

Employees' Perceptions of Interpersonal Competence: The Case of South Korea

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This study examined employees' perceptions of interpersonal competence at work through the research methodology known as concept mapping. The purpose of this study was to identify the phenomenally derived components of interpersonal competence in work environments and employees' underlying cognitive structures of interpersonal competence at work. Multidimensional scaling analysis indicated that the participants conceptualized interpersonal competence in the following two dimensions: (i) work-specific domain versus general domain and (ii) unilateral domain versus bilateral domain. In addition, hierarchical clustering on the MDS coordinates produced six clusters: Caring & Considerate, Sociable & Out-going, Kind & Gentle, Reliable & Leadership skills, and Confident & Responsible. Our results were discussed with respect to future research and educational approaches to the issues surrounding interpersonal competencies at work.

Key words: interpersonal competence, social competence, work setting, concept mapping, multidimensional scaling analysis

Interpersonal relationships have long been considered a very important aspect in human functionality and, consequently, researchers have been interested in this area. As societies become more fragmented and diverse, it has become even more important to successfully engage in interpersonal relationships and this ability is considered to be one of the key abilities of an individual's proper functioning. An ability to engage in interpersonal relationships in various social situations is known to be important for healthy adjustment in society and psychological well-being for

various age groups and evidence supporting this is well documented (e.g., Blakemore & Frith, 2004; Larson, Whitton, & Hauser, 2007; Rubin, Bukowski, & Parker, 1998). For example, Larson and his colleagues (2007) found that the ability to engage in close relationships and to be liked by others were correlated to indices of functioning such as self-worth, education, psychological distress, criminal behavior, and ego development.

Interpersonal relationships, in particular, have been emphasized as an important area of competence in employment. Boyatzis (1982) identified 6 work related competence groups for evaluating a manager's performance and found that 4 out of 6 groups were highly connected to interpersonal competencies. Several empirical studies have confirmed the importance of certain competencies related to work outcomes. Wayne, Liden, Graf, and Ferris (1997) found interpersonal effectiveness predicted job performance in assessing potential employees in a variety of managerial,

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professional, and technical jobs. They also found that supervisors' perceptions of interpersonal skills were positively related to an employee's salary progression. These and other similar empirical studies also found that individual characteristics related to the ability to engage in interpersonal relationships and social effectiveness were essential for managerial effectiveness such as leadership positions (Kilduff & Day, 1994), and career success (Luthans, Hodgetts, & Resenkrantz, 1988). Zaccaro, Gilbert, Thor, and Mumford (1991) found that social intelligence is directly related to leadership effectiveness and that it is necessary to effectively develop and implement a vision for an organization. Thus, greater attention needs to be given to interpersonal competency as it is an important concept in organization studies, playing a vital role in leadership, organization development, and human resource development (Ferris, Perrewe, & Douglas, 2002).

Considering the importance of interpersonal relationships at work, developing the interpersonal competencies of employees is important, not only for human resource management, but also for education. Jung (1997) reported employees' growing needs for counseling or educational programs to enhance their interpersonal competence in the work environment. This finding suggests that diverse educational programs to facilitate an individual's interpersonal competence need to be provided in schools, colleges, and universities as well as in organizations. Educational professionals need to establish a sound conceptual understanding as to what constitutes the interpersonal competencies required at work and develop programs for interpersonal competencies development. It is therefore essential to clarify what are interpersonal competencies required in work environments.

Although interpersonal competency has been noted as an attractive concept for practitioners in terms of its practical implications for organizations, the complexity and the ambiguity of the concept presents a challenge to the investigation of psychometrical attributes (Ferris et al., 2002). The efforts to conceptualize these abilities have failed to form the much needed theoretical frameworks in more consistent ways. Such related theoretical models have been construed in a somewhat broad approach. Some models conceptualized these abilities as within the domains of mental abilities, called intelligence. Intelligence model theorists conceptualized these abilities as forms of social

