performance evaluation (Borman, 1987; Mackenzie et al., 1991; Podsakoff, & Mackenzie, 1994; Werner, 1994). However, there has been little evidence to support the influence of age and tenure on expectations of ERB with regard to ERB givers' seniority. Job position will serve this study as a control variable. Also, as there are differences in perception of ERB between countries (e.g. Choi, 1994; Farh et al., 2004), country needs to be controlled. In this study, country refers to the location of work sites (South Korea & the U.S.) rather than participants' nationality. Thus, control variables are job position (0 = *non-supervisor*, 1 = *supervisor*) and country (0 = *South Korea*, 1 = *US*).

Demographics. I obtained demographic factors such as age, gender (0 = *male*, 1 = *female*), education level (1 = *high-school or lower*, 2 = *2-year college*, 3 = *4-year university*, 4 = *master's or higher*), job level (1 = *Entry level*, 2 = A*ssist. Manager*, 3 = *Manger*, 4 = *Deputy General Manager*, 5 = *General Manager*), department (1 = *Operating*, 2 = *R&D*, 3 = *Sales & Marketing*, 4 = *Planning/Mgt. Support*), tenure with the current companies (months), and nationality (1 = *South Korea*, 2 = *the U.S.*, 3 = *Others*).

Preliminary Analysis: Factor Analyses & Measurement Invariance Tests

I conducted preliminary tests to evaluate the factor structure of *coworkers' expectations of ERB* (CERB) for senior employees (SrCERB) and for junior employees (JrCERB). Since the construct and its measures were developed for this study, I ran exploratory factor analyses (EFAs)

to assess the structure of the construct CERB. I conducted confirmatory factor analyses (CFAs) to test the hypothesized factor structure of Confucianism Orientation (CO). I also tested the international applicability of CERB and CO measures by testing those measures on the South Korean and US samples. Cross-cultural study scholars have recommended assessing measurement equivalence before testing hypothesized relationships (Tsui, Nifadkar, & Ou, 2007). For testing measurement equivalence, I adopted the multi-group multi-factor CFA method because both CERB and CO were assessed by multi-item composite measures. Using Jöreskog and Sörbom's (1993, 1996) LISREL model, I tested configural and metric invariance of those two constructs for measurement equivalence between the SrCERB scale and the JrCERB scale as well as between the South Korean sample and the US sample.

Exploratory factor analysis. To ensure appropriate indicators of scale, I ran exploratory factor analyses with principal axis factor (PAF) and obligue promax rotation on the overall sample. PAF is preferred when variables are measured with scales that have not been tested statistically (Dekas, 2010). As the items of CERB variables were modified from Konovosky and Organ's (1996) ERB scales, PAF is the best type of factor analysis for this study. Promax is a type of oblique rotation, which is always recommended as a good choice when oblique rotation needs to be used (Thompson, 2004, p. 43). Much social science research has found that factors are correlated, using oblique rotation broadly (Costello & Osborne, 2005). The oblique rotation results in simpler factor structures of loadings than the oblique varimax rotation, particularly when there are high correlations between factors (McLeod, Swygert, & Thissen, 2001). ERB studies have found medium or higher levels of interfactor correlations (e.g., Hoffman, Blair, Meriac, & Woehr, 2007; Podsakoff et al., 1990). Hoffman, Blair, Meriac, and Woehr (2007) conducted meta-analytic intercorrelations of 361 ERB studies and found that the intercorrelations

range from .32 to .67. Thus, I adopted the oblique promax rotation rather than the oblique varimax rotation which is usually used.

EFA of SrCERB & JrCERB. As hypothesized, results of EFA on the overall samples indicated the five common factors of CERB toward seniors (SrCERB) and toward juniors (JrCERB). The initial factor analysis, which included 21 items of CERB, supported a five-factor model that accounted for 62.83% of the total variance of SrCERB and 61.23% of the total variance of JrCERB. The factor clusters were explicitly specified except for two sportsmanship items of CERB. Factor loadings and inter-correlation between factors are reported in Tables 4.4-7.

The factor loadings reported in Tables 4.4 and 4.6 were obtained after the promax rotation. Factor loadings less than .35 were suppressed. In EFA only factor loadings greater than ± .33 are considered a cut-off for selecting items of certain factors (Ho, 2006). I modified CERB from Konovsky and Organ's (1996) ERB scale. They used the criteria of factor loadings higher than .35 on the hypothesized factor and without cross-loadings higher than .35 (e.g., Livens & Anseel, 2004). In ERB studies, a cut-off for selecting items ranges from .30 to .40 (i.e., Konovsky & Organ, 1996; Moorman & Blakely, 1995; Rego & Chunha, 2010). Considering this, the criteria used in this study is reasonable. Most of the items also had factor loadings higher than a critical cut-off, .35 (Floyd & Widaman, 1995).

For **SrCERB**, the first factor had an eigenvalue of 6.59 and explained 31.4% of the total variance. Factor loadings ranged from .61 to .87 for the items of civic virtue. The fifth item of sportsmanship was also loaded to this factor with a factor loading of .69. The second factor with an eigenvalue of 1.89 accounted for additional 9% of the total variance. The four conscientiousness items were loaded to this factor, and their loadings ranged from .58 to .77. The

third factor, expectation of altruism, had an eigenvalue of 1.79 and explained an additional 8.5% of the total variance. However, only the four items were loaded to this factor without cross-loadings higher than .35, which ranged from .47 to .82. The fourth items of sportsmanship was also loaded to this factor with a factor loading of .38. The fourth factor, with an eigenvalue of 1.5, accounted for an additional 7.2% of the total variance. The three sportsmanship items were loaded to this factor, and their loadings ranged from .55 to .91. Finally, the fifth factor, with an eigenvalue of 1.28, explained an additional 6.1% of the total variance. The four courtesy items were loaded onto this factor. Factor loadings ranged from .46 to .72. Inter-factor correlations of SrCERB ranged from .28 to .58 (see Table 4.5).

Table 4.4

EFA results of the overall sample: coworkers' expectations of ERB for seniors (SrCERB)

Factor	Factor1	Factor2	Factor3	Factor4	Factor5
Eigenvalue	6.59	1.89	1.79	1.5	1.28
% of the item variance	31.4	9	8.5	7.2	6.1
Items	Factor Loadings				
Altruism1			.82		
Altruism2			.61		
Altruism3			.69		
Altruism4			.47		
Altruism5		.38	.37		
Courtesy1					.50
Courtesy2					.71
Courtesy3					.72
Courtesy4					.46
Sportsmanship1				.59	
Sportsmanship2				.91	
Sportsmanship3				.89	
Sportsmanship4			.38		

Table 4.4 (cont'd)

Factor	Factor1	Factor2	Factor3	Factor4	Factor5
Eigenvalue	6.59	1.89	1.79	1.5	1.28
% of the item variance	31.4	9	8.5	7.2	6.1
Sportsmanship5	.69				
Conscientiousness1		.64			
Conscientiousness2		.72			
Conscientiousness3		.77			
Conscientiousness4		.58			
Civic Virtue1	.79				
Civic Virtue2	.87				
Civic Virtue3	.61				

Note. *N* = 419; Extraction Method: Principal Axis Factoring; Rotation Method: Promax with Kaiser Normalization; Loadings less than .35 are suppressed.

Table 4.5

Inter-factor correlations of coworkers' expectations of ERB for seniors (SrCERB)

Factor	1	2	3	4	5
1. Factor 1	1.0				
2. Factor 2	.54	1.0			
3. Factor 3	.45	.39	1.0		
4. Factor 4	.33	.36	.30	1.0	
5. Factor 5	.58	.42	.50	.28	1.0

Note. *N* = 419; Extraction Method: Principal Axis Factoring; Rotation Method: Promax with Kaiser Normalization

In terms of **JrCERB**, the first factor had an eigenvalue of 6.27 and explained 29.6% of the total variance. Factor loadings of the five items ranged from .59 to .77 for the item hypothesized expectation of altruism toward juniors. The second factor with an eigenvalue of 2.14 accounted for an additional 10.2% of the total variance. The four conscientiousness items

were loaded to this factor, and their loadings ranged from .51 to .72. The third factor, coworkers' expectations of civic virtue, had an eigenvalue of 1.85 and explained an additional 8.8% of the total variance. Also, the third factor included the fifth item of sportsmanship with a factor loading of .69. The fourth factor, sportsmanship, with eigenvalue of 1.38, accounted for an additional 6.6% of the variance. However, only the three items were loaded to this factor without cross-loadings higher than .35, which ranged from .52 to .89 (the fourth and fifth item were loaded to the civic virtue factor). Finally, the fifth factor, with an eigenvalue of 1.23, accounted for an additional 5.9% of the total variance. All the courtesy items were loaded to this factor and their loadings ranged from .43 to .74. As seen in Table 5.4, 1nter-factor correlations of JrCERB ranged from .23 to .57.

As the result of EFAs, the SrCERB scale has five common factors with 19 items and the JrCERB scale has five factors with 20 items. The fifth altruism item was loaded onto the expectation of juniors' altruism while it was double-loaded onto both expectations of conscientiousness and altruism for seniors to a similar extent. In order to test the proposed hypothesis, the assumption of the measurement invariance needs to be met. This means that item or factor clusters are invariant across groups or targets. Therefore, I deleted items which were not loaded onto both the SrCERB scale and the JrCERB scale as well as those which were not hypothesized factors, obtaining 18 items of the CERB scale: altruism (4 items), courtesy (4 items), sportsmanship (3 items), conscientiousness (4 items), and civic virtue (3 items).

Likewise, EFAs of the South Korean and US samples indicated a five-factor structure of SrCERB and JrCERB (see Appendices 1-2). For the South Korean sample, the initial factor analysis including 21 items of SrCERB supported a five-factor model that explained 62.8% of the total variance and 61.2% of the total variance of JrCERB. The factor clusters were explicitly

specified except for two sportsmanship items of both SrCERB and JrCERB. For the SrCERB scale, the fifth item of altruism had factor loadings lower than .35. For the JrCERB scale, the fifth item of juniors' altruism and the fourth item of sportsmanship were cross-loaded and the fourth item of junior's courtesy had a factor loading of .33, which is close to a critical cut-off, .35. Similarly, for the US sample, the initial factor analysis including 21 items of CERB indicated a five-factor model that accounted for 63.5% of the total variance of SrCERB and 64.7% of the total variance of JrCERB. For the SrCERB scale, the fourth and the fifth item of altruism were cross-loaded. In addition, items loaded onto the hypothesized factors, except for two sportsmanship items of both SrCERB and JrCERB.

To summarize, these results suggest that consistent with ERB, the CERB construct has five distinct dimensions: expectations of altruism, courtesy, sportsmanship, conscientiousness, and civic virtue.

Table 4.6

EFA results of the overall sample: Coworkers' expectations of ERB for juniors (JrCERB)

Factor	Factor1	Factor2	Factor3	Factor4	Factor5
Eigenvalue	6.27	2.14	1.85	1.38	1.23
% of the item variance	29.6	10.2	8.8	6.6	5.9
Items	Factor Loadings				
Altruism1	.72				
Altruism2	.65				
Altruism3	.77				
Altruism4	.63				
Altruism5	.59				
Courtesy1					.53
Courtesy2					.74
Courtesy3					.70
Courtesy4					.43

Table 4.6 (cont'd)

Factor	Factor1	Factor2	Factor3	Factor4	Factor5
Eigenvalue	6.27	2.14	1.85	1.38	1.23
% of the item variance	29.6	10.2	8.8	6.6	5.9
Sportsmanship1				.52	
Sportsmanship2				.89	
Sportsmanship3				.84	
Sportsmanship4					
Sportsmanship5			.59		
Conscientiousness1		.72			
Conscientiousness2		.67			
Conscientiousness3		.71			
Conscientiousness4		.51			
Civic Virtue1			.69		
Civic Virtue2			.83		
Civic Virtue3			.69		

Note. *N* = 419; Extraction Method: Principal Axis Factoring; Rotation Method: Promax with Kaiser Normalization; Loadings less than .35 are suppressed.

Table 4.7

Inter-factor correlations of coworkers' expectations of ERB for juniors (JrCERB)

Factor	1	2	3	4	5
1. Factor 1	1.0				
2. Factor 2	.33	1.0			
3. Factor 3	.43	.57	1.0		
4. Factor 4	.28	.24	.39	1.0	
5. Factor 5	.37	.49	.56	.23	1.0

Note. *N* = 419; Extraction Method: Principal Axis Factoring; Rotation Method: Promax with Kaiser Normalization.

Confirmatory factor analysis. Before discussing CFA results of Confucianism Orientation, I discuss fit indices of CFA. The overall fit of a hypothesized model is assessed by maximum likelihood (*ML*) chi-square (). The significance of the χ^2 value indicates whether the null hypothesis ($\sum = \sum(\theta)$) is rejected or not. A non-significant χ^2 value means that the implied covariance matrix of sample is not different from the covariance matrix of the population. Therefore, the non-significant χ^2 value indicates good fit. However, as it is quite sensitive to sample size, almost any model tested on a large sample has statistically significant χ^2 scores (Recklitis et al., 2006). Especially when there are 200 or more respondents, the chi-square statistic would not be the best fit index (Bollen & Long, 1993). In other words, when sample size is over 200, the overall fit of the model needs to be assessed with alternative fit indices.

There are a variety of alternative fit indices such as the root-mean-square-error-of-approximation (RMSEA, Steiger, 1989), the comparative fit index (CFI, Bentler, 1990) and the goodness-of-the fit index (GFI). For CFI and GFI, cut-off criteria range from .90 to .95, and close to 1 indicates good fit (Tanaka, 1987; Thompson, 2004). On the other hand, a small value of RMSEA supports better fit: Values of less than .05 indicates good fit; values of .05 to .08, acceptable fit; values of .08 to .1, marginal fit; and values higher than .1, poor fit (Browne & Cudeck, 1992). However, the choice of a fit index depends on disciplines or research purposes. RMSEA and CFI have recently been recommended as fit indices (Hu & Bentler, 1999) in that they are sensitive to model misspecification (Bandalos, 2002). Values of the RMSEA and CFI are appropriate fit indices for the repeated measures analysis of variance (Bandalos, 2002). As participants were asked to respond to both expectations of senior coworkers' ERB and those of juniors' ERB, this study used repeated measures; therefore, RMSEA and CFA were appropriate

fits indices for this study. Thus, *ML* χ^2, RMSEA, 90% confidence intervals (CI) of RMSEA, GFI, and CFA were used as fit indices in this study.

CFAs of Confucianism Orientation. I conducted confirmatory factor analyses (CFAs) using LISREL (Jöreskog & Sörbom, 1993) to assess the fit of data to the hypothesized measurement model of Confucianism Orientation (CO). It is known as a two-factor model with the future orientation and the past/present orientation. I ran CFAs to assess the fit of a two-factor CO model with 6 items and a CO model with 8 items: the 6-item CO model is not nested in the 8-item CO model. However, as reported in Table 4.8, the model with 6 items best fits to the data, χ^2 (8, N = 419) = 16.63, $p < .05$, RMSEA = .05, (90% CI = [.01, .09]), CFI = .98, and GFI = .99, indicating acceptable fit. Also, the two-factor model with 6 items has a lower AIC than that of the alternative model, which provides support for the former. Table 4.9 displays the completely standardized factor loadings of the final CO items.

Table 4.8

CFA results for the overall model: Fit indices of Confucianism Orientation model

Model	χ^2	*df*	RMSEA	[90% CI]	CFI	GFI	AIC
2-factor model: 6 items	16.63*	8	.05	[.01, .09]	.98	.99	42.49
2-factor model: 8 items	91.65***	19	.10	[.08, .12]	.89	.95	127.65

Note. N = 419. *** $p < .001$. ** $p < .01$. * $p < .05$.

Table 4.9

CFA results for the overall sample: Factor loadings of Confucianism Orientation scale

Dimensions & Items	λ
Future Orientation	
Personal stability is not critical to success in business.	.46
The exchange of favors and gifts is not necessary to excel.	.70

Table 4.9 (cont'd)

Dimensions & Items	λ
Upholding one's personal image makes little difference in goal achievement.	.48
Past/Present Orientation	
Managers must be persistent to accomplish objectives.	1.11
There is a hierarchy to on-the-job relationship and it should be observed.	.84
It is important to have a conscience in business.	1.07

Note. $N = 419$; λ = Standardized Lamda; All λ are significant at or below .05.

Scale reliability. To assess internal reliability of each scale, Cronbach's alpha (α) was computed: a value of α close to 1 indicates higher internal consistency of the scale items (Cronbach, 1951). A cut-off criteria of reliability is Cronbach's α of .70 (Nunnally, 1978). As Cronbach'α is computed under the assumption of unidimensional structure to the scale (Dekas, 2010, p.142), I conducted an EFA with PAF and promax rotation and a CFA of each set of items separately.