intelligence (Thorndike, 1920), interpersonal intelligence (Gardner, 1983), and practical intelligence (Sternberg, 1985, 1997) and recently emotional intelligence (Goleman, 1995). In addition, interpersonal competency has also been discussed under similar labels such as social skills (Meichenbaum, Butler, & Gruson, 1981), or social competence (Schneider, Ackerman, & Kanfer, 1996), etc. These theorists agreed that traditional cognitive ability tests were limited in predicting work performance in real world contexts. These models had a variety of theoretical frameworks, which in turn led to the development of different concepts in this area. There have been a few empirical studies on related constructs, such as social competence and social skills, but no empirical study has been conducted on interpersonal competence. For example, Schneider, Ackerman, and Kanfer (1996) measured social competence and identified seven factors underlying this construct (i.e., Extraversion, Warmth, Social Influence, Social Insight, Social Openness, Social Appropriateness, and Social Maladjustment). In another study, Riggio (1986) developed the Social Skill Inventory and confirmed six basic dimensions: Emotional Expressivity, Emotional Sensitivity, Emotional Control, Social Expressivity, Social Sensitivity, and Social Control.

Other models conceptualized the abilities related to interpersonal relationship in social contexts from a competence approach. McClelland (1973) criticized the validity of intelligence tests in terms of their limited predictive power for success in work and social life and suggested the term *competence* in a broad perspective. This term, refers to the psychological and behavioral characteristics influencing work and social life. Since his study, competence approach also has been widely utilized and applied in various areas, such as primary and secondary education (Murnane & Levy, 1996), higher education (Barnett, 1996), and organization studies (Ferris et al., 2002). In the 1980s, Boyatzis (1982) defined competence in a more specific way, referring to it as an underlying characteristic that differentiated superior and average performers. Later, Spencer and Spencer (1993) defined competence as an underlying characteristic, causally related to effective performance in specific task criteria.

From the competence approach, many researchers have tried to provide definitions of interpersonal competencies and related concepts. The OECD's definitions of interpersonal competencies are 1) the ability to relate well to others, 2) the

ability to cooperate, and 3) the ability to manage and resolve conflicts (Rychen & Salganik, 2001). According to the DeSeCo Project, the ability to relate well to others requires empathy and effective management of emotions. The ability to cooperate includes 1) the ability to present ideas and listen to those of others, and an understanding of the dynamics of debate and of following an agenda, 2) the ability to construct tactical or sustainable alliances, 3) the ability to negotiate, and 4) the capacity to make decisions that allow for different shades of opinion. The ability to manage and resolve conflicts requires the need to 1) analyze the issues and interests at stake, 2) identify areas of agreement and disagreement, 3) reframe the problem, and 4) prioritize needs and goals, deciding what they are willing to give up and under what circumstances. Interpersonal competence can also be defined by a collection of interpersonal skills such as an ability to 1) initiate relationships, 2) assert oneself negatively, 3) disclose personal information, 4) provide emotional support, and 5) manage conflict (Buhrmester, Furman, Wittenberg, & Reis, 1988).

The studies presented above have provided a general understanding of the various factors in the interpersonal competencies required in the workplace. However, a great many definitions of interpersonal competence are theoretical, metaphysical and speculative, and hence not concrete. Therefore, more empirical research on interpersonal competence from a competence approach is needed. Since competence is defined as an underlying characteristic related to effective performance in specific task criteria, an understanding of such competence needs to be context-specific and based on the norms of the particular peer group in which social behavior occurs (Dodge & Murphy, 1989). For understanding of what constitutes interpersonal competence in a work environment, it is essential to extensively investigate employees' perceptions, which reflect the norms of organizations and the employees' real world issues. This would enable our research findings to be more context-specific and empirically driven.

The overall goal of this study was to explore employees' perceptions of interpersonal competence in a work environment. In this study, we intended to clarify more specific characteristics needed to engage in successful interpersonal relationships in a work environment from the employees' perspective and investigate their ratings of the perceived importance of those characteristics. The

employees' ratings of the perceived importance of each component of interpersonal competencies will serve as a useful guide for creating need assessments in education, and, more generally, program development for interpersonal competence.

We focused specifically on applying concept mapping methodology to reveal the underlying cognitive structures of employees' perceptions of interpersonal competence. The result of the MDS shows the special representation of each stimulus by placing each stimulus along orthogonal axes based on dissimilarity. Concept mapping is a methodology that combines qualitative and quantitative research approaches by actively involving participants in generating ideas and interpreting data (Trochim, 1989). The involvement of participants in the research process reduces researchers' bias in contrast to the qualitative research method. Due to this advantage, MDS has been used in cognitive psychology to reveal participants' cognitive processes and cognitive maps minimize the influence of prior assumptions (Tracey, Lichtenberg, Goodyear, Claiborn, & Wampold, 2003). This type of methodology will enable this study to tap into more real-world issues related to interpersonal competencies. The results will also reflect cultural considerations applied to interpersonal competencies.