Scale reliability of SrCERB. I started with evaluation of the altruism scale. The four items related to altruism were moderately correlated; correlations ranged from .29 to .57. An EFA using PAF and promax rotation provided support for the one-factor model with an eigenvalue of 2.33, which explained 58.2% of the total variance. Factor loadings ranged from .55 to .78 for the hypothesized altruism factor. Similarly, a CFA provided evidence for the one-factor model, CFI of .99, GFI of .99, RMSEA of .08 (90% CI = [.02, .14]), and χ^2 (2, $N = 419$) = 6.38, $p < .05$. Standardized λ ranged from .45 to .77. The Cronbach's α for the altruism scale was .75 ($M = 22.69$, $SD = 2.97$). Therefore, the altruism scale of SrCERB had respectable reliability.

Next, the four items of the courtesy scale were highly correlated: Correlations ranged from .54 to .74. An EFA suggested that it is the one-factor model with an eigenvalue of 2.14, which explained 53.5% of the total variance. Factor loadings ranged from .47 to .68 for the hypothesized factor. Similarly, a CFA provided evidence for the one-factor model, CFI of .90, GFI of .95, RMSEA of .22 (90% CI = [.16, .28]), and χ^2 (2, N = 419) = 28.06, p < .001. Standardized λ ranged from .47 to 68. The Cronbach's α for the courtesy scale was .71 (M = 23.16, SD = 2.83). Therefore, the courtesy scale of SrCERB had respectable reliability.

Third, the three sportsmanship items were highly correlated, and correlations ranged from .54 to .77. An EFA suggested that it is the one-factor model with an eigenvalue of 2.26, which explained 75.5% of the total variance. Factor loadings ranged from .64 to .92 for the hypothesized factor. Similarly, a CFA provided evidence for the one-factor model, CFI of .95, GFI of .95, RMSEA of 0, and χ^2 (0, N = 492) = 0, p > .05. Standardized λ ranged from.83 to 1.38. The Cronbach's α for the sportsmanship scale was 0.84 (M = 13.43, SD = 3.75). Therefore, the sportsmanship measures of SrCERB scale had good reliability.

Fourth, the four conscientiousness items were moderately correlated, and correlations ranged from .47 to .65. An EFA suggested that it is the one-factor model with an eigenvalue of 2.61, which explained 65.2% of the total variance. Factor loadings ranged from .66 to .80 for the hypothesized factor. Similarly, a CFA provided evidence for the one-factor model, CFI of .99, GFI of .99, RMSEA of .11 (90% CI = [.06, .17]), and χ^2 (2, N = 419) = 12.76, p < .01. Standardized λ ranged from .56 to .80. The Cronbach's α for the conscientiousness scale was .82 (M = 23.27, SD = 3.12). Therefore, the conscientiousness measures ensured good reliability.

Finally, the three civic virtue items were moderately or more correlated, and correlations ranged from .54 to .77. An EFA suggested that it is the one-factor model with an eigenvalue of 2.21, which explained 73.6% of the total variance. Factor loadings ranged from .69 to .85 for the hypothesized factor. Similarly, a CFA provided evidence for the one-factor model, CFI of .95, GFI of .95, RMSEA of 0, and χ^2 (0, N = 419) = 0, p = 1.0. Standardized λ ranged from .68 to .77. The Cronbach's α for the civic virtue scale was .82 (M = 17.43, SD = 2.29). Therefore, the civic virtue measures established good reliability. Tables 4.10 and 4.11 display results of the scale reliability of SrCERB.

Table 4.10

EFA results & reliability for the overall sample: SrCERB scale by dimension

Dimension	Item	Factor Loadings	Eigenvalue	% of the item variance	Cronbach's α
Altruism	Altruism1	.78	2.33	58.2	.75
	Altruism2	.59			
	Altruism3	.75			
	Altruism4	.55			
Courtesy	Courtesy1	.54	2.14	53.5	.71
	Courtesy2	.66			
	Courtesy3	.73			
	Courtesy4	.54			
Sportsmanship	Sportsmanship1	.64	2.26	75.5	.84
	Sportsmanship2	.92			
	Sportsmanship3	.84			
Conscientiousness	Conscientiousness1	.78	2.61	65.2	.82
	Conscientiousness2	.80			
	Conscientiousness3	.66			
	Conscientiousness4	.69			

Table 4.10 (cont'd)

Dimension	Item	Factor Loadings	Eigenvalue	% of the item variance	Cronbach's α
Civic Virtue	Civic Virtue1	.82	2.21	73.6	.82
	Civic Virtue2	.85			
	Civic Virtue3	.67			

Note. *N* = 419.

Table 4.11

CFA result for the overall sample: Fit indices of SrCERB scale by dimension

Dimension	# of items	χ^2	*df*	RMSEA	[90% CI]	CFI	GFI
Altruism	4	6.38*	2	.08	[.02, .14]	.99	.99
Courtesy	4	38.06**	2	.22	[.16, .28]	.90	.95
Sportsmanship	3	0	0	0	-	-	-
Conscientiousness	4	12.76**	2	.11	[.06, .17]	.99	.99
Civic virtue	3	0	0	0	-	-	-

Note. *N* = 419. *** $p < .001$. ** $p < .01$. * $p < .05$.

Scale reliability of JrCERB. Like SrCERB, each dimension of the JrCERB scale secured internal reliability. First, the four items related to altruism were moderately correlated; correlations ranged from .34 to .60. An EFA using PAF provided support for the one-factor model with an eigenvalue of 2.43, which explained 60.8% of the total variance. Factor loadings ranged from .54 to .78 for the hypothesized altruism factor. Similarly, a CFA provided evidence for the one-factor model, CFI of .99, GFI of .99, RMSEA of .07 (90% CI = [0, .13]), and χ^2 (2, *N* = 492) = 5.62, $p = .06$. Standardized λ ranged from .62 to .83. The Cronbach's α for the altruism scale was .78 (*M* = 26.69, *SD* = 3.52). Therefore, the altruism scale had good reliability.

Next, the four items of the courtesy scale were moderately correlated: Correlations ranged from .21 to .51. An EFA suggested that it is the one-factor model with an eigenvalue of 2.15, which explained 53.8% of the total variance. Factor loadings ranged from .44 to .72 for the hypothesized courtesy factor. Similarly, a CFA provided evidence for the one-factor model, CFI of .93, GFI of .96, RMSEA of .19 (90% CI = [.13, .25]), and χ^2 (2, N = 419) = 29.25, $p < .001$. Standardized λ ranged from .43 to .71. The Cronbach's α for the courtesy scale was .71 (M = 23.33, SD = 2.75). Therefore, the courtesy measures established reliability.

Third, the three sportsmanship items were moderately or more correlated, and correlations ranged from .50 to .73. An EFA suggested that it is the one-factor model with an eigenvalue of 2.19, which explained 73.1% of the total variance. Factor loadings ranged from .62 to .91 for the sportsmanship factor. Similarly, a CFA provided evidence for the one-factor model, GFI of .95, RMSEA of 0, and χ^2 (0, N = 419) = 0, p = 1.0. Standardized λ ranged from .83 to 1.36. The Cronbach's α for the sportsmanship scale was .78 (M = 13.11, SD = 3.72). Therefore, the sportsmanship measures ensured reliability.

Fourth, the four conscientiousness items were moderately correlated, and correlations ranged from .46 to .58. An EFA suggested that it is the one-factor model with an eigenvalue of 2.49, which explained 62.2% of the total variance. Factor loadings ranged from .65 to .78 for the conscientiousness factor. Similarly, a CFA provided evidence for the one-factor model, CFI of 1.0, GFI of 1.0, RMSEA of .04 (90% CI = [0, .11]), and χ^2 (2, N = 419) = 3.11, p = .21. Standardized λ ranged from .56 to .71. The Cronbach's α for the altruism scale was .80 (M = 23.54, SD = 2.89). Therefore, the sportsmanship measures had respectable reliability.

Finally, the three civic virtue items were moderately or more correlated, and correlations ranged from .47 to .64. An EFA suggested that it is the one-factor model with an eigenvalue of 2.09, which explained 69.8% of the total variance. Factor loadings ranged from .63 to .85 for the hypothesized factor. Similarly, a CFA provided evidence for the one-factor model, CFI of .95, GFI of .95, RMSEA of 0, and χ^2 (0, N = 419) = 0, $p < 1.0$. Standardized λ ranged from .66 to .84. The Cronbach's α for the altruism scale was .78 (M = 16.49, SD = 2.46). Therefore, the sportsmanship measures established reliability. Tables 4.12-4.13 display results of scale reliability of JrCERB.

Table 4.12

EFA results & reliability for the overall sample: JrCERB scale by dimension

Dimension	Item	Factor Loadings	Eigenvalue	% of the item variance	Cronbach's α
Altruism	Altruism1	.79	2.43	60.8	.78
	Altruism2	.66			
	Altruism3	.78			
	Altruism4	.54			
Courtesy	Courtesy1	.59	2.15	53.8	.71
	Courtesy2	.72			
	Courtesy3	.72			
	Courtesy4	.44			
Sportsmanship	Sportsmanship1	.62	2.19	73.1	.78
	Sportsmanship2	.91			
	Sportsmanship3	.80			
Conscientiousness	Conscientiousness1	.78	2.49	62.2	.80
	Conscientiousness2	.72			
	Conscientiousness3	.68			
	Conscientiousness4	.65			

Table 4.12 (cont'd)

Dimension	Item	Factor Loadings	Eigenvalue	% of the item variance	Cronbach's α
Civic Virtue	Civic Virtue1	.75	2.09	69.8	.78
	Civic Virtue2	.85			
	Civic Virtue3	.63			

Note. *N* = 419.

Table 4.13

CFA result for the overall sample: Fit indices of JrCERB scale by dimension

Dimension	# of items	χ^2	*df*	RMSEA	[90% CI]	CFI	GFI
Altruism	4	5.80	2	.07	[0, .13]	.99	.99
Courtesy	4	30.65**	2	.19	[.13, .25]	.93	.96
Sportsmanship	3	0	0	0	0	-	-
Conscientiousness	4	3.17	2	.04	[0, .11]	1.0	1.0
Civic virtue	3	0	0	0	-	-	-

Note. *N* = 419. *** *p* < .001. ** *p* < .01. * *p* < .05.

Confucianism Orientation. The three items of the past/present orientation scale were moderately correlated, and correlations ranged from .42 to .49. An EFA suggested that it is a one-factor model with an eigenvalue of 1.89, which explained 63% of the total variance. Factor loadings ranged from .60 to .70 for the hypothesized factor. Similarly, a CFA provided evidence for the one-factor model, CFI of 1.0, GFI of 1.0, RMSEA of 0 (90% CI = [0, .09]), and χ^2 (1, *N* = 419) = .08, *p* = .77. Standardized λ ranged from 1.09 to 1.09. The Cronbach's α for the scale was .71 (*M* = 9.54, *SD* = 3.58). Therefore, the past/present orientation measure demonstrated reliability.

Table 4.14

EFA results & reliability of CO scale for the overall sample

Dimension	Item	Factor Loadings	Eigenvalue	% of the item variance	Cronbach's α
Past/Present Orientation	Past/Present 1	.70	1.89	63	.71
	Past/Present 2	.60			
	Past/Present 4	.70			

Note. $N = 419$.

Table 4.15

Confirmatory Factor Analysis of CO scale for the overall sample

Model	χ^2	*df*	RMSEA	[90% CI]	CFI	GFI
Past/Present orientation	.08	1	0	[0 - .09]	1.0	1.0

Note. $N = 419$. *** $p < .001$. ** $p < .01$. * $p < .05$.

In conclusion, all variables secured internal reliability as measured by their inter-item correlations, EFA and CFA scores, and Cronbach's alphas (results of reliability tests on the South Korean and US samples display in Appendices 3-5). To test the hypotheses, I computed averages of the items from each scale to obtain scale scores for each participant.

Measurement invariance models. Measures need to represent the same number of factors across cultures for cross-cultural studies. This is called measurement invariance (MI), which means the extent to which a certain measure can be universally applied to different conditions (Drasgow, 1984; Horn & McArdle, 1992). Such conditions include different populations such as cultures (Ryan, Chan, Ployhart, & Slade, 1999), gender (Marsh, 1987), and age groups (Marsh & Hocevar, 1985). Before testing the hypotheses, the global applicability of CERBs (SrCERB & JrCERB) and CO measures was examined with the South Korean and US

sample due to differences in language and culture. According to Hofstede's (1980, 1991) characterization of national cultures, South Korea and the U.S. differ in individualism, power distance, uncertainty avoidance, and long-term orientation. Therefore, the measurement properties of both questionnaires—CERB and CO—were tested to the samples.

To this end, I adopted multi-group CFA models using maximum likelihood estimation with LISREL 8.53 because CERBs (SrCERB & JrCERB) and CO were measured by multi-item composite measures. Vandenberg and Lance (2000) mentioned that multiple-group CFA has been the most widely used in organizational research. The multi-group CFA model is considered the superior approach to test measurement invariance in that it 1) clearly identifies the item clusters; 2) estimates factor loadings across groups simultaneously; and 3) tests statistical significance of the equal-factor loadings (Gregorich, 2006, p. S81; Liu, Borg, & Spector, 2004).

The multi-group CFA approach includes dimensional, configural, metric, strong, and strict factorial invariance, which are more and more constrained, respectively. The dimensional factorial invariance means the equal number of common factors across groups. A test of configural invariance should follow after dimensional invariance is ensured. Configural invariance indicates that factor structures and factor patterns are equal across samples. This is a necessary condition for further tests of measurement invariance (Vandenberg & Lance, 2000, p. 19). Assuming configural invariance, metric invariance involves the equality of corresponding factor loadings across groups (Gregorich, 2006; Vandenberg & Lance, 2000), which means that the common factors have the same meanings across groups. Metric invariance is the necessary condition which allows for quantitative comparisons of estimated factor variance and covariance across groups. Strong invariance tests the hypothesis of equal factor means across groups on the assumption that metric invariance is ensured. Strict invariance indicates invariant residual

variances, which allows for quantitative comparisons of observed variances/covariances across groups.

In the current study, I tested dimensional, configural, and metric factorial invariance of CERB and CO across the samples because they are most used for testing measurement equivalence (Vandenberg & Lance, 2000). According to Ryan et al. (1999, p. 53), the metric invariance test is less tenable if the majority of items are not invariant. Equal factor loadings across cultures are the most general criteria of measurement equivalence (Ryan et al., 1999). Also, small but statistically significant difference between groups needs to be overlooked if the hypothesized model fits the data well (Ryan et al., 1999, p. 53). Therefore, I used the metric invariance as the determinant of measurement invariance (e.g., Alwin & Jackson, 1981; Reise, Widaman, & Pugh, 1993; Sörbom, 1974).

Using multi-group CFA, MI has depended on the test of maximum likelihood chi-squared difference ($\Delta\chi^2$) and degrees of freedom (Δdf) between two nested models. The comparison tests whether the more constrained model leads to significant worsening of fit (Gregorich, 2006, p. S84). A non-significant improvement in fit provides support for MI (Cheung & Rensvold, 2002; Vandenberg & Lance, 2000). However, the χ^2 is sensitive to the sample size, which means that a large sample can result in rejection of the null hypothesis with too much power (Wu, Li, & Zumbo, 2007, p. 5). When deciding whether MI is supported or rejected, alternative fit indices such as RMSEA also need to be considered (Brannick, 1995; Cheung & Rensvold, 2002; Kelloway, 1995; Vandenberg & Lance, 2000). In addition to χ^2, therefore, I considered alternative fit indices, which accommodate the sample size and model complexity to test MI, namely RMSEA, CFI, and ΔCFI. A value of ΔCFI less than .01 indicates that a more constrained

model does not result in dropping fit, which supports measurement invariance across groups (Cheung & Rensvold, 2002). I adopted Jöreskog and Sörbom's (1993, 1996) LISREL model because it provides a precise examination of CFA (Liu et al., 2004). Then, I tested whether measures of SrCERB and JrCERB were invariant on the overall sample.

Measurement Invariance of CERB by target: Seniors vs. Juniors. To test the relationships between coworkers' expectations of ERB and ERB givers' seniority, it is assumed that the SrCERB scale and JrCERB scale are invariant. Based on the results of EFA in preliminary analysis, the dimensional invariance of SrCERB and JrCERB was defensible in the overall sample: They had five common factors: altruism, courtesy, sportsmanship, conscientiousness, and civic virtue. Although this invariance supports only the equal number of common factors across groups in quantitative comparative studies, it does not warrant quantitative group comparisons (Vandenberg & Lance, 2000). Therefore, configural and metric invariance tests need to follow dimensional invariance.

Configural Invariance. I used each item of CERB as an indicator of its hypothesized construct. According to Vandenberg and Lance (2000), this approach is the most thorough, appropriate, and rigorous test of construct validity and possible differences between the SrCERB scale and the JrCERB scale. Configural invariance means that item clusters of common factors are invariant across groups (Gregorich, 2006, p. S81). Therefore, configural invariance is supported "when corresponding items have sizeable loadings on the same common factor(s) across samples and small loadings on other factors" (Gregorich, 2006, p. S81). In the CFA model, the SrCERB scale and the JrCERB scale had equal factor structures on the overall sample, suggesting invariance of factor loadings and each covariance between the two scales. Also, the alternative fit indices indicate acceptable model fit, CFI = .95 and RMSEA = .07.

Metric Invariance. Metric MI model is calculated by subtracting the chi-squared score of the configural invariance model from that of the metric invariance model, $\Delta\chi^2$ (13, N = 419) = 19.23, $p > .05$, indicating metric invariance between the SrCERB scale and the JrCERB scale in the overall sample. Also, the alternative fit indices indicated acceptable model fit, CFI = .95, ΔCFI = .01, and RMSEA = .08.

To sum up, SrCERB and JrCERB measures were invariant on the overall sample. Table 4.16 displays model fit of measurement invariance between the SrCERB scale and the JrCERB scale. This indicated that the quantitative comparison of SrCERB and JrCEB was defendable, providing initial support for tests of the proposed hypotheses.

Table 4.16

Model fit summary of MI of CERB by target: SrCERB vs. JrCERB scale (the overall sample)

Model	χ^2	*df*	Reference Model #	$\Delta\chi^2$	Δ*df*	RMSEA	[90% CI]	CFI
1. Configural	879.79**	250	-	-	-	.08	[.07, .08]	.95
2. Meric	899.02**	263	1	19.23	13	.08	[.06, .08]	.94

Note. N = 419. ** $p < .01$. * $p < .05$.

Measurement Invariance by country: South Korea vs. the U.S. Another premise of testing the hypotheses is that both the SrCERB scale and the JrCERB scale are invariant across samples. To be specific, MI of the SrCERB and JrCERB scales needs to be ensured between the South Korean sample and the US sample. The results of EFAs in the preliminary analysis support the dimensional invariance of CERB scales across samples: The South Korean sample and the US sample had five common factors of SrCERB and JrCERB. Using multi-group CFA, I tested configural and metric invariance of the SrCERB and JrCERB scales across samples.

Configural Invariance. Using multi-sample CFA, I tested invariance of factor structures of the SrCERB scale between the South Korean sample and the US sample. In the CFA model, items of clusters were invariant between the two samples. Also, the alternative fit indices indicate acceptable model fit, CFI = .95 and RMSEA = .07 (90% CI = [.07, .09]). Similarly, configural MI of the JrCERB scale was secured across samples, CFI = .95 and RMSEA = .07 (90% CI = [.07, .09]). Results indicate that the South Korean sample and the US sample had equal factor structures of SrCERB and JrCERB. Tables 4.17-18 display results of configural invariance tests of SrCERB and JrCERB, respectively.

Metric Invariance. Metric invariance model of SrCERB was not secured, $\Delta\chi^2$ (13, N = 419) = 78.69, p < .001, CFI = .95, ΔCFI = .01, RMSEA = .07 (90% CI = [.07, .09]). This indicated that factor loadings of the SrCERB scale were not invariant between the South Korean sample and the US sample. However, the metric MI of the JrCERB scale was not defendable across samples, $\Delta\chi^2$ (13, N = 419) = 40.62, p < .01, CFI = .95, ΔCFI = 0, RMSEA = .07 (90% CI = [.07, .09]). Tables 4.17-18 display results of metric invariance tests of SrCERB and JrCERB across samples, respectively.

Table 4.17

Model fit summary of MI: SrCERB between the Korean sample and the US sample

Model	χ^2	*df*	Reference Model #	$\Delta\chi^2$	Δ*df*	RMSEA	[90% CI]	CFI
1. Configural	550.68**	250	-	0	0	.08	[.07, .09]	.95
2. Meric	629.37**	263	1	78.69**	13	.08	[.07, .09]	.94

Note. N = 419. ** p < .01. * p < .05.

Table 4.18

Model fit summary of MI: JrCERB between the Korean sample and the US sample

Model	χ^2	*df*	Reference Model #	$\Delta\chi^2$	Δdf	RMSEA	[90% CI]	CFI
1. Configural	515.04**	250	-	0	0	.07	[.06, .08]	.95
2. Meric	552.66**	263	1	40.62**	13	.07	[.06, .08]	.95

Note. $N = 419$. ** $p < .01$. * $p < .05$.

To summarize, both the SrCERB scale and the JrCERB scale were not invariant across samples (the South Korean sample and the US sample). This suggested that the quantitative comparisons of SrCERB and JrCERB were not defendable across samples, which did not provide initial support for testing the proposed hypotheses.

Measurement Invariance of the Confucianism Orientation scale by country. Based on the multi-group CFA approach, I determined that the Confucianism Orientation (CO) scale is invariant between the South Korean sample and the US sample. As CO is a one-factor construct in this study, dimensional invariance is assumed. Results are presented in Table 4.19.

Configural Invariance. Using multi-sample CFA, I tested invariance of factor structures of the CO scale between the South Korean sample and the US sample. In the CFA model, both samples have the same item clusters. Also, the alternative fit indices indicate acceptable model fit, CFI = 1.0 and RMSEA = .01 (90% CI = [0, .07]). This implies that factor structures of the CO scale are invariant between the South Korean sample and the US sample.

Metric Invariance of CO scale. Metric MI model of the CO scale was also secured, $\Delta\chi^2$ (4, $N = 419$) = 5.04, $p > .05$, CFI = 1.0, ΔCFI = 0, RMSEA = .01 (90% CI = [0, .07]). This indicated that factor loadings of the CO scale were invariant between the South Korean sample and the US sample.

To summarize, the CO scale was invariant between the South Korean sample and the US sample. This suggested that the quantitative comparisons of the CO scale were defendable across samples, providing initial support for testing the proposed hypotheses

Table 4.19

Model fit summary of MI: CO between the Korean sample and the US sample

Model	χ^2	*df*	Reference Model #	$\Delta\chi^2$	Δdf	RMSEA	[90% CI]	CFI
1. Configural	16.77	16	-	0	0	.01	[0, .07]	1.0
2. Metric	21.81	20	1	5.04	4	.02	[0, .07]	1.0

Note. $N = 419$. ** $p < .01$. * $p < .05$.

In conclusion, results of MI tests provided partial support for the scales used in this study. The CO scale was invariant between the South Korean sample and the US sample. MI tests of the SrCERB scale and the JrCERB scale also indicated that the two scales had the equal number of common factors, equal factor structures, and equal factor loadings on the overall sample. However, measurement of SrCERB and JrCERB was not invariant across samples, meaning that the quantitative comparisons of the South Korean sample and the US sample are not defendable. This may be due to lack of the US sample. The CERB measurement model is complex with 5 factors and 18 items. While the Korean sample ($n = 292$) is adequate, the US sample ($n = 127$) is small for testing the model. The limited sample for the US may raise concerns about the stability of results and biased estimates. However, metric invariance models of SrCERB and JrCERB show reasonable fit indices (i.e., RMSEA $\leq .08$, CFI $\geq .94$). In addition, metric invariance is considered to be the minimum condition for comparative comparisons of different samples. Therefore, despite the fact that the SrCERB scale and the JrCERB scale by country was not invariant, it is assumed for testing the hypotheses in this study.

CHAPTER V: RESULTS

Before testing the hypotheses, I conducted initial tests such as descriptive, correlations, reliability, and missing values. As the sample data had a minimum level of missing information, I substituted them with multiple imputation. As participants were asked to respond to both coworkers' expectations of ERB (CERB) for senior employees and junior employees, repeated measure approach is appropriate. Using SPSS 20, I conducted repeated measures with Mixed Model for the relationships between coworkers' expectations of ERB and employees' seniority, industry, and Confucianism Orientation. Using hierarchical regression with Mixed Model, I tested the moderating effect of cultures on the relationship between CERB and employees' seniority. Hypothesis tests and results will be presented below in detail.

Analysis of Missing Data

Overall, the sample of this study had a good quality in that there were no respondents with missing information in the variables of interests exceeding 10% of their responses. I used a multiple imputation approach in order to substitute missing values. I will further discuss missing data in the following:

Frequencies. The Korean sample had 20.5% of participants with missing information (n = 63), and most of them had less than eight items missing. Likewise, the US sample had 24.4% of respondents with missing values (n = 31), but there were no participants with missing values exceeding 10% of their responses. On the whole, data quality was excellent, with little information missing. Therefore, I did not drop any individual's responses. Table 5.1 displays the frequency of individuals with missing information.

Table 5.1

Frequency of individuals with missing information in CERB & CO scales

	Overall (N = 419)		South Korea (n = 292)		US (n = 127)	
# of missing values	# of individuals with missing values	% of the sample	# of individuals with missing values	% of the sample	# of individuals with missing values	% of the sample
1	53	12.6	41	14.0	12	9.4
2	23	5.5	13	4.5	10	7.9
3	9	2.1	4	1.4	5	3.9
4	6	1.4	4	1.4	2	1.6
5	2	0.5	-	-	2	1.6
6	-	-	-	-	-	-
7	1	0.2	1	0.3	-	-
Total	94	22.4	63	20.5	31	24.4

Note. the overall sample = the South Korean sample and the US sample.

Imputation of missing data. I substituted individual missing values with multiple imputation, which is generally used for analysis of data sets with missing information in multivariate analysis (Rubin, 1987, 1996; van Burren, 2007). This method means that missing values are replaced with respondents' values whose responses are quite similar to those of individuals with missing information. Based on statistically valid estimates, multiple imputation provides appropriate values to replace missing values (van Burren, 2007). Multiple imputation is a desirable method in that it is applicable to any kind of data and that by using repeated imputations, it provides approximately unbiased estimates of all parameters of interests (Landerman, Land, & Pieper, 1997; Little & Rubin, 1989). Multiple imputation approach also produces less biased estimations by using the consistency of estimations computed through multiple imputations, producing unbiased estimations of standard errors (Acock, 2005).

However, there are some required conditions for using multiple imputation (Rubin, 1987, 1996): 1) the data are missing at random (MAR); 2) the model to generate the imputed values are correct; and 3) the model of interests matches with the model used for the imputation (as cited in Allison, 2000, p. 301). The data of this study has no specific pattern of missing values, which implies MAR. Therefore, this study adopted multiple imputation for substituting missing values. In general, imputation is conducted between three and five or ten times (van Burren, 2007). Although there is no rule of thumb for the number of imputations, any number of imputations between 10 and 20 is considered more than sufficient (Acock, 2005). Thus, I imputed missing values 20 times in this study.

Descriptive Statistics, Reliabilities, and Correlations

Tables 5.2 and 5.3 show scale means (*M*), standard deviation (*SD*), reliabilities (Cronbach's α), and correlations (*r*) among the variables for the South Korean and US samples, respectively. There are four points to mention. First, the five dimensions of coworkers' expectations of ERB for seniors (SrCERB) are significantly correlated with one another in each of the samples: for the South Korean sample, r = [.20, .63]; and for the US sample, r = [.20, .45]. Similarly, the five dimensions of CERB for juniors (JrCERB) are significantly correlated with one another in each of the samples: for the South Korean sample, r = [.19, .62]; and for the US sample, r = [.25, .43]. These results were similar to those of the existing research on ERB, which suggests a reasonable support for the scale of the current study.

Second, correlations between some ERB dimensions and Confucian Orientation (CO) were significant, which provides partial support for the hypotheses discussing that CO moderates the relationships between CERB and a target worker's seniority.

Next, the South Korean means were higher than the US means on Confucianism Orientation, $t(417) = 5.88$, $p < .001$, on coworkers' expectations of seniors' conscientiousness, $t(417) = 1.55$, $p = .12$, and on coworkers' expectations of juniors' altruism, $t(417) = 3.21$, $p < .001$. Meanwhile, the US means were higher than the South Korean mean on coworkers' expectations of seniors' courtesy, $t(417) = -3.9$, $p < .001$, on CERB of seniors' sportsmanship, $t(417) = -2.22$, $p = .03$, on those of seniors' civic virtue, $t(417) = -3.4$, $p = .001$, on those of juniors' courtesy, $t(417) = -4.19$, $p < .001$, on those of juniors' sportsmanship, $t(417) = -3.25$, $p < .001$, and on those of juniors' civic virtue, $t(417) = -3.08$, $p = .002$. Finally, both samples showed that the reliabilities for the items of SrCERB and JrCERB were satisfied with cut-off criteria suggested by Nunnally (1978), above .70 of Cronbach's λ. However, the US sample yielded an acceptable value of reliability of CO, $\alpha = .63$ (Gifford & Cummings, 1999).

Table 5.2

Basic statistics, correlations, & scale reliability for the South Korean sample

	M	*SD*	1	2	3	4	5	6	7
1. SrAl	5.70	0.71	(.74)						
2. SrCo	5.70	0.69	.45**	(.70)					
3. SrSp	4.39	1.23	.20**	.24**	(.85)				
4. SrGC	5.86	0.76	.35**	.44**	.41**	(.83)			
5. SrCV	5.73	0.78	.33**	.44**	.32**	.63**	(.84)		
6. JrAl	5.51	0.80	.63**	.25**	.19**	.24**	.25**	(.77)	
7. JrCo	5.74	0.66	.40**	.70**	.22**	.43**	.43**	.31**	(.66)
8. JrSp	4.24	1.15	.16**	.23**	.73**	.31**	.25**	.24**	.19**
9. JrGC	5.90	0.69	.28**	.37**	.36**	.72**	.50**	.26**	.50**
10. JrCV	5.42	0.80	.27**	.43**	.39**	.56**	.66**	.33**	.45**
11. CO	5.04	1.12	.09	-.01	-.19**	-.02	.001	.05	.12*
12. age	36.91	7.14	.12*	.06	.25**	.20**	.09	.17**	-.07
13. gender	0.13	0.33	-.12*	-.07	-.002	-.02	-.09	-.15*	-.02

Table 5.2 (cont'd)

	M	*SD*	1	2	3	4	5	6	7
14. education	3.01	0.65	-.02	.07	-.16**	-.05	.04	-.10	.07
15. position	1.95	0.23	-.15*	-.06	-.20**	-.13*	-.16**	-.14*	-.003
16. tenure	127.86	87.97	.07	.01	.27**	.22**	.05	.12*	-.12
17. department	2.72	1.05	.01	-.02	.13*	-.05	-.002	.04	-.08

Note. *N* = 281-292. ** $p < .01$. * $p < .05$. SrAl = coworkers' expectations of altruism as seniors' in-role; SrCo = coworkers' expectations of courtesy as seniors' in-role; SrSp = coworkers' expectations of sportsmanship as seniors' in-role; SrGC = coworkers' expectations of conscientiousness as seniors' in-role; SrCV = coworkers' expectations of civic virtue as seniors' in-role; JrAl = coworkers' expectations of altruism as juniors' in-role; JrCo = coworkers' expectations of courtesy as juniors' in-role; JrSp = coworkers' expectations of sportsmanship as juniors' in-role; JrGC = coworkers' expectations of conscientiousness as juniors' in-role; JrCV = coworkers' expectations of civic virtue as juniors' in-role; position (0 = *non-supervisor*, 1 = *supervisor*); tenure (in months); and department (1 = *Operating*, 2 = *R&D*, 3 = *Sales & Marketing*, 4 = *Planning/Mgt. Support*).

Table 5.2 (cont'd)

8	9	10	11	12	13	14	15	16	17
(.80)									
.31**	(.80)								
.39**	.62**	(.77)							
-.25**	.01	-.12*	(.71)						
.27**	.12*	.18**	-.05	1					
-.01	.05	-.002	-.03	-.33**	1				
-.24**	-.10	-.18**	.21**	-.13*	-.23**	1			
-.23**	-.15**	-.18**	.05	-.24**	.05	.01	1		

Table 5.2 (cont'd)

8	9	10	11	12	13	14	15	16	17
.32**	.16**	.15*	-.11	.90**	-.15*	-.36**	-.21**	1	
.14*	-.05	.01	.07	.02	.22**	-.14*	-.08	.03	1

Table 5.3

Basic statistics, correlations, & scale reliability for the US sample

	M	*SD*	1	2	3	4	5	6	7
1. SrAl	5.62	0.81	(.76)						
2. SrCo	5.99	0.71	.45**	(.70)					
3.SrSp	4.68	1.27	.35**	.36**	(.83)				
4.SrGC	5.73	0.83	.28**	.36**	.26**	(.80)			
5. SrCV	6.00	0.68	.41**	.35**	.20*	.39**	(.77)		
6. JrAl	5.21	1.01	.56**	.41**	.30**	.33**	.27**	(.80)	
7. JrCo	6.04	0.70	.40**	.60**	.08	.27**	.36**	.33**	(.78)
8. JrSp	4.66	1.38	.32**	.31**	.76**	.26**	.24**	.36**	.19*
9. JrGC	5.86	0.79	.39**	.45**	.21*	.65**	.44**	.36**	.43**
10. JrCV	5.68	0.85	.25**	.32**	.19*	.37**	.56**	.40**	.35**
11. CO	4.32	1.22	-.04	-.02	-.26**	-.02	.04	-.01	.20*
12. age	39.47	8.43	.07	.18	.19*	.14	.16	.03	.16
13. gender	0.32	0.47	.17	.20*	.20*	.22*	.22*	.26**	0
14. education	3.18	0.54	.14	.05	0	-.08	.16	-.01	.18*
15. position	1.71	0.45	-.13	-.18*	-.23*	-.11	-.18*	-.19*	-.14
16. tenure	66.55	61.50	.05	.02	.06	.14	.08	.12	.08
17. department	2.94	.94	.13	-.01	.23*	.19*	.02	.26**	-.06
18. nationality	1.79	0.60	-.09	.07	-.19*	-.15	.13	-.20*	.21*
19. company	1.38	0.49	.17	.01	.16	.26**	-.07	.25**	-.18*

Note. *N* = 114-127. ** $p < .01$. * $p < .05$. SrAl = coworkers' expectations of altruism as seniors' in-role; SrCo = coworkers' expectations of courtesy as seniors' in-role; SrSp = coworkers' expectations of sportsmanship as seniors' in-role; SrGC = coworkers' expectations of conscientiousness as seniors' in-role; SrCV = coworkers' expectations of civic virtue as seniors' in-role; JrAl = coworkers' expectations of altruism as juniors' in-role; JrCo = coworkers'

expectations of courtesy as juniors' in-role; JrSp = coworkers' expectations of sportsmanship as juniors' in-role; JrGC = coworkers' expectations of conscientiousness as juniors' in-role; JrCV = coworkers' expectations of civic virtue as juniors' in-role; position (0 = *non-supervisor*, 1 = *supervisor*); tenure (in months); and department (1 = *Operating*, 2 = *R&D*, 3 = *Sales & Marketing*, 4 = *Planning/Mgt. Support*).