Method

Participants

Participants were drawn from a company in Seoul, Korea. There were two data-gathering phases. During the first phase, a sample of 56 employees (37 men, 19 women) who were working for 3 different departments of the company participated in this study. The participants' mean age was 30.7 years and their ages ranged from 21 to 45 years. Of the participants, 6 worked for the production and technology department, 26 worked for the management and support department, 16 worked for the research department, and 8 did not report this information. Their mean career experience was 5.84 years, and ranged from 0.3-19 years. For the second phase, 44 employees (32 men, 12 women) from the same company participated in the study. The participants' mean age was 29.11 years and their ages ranged from 19 to 42 years. Of the participants, 1 worked for the

production and technology department, 25 worked for the management and support department, 17 worked for the research department, and 1 person did not report this information.

Procedure

During the first phase, 56 participants were asked to make a list of interpersonal competencies. To probe their responses, we asked, “What are the behaviors or characteristics of the people who you have seen who might have good interpersonal relationships at work?” The probe was designed to elicit participants’ perspectives on their experience at work by minimizing abstract and general responses and encouraging more specific responses. From the data-collecting process, a total of 273 statements were elicited. The research team examined each statement and reduced them into a more reasonable number to facilitate the rating task, but still maintaining the essence of the participants’ language. For this, we first scrutinized the whole set of statements and excluded 4 irrelevant statements. A statement with two or more distinct ideas was split into separate statements. Next, we compared each statement and excluded redundant statements, resulting in a final list of 79 qualitative descriptive statements of what the participants thought to be interpersonal competencies.

For the second data-gathering phase, each of the 79 statements was printed on a card and 44 participants completed the sorting task. Participants were asked to place the 79 cards in piles according to similarity. No structures were provided on their sorting task, other than not placing each card alone in a pile or placing all cards in one pile. For the rating task, on completing the sorting task, the participants were asked to rate the importance of each statement on a 7-Likert scale from 1 (not important) to 7 (very important) for career success (“How is this competence important to succeed at work?”) as well as for personal preference (“How is this competence important when you would choose a person as a co-worker?”). For the MDS analysis, the ratings of each of the 44 participants were organized into separate matrixes (i.e., 1 if two statements were placed in the same pile, 0 if otherwise) and each matrix was aggregated as the input for MDS. Finally, for the rating task, the participants were asked to rate the importance of each statement and the data was analyzed

using a t-test to examine whether there was a difference of ratings between importance for career success and importance as a co-worker.

Results

From the MDS analysis, a two-dimensional solution was chosen with the consideration of parsimony and interpretability. The stress value for a two-dimensional solution was .28, which is reasonably stable (Gol & Cook, 2004). In addition, a two-dimensional solution was appropriate to display clustering results on the MDS point map, which is difficult to do when working with more than two dimensions (Kruskal & Wish, 1978).

Hierarchical cluster analysis (Ward’s method) of the MDS similarity matrix was performed to group the MDS results and the cluster analysis solution was superimposed on the MDS point map. In addition to the placement and adjacency of the MDS point map, clusters could be used as a secondary guide to interpret the map and therefore, the perception of the participants (Paulson, Truscott, & Stuart, 1999). The selection of the number of clusters is rarely clear (Borgen & Barnet, 1987). For interpretability and ease of use, we chose a solution of 6 clusters with sufficient variance in terms of content and logical placement and assigned labels to them. For labeling the clusters, we considered the statements that comprised the clusters, and the relative distance of each statement from others on the map. Six clusters of interpersonal competences at work were ‘Caring & Considerate’, ‘Sociable & Out-going’, ‘Kind & Gentle’, ‘Gregarious & Friendly’, ‘Reliable & Leadership skill’, and ‘Confident & Responsible’.