Table 5.3 (cont'd)

8	9	10	11	12	13	14	15	16	17	18	19
(.85)											
.29**	(.79)										
.24**	.37**	(.82)									
-.19*	.08	0	(.63)								
.18	.08	.24*	.16	1							
.20*	.23*	.08	-.07	.08	1						
0	-.04	.11	.22*	.14	-.13	1					
-.13	-.15	-.20*	-.20*	-.45**	.02	-.16	1				
.02	.09	.04	.09	.52**	.21*	-.02	-.40**	1			
.19*	.18*	.09	-.10	.03	.15	.01	-.3**	.18	1		
-.10	-.07	.03	.27**	.10	-.19*	.19*	-.02	-.16	.05	1	
.08	.17	.01	-.25**	-.15	.28**	-.22*	-.01	.06	.01	-.78**	1

Hypothesis Testing: Mixed Model

Using repeated measures with Mixed Model, I tested the proposed hypotheses. Mixed Model is a statistical analysis for analyzing repeated measures data and regression. Hypotheses

1a-1d describes the relationship between coworkers' expectations of ERB and employees' seniority. Repeated measure approach with Mixed Model is appropriate in that participants were asked to respond to both questionnaires of coworkers' expectations of ERB (CERB) for senior employees and junior employees, which tests within-subject variance. To test the moderating effects of Confucianism Orientation (CO) on these relationships (Hypotheses 2a-2d), I also used hierarchical regression with Mixed Model in order to decompose the effect of the moderator—CO—from the other covariates. Next, to test the effects of CO (Hypothesis 3) and industry on CERB (Hypothesis 4), I ran repeated measures with Mixed Model using the average score of the overall ERB, which is the average of each measurement of altruism, courtesy, civic virtue, sportsmanship, and conscientiousness.

Relationships between CERB and ERB givers' seniority. A main goal of this study was to examine whether there is variation in coworkers' expectations of ERB based on ERB givers' seniority. Using repeated measures with Mixed Model, I tested whether there was significant within-subject variance in CERB for senior employees and junior employees. This approach is used to compare means on an outcome variable across repeated measures when controlling for covariates. For this study, CERB is an outcome variable, and ERB givers' seniority is within-subject factor. In other words, ERB givers' seniority is the within-subjects factor while there is no between-subject factor. Also, covariates are country and supervisory position.

Effects of covariates on CERB. Table 5.4 displays the results the effects of all covariates on CERB. Results indicate significant effects for some of the covariates. First, consistent with the ERB literature, supervisory position (0 = *non-supervisor*, 1 = *supervisor*) is significantly and positively related to coworkers' expectations of employees' altruism (unstandardized beta = .37,

$p < .001$), those of civic virtue (unstandardized beta = .41, $p < .001$), those of courtesy (unstandardized beta = .19, $p < .05$), and those of sportsmanship (unstandardized beta = .74, $p < .001$), indicating that supervisors are more likely than non-supervisors to expect employees to engage in ERB.

Next, country (0 = *South Korea*, 1 = *US*) is significantly and negatively related to coworkers' expectations of altruism (unstandardized beta = -.26, $p < .001$), indicating that employees working in South Korea are likely to expect their colleagues to engage more in altruism than employees working in the U.S. On the other hand, country is significantly and positively related to coworkers' expectations of civic virtue (unstandardized beta = .17, $p = .01$), courtesy (unstandardized beta = .25, $p < .001$), and sportsmanship (unstandardized beta = .19, $p = .049$), suggesting that employees working in US sites are likely to expect their colleagues to engage more in civic virtue and courtesy than employees working in South Korean sites.

CERB for seniors. **Hypotheses 1a and 1b** predict that altruism and civic virtue are more likely to be regarded as in-role behaviors for senior employees than juniors, respectively. For coworkers' expectations of altruism, there was a significant effect of a target employee's seniority on coworkers' expectations, B = .25 (*SE* = .06), $t(814) = 4.52$, $p < .001$, with CERB of senior employees' altruism receiving higher scores than that of juniors. This provided support for H1a, indicating that altruism is more likely to be regarded as seniors' in-role behaviors than juniors'.

Similarly, for civic virtue, there was a significant effect for ERB givers' seniority, B = .31 (*SE* = .05), $t(829) = 5.9$, $p < .001$, with coworkers' expectations of seniors receiving higher scores than juniors. This provided support for H1b, indicating that civic virtue is more likely to be regarded as in-role behaviors for seniors than for juniors.

CERB for juniors. **Hypotheses 1c and 1d** predict that courtesy and sportsmanship are more likely to be regarded as in-role behaviors for junior employees than for seniors, respectively. Unlike hypothesized, for courtesy and sportsmanship, there were non-significant effects for employees' seniority. As predicted, expectations of seniors' courtesy had lower scores than that of juniors, B = -.04 (*SE* = .05), *t*(833) = -.83, *p* = .41. This did not provide support for H1c, indicating that there is non-significant difference in coworkers' expectations of courtesy for seniors versus juniors.

Likewise, for sportsmanship, there was a non-significant effect for target employees' seniority, B = .11 (*SE* = .08), *t*(833) = 1.28, *p* = .20, with coworkers' expectations of senior employees receiving higher scores than those of juniors. Interestingly, coworkers' expectations of seniors' sportsmanship had higher scores than juniors, which is opposite to H1d. However, H1d was not supported, suggesting that sportsmanship is not specific to in-role behaviors of seniors or juniors. Table 5.4 displays results of testing hypotheses that predict the relationship between CERB and employees' seniority.

Table 5.4

Results of repeated measures with Mixed Model: Relationships between CERB and seniority

Outcome variables	Altruism	Civic Virtue	Courtesy	Sportsmanship
Intercept	5.45***	5.88***	5.95***	4.52***
	(.06)	(.06)	(.05)	(.10)
Seniority (0 = *JR*, 1= *SR*)	.25***	.31***	-.04	.11
	(.06)	(.05)	(.05)	(.08)
Job position	.37***	.41***	.19*	.74***
(0 = *non-supervisor*, 1 = *supervisor*)	(.09)	(.09)	(.08)	(.13)
Country	-.26***	.17*	.25***	.19*
(0 = *South Korea*, 1 = *US*)	(.06)	(.06)	(.05)	(.10)

Notes. *N* = 419; *** *p* <.001. ** *p* < .01. * *p* < .05. unstandardized beta reported; *SE* reported in parenthesis.

To sum up, above and beyond the effects of covariates, there are coworkers' expectations of ERB for senior employees: altruism and civic virtue are more likely to be regarded as senior employees than junior employees. However, there are non-significant coworkers' expectations of ERB for junior employees.

Moderating effect of Confucianism Orientation on the CERB-seniority links. To test the moderating effects of Confucianism Orientation (CO) on the relationship between CERB and ERB givers' seniority, hierarchical linear regression (HLR) analyses with Mixed Model were employed. These analyses were performed to address how CO affects the extent to which there is difference between CERB for senior employees and for junior employees. To this end, HLR analysis controls for the relationships between alternatives (country & supervisory position) and CERB before testing the relationships between CERB and ERB givers' seniority. Country and supervisory position were regressed on CERB at Step 1, ERB givers' seniority (seniors or juniors) was regressed at Step 2, CO was regressed at Step 3, and then interaction of ERB givers' seniority and CO (target × CO) was regressed at Step 4. The increase in R^2 from Step 3 to Step 4 indicates the moderating effects of CO on the outcome variable. Standardized values of the variables were used in analyses. The outcomes of these analyses are presented in Table 5.5.

Hypothesis 2a predicted that greater CO will lead to stronger coworkers' expectations of altruism for senior employees' in-role than those of juniors. Interaction effect of CO on CERB for seniors was non-significant, β = -.01, $t(828)$ = -.33, p = .75. In Step 4, the moderating effect of CO did not contribute to significant variance to the model, $\Delta R^2 = 0$, $F(1, 828) = .11$, p =.75. Thus, Hypothesis 2a was not supported, indicating that coworkers' expectations of altruism for seniors are not influenced by their Confucianism Orientation. This implies that the strength of

CERB towards senior employees' altruism (coworkers' expectations of seniors' altruism as in-role behavior) is invariant between individuals high in CO and individuals low in CO.

Hypothesis 2b predicted that greater CO will lead to stronger coworkers' expectations of civic virtue for senior employees' in-role than those of juniors. For coworkers' expectations of civic virtue as seniors' in-role behavior, CO was a non-significant moderator, β = .04, $t(827)$ = 1.30, p = .19. In Step 4, the moderating effect of CO did not contribute to significant variance to the model, ΔR^2 = .002, $F(1, 828)$ = 1.69, p = .19. This indicates that the strength of CERB of senior employees' civic virtue does not differ between individuals high in CO and individuals low in CO. Therefore, Hypothesis 2b was not supported

Hypothesis 2c predicted that greater CO will lead to stronger coworkers' expectations of courtesy for junior employees' in-role than those of seniors. The moderating effect of CO was significant to coworkers' expectations of juniors' courtesy as in-role behaviors. In Step 4, interaction between CO and seniority contributed to marginally significant variance to the model, ΔR^2 = .01, $F(1, 828)$ = 4.9, p = .03. Higher CO can be attributed to significantly higher levels of coworkers' expectations of courtesy for juniors' in-role behaviors than seniors', β = -.08, $t(828)$ = 2.21, p = .03. This suggests that compared with coworkers at low levels of CO, workers at high levels of CO are more likely to regard courtesy as in-role behaviors for juniors than for seniors. Therefore, Hypothesis 2c was supported.

Hypothesis 2d predicted that greater CO will lead to stronger coworkers' expectations of sportsmanship for junior employees' in-role than those of seniors. However, CO had a non-significant moderating effect on CERB of juniors' sportsmanship, β = .01, $t(828)$ = .40, p = .69. In Step 4, the interaction of CO and a target employee's seniority did not contribute to significant variance to the model, ΔR^2 = 0, $F(1, 828)$ = .16, p =.69. This indicates that the extent of CERB of

senior employees' sportsmanship is invariant between individuals high in CO and individuals low in CO. Therefore, Hypothesis 2d was not supported.

Table 5.5

Results of hierarchical regression: The effects of CO on relationships between CERB and seniority

	Coworkers' expectations of ERB			
Outcome Variables:	Altruism	Civic Virtue	Courtesy	Sportsmanship
Step 1				
Intercept	5.97	5.96	5.90	5.01
Country (0 = *South Korea*, 1 = *US*)	-.16***	.10**	.17***	.07
Supervisor (0 = *non-supervisor*, 1 = *supervisor*)	.16***	.17***	.09*	.20***
ΔR^2	.03	.05	.05	.05
ΔF	14.07***	21.56***	19.63***	22.63**
Step 2				
Seniority (0 = *JR*, 1= *SR*)	.15***	.20***	-.03	.04
ΔR^2	.02	.04	.001	.002
ΔF	20.47***	34.67***	.82	1.68
Step 3				
CO	.02	-.05	.06	-.24***
ΔR^2	0	.002	.003	.05
ΔF	.38	1.8	3.0	50.57***
Step 4				
Target × CO	-.01	.04	-.08*	.01
ΔR^2	0	.002	.01	0
ΔF	.01	1.69	4.90*	.16

Notes: N = 419; Betas presented; *** $p < .001$. ** $p < .01$. * $p < .05$.

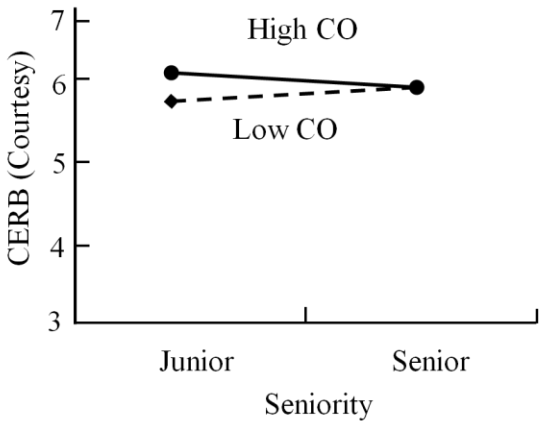

Figure 5.1 Moderating effects of CO on the CERB (courtesy) and seniority link

Consistent with Hypothesis 2c, Figure 5.1 displays a negative slope between coworkers' expectations of seniors' courtesy among employees high in Confucianism Orientation. On the other hand, the figure presents a positive slope between coworkers' expectations of seniors among employees low in Confucianism. This suggests that compared to employees having low CO scores, employees having high CO scores are more likely to expect juniors to engage more in courtesy than seniors.

Main effect of Confucianism Orientation on CERB. Hypothesis 3 predicted that Confucianism Orientation (CO) is positively related to coworkers' expectations of overall ERB. CO was significantly and negatively related to CERB, B = -.05 (*SE* = .02), $t(833) = -2.74$, $p = .006$. Interestingly, higher CO can be attributed to significantly lower levels of coworkers' expectations of overall ERB. This suggests that compared with coworkers at high levels of CO, workers at lower levels of CO are more likely to expect their colleagues to engage in ERB. Therefore, Hypothesis 3 was not supported. Results are displayed in Table 5.6.

Table 5.6

Results of repeated measures with Mixed Model: The relationship between CERB and CO

Dependent variable: CERB	B	*SE*	*df*	*t*
Confucianism Orientation	-.05	.02	833	-2.75**
Country (0 = *South Korea*, 1 = *US*)	.003	.05	833	.05
Job position (0 = *non-supervisor*, 1 = *supervisor*)	.42	.06	833	6.56***

Notes. $N = 419$; *** $p < .001$. ** $p < .01$. * $p < .05$.

Relationships between CERB and Industry. Hypothesis 4 predicted that employees of the service organization are more likely to engage in ERB than are employees of the manufacturing organization. As the South Korean sample was collected from only the automobile company, the country and the industry variables might violate multicollinearity. Country is correlated to company, $r = .55$; typically, this value is not so high. However, compared to correlations between country and other variables used in this study ($-.1 \leq r \leq .19$), the correlation between country and industry is relatively high. Therefore, to test the industry effects on CERB, I used only the US sample ($n = 127$) because it consisted of the sample from both the bank and the automobile.

There was a significant effect of industry on coworkers' expectations of ERB, B = .22 (*SE* = .08), $t(249) = 2.75$, $p = .006$, with CERB of the service organization (bank) receiving higher scores than the manufacturing organization (automobile firm). This provided support for H4, indicating that employees are likely to expect higher levels of expectations for their colleagues' ERB in service organizations than in manufacturing organizations. Results are displayed in Table 5.7.

Table 5.7

Results of repeated measures with Mixed Model: The relationship between CERB and industry

Dependent variable: CERB	B	*SE*	*df*	*t*
Industry (0 = *Manufacturing*, 1 = *Service*)	.22	.08	249	2.75**
Job position (0 = *Non-supervisor*, 1 = *Supervisor*)	.34	.08	249	4.15***

Notes. $N = 419$; *** $p < .001$. ** $p < .01$. * $p < .05$.

Summary of Hypothesis Tests

The results of all hypotheses are summarized in Table 5.8. Two hypotheses that predict coworkers' expectations of ERB for senior employees were supported by the results of repeated measures with Mixed Model. Results provide significant support for the claim that altruism and civic-virtue are more likely to be considered seniors' in-role behaviors than juniors'. On the other hand, two hypotheses that predict coworkers' expectations of ERB for juniors were not supported. This suggests that there is non-significant variation in coworkers' expectations of courtesy and sportsmanship based on employees' seniority. Thus, altruism and civic virtue are considered to be seniors' in-role behaviors more than juniors' while courtesy and sportsmanship are considered in-role behaviors for neither seniors nor juniors.

Unlike what was hypothesized, results indicate non-significant influence of Confucianism Orientation (CO) on the relationship between potential ERB givers' seniority and coworkers' expectations of altruism, civic virtue, and sportsmanship. However, CO was related to difference in coworkers' expectations of courtesy for juniors versus for seniors. Respondents high in CO showed more explicit difference between expectations for seniors and for juniors than did respondents low in CO. These results were found while controlling for country and supervisory position. Interestingly, results indicate that Confucianism Orientation is negatively related to

coworkers' expectations of overall ERB for employees, which is opposite to the hypothesis. This implies that employees low in CO are more likely to expect their colleagues to engage in ERB than coworkers high in CO. Finally, results suggest that there is significant industrial difference in coworkers' expectations of ERB, suggesting that employees are more likely to expect their colleagues to engage in ERB in service organizations than they are in manufacturing organizations.

Table 5.8

Results of hypotheses testing

Hypothesis	Result
Linkage of CERB to potential ERB givers' seniority	
H1a. Altruism is more likely to be regarded as seniors' in-role than juniors'.	Supported
H1b. Civic virtue is more likely to be regarded as seniors' in-role than juniors'	Supported
H1c. Courtesy is more likely to be regarded as juniors' in-role than seniors'.	Not supported
H1d. Sportsmanship is more likely to be regarded as juniors' in-role than seniors'.	Not supported
Moderating effects of CO on Linkage of CERB to seniority	
H 2a. For coworkers high in CO, *altruism* is much more likely to be regarded as in-role for seniors than juniors.	Not supported
H 2b. For coworkers high in CO, civic virtue is much more likely to be regarded as in-role for seniors than juniors.	Not supported
H 2c. For coworkers high in CO, courtesy is much more likely to be regarded as in-role for juniors than seniors.	Supported
H 2d. For coworkers high in CO, sportsmanship is much more likely to be regarded as in-role for juniors than seniors.	Not supported
Main effect of CO on coworkers' expectations of overall ERB	
H4. Confucianism Orientation is positively related to coworkers' expectations of ERB.	Not supported
Industrial Differences in CERB	
H4. Coworkers' expectations of ERB are likely to be higher in service organizations than in manufacturing organizations.	Supported

CHAPTER VI: DISCUSSION & CONCLUSION

In this dissertation, I explored how potential ERB receivers' expectations of ERB can shape employees' ERB by offering a new construct "*coworkers' expectations of ERB* (CERB)" which refers to perceptions of ERB commonly shared by potential ERB receivers. As a pioneer study exploring the role of ERB receivers, this study aims to define CERB and then understands what factors influence it. To be specific, drawing on Self-Categorization Theory and Role Theory, I argue that CERB is influenced by employees' seniority. Pointing out that seniority is a more important demography in a Confucian context than in a non-Confucian context, I propose that Confucianism Orientation (CO) will moderate the relationship between CERB and employees' seniority. Also, I argue that CO and industry will affect CERB in that the existing ERB literature has support for cultural and organizational differences in perceptions of ERB as well as in levels of ERB performance. Using multinational company study design and Mixed Model analyses, I test the proposed hypotheses. In this chapter, I summarize the findings from this study, discuss the theoretical and practical contributions, limitations, and suggestions for future research, and finish with concluding remarks.

Summary of Findings

Suggesting the role of potential ERB receivers in shaping employees' ERB, this study investigated what influences *coworkers' expectations of ERB* (CERB) for their colleagues. To be specific, I examined the relationships between CERB and employees' seniority and a moderating effect of Confucianism Orientation (CO) on the linkage of CERB to employees' seniority. I also explored the influences of CO and industry on CERB. 419 Participants were white-collar

workers working in Korea sites and US sites of two South Korea multinational companies: 292 of the Korean sample data and 127 of the US sample data.

Results indicate that altruism and civic virtue are more likely to be regarded as in-role behaviors for senior employees than for junior employees. This indicates that coworkers expect seniors to engage more in altruism and civic virtue than juniors, supporting H1a and H1b. On the other hand, results do not provide evidence that courtesy and sportsmanship are more likely to be considered in-role behaviors for junior employees than for senior employees, thus H1c and H1d are not supported. This suggests that there are non-significant differences in coworkers' expectations of courtesy and sportsmanship based on employees' seniority.

Overall, the linkage of CERB to ERB givers' seniority is less likely to be moderated by Confucianism Orientation. CO moderates only the relationship between CERB of courtesy and employees' seniority. Compared with employees low in Confucianism, employees high in Confucianism are more likely to regard courtesy as in-role behavior for junior colleagues than for senior colleagues. However, CO does not influence the strength of the relationships between CERB and altruism, civic virtue, and sportsmanship.

Also, results show that CO is significantly and negatively related to coworkers' expectations of overall ERB for employees. Unlike hypothesized, this suggests that employees high in CO are less likely to expect their colleagues to engage in ERB than are employees low in CO. Thus, H3 is not supported.

Finally, results suggest that there is difference in coworkers' expectations of overall ERB for their colleagues between service organizations and manufacturing organizations. Employees of service organizations are more likely than employees of manufacturing organizations to expect their colleagues to engage more in ERB. Results of this study provide support for four

hypotheses, despite controlling for strong alternatives. Main patterns of the findings will be discussed in more detail in the following sections.

Linkage of Coworkers' Expectations of ERB to Employees' Seniority

Employees' seniority was found to have significant influence on coworkers' expectations of altruism and civic virtue while it was not on those of courtesy and sportsmanship. This implies that senior employees are likely to be expected to engage more in altruism and civic virtue. Consistent with the socially responsible norm of benevolence for senior employees (Kanungo & Conger, 1993), employees regard altruistic behaviors as senior employees' in-role behaviors more than as junior employees'. Similarly, civic virtue is considered to be in-role behavior for seniors more than for juniors. Civic virtue refers to behavior involving "what policies are adopted and which candidates are supported" (Organ, 1988, p. 12), suggesting that it is more likely to be regarded as managers' than non-managers' behavior (Conway, 1996). Moreover, in the workplace civic virtue means to provide ideas and suggestions, which may lead to challenging behaviors (Kidder & McLean Parks, 2001, p. 946). Given that seniority refers to relative hierarchy in organizational contexts (Gosseries, 2004), senior employees are considered to be at a higher position than junior employees. As such, senior employees are expected to engage in ERB which is considered in-role behaviors for employees at higher-level positions.

However, employees' seniority was not found to have significant influence on coworkers' perceptions of courtesy and sportsmanship as in-role behaviors. People think that these ERB dimensions are not in-role behaviors for seniors and juniors. In particular, the scale means of sportsmanship (M = 4.23, SD = 1.25) were lower than those of altruism (M = 5.55, SD = .82), civic virtue (M = 5.65, SD = .81) and courtesy (M = 5.81, SD = .70). On the other hand, courtesy

may be considered in-role for both seniors and juniors in that its scale mean is higher than the other ERB dimensions'. Results show that junior employees are expected to engage in courtesy more than are seniors to some extents, but one which is not statistically significant. This may be because it involves behaviors preventing problems such as "taking steps in advance to mitigate the problem" (Organ, 1988, p. 12), suggesting that it may be required for all employees. Also, some scholars addressed that, coupled with altruism, courtesy can be categorized into helping behaviors (e.g., Podsakoff & MacKenzie, 1997). Also, the items of courtesy used in this study include "consulting with those who might be affected by seniors'/juniors' actions or decisions" and "informing others before taking any important actions." Such behaviors are involved in helping behaviors in that they imply sensitivity (Organ, 1988, p. 103). As such, courtesy may also be regarded as in-role behavior for seniors. Thus, results may support that there is a significant difference in coworkers' expectations of courtesy for juniors versus those for seniors.

Similarly, results do not provide evidence that sportsmanship is more likely to be considered in-role behavior for juniors than for seniors. The core of sportsmanship is to be willing "to tolerate less than ideal circumstances without complaining" (Podsakoff et al., 2006, p. 115). As global competition has increased, businesses, particularly global companies, need to adapt to a dynamic business environment by making continuous changes (Organ et al., 2006). This also requires employees to take the burden resulting from changes the management introduces, suggesting that sportsmanship may be in-role behavior for all employees.

In addition, items of the coworkers' expectations of sportsmanship scale include "not complaining a lot about a trivial matter," "not finding fault with what the organization is doing," and "not expressing resentment with any changes introduced by management." This means that sportsmanship is passive behavior rather than prosocial behavior in that its essence is to avoid

getting into trouble by remaining silent. Given this, sportsmanship may be required for employees in the workplace. Another possible explanation comes from the sample. The majority of participants of this study were white-collar workers of automobile companies, which need to adjust to an increasingly global marketplace. Therefore, results may not provide evidence that there is a significant difference in coworkers' expectations of sportsmanship for senior employees vs. junior employees.

Influences of CO on the Relationship between CERB and Employees' Seniority

Overall, results did not support moderating effects of Confucianism Orientation (CO) on the relationship between coworkers' expectations of ERB (CERB) and employees' seniority, except for courtesy. Compared to employees low in CO, courtesy is more likely to be regarded as in-role behavior for juniors more than for seniors among employees high in CO. However, for altruism, civic virtue, and sportsmanship, there were non-significant differences in the strength of the CERB-employees' seniority link between employees low in CO and employees high in CO. There are some possible explanations that CO was a non-significant moderator of the relationship between CERB and employees' seniority.

First, one primary possible reason is little variation in CO scores among participants. Data were collected from US sites and South Korean sites of South Korean global companies. Compared to the number of participants originated in Confucian cultures (n = 331), that of non-Confucian cultures was small (n = 88). Culture is not identical with nationality or country (Organ et al., 2011, p. 291; Triandis, 1995). However, a large difference in the number between South Korean participants and non-South Korean participants may cause little variation in CO scores. Moreover, 75% of participants have values of CO higher than 4.0 (7-point Likert scale),

suggesting that the distribution of CO scores was right-handed skewed (*Skewness* = -.72, *Kurtosis* = .20). Therefore, there was little variation in CO scores of the sample. This may lead to weaker effect of CO as a moderator of the relationship between coworkers' expectations of ERB and employees' seniority.

Another possible explanation is that coworkers' expectations of certain ERB dimensions related to seniority may be invariant across cultures, particularly altruism. As seniors are expected to take care of juniors in Confucian contexts, seniors' helping behaviors and emotional support are also socially desirable in Western contexts (e.g., Kanungo & Conger, 1993). Therefore, altruism may also be considered in-role behavior for seniors rather than for juniors among people oriented to individualism. This suggests that regardless of cultural backgrounds, altruism may be regarded as seniors' in-role behaviors, which may lead to a non-significant effect for Confucianism Orientation.

Also, the relationship between coworkers' expectations of civic virtue and employees' seniority was not moderated by Confucianism Orientation. This may be because civic virtue is regarded as in-role behavior for employees at supervisory positions (Graham & Van Dyne, 2006). According to Graham (1986) and Organ (1988), the core of civic virtue consists of two parts: 1) "gathering information" and 2) "exercising influence with the intent of making positive contributions to the organization" (Graham & Van Dyne, 2006, p. 91). Based on the definition of Graham (1986) and Organ (1988), Graham and Van Dyne (2006) suggested that gathering information refers to "affiliative-promotive behavior," which is cooperating to gather information, and that exercising influences refers to "change-oriented-promotive behavior," which means voice behavior (p. 91-92). They imply that civic virtue is likely to require 1) experienced knowledge of organizations, which helps to recognize important issues of

organizations and 2) manager-level positions, which are likely to keep informed of organizational issues and thus may feel responsibility for improvement (Graham, 1986). These studies suggest that civic virtue means role-behaviors related to job position, particularly the in-role behavior of supervisor-level positions. Similarly, some scholars asserted that civic virtue is passive participation rather than assertive participation (Organ et al., 2011, p. 284). Considering that civic virtue is positively related to job position, perceptions of civic virtue may be less likely to be influenced by cultures. Therefore, Confucianism Orientation may have slight or little effect on the relationship between CERB and employees' seniority.

Similarly, coworkers' expectations of sportsmanship for juniors versus seniors may be little influenced by Confucianism Orientation in that sportsmanship refers to "tolerating inconveniences that occur occasionally." One of primary Confucian virtues is *i* (faithfulness), which means loyalty, or righteousness (Laulusa, 2008, p. 6). This virtue is a basic rule for interpersonal relationships as well as individuals a member of a group (Yum, 1988), suggesting that both seniors and juniors are expected to display loyalty and faithfulness. Therefore, there may be non-significant differences in coworkers' expectations of sportsmanship for junior employees versus for those senior employees.

In addition, the majority of participants are white-collar employees of the automobile company. The CERB of sportsmanship items involves "not to find faults with what the management is doing" and "not to express resentment with changes the management makes." In particular, the labor union of the participating automobile firm has been considered one of the most hard-line unions in South Korea[2]. Therefore, sportsmanship is less likely to be regarded as

[2] http://www.kookje.co.kr/news2011/asp/newsbody.asp?code=0300&key=20120202.22012204422. Valid until April 13, 2012.
http://view.heraldm.com/view.php?ud=20111105000015. Valid until April 13, 2012.

in-role behavior in the automobile company. The mean score of sportsmanship (M = 4.37, SD = 1.23) was the lowest among the other dimensions of ERB: altruism (M = 5.53, SD = .80), $t(741) = 24.19$, $p < .001$; courtesy (M = 5.79, SD =.69), $t(741) = 30.92$, $p < .001$; and civic virtue (M = 5.63, SD = .79), $t(741) = 27.62$, $p < .001$. Furthermore, the automobile company had lower scores of coworkers' expectations of sportsmanship (M = 4.37, SD = 1.23) than the bank (M = 4.87, SD = 1.28), $t(836) = -3.77$, $p < .001$, suggesting that the automobile company is more likely than the bank to have lower expectations of sportsmanship for their colleagues. Thus, industry may affect CERB, which may lead to non-significant interaction effects of Confucianism Orientation on the relationship between CERB and target employees' seniority.

Influence of CO on Coworkers' Expectations of overall ERB for Employees

Interestingly, unlike what was hypothesized, Confucianism Orientation (CO) is negatively related to coworkers' expectations of ERB (CERB), suggesting that people high in CO are less likely to expect their colleagues to display ERB than people low in CO. Given that Confucianism highlights group-interests rather than self-interests and values strong work ethic, it is predicted that Confucianism-oriented employees are likely to expect high levels of their colleagues' ERB. However, findings from this study suggest that employees lower in CO are more likely to expect their colleagues to engage in ERB than are employees high in CO. There are some possible explanations.

First, the CO scale adopted in this study seems to focus on individuals' behaviors rather than group orientation. The higher score in CO indicates seeking "personal steadiness and stability," "saving face," "respect for tradition," and "reciprocation of greetings, favors, and gifts" (Robertson, 2000, p. 257). Although the CO scale emphasizes reciprocity, it seems to focus on

self-regulation behaviors rather than basic rules of interpersonal relationships in that it emphasizes one's steadiness and stability and saving face. The construct coworkers' expectations of overall ERB for employees deals with others' behaviors. Therefore, the CO scale dealing with individuals' self-regulations does not influence the relationship between CO and coworkers' expectations of overall ERB for employees.

Another explanation for the finding contrary to the hypothesis may be some cultural biases and methodological limitations. In this study CO was measured with three items. Moreover, its Cronbach's α met .70 of the minimum cut-off on the South Korean sample, but was lower than .70 on the US sample (Cronbach's α = .63). Robertson (2000) asserted that he tested the reliability of the CO scale on undergraduate students and found that it yielded a good reliability. However, the items of the Robertson's CO scale describe Confucian values in the workplace settings. Pretesting of the CO scale on a student sample may be less appropriate for securing reliability of the CO scale. Therefore, further studies need to be conducted on developing a more differentiated measurement of the CO scale.

To sum up, more research is required on the influence of CO on coworkers' expectations of overall ERB for employees. Such research will rely on the development of more reliable and appropriate CO scales to capture the essence of Confucianism values related to employees' behaviors within the workplace settings.

Industrial Differences in Coworkers' Expectations of overall ERB for Employees

One key finding of this study was that there are significant differences in coworkers' expectations of their colleagues' ERB (CERB) between service organizations and manufacturing organizations. To rule out the country effects on CERB, I used the US sample which consisted of

86 participants from the automobile industry and 41 from the bank. Despite the difference in size between the automobile and bank samples, with the automobile sample doubling the size of the bank sample, there is significant industrial difference in CERB. As hypothesized, employees in service organizations are more likely than employees in manufacturing industries to expect their colleagues to engage in ERB. Although this finding does not mean that employees of service organizations are willing to "go beyond job duty," it provides empirical support for some studies that employees of service organizations should demonstrate higher levels of ERB (e.g., Ariani, 2012; Raub, 2008). This implies that there may be business unit-level difference in ERB within an organization: employees of work groups or teams where "constant customer-employee exchange" (Ma & Qu, 2011) may engage more in ERB than employees of other departments. Therefore, further studies need to be conducted on the industrial differences in coworkers' expectations of overall ERB for employees by including organizations from a variety of industries.