The concept map of the employees’ perceptions of interpersonal competence in the work environment is presented in Figure 1, which also displays the clustering results. Each point on this map represents the responses of the 79 participants, which were derived in this study. The distance of each point represents how frequently the statements were sorted together by participants, which means how each statement was perceived as being similar with another by the participants and the cluster boundaries around groups of points represent how frequently statements were sorted together in the same pile (Paulson et al., 1999). The clusters and statements included in each cluster are

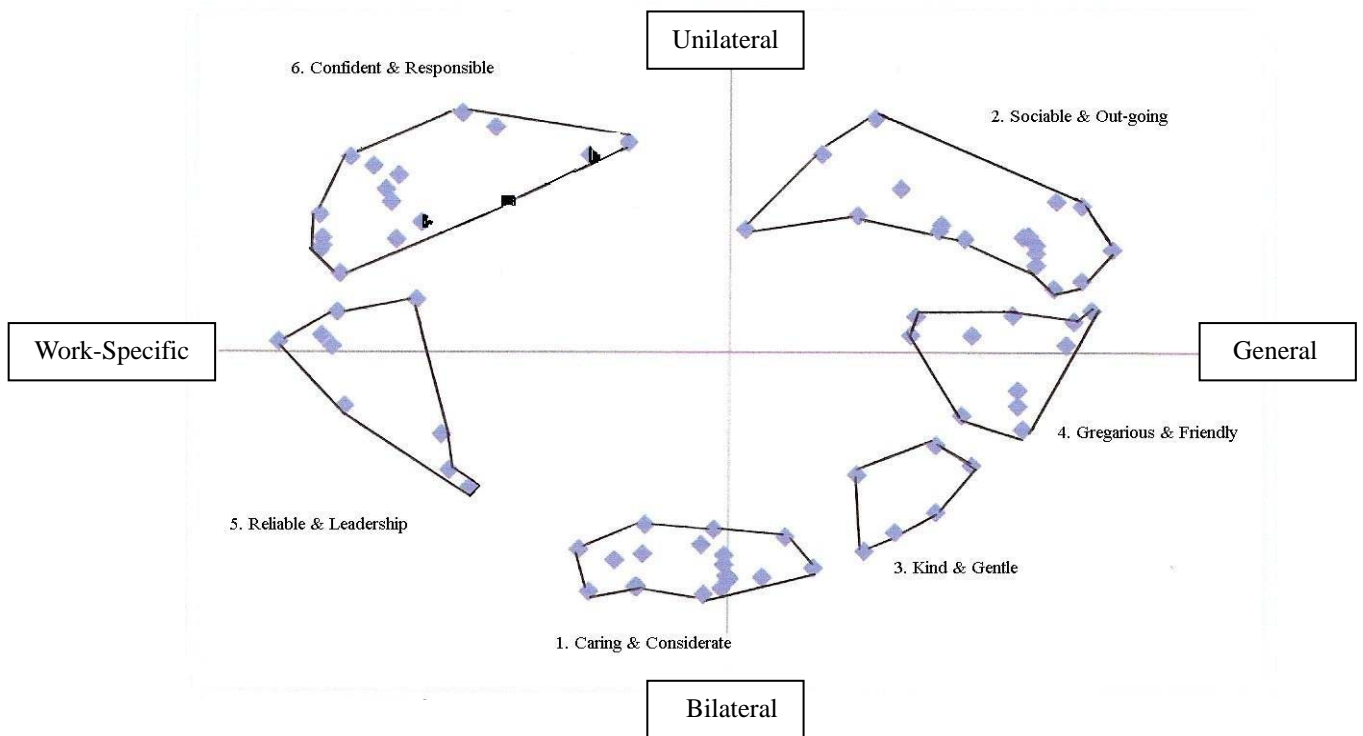


Figure 1. Concept map of employees' perceptions of interpersonal competences

Table 1
Clusters and Statements of Interpersonal Competence at Work

Clusters & statements	Importance			
	Career success		Co-worker	
Cluster 1: Caring & Considerate	5.26	(0.43)	5.52	(0.33)
60 Empathize with other people.	5.49	(0.88)	5.79	(1.00)
79 Listen to other people's opinion.	5.77	(1.00)	5.95	(1.13)
52 Do not insist on one's own opinion intensely when conflict arises.	4.82	(1.13)	5.20	(1.12)
28 Praise people a lot.	5.20	(1.05)	5.17	(1.07)
61 Do not mind doing a difficult job.	5.32	(1.18)	5.71	(1.11)
39 Encourage others frequently.	5.43	(1.00)	5.68	(1.04)
64 Work collaboratively.	5.95	(0.91)	5.76	(1.03)
17 Be modest.	5.23	(1.20)	5.60	(1.16)
26 Be good to others without thinking about "what's in it for me".	4.30	(1.32)	4.73	(1.45)
5 Be mindful of other people's needs and accommodate them.	5.23	(0.94)	5.47	(1.10)
9 Help others when they are in need.	5.50	(0.95)	5.79	(0.91)
77 Tailor one's actions to one's counterparts.	4.80	(1.11)	5.24	(1.08)
35 Be considerate of others.	5.45	(0.90)	5.71	(0.84)

69	Listen well.	5.41	(1.00)	5.67	(1.00)
19	Be sensitive.	4.86	(1.31)	5.05	(1.13)
66	Often make a concession for others.	4.61	(1.13)	5.24	(1.10)