Theoretical Contributions

The findings of the present study will have at least eight critical implications for research on extra-role behaviors. First, the current study contributes to filling out the gaps of the literature of ERB by suggesting the new construct *coworkers' expectations of ERB* (CERB), which refers to perceptions of ERB commonly shared by potential ERB givers. As existing research on ERB has mainly focused on why workers engage in ERB, it is unknown how potential beneficiaries (coworkers) of ERB more greatly influence a particular category of employees to engage in particular ERBs than others. However, it is important to know the effects of coworkers on a worker's ERB performance in that ERB is exhibited in organizational contexts where

interactions between members occur on a regular basis. This implies that ERB receivers can play a critical role in ERB performance of potential ERB givers. Therefore, research on ERB needs to consider two parties of exchange (givers and receivers) in that ERB is interpersonal behavior affected by others, rather than individuals' discretionary and voluntary behaviors influenced by personal disposition (Banki, 2010, p. 360). In this light, this research shows that the area of ERB research could be expanded beyond the relations between individual/task attributes and ERB performance to CERB. With a scarcity of research in this field, the existing literature has assumed that whether a person performs ERB or not is a personal choice depending on personal traits (Banki, 2010) and has little relation to expectations from other members within the organization. Therefore, *coworkers' expectations of ERB,* which highlights coworkers' expectations of ERB, contributes to the literature by expanding the ERB research field beyond ERB giver-focused view.

Second, as a pioneer study of CERB, this dissertation explores how CERB can be influenced by various factors: target employees' seniority, industry, and Confucianism Orientation (CO). The findings from this study imply that there are certain expectations of ERB for senior employees: altruism and civic virtue are more likely to be regarded as in-role behaviors for senior employees than for junior employees. Also, results indicate that coworkers' expectations of ERB are related to industry. In service organizations, employees are more likely to expect their colleagues to engage in ERB than are employees in manufacturing organizations. Although the proposed CO effects on CERB are mostly not supported by results, CO has a significant and negative relationship with CERB. This implies that there are cultural differences in CERB, which is consistent with findings from some cross-cultural ERB studies: there is variation in perceptions of ERB as well as CERB. Taken together, results indicate that CERB

can be influenced by potential ERB givers' seniority, industry, and Confucianism Orientation. Also, they call for further research on conceptualizing coworkers' expectations of ERB by exploring relationships between CERB and various variables.

Third, the findings from this study provide a good understanding of why particular workers involuntarily engage in ERB. Some scholars have provided empirical evidence that employees may engage in ERB due to strong peer pressures rather than their own good will (Vigoda-Gadot, 2007). For example, "compulsory citizenship behavior" (CCB) suggested by Vigoda-Gadot (2006, 2007) implies that ERB may be performed under pressure. CCB refers to involuntary extra-role behaviors to meet expectations implicitly forced by supervisors or management (Vigoda-Gadot, 2006, 2007). Similarly, Hui et al. (2004b) addressed that group members' expectations can lead individual members to being involved in the group. This suggests that individuals' ERB performance is influenced by potential ERB beneficiary's expectations.

However, as they focused on ERB givers, they did not provide comprehensive explanations for why they feel pressures to engage in ERB. By incorporating potential ERB receivers' expectations of ERB, this study provides explanations of why employees feel the pressure to go beyond their official duties even when they want to. Coworkers' expectations may implicitly impose particular ERBs on a target category of workers, which in turn coerces workers into involuntarily engaging in ERB. Also, in general, employees' ERB is likely to be influenced by peers and subordinates in social exchange contexts (Banki, 2010; Koser & Sanders, 2006). In particular, given that employees are influenced by expectations and implicit pressure from their coworkers (e.g., citizenship pressure and CCB), expectations of ERB receivers may implicitly

influence potential ERB givers' engagement in ERB. This implies that potential ERB receivers—coworkers—can play a critical role in the ERB performance of ERB givers.

Fourth, this study makes a contribution to cross-cultural ERB literature in that it examines the moderating effect of Confucianism Orientation on coworkers' expectations of ERB related to employees' seniority. Kirkman et al. (2006) reviewed 180 studies using Hofstede's cultural value framework, which were published in 40 psychology and management journals from January 1980 to June 2002. They classified those papers into two types: 1) Type I study, which deals with culture as a main effect on outcome variables; and 2) Type II study, which examines moderating effects of cultural values on organizational behavior variables. According to Kirkman et al. (2006), there were only two Type I ERB studies: Moorman and Blakely (1995) and Van Dyne et al. (2000). These both examined the main effect of culture on employees' ERB performance at the individual level. On the other hand, there was no research that examined the moderating effects of cultural values on ERB.

Similarly, Tsui et al. (2007), who reviewed 93 empirical cross-cultural studies published in the 16 leading management journals from 1996 to 2005, found no research that explores the moderating effect of cultural values on ERB. 38 Type II studies have mostly focused on *job attitudes, justice, reward allocation, leadership behaviors, and well-being* (Tsui et al., 2007, p. 446). The culture-related variables may be significant moderators of the relationships between ERB and other organizational or personal variables. Although there are some ERB dimensions valid across cultures, there is cultural variation in the extent to which people engage in such ERB (e.g., altruism, courtesy, and civic virtue). This study is considered a Type II study in that it explores the moderating effect of Confucianism Orientation on the link between ERB givers'

seniority and ERB receivers' expectations of the ERB givers' ERB performance. Therefore, the findings and purpose of this study enrich the cross-cultural ERB literature.

Fifth, specifically, this study contributes to cross-cultural ERB literature by using a construct based on Confucianism Orientation as a cultural value. It examines Confucianism on employees' expectations of their coworkers' ERB performance. Current cross-cultural studies have focused primarily on Hofstede's cultural value framework, especially the individualism-collectivism (IC) construct (Dickson, Den Hartog, & Mitchelson, 2003). According to Tsui et al. (2007), 70 studies adopted the IC construct to make a distinction among cultures. In particular, research which compares differences in behaviors, social belief, and values between Asian cultures and US cultures, has been primarily driven by the individualism-collectivism framework. Similarly, previous cross-cultural ERB studies have been conducted based on an IC (e.g., Euwema et al, 2007; Cohen, 2006; Moorman, & Blakely, 1995; Varela et al., 2010) or power distance construct (e.g., Cohen, 2006; Euwema et al, 2007; Kirkman et al., 2009; Varela et al., 2010). Recently, therefore, cross-cultural research has called for the necessity of other cultural constructs (Gelfand et al., 2007). Also, given Asian countries leading Asian economic development, such as South Korea, China, and Japan, Asian cultures can be characterized by collectivism based on Confucianism (Rhee et al., 2004). By paying attention to the effects of Confucianism on employees' attitudes toward their coworkers, this study provides a more detailed description of East-Asian cultures, thus contributing to cross-cultural literature on ERB. Also, this study makes a contribution to cross-cultural literature by suggesting the Confucianism Orientation construct as a cultural value, which can be substituted for Hofstede's collectivism-individualism construct.

Sixth, this study provides a better understanding of ERB outside the U.S. by comparing a South Korean sample and a US sample. According to Tsui et al.'s (2007) review of the 93 cross-cultural studies, the US sample is the most frequently included (78 studies). Among Asian couturiers, Japan (30) was the most frequently studied, followed by Hong Kong (27), the People's Republic of China (26), India (18), Taiwan (15), and South Korea (11). In particular, cross-cultural ERB literature has focused on comparing US contexts with Chinese (Moorman & Blakely, 1995; Blakely et al., 2005), Hong Kong (e.g., Lam et al., 1999), or Taiwanese contexts (e.g., Farh et al., 1997). Compared to Chinese or Japanese contexts, South Korean contexts have been less studied. As discussed above, there are cultural differences within Asian countries because they have different historical, economic, or societal backgrounds. Therefore, the findings from the comparison between South Korean and US contexts contribute to filling the gap of US contexts.

Seventh, this study also contributes to the literature on Self-Categorization Theory (SCT). SCT has provided a theoretical background for the effects of workforce diversity on employee attitudes toward the organization (Tsui et al., 1992, p. 549). SCT has mainly served research on diversity in the organization as a primary theoretical background. In particular, SCT has served as a primary theoretical background of relational demography studies (Mowday & Sutton, 1993; Tsui, Xin, & Egan, 1995). Relational demography refers to the relative demographic features that are correlated to work-related attitudes and performance (Zenger & Lawrence, 1989). Existing relational demography studies based on SCT have mainly focused on exploring the importance of similarity/difference between supervisors and subordinates (Graen & Scandura, 1987: Tsui et al., 1992; Tsui & O'Reilly, 1989). For example, dissimilarity between supervisors and

subordinates is negatively related to performance ratings of subordinates and supervisors' liking of subordinates (Tsui & O'Reilly, 1989).

SCT serves this study as a theoretical background to support the linkage of ERB givers' seniority to expectations of ERB. SCT suggests that people routinely use demography such as age and job tenure when perceiving and classifying others, thereby contributing to shaping expectations of role-behaviors commonly shared by members. This implies that based on organizational seniority, individuals may be expected to engage in particular extra-role behaviors. Little research has been attempted to connect SCT and ERB. Although existing research has focused on job position roles (i.e., leader behaviors) and gender roles, little research has been conducted on role-behaviors connected to organizational seniority. Thus, this study will contribute to enriching both the literature on SCT and ERB.

Finally, this research contributes to the literature on age demography in organizational contexts by clarifying the definition of organizational seniority. Age, job level, and tenure are compounded by seniority. Although seniority is commonly determined by age, it is also influenced by job position and tenure at the workplace or work experience within the current organization. Therefore, the definition of seniority needs to be clarified. Current research on seniority in organizational contexts has used age as a proxy of seniority: for example, the link of age to performance evaluation or promotion was explored (e.g., Lawrence, 1988, 1996). Although age and seniority are highly correlated to each other, age is a less appropriate indicator of seniority in that job position or tenure plays a more critical role than age in defining seniority within organizational contexts. Also, job position needs to be separated from seniority because the former is more related to hierarchy. In particular, in exploring relationships between seniority and behavior or attitude variables, job position needs to be controlled because those variables are likely to be related to job position. Along this line, assuming similar positions, I defined

organizational seniority as tenure in the current organization: at similar positions, seniors (or juniors) are defined as workers who have longer (or less) tenure in the current organization. Thus, the definition of seniority proposed by this study will contribute to future research on seniority in organizational contexts.

Implications for Practice

The findings of this study hold significant implications for practitioners in several ways. First, the findings call on HRM managers to set clear boundaries of in- and extra-role behaviors. The current study found that altruism and civic virtue are likely to be considered senior employees' in-role behaviors while sportsmanship and courtesy are considered juniors' duty. In particular, as managers evaluate subordinates' performance, the definition of performance depends on how *managers* actually define "performance." Scholars have provided empirical evidence that supervisors take into consideration task performance and citizenship behaviors in performance ratings (e.g., Borman, 1987; Mackenzie et al., 1991; Podsakoff & MacKenzie, 1994; Werner, 1994). For example, Borman (1987) found that Army officers considered both technical proficiency and citizenship behaviors in performance ratings. Similarly, university managers (Werner, 1994) and insurance agency supervisors (MacKenzie et al., 1991) sought out and used task performance as well as ERB performance (i.e., altruism and civic virtue). Such findings imply that supervisors perceive performance as going beyond an individual's job duties (Organ, 1988). As supervisors are potential ERB receivers as well as performance raters, their expectations of ERB related to a target worker group may affect performance evaluations.

In particular, it is important to clearly define an individual's duty in organizations where an individual's compensation is based on individual performance. Supervisors are likely to put just as much emphasis on their subordinates' ERB as they are on task performance (Borman,

2004; Podsakoff et al., 2000). Peers' and subordinates' evaluation are also important sources of individual performance ratings in a 360 degree performance evaluation, which incorporates performance information from diverse sources such as supervisors, peers, subordinates, and clients. Results of this study suggest that there are differences in potential ERB receivers' expectations towards juniors' ERB versus those towards seniors'. This implies that employees' duties need to be defined more clearly and that the organization needs to establish clear criteria to evaluate individuals' performance.

Second, the findings of this research will contribute to international HRM in business environments with a globalized workforce because they may help managers understand Confucianism Orientation (CO) on expectations of ERB. This study found that for employees high in CO, courtesy is much more likely to be regarded as juniors' in-role behaviors than seniors'. Results also show that CO has a significantly negative relationship with CERB.

Also, I conducted additional tests on country differences in coworkers' expectations of ERB by comparing the US automobile sample and the Korean automobile sample. Results show that there are significant national differences in CERB. For example, country (0 = *South Korea*, 1 = *US*) is significantly and negatively related to coworkers' expectations of altruism (unstandardized beta = -.42, $p < .001$), indicating altruism is more likely to be regarded as in-role behavior in South Korean contexts than in US contexts. On the other hand, country is positively related to coworkers' expectations of civic virtue (unstandardized beta = .17, $p < .05$) and courtesy (standardized beta = .30, $p < .001$), suggesting that civic virtue and courtesy are more likely to be considered in-role behaviors for colleagues in US contexts than in South Korean contexts. The findings from this study provide important implications for how managers can bridge the cultural gap in expectations of in- and extra-role behaviors in multicultural work

groups, thereby reducing conflicts among employees. For instance, as altruism is more likely to be considered in-role behaviors in Asian contexts based on Confucianism and collectivism than US contexts grounded in individualism, supervisors should try to reduce such cultural differences in perceptions of ERB in multinational teams. The management should also pay attention to role conflicts resulting from different perceptions of role behaviors in multinational organizations.

Third, the findings from this research also offer some insights into the job-related stress of role-overload and suggest ways to help reduce it. Schaufeli and Bakker (2004) implied that role-overload stress occurs when employees make a significant effort toward meeting others' expectations of their role behaviors. Coworkers' expectations may require a certain category of employees to engage in ERB, which may result in role-overload. This role-overload may be positively related to stress. For example, this study found that senior employees were expected to engage more in altruism than juniors were. This suggests that seniors could be implicitly forced to perform altruism by their coworkers just because they are seniors. Such implicit pressure from coworkers could lead to conflicts between workers, which may have a negative impact on workers' attitudes towards their organizations or job. In this light, ERB may actually have a negative effect on employees despite ERB's tendency to influence workplace culture and climate positively (Ganesh & Gupta, 2010, p. 171). For example, Bolino et al. (2010) found that citizenship pressure is positively related to work–family conflict, work–leisure conflict, job stress, and intentions to leave, turning out to be harmful to both individuals and organizations. Thus, organizations should pay attention to removing such pressures and undergo additional formal processes or tasks to decrease the chance that someone might perform ERB by implicit pressure.

Finally, results indicate that service organizations should be concerned with providing HR practices or polices that facilitate employees' willingness to go beyond the requirement. Results show that employees of service organizations are more likely to expect their colleagues to engage in ERB than are employees of manufacturing organizations. Service organizations or customer service teams tend to require high levels of ERB because they are required to satisfy variant and continually changing customer needs. However, it is not reasonable to expect that employees of service organizations are willing to go beyond their job duties. Therefore, the management or supervisors of service organizations should try to make the workplace promote ERB by providing HR practices that encourage employees to engage in ERB. Also, supervisors need to exercise leadership styles that are positively related to ERB. For example, servant leadership and supportive leadership are positively related to subordinates' ERB (Organ et al., 2006). This implies that supervisors of service organizations or teams should display supportive leadership to increase employees' willingness to engage in ERB.

Limitations

Despite the contributions and strengths of this study, it has some limitations. The majority of the weaknesses come from the methodology and the sample. In what follows, I discussed limitations in the method and the ERB literature, providing valuable suggestions for future research.

There are five limitations, which are primarily related to the sample and methodology. First, the current research has limitations in the sample data in that the US sample was not equivalent to the South Korean sample. Compared to the Korean sample data (n = 292), the US sample (n = 127) is relatively small. There have been some cross-cultural studies that used small

samples (e.g., Turnipseed & Murkison, 2000: the US sample = 106 versus the Romanian sample = 101). However, the US sample data of the current study was not large enough to use the proposed analyses of this study, in particular measurement invariance using multi-group CFA. Therefore, I strongly encourage ERB scholars to explore the findings of this study using a large sample. Another difference between the two samples resulted from demographic disparities. In particular, there was a large difference in the average tenure between the South Korean sample and the US sample. The US sites of the participating automobile company had a relatively shorter history because the company opened US sites later than those of South Korea. Therefore, the average tenure of US participants was 66.6 months (*SD* = 61.5) while that of their South Korean counterparts was around 121.9 months (*SD* = 88). Also, the South Korean sample data were collected across a number of departments while the US sample data were primarily collected from the R&D Department and the Planning/Mgt. Support Department. Therefore, the South Korean sample included a greater variety of occupations than the US sample did. The average age of the US sample was 39.5 years old (*SD* = 8.4) and that of the South Korean was 36.9 (*SD* = 7.1). The ratio of gender was also different: The ratio of males was 87.3% in the South Korean sample and 67.7% in the US sample. Finally, the South Korean sample consisted of South Korean employees while the US sample was comprised of Americans, South Koreans, and others. Future research needs to be conducted comparing organizations from different countries with similar size and length of history in the same industry.

Another limitation of the findings from this study involved the characteristics of participants. The majority of participants were male full-time workers with a 4-year university degree or higher. As the automobile industry is male-dominant, the majority of the workforce of the company consisted of male employees: 70% were male and 30% were female. Therefore, the

majority of the sample consisted of male workers: 81.4% of the overall sample was male and 18.6 % was female. The use of a male-dominant sample limits the extent to which the findings from this study are generalizable to a gender-mixed or female-dominant sample. If this study is replicated in female-dominant organizations or industries, results may be different from those of the current study. Female-dominant or mixed industries need to be studied in that gender differences may exist in expectations of ERB, which are related to gender roles (Johson, Holladay, & Quinones, 2009, p. 411) given that gender roles may contribute to differences in expectations of ERB for males versus females. For example, altruism and courtesy are more likely to be considered in-role behaviors for females than they are for males (Kidder & McLean Parks, 2001). Morrison (1994) addressed that altruism, conscientiousness, and involvement are more likely to be regarded in-role behaviors for females than males. Therefore, it can be inferred that females are more likely than males to regard ERB as in-role behavior. If this study is replicated with a female-dominant sample, coworkers' expectations of ERB might be higher than the results of this study. It is important to understand ERB receivers' characteristics, namely demography in investigating ERB receivers' view. ERB receivers' gender could be an important predictor of expectations of their coworkers' ERB.

Third, this study focused on ERB expectations of white-collar workers, who usually have a 4-year university degree or higher. Therefore, the findings from this study may have limited generalizability. Future research needs to be conducted on operating technicians, floor workers, or professionals such as salespersons. The workforce of these occupations may be different from the sample of this study. In particular, operating technicians and floor workers may be less educated than white-collar workers. Also, these occupations were excluded in this study as their

job duty is clearer than white-collar workers'. Therefore, to generalize the findings from this study, research on technicians' expectations of ERB would be necessary.

Fourth, I collected the data at a single point in time, as this study did not aim to argue causality between the variables of interests. Therefore, the findings from this study are limited in inferring the cause-effect relations. Future research with longitudinal design may provide a better understanding of the causality between variables of interest, as well as show the pattern of changes in expectations of ERB. Workers' expectation of ERB may be influenced by the extent to which individual workers are socialized. Therefore, I encourage future research to investigate the relationships between expectation of coworkers' ERBs and coworkers' demographic clues using longitudinal research designs.

Finally, this study used cross-sectional self-report surveys. Self-report is an appropriate method in that this study aims to explore individuals' expectations of their coworkers' ERB performance rather than their actual ERB performance. However, there is little evidence to support that method alone can produce bias (Spector, 2006, p. 223). In other words, it is difficult to argue that variables measured by the same method share common method bias (CMB) or common method variance (CMV). Harman's single-factor test has typically been used for testing whether there is the issue of CMV in analysis results (Chang, Witteloostuijn, Eden, 2010, p. 180-181; Podsakoff, MacKenzie, Lee, & Podsakoff, 2003, p. 889). For Haman's test, all items from each of constructs are loaded on one single factor in an exploratory factor analysis. If one single factor does not explain a majority of the covariance among the measures, CMV is not a critical issue (Podsakoff et al., 2003, p. 889). In this study, the results of Haman's single-factor test support that CMV is not pervasive: one general factor accounts for 25.8% of the variance.

Despite that such patterns of the data used in this study mitigate CMV concern, it may be difficult to deny that single-source data may be subject to CMV, and that the reliability of a single-data source tends to be low (Gerhart, Wright, McMahan, & Snell, 2000). Coworkers' expectations of ERB may be socially sensitive questions with self-reports in that ERB is considered to positively influence organizations. This implies that people are more likely to distort their responses to expectation of ERB. For example, people may report the same extent of expectations of seniors' ERB as that of juniors, even if they expect juniors to engage more in ERB than seniors, and vice versa. Therefore, the linkage of ERB receivers' expectation to potential ERB givers' ERB performance needs to be further explored using multi-source data.

Directions for Future Research

Findings from this study offer several opportunities for further research on conceptualizing coworkers' expectations of ERB (CERB) across cultures. First, much has been unknown about what influences CERB. This study explored the relationship between CERB and employees' seniority. However, there are important demographic factors in the workplace settings such as gender, job position (i.e., supervisor vs. non-supervisor), and employment type (i.e., regular employment vs. irregular employment). For example, coworkers may have different expectations of regular workers' ERB and irregular workers' in that they may consider irregular workers less committed than regular workers to the organization. In addition to seniority, further research needs to be conducted on what demographic factors influence coworkers' expectations of ERB.

Second, another possible opportunity for future research is to explore the relationships between coworkers' characteristics and their expectations of ERB for employees. This study

focuses on coworkers' expectations of employees' ERB with regard to ERB givers' demography rather than ERB receivers'. Likewise, potential receivers' demography could influence expectations of their colleagues' ERB. Future research needs to discover how the ERB receivers' social category influences expectations of the target employee's ERB. Social Identity Theory suggests that people usually self-categorize through group membership such as "age, gender, organizational affiliation, occupational affiliation, or religious membership" (Ashforth & Mael, 1989; Tajfel & Turner, 1985; cited in Todd & Kent, 2009, p. 174). A certain person's perceived membership may result in different attitudes toward and characteristic perceptions of in-group versus out-group members (Tsui & Gutek, 1999). In this light, coworkers' social identity may influence expectations of the target employee's ERB.

Third, further research needs to be conducted on multi-level analysis of coworkers' expectations of ERB. This study used a single level of analysis in order to avoid fallacies and spurious conclusions, which result from an inappropriate cross-level of analysis. However, the single-level of analysis has some limitations. One possible limitation is that it is difficult to rule out the influence of relevant variables at other levels (Kwantes et al., 2008, p. 231). Also, another drawback is that the single-level measurement alone is not sufficient to make convincing the argument that individual differences results from cultural influence. As ERB is an individual's behavior nested within a group or organizational context, the multi-level nature of the context in which ERB is exhibited needs to be incorporated into ERB research, moving beyond single-level research (e.g., Ehrhart & Naumann, 2004; Fischer, Ferreira, Assmar, Redford, & Harb, 2005; Karam & Kwantes, 2006; Kozlowski, & Klein, 2000; Kwantes et al., 2008). Therefore, to further explore cultural effects on expectation of ERB, future research needs to be conducted on incorporating the influence of existing relevant variables at the upper level. Future research

needs to be conducted on expectations of ERB at multiple levels of analysis by incorporating more national samples.

Fourth, further research needs to explore Confucianism Orientation (CO) on coworkers' expectations of ERB. This research is an exploratory study which conceptualizes ERB across cultures from the perspective of potential ERB receivers. Although CO was found to be a non-significant moderator of the relationship between CERB and ERB givers' seniority, such a result may be due to little variation in CO among respondents. This implies that more variation in CO among respondents may have different results. Therefore, to confirm findings from this study, further research needs to be conducted by using samples with much variation in CO. Also, in addition to Confucianism, further research needs to be conducted on influences of other cultural values on CERB, which provide a better understanding of cultural impacts on potential ERB receivers' perceptions of ERB.

Fifth, further research needs to be conducted within organizational contexts on defining the seniority construct. In this study, seniority has an open-ended definition in order to create a widely-applicable construct. Other than the assumption of similar positions, there were no restrictions in defining seniority. This may allow participants to create their own meaning of seniority, even though I provided the definitions of juniors and seniors in the survey questionnaire. However, seniority can have different meanings across organizational contexts or occupations. For instance, professors with five-year tenure in the current organization are less likely to be regarded as seniors because there is a broad spectrum of tenure among the faculty. On the other hand, in the high technology industry in the Silicon Valley, employees are expected to move from company to company (Carnoy, Castells, & Benner, 1997, p. 42). Employees with five years in the current company could be seniors in that organizational tenure has a narrow spectrum. According to Carnoy et al.'s (1997) interview with HR managers, annual turnover

rates were in the range of 15-25% in the Silicon Valley (p. 42). These factors imply that CERB based on seniority may be different because of different definitions of seniority. Therefore, it would be meaningful to study the relationship between CERB and seniority in various organizational contexts.

Sixth, another promising research focus is on the linkage between coworkers' expectations of ERB and target workers' seniority based on job tenure. In this study, the choice to focus on organizational seniority was based on literature which held that organizational tenure was more influential than job tenure (e.g., Gordon & Fitxgibbons, 1982; Gosseries, 2004; Huang et al., 1998). However, for professionals, job tenure might be as critical as organizational tenure in terms of demography. For example, using an IT professional sample, Chou and Pearson (2011) used job tenure as measure of tenure rather than the organizational tenure. Based on teacher sample, Belogolovsky and Somech (2010) measured both job tenure and organizational tenure. Therefore, research on relationships between seniority based on job tenure and CERB could make great contributions to the ERB literature in that job tenure can play a more important role than organizational tenure in certain context.

Seventh, another possible opportunity for further research is related to industrial difference in coworkers' expectations of ERB. This study tested the proposed hypothesis predicting industrial differences in CERB using the data from an automobile company and a bank. To obtain generalizability of the findings, a future study needs to include more organizations from each industry. Also, this research explored industrial differences in CERB by comparing the service organization and the manufacturing organization. Based on findings from this study, further research needs to be conducted on industrial differences in coworkers' expectations of ERB by including data from more various industries. Moreover, results indicate that industry (0 = *manufacturing*, 1 = *bank*) is significantly and positively related to coworkers'

expectations of altruism (unstandardized beta = .40, $p < .001$) and conscientiousness (unstandardized beta = .36, $p < .001$) while it is non-significantly related to expectations of courtesy, civic virtue, and sportsmanship. This suggests that industrial influence on CERB may vary across ERB dimensions. Therefore, future research needs to explore industrial difference in CERB by dimensions.

Eighth, another possible research focus is to develop a better measure of Confucianism or Confucianism Orientation (CO). Although I used Robertson's (2000) Confucian Dynamism scale to measure CO in this study, it needs further revisions. Robertson's scale consists of two dimensions: the past/present-orientation and the future-orientation. As the two dimensions are bipolar constructs, it is unclear in terms of demography how to combine them. For instance, Confucianism Dynamism results from high scores of the future-orientation and low scores of the past-presentation. As these dimensions are bipolar, high scores of the future orientation would come with low scores of the past/present orientation. It is difficult to interpret the high scores of both dimensions. Other than Robertson's (2000) scale, there is no scale to measure CO, so I adopted it. Robertson mentioned that the scale has good reliability, but he did not provide any statistical evidence such as Cronbach's α. Therefore, future research needs to be conducted on developing a more reliable measure of Confucianism.

Finally, this study tested only cultural influence in measurement invariance of the CERB scale. Therefore, future research needs to be conducted on linguistic influence of measurement invariance by comparing the samples having the same language but the different culture. For example, taking such approach, Ryan and her colleagues (1999) assessed both cultural and linguistic influences in measurement equivalence of employee attitudes such as job satisfaction, workload and stress, quality culture, and supervisory communication. In this light, I strongly

encourage scholars to test MI of CERB on more varied international sample data. I conducted MI tests on only two countries: South Korea and the US. To obtain international applicability of the CERB scale and the Korean CERB scale, more countries need to be included in future research.

Concluding Remarks

Central to this discussion was to explore what influences coworkers' expectations of ERB (CERB) using cross-national sample data. This study contributes to expanding the ERB literature beyond the existing ERB literature focused on ERB givers using a US-dominant sample. By examining hypotheses predicting the relationship between CERB and related variables, this study aims to address the limitations of the ERB literature and to conceptualize ERB from the perspective of potential ERB receivers (coworkers). Findings from this study indicate that there are some significant patterns of coworkers' expectations of ERB related to employees' seniority, industry, and Confucianism Orientation. Also, given a dynamic workforce change, findings from this study offer valuable implications for the HR practices that contribute to employees willingly going beyond the requirement, while also helping managers and employees understand cultural influences on expectations of ERB in multi-national or multi-cultural teams and organizations.

APPENDICES

Appendix 1: Factor analyses of CERB for the South Korean sample

Table 4.20

EFA results of the Korean sample: Coworkers' expectations of ERB for seniors (SrCERB)

Factor	Factor1	Factor2	Factor3	Factor4	Factor5
Eigenvalue	7.09	2.10	1.69	1.23	1.08
% of the item variance	33.8	10	8.1	5.9	5.2
Items	Factor Loadings				
Altruism1		.88			
Altruism2		.57			
Altruism3		.69			
Altruism4		.57			
Altruism5					
Courtesy1					.43
Courtesy2					.61
Courtesy3					.77
Courtesy4					.56
Sportsmanship1			.56		
Sportsmanship2			.99		
Sportsmanship3			.86		
Sportsmanship4	.36	.43			
Sportsmanship5	.56				
Conscientiousness1				.91	
Conscientiousness2				.54	
Conscientiousness3				.62	
Conscientiousness4				.57	
Civic Virtue1	.87				
Civic Virtue2	.84				
Civic Virtue3	.75				

Note. *n* = 292; Extraction Method: Principal Axis Factoring; Rotation Method: Promax with Kaiser Normalization; Loadings less than .30 are suppressed.

Table 4.21

Inter-factor correlations of coworkers' expectations of ERB for seniors (SrCERB)

Factor	1	2	3	4	5
1. Factor 1	1.0				
2. Factor 2	.52	1.0			
3. Factor 3	.41	.28	1.0		
4. Factor 4	.66	.38	.43	1.0	
5. Factor 5	.58	.60	.29	.51	1.0

Note. *n* = 292; Extraction Method: Principal Axis Factoring; Rotation Method: Promax with Kaiser Normalization

Table 4.22

EFA results of the South Korean sample: Coworkers' expectations of ERB for juniors (JrCERB)

Factor	Factor1	Factor2	Factor3	Factor4	Factor5
Eigenvalue	6.56	2.15	1.93	1.19	1.02
% of the item variance	31.2	10.2	9.2	5.7	4.9
Items	Factor Loadings				
Altruism1	.84				
Altruism2	.65				
Altruism3	.76				
Altruism4	.61				
Altruism5	.42				
Courtesy1					.47
Courtesy2					.77
Courtesy3					.68
Courtesy4					
Sportsmanship1				.48	
Sportsmanship2				.95	
Sportsmanship3				.75	
Sportsmanship4			.41		
Sportsmanship5			.51		

Table 4.22 (cont'd)

Factor	Factor1	Factor2	Factor3	Factor4	Factor5
Eigenvalue	6.56	2.15	1.93	1.19	1.02
% of the item variance	31.2	10.2	9.2	5.7	4.9
Conscientiousness1		.87			
Conscientiousness2		.60			
Conscientiousness3		.58			
Conscientiousness4		.47			
Civic Virtue1			.63		
Civic Virtue2			.76		
Civic Virtue3			.75		

Note. *n* = 292; Extraction Method: Principal Axis Factoring; Rotation Method: Promax with Kaiser Normalization; Loadings less than .30 are suppressed.

Table 4.23

Inter-factor correlations of coworkers' expectations of ERB for juniors (JrCERB)

Factor	1	2	3	4	5
1. Factor 1	1.0				
2. Factor 2	.26	1.0			
3. Factor 3	.51	.61	1.0		
4. Factor 4	.24	.21	.43	1.0	
5. Factor 5	.46	.57	.59	.16	1.0

Note. *n* = 292; Extraction Method: Principal Axis Factoring; Rotation Method: Promax with Kaiser Normalization

Appendix 2: Factor analyses of CERB for the US sample

Table 4.24

EFA results of the US sample: Coworkers' expectations of ERB for seniors (SrCERB)

Factor	Factor1	Factor2	Factor3	Factor4	Factor5
Eigenvalue	6.14	2.22	2.0	1.65	1.33
% of the item variance	29.2	10.6	9.5	7.9	6.4
Items	Factor Loadings				
Altruism1					.73
Altruism2					.87
Altruism3					.62
Altruism4	.45				
Altruism5					
Courtesy1	.50				
Courtesy2	.58				
Courtesy3	.82				
Courtesy4	.58				
Sportsmanship1				.56	
Sportsmanship2				.94	
Sportsmanship3				.83	
Sportsmanship4					
Sportsmanship5		.58			
Conscientiousness1			.59		
Conscientiousness2			.82		
Conscientiousness3			.69		
Conscientiousness4			.58		
Civic Virtue1		.91			
Civic Virtue2		.86			
Civic Virtue3	.33	.33			

Note. *n* = 127; Extraction Method: Principal Axis Factoring; Rotation Method: Promax with Kaiser Normalization; Loadings less than .30 are suppressed.

Table 4.25

Inter-factor correlations of coworkers' expectations of ERB for seniors (SrCERB)

Factor	1	2	3	4	5
1. Factor 1	1.0				
2. Factor 2	.46	1.0			
3. Factor 3	.31	.29	1.0		
4. Factor 4	.29	.15	.25	1.0	
5. Factor 5	.38	.43	.24	.41	1.0

Note. *N* = 127; Extraction Method: Principal Axis Factoring; Rotation Method: Promax with Kaiser Normalization

Table 4.26

EFA results of the US Sample: Coworkers' expectations of ERB for juniors (JrCERB)

Factor	Factor1	Factor2	Factor3	Factor4	Factor5
Eigenvalue	6.29	2.28	1.82	1.62	1.59
% of the item variance	29.9	10.9	8.6	7.7	7.6
Items	Factor Loadings				
Altruism1	.74				
Altruism2	.90				
Altruism3	.66				
Altruism4	.46				
Altruism5	.53				
Courtesy1		.61			
Courtesy2		.74			
Courtesy3		.84			
Courtesy4		.58			
Sportsmanship1					.59
Sportsmanship2					.90
Sportsmanship3					.89
Sportsmanship4		.34		-.34	
Sportsmanship5			.44		

Table 4.26 (cont'd)

Factor	Factor1	Factor2	Factor3	Factor4	Factor5
Eigenvalue	6.29	2.28	1.82	1.62	1.59
% of the item variance	29.9	10.9	8.6	7.7	7.6
Conscientiousness1				.70	
Conscientiousness2				.83	
Conscientiousness3				.56	
Conscientiousness4				.55	
Civic Virtue1			.85		
Civic Virtue2			.95		
Civic Virtue3			.56		

Note. *n* = 127; Extraction Method: Principal Axis Factoring; Rotation Method: Promax with Kaiser Normalization; Loadings less than .30 are suppressed.