29	Always be positive.	5.75	(0.78)	5.78	(0.79)
78	Communicate well without hurting other people's feelings.	5.50	(1.05)	5.76	(1.08)
Cluster 2: Sociable & Out-going		4.87	(0.56)	4.90	(0.50)
34	Maintain a good appearance.	4.23	(1.43)	4.63	(1.43)
56	Enjoy oneself.	4.86	(1.17)	4.67	(1.32)
41	Drink responsibly.	4.50	(1.46)	4.17	(1.79)
44	Meet colleagues outside of work hours for socializing.	4.57	(1.09)	4.53	(1.18)
10	Have frequent personal meetings or activities after work.	4.45	(1.25)	4.47	(1.42)
37	Participate actively in team activities.	5.27	(0.92)	5.00	(1.20)
14	Have a good sense of humor.	5.30	(1.19)	5.51	(0.96)
15	Initiate conversation to blend in.	5.47	(0.88)	5.40	(0.85)
58	Be fond of people.	5.43	(0.95)	5.29	(0.92)
27	Be charming.	3.84	(1.16)	4.54	(1.42)
24	Do not hold grudges.	5.16	(1.28)	5.65	(1.04)
65	Share common topics with others for conversation that are not related to work.	5.07	(1.19)	5.10	(1.08)
25	Are not stingy.	4.36	(1.20)	4.73	(1.34)
31	Speak fluently and smoothly.	5.66	(0.99)	5.22	(1.26)
32	Be flexible.	5.86	(0.91)	5.68	(1.01)
20	Talk in a loud voice.	4.25	(1.45)	3.86	(1.54)
33	Enjoy sports.	4.55	(1.36)	4.85	(1.32)
53	Show proper interest in public and private affairs.	4.91	(1.03)	4.86	(1.07)
Cluster 3: Kind & Gentle		5.33	(0.55)	5.34	(0.49)
11	Speak gently and softly.	5.39	(1.08)	5.33	(0.99)
13	Be courteous and well-mannered.	5.86	(0.96)	5.65	(1.02)
1	Speak to people a lot.	5.84	(1.00)	5.58	(1.03)
2	Be gentle and kind.	5.70	(0.98)	5.79	(1.04)
42	Regularly keep in touch with others.	4.39	(1.19)	4.41	(1.45)
23	Be always concerned about others.	5.41	(1.06)	5.26	(1.14)
Cluster 4: Gregarious & Friendly		5.32	(0.29)	5.36	(0.34)
62	Give a favorable impression.	5.25	(1.16)	5.12	(1.23)
76	Make friends easily.	5.39	(1.02)	5.69	(1.05)
46	Always remember to congratulate or console others appropriately.	4.95	(1.08)	4.68	(1.19)
18	Share one's thoughts and life with others.	5.20	(1.30)	5.45	(0.94)
7	Often laugh.	5.43	(1.00)	5.53	(0.98)