Table 4.27

Inter-factor correlations of coworkers' expectations of Juniors' ERB (JrCERB)

Factor	1	2	3	4	5
1. Factor 1	1.0				
2. Factor 2	.39	1.0			
3. Factor 3	.39	.44	1.0		
4. Factor 4	.33	.41	.40	1.0	
5. Factor 5	.35	.17	.28	.28	1.0

Note. *n* = 127; Extraction Method: Principal Axis Factoring; Rotation Method: Promax with Kaiser Normalization

Appendix 3: Scale reliability of CERB scale for the South Korean sample

Table 4.28

EFA results & reliability for the South Korean sample: SrCERB scale by dimension

Dimension	Item	Factor Loadings	Eigenvalue	% of the item variance	Cronbach's α
Altruism	Altruism1	.80	2.32	58.3	.74
	Altruism2	.47			
	Altruism3	.77			
	Altruism4	.62			
Courtesy	Courtesy1	.56	2.11	52.8	.70
	Courtesy2	.62			
	Courtesy3	.68			
	Courtesy4	.58			
Sportsmanship	Sportsmanship1	.64	2.30	76.5	.85
	Sportsmanship2	1.0			
	Sportsmanship3	.80			
Conscientiousness	Conscientiousness1	.85	2.68	67.0	.83
	Conscientiousness2	.76			
	Conscientiousness3	.68			
	Conscientiousness4	.71			
Civic Virtue	Civic Virtue1	.80	2.27	75.8	.84
	Civic Virtue2	.81			
	Civic Virtue3	.78			

Note. *n* = 292.

Table 4.29

CFA result for the South Korean sample: Fit indices of SrCERB scale by dimension

Dimension	# of items	*df*	χ^2	RMSEA	RMSEA [90% CI]	CFI	GFI
Altruism	4	2	1.63	0	[0, .11]	1.0	1.0
Courtesy	4	2	23.92***	.19	[.13, .27]	.92	.96
Sportsmanship	3	0	0	0	-	-	-
Conscientiousness	4	2	3.39*	.10	[.03, .17]	1.0	1.0
Civic virtue	3	1	.01	0	[0, .06]	1.0	1.0

Note. n = 292. *** $p < .001$. ** $p < .01$. ** $p < .05$.

Table 4.30

EFA results & reliability for the South Korean sample: JrCERB scale by dimension

Dimension	Item	Factor Loadings	Eigenvalue	% of the item variance	Cronbach's α
Altruism	Altruism1	.84	2.43	60.7	.77
	Altruism2	.53			
	Altruism3	.77			
	Altruism4	.62			
Courtesy	Courtesy1	.56	2.0	49.9	.66
	Courtesy2	.69			
	Courtesy3	.67			
	Courtesy4	.39			
Sportsmanship	Sportsmanship1	.57	2.13	71.0	.80
	Sportsmanship2	.95			
	Sportsmanship3	.75			
Conscientiousness	Conscientiousness1	.78	2.53	63.2	.80
	Conscientiousness2	.71			
	Conscientiousness3	.71			
	Conscientiousness4	.66			

Table 4.30 (cont'd)

Dimension	Item	Factor Loadings	Eigenvalue	% of the item variance	Cronbach's α
Civic Virtue	Civic Virtue1	.70	2.06	68.6	.77
	Civic Virtue2	.78			
	Civic Virtue3	.71			

Note. n = 292.

Table 4.31

CFA result for the South Korean sample: Fit indices of JrCERB scale by dimension

Dimension	# of items	*df*	χ^2	RMSEA	[90% CI]	CFI	GFI
Altruism	4	2	3.1	.04	[0, .13]	1.0	.99
Courtesy	4	2	21.97***	.19	[.12, .26]	.90	.96
Sportsmanship	3	0	0	0	-	-	-
Conscientiousness	4	2	3.39	.05	[0, .13]	.99	.99
Civic virtue	3	1	.01	0	[0, .05]	1.0	1.0

Note. n = 292. *** $p < .001$. ** $p < .01$. ** $p < .05$.

Appendix 4: Scale reliability of CERB scale for the US sample

Table 4.32

EFA results & reliability for the US sample: SrCERB scale by dimension

Dimension	Item	Factor Loadings	Eigenvalue	% of the item variance	Cronbach's α
Altruism	Altruism1	.73	2.37	59.2	.76
	Altruism2	.86			
	Altruism3	.69			
	Altruism4	.41			
Courtesy	Courtesy1	.45	2.16	54.0	.70
	Courtesy2	.66			
	Courtesy3	.84			
	Courtesy4	.55			
Sportsmanship	Sportsmanship1	.61	2.25	74.9	.83
	Sportsmanship2	.87			
	Sportsmanship3	.91			
Conscientiousness	Conscientiousness1	.66	2.5	62.6	.80
	Conscientiousness2	.87			
	Conscientiousness3	.64			
	Conscientiousness4	.67			
Civic Virtue	Civic Virtue1	.95	2.05	68.3	.77
	Civic Virtue2	.84			
	Civic Virtue3	.41			

Note. *n* = 127.

Table 4.33

CFA result for the US sample: Fit indices of SrCERB scale by dimension

Dimension	# of items	*df*	χ^2	RMSEA	[90% CI]	CFI	GFI
Altruism	4	2	4.81	.11	[0, .23]	.98	.98
Courtesy	4	2	12.06	.20	[.1, .31]	.91	.96
Sportsmanship	3	0	0	0	-	-	-
Conscientiousness	4	2	12.94	.19	[.09, .31]	.94	.96
Civic virtue	3	1	.11	0	[0, .16]	1.0	1.0

Note. n = 127. *** $p < .001$. ** $p < .01$. ** $p < .05$.

Table 4.34

EFA results & reliability for the US sample: JrCERB scale by dimension

Dimension	Item	Factor Loadings	Eigenvalue	% of the item variance	Cronbach's α
Altruism	Altruism1	.74	2.57	64.3	.80
	Altruism2	.93			
	Altruism3	.74			
	Altruism4	.49			
Courtesy	Courtesy1	.63	2.44	60.9	.78
	Courtesy2	.78			
	Courtesy3	.85			
	Courtesy4	.50			
Sportsmanship	Sportsmanship1	.67	2.31	77.12	.85
	Sportsmanship2	.90			
	Sportsmanship3	.87			
Conscientiousness	Conscientiousness1	.76	2.45	61.25	.79
	Conscientiousness2	.73			
	Conscientiousness3	.65			
	Conscientiousness4	.64			

Table 4.34 (cont'd)

Dimension	Item	Factor Loadings	Eigenvalue	% of the item variance	Dimension
Civic Virtue	Civic Virtue1	.88	2.20	73.22	.82
	Civic Virtue2	.91			
	Civic Virtue3	.54			

Note. n = 127.

Table 4.35

CFA result for the US sample: Fit indices of JrCERB scale by dimension

Dimension	# of items	*df*	χ^2	RMSEA	[90% CI]	CFI	GFI
Altruism	4	2	13.34**	.13	[.07, .21]	.98	.98
Courtesy	4	2	5.95	.13	[.02, .25]	.98	.98
Sportsmanship	3	0	0	0	-	-	-
Conscientiousness	4	2	1.91	0	[0, .17]	1.0	.99
Civic virtue	3	1	.06	0	[0, .15]	1.0	1.0

Note. n = 127. *** $p < .001$. ** $p < .01$. ** $p < .05$.

Appendix 5: Scale reliability of Confucianism Orientation for the South Korean sample

Table 4.36

EFA results & reliability of Confucianism Orientation for the South Korean sample

	Item	Factor Loadings	Eigenvalue	% of the item variance	Cronbach's α
CO	Past/Present 1	.78	1.90	63.2	.71
	Past/Present 2	.59			
	Past/Present 4	.64			

Note. *n* = 292.

Table 4.37

CFA results of Confucianism Orientation for the South Korean sample

	χ^2	*df*	RMSEA	[90% CI]	CFI	GFI
CO	.01	1	0	[.0 - .06]	1.0	1.0

Note. *n* = 292. *** $p < .001$. ** $p < .01$. * $p < .05$.

Appendix 6: Scale reliability of Confucianism Orientation for the US sample

Table 4.38

EFA results & reliability of Confucianism Orientation for the US sample

	Item	Factor Loadings	Eigenvalue	% of the item variance	Cronbach's α
CO	Past/Present 1	.56	1.73	57.8	.63
	Past/Present 2	.49			
	Past/Present 4	.78			

Note. *n* = 127.

Table 4.39

CFA results of Confucianism Orientation for the US sample

	χ^2	*df*	RMSEA	[90% CI]	CFI	GFI
CO	0***	0	0	-	-	-

Note. *n* = 127. *** $p < .001$. ** $p < .01$. * $p < .05$.

Appendix 7: Consent form

Consent Form

Background Information:

You have been randomly selected to participate in this research study. Participation will involve completing a survey which should take twenty minutes or less. This survey will ask you about your perceptions of extra-role behaviors (ERBs). ERBs are discretionary and beneficial behaviors of members, but not directly rewarded or directed by an organization. For example, ERBs include actively attending coworkers' family events, helping co-works with heavy work load, and so on.

Confidentiality:

You must be at least 18 years old to participate in this research. Your privacy will be protected to the maximum extent allowable by law. No personally identifiable information will be reported in any research product. Moreover, only trained research staff will have access to your responses. Within these restrictions, results of this study will be made available to you upon request.

Voluntary Nature of the Study:

Participation is voluntary. You may choose not to participate, and you may withdraw from the study at any time without penalty. Moreover, you can withdraw or refuse to answer any of the questions without penalty. If you feel that you have been harmed by participating in this study, please contact Dr. Ellen Kossek or the Michigan State University IRB (Institutional Review Board).

Contacts and Questions:

You have the right to contact the investigators if you have any objections to or concerns with any aspect of this study. The contact information is as follows: Research supervisor, Dr. Ellen Kossek (kossek@msu.edu, 517-353-9040), researcher, Young Hee Kang (517-355-2944, kangyou4@msu.edu), School of Human Resources & Labor Relations, Michigan State University, East Lansing, MI 48824.

If you have questions or concerns about your role and rights as a research participant, would like to obtain information or offer input, or would like to register a complaint about this study, you may contact, anonymously if you wish, the Michigan State University's Human Research Protection Program at 517-355-2180, Fax 517-432-4503, or e-mail irb@msu.edu or regular mail at 207 Olds Hall, MSU, East Lansing, MI 48824.

You indicate your voluntary agreement to participate in this study by completing and returning the survey. I would be deeply appreciative of your consideration.

& Survey (English)

Appendix 8: Survey (English)

Survey

Guidelines

1) This survey has no correct answers. Please do not take as much time to answer each question but respond immediately and honestly once you have read each question.

2) This survey may contain questions that may seem similar or repetitive, but please keep in mind that your answer to each question is very important.

1. This section is about your perceptions of '**Senior Coworkers'.** *Senior coworkers* refer to **workers in the similar positions with longer tenure in the current organization.**

   Please mark the appropriate box that matches your agreement after reading each statement.

Item **I think that "Senior Coworkers should _____"**	Strongly disagree 1	Dis-agree 2	Somewhat disagree 3	Neutral 4	Somewhat agree 5	Agree 6	Strongly agree 7
help others who have heavy work loads.	1	2	3	4	5	6	7
help others who have been absent.	1	2	3	4	5	6	7
help make other workers productive.	1	2	3	4	5	6	7
help orient new people even though it is not required.	1	2	3	4	5	6	7
share personal property with others if necessary to help them with their work.	1	2	3	4	5	6	7
respect the rights and privileges of others.	1	2	3	4	5	6	7
try to avoid creating problems for others.	1	2	3	4	5	6	7
consult with other people who might be affected by their actions or decisions.	1	2	3	4	5	6	7
inform others before taking any important actions.	1	2	3	4	5	6	7
not complain a lot about trivial matter.	1	2	3	4	5	6	7
not find fault with what the organization is doing	1	2	3	4	5	6	7
not express resentment with any changes introduced by management	1	2	3	4	5	6	7

Item **I think that "Senior Coworkers should ____"**	Strongly disagree 1	Dis-agree 2	Somewhat disagree 3	Neutral 4	Somewhat agree 5	Agree 6	Strongly agree 7
think about others' work problems as well	1	2	3	4	5	6	7
pay attention to announcement, messages, or printed material that provide information about the company	1	2	3	4	5	6	7
be always on time.	1	2	3	4	5	6	7
have above average attendance at work.	1	2	3	4	5	6	7
give advance notice when unable to come to work.	1	2	3	4	5	6	7
maintain a clean workplace.	1	2	3	4	5	6	7
stay informed about developments in the company	1	2	3	4	5	6	7
attend and participate in meetings regarding the company.	1	2	3	4	5	6	7
offer suggestions for ways to improve operations.	1	2	3	4	5	6	7

2. This section is related to your understanding of business. Please mark the appropriate box that matches your agreement after reading each statement.

Item	Strongly disagree 1	Dis-agree 2	Somewhat disagree 3	Neutral 4	Somewhat agree 5	Agree 6	Strongly agree 7
Managers must be persistent to accomplish objectives.	1	2	3	4	5	6	7
There is a hierarchy to on-the-job relationship and it should be observed.	1	2	3	4	5	6	7
A good manager knows how to economize.	1	2	3	4	5	6	7
It is important to have a conscience in business.	1	2	3	4	5	6	7
Personal stability is not critical to success in business.	1	2	3	4	5	6	7
Respect for tradition hampers performance.	1	2	3	4	5	6	7
The exchange of favors and gifts is not necessary to excel.	1	2	3	4	5	6	7
Upholding one's personal image makes little difference in goal achievement.	1	2	3	4	5	6	7

3. This section is about <u>your perceptions</u> of '**Junior Coworkers**.' *Junior coworkers* refer to **workers in the similar positions with shorter tenure in the current organization**.

Please mark the appropriate box that matches your agreement after reading each statement.

Item **I think that "<u>Junior Coworkers should</u>"**	Strongly disagree 1	Dis-agree 2	Somewhat disagree 3	Neutral 4	Somewhat agree 5	Agree 6	Strongly agree 7
help others who have heavy work loads.	1	2	3	4	5	6	7
help others who have been absent.	1	2	3	4	5	6	7
help make other workers productive.	1	2	3	4	5	6	7
help orient new people even though it is not required.	1	2	3	4	5	6	7
share personal property with others if necessary to help them with their work.	1	2	3	4	5	6	7
respect the rights and privileges of others.	1	2	3	4	5	6	7
try to avoid creating problems for others.	1	2	3	4	5	6	7
consult with other people who might be affected by their actions or decisions.	1	2	3	4	5	6	7
inform others before taking any important actions.	1	2	3	4	5	6	7
not complain a lot about trivial matter.	1	2	3	4	5	6	7
not find fault with what the organization is doing	1	2	3	4	5	6	7
not express resentment with any changes introduced by management	1	2	3	4	5	6	7
think about others' work problems as well	1	2	3	4	5	6	7
pay attention to announcement, messages, or printed material that provide information about the company	1	2	3	4	5	6	7
be always on time.	1	2	3	4	5	6	7
have above average attendance at work.	1	2	3	4	5	6	7
give advance notice when unable to come to work.	1	2	3	4	5	6	7
maintain a clean workplace.	1	2	3	4	5	6	7
stay informed about developments in the company	1	2	3	4	5	6	7
attend and participate in meetings regarding the company.	1	2	3	4	5	6	7
offer suggestions for ways to improve operations.	1	2	3	4	5	6	7

◎ Now just a few personal questions to help us classify your responses:

1. Birth year	(19____)
2. Gender	① Male ② Female
3. Education	① High school or lower ② 2-year college ③ 4-year university ④ Master or higher
4. Job Position	① Supervisor ② Non-Supervisor
5. Job Level	① Entry Level ② Assist. Manager ③ Manager ④ Deputy General Manager ⑤ General Manager or higher
6. Working Experience	1) in your <u>current organization</u> : ( ) years and ( ) months 2) at your <u>current job level</u> : ( ) years and ( ) months 3) in this <u>industry</u> : ( ) years and ( ) months 4) working (<u>Total</u>) : ( ) years and ( ) months
7. Employment Type	① Regular Full-time ② Regular Part-time ③ Temporary Full-time ④ Temporary Part-time
8. Department	① Production ② Research & Development (R&D) ③ Sales & Marketing ④ Planning/Management Support
9. Work Site	① South Korea ② US
10. Nationality of Origin	① South Korea ② US ③ Others

Thank you for participation

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