Employees' Perceptions on Interpersonal Competence

12	Have a bright facial expression.	5.74	(0.93)	5.58	(0.91)
21	Greet people well.	5.64	(1.01)	5.35	(1.07)
30	Have a sense of timing.	5.70	(0.93)	5.95	(0.87)
67	Lead a conversation.	5.23	(0.83)	5.36	(1.10)
36	Speak comfortably with others.	4.95	(1.01)	5.07	(1.03)
71	Talk freely with others.	5.00	(0.99)	5.19	(0.99)
Cluster 5: Reliable & Leadership skill		5.52	(0.40)	5.60	(0.43)
22	Keep a promise well.	5.95	(0.96)	6.14	(0.80)
75	Facilitate different opinions well in communication.	5.66	(0.94)	5.69	(1.05)
16	Words and behaviors are trustworthy.	5.89	(0.95)	5.95	(0.95)
47	Judge a political situation well, and be a helpful advisor.	4.82	(1.19)	4.83	(1.20)
74	Care what other people think but not overly.	4.93	(1.15)	5.02	(1.09)
73	Exercise positive leadership.	5.77	(0.83)	5.86	(0.90)
4	Use a combination of carrot and stick.	5.61	(1.10)	5.42	(1.10)
50	Do not get easily excited or disturbed.	5.32	(1.03)	5.71	(1.03)
63	Give appropriate feedback to others.	5.70	(0.83)	5.74	(1.01)
Cluster 6: Confident & Responsible		5.39	(0.60)	5.46	(0.50)
57	Be indifferent to little things or details.	4.00	(1.40)	4.19	(1.45)
72	Be not bound to performance rating.	4.55	(1.37)	5.14	(1.22)
43	Be not afraid of presenting oneself in front of others.	5.50	(0.98)	5.51	(1.03)
54	Always be proactive.	5.48	(0.98)	5.26	(0.99)
40	Take responsibility for the task undertaken.	6.18	(0.92)	6.32	(0.72)
49	Be a good performer in business.	5.88	(1.12)	5.78	(0.94)
6	Get things done.	6.00	(0.86)	6.19	(0.76)
51	Speak in a cohesive manner.	6.00	(0.86)	5.98	(0.94)
68	Be emotionally stable.	5.05	(0.94)	5.62	(1.01)
45	Have one's own opinion and act independently.	5.02	(1.09)	4.90	(1.30)
70	Live a disciplined life.	4.84	(1.16)	4.74	(1.13)
8	Do not find it difficult to make demands at work.	5.45	(1.04)	5.35	(1.00)
55	Have good problem solving skills.	6.00	(0.89)	6.00	(0.86)
59	Have a clear boundary in relationships.	4.89	(1.22)	5.05	(1.29)
3	Work hard.	5.50	(1.27)	5.47	(1.16)
48	Be cheerful and active.	5.36	(0.99)	5.46	(0.98)
38	Be full of confidence.	5.91	(0.86)	5.80	(0.85)

presented in Table 1, together with the perceived importance rating of each statement.

An examination of the map in Figure 1 shows two primary dimensions of the participants' perception of interpersonal competence at work. Dimension 1, which represents axis 'x', appears to capture the work-specific domain (left side of the map) as opposed to the general domain (right side of the map). Cluster 5 (Reliable & Leadership skill: e.g., "Exercise positive leadership"), cluster 6 (Confident & Responsible: e.g., "Be full of confidence") were placed on the left side of the map and cluster 4 (Gregarious & Friendly: e.g., "Make friends easily"), cluster 2 (Sociable & Out-going: e.g., "Have frequent personal meetings or activities after work") and cluster 3 (Kind & Gentle: e.g., "Be gentle and kind") were placed on the right side of the map with cluster 1 (Caring & Considerate: e.g., "Empathize with other people") in the middle.

Dimension 2, which represents axis 'y', appears to capture the unilateral domain (upper side of the map) as opposed to the bilateral domain (bottom side of the map). We derived these terms from child studies literature, in which the researchers defined and differentiated peer dyadic experiences and peer group experience (e.g., Bukowski, Hoza, & Boivin, 1993). Bukowski and others (1993) described popularity as a unilateral relationship, group toward the individual, as opposed to friendship which is bilateral - a relationship between two individuals (Bukowski et al., 1993). In our results, Cluster 6 (Confident & Responsible: e.g., "Have one's own opinion and act independently") and Cluster 2 (Sociable & Out-going: e.g., "Enjoy sports") were placed on the upper side of the map where as Cluster 1 (Caring & Considerate: e.g., "Be mindful of other people's needs and accommodate them") and Cluster 3 (Kind & Gentle: e.g., "Be courteous and well-mannered") were place on the bottom side of the map. Moreover, a further examination of each of the statements in clusters reveals that the competencies in the unilateral

domain encompass the more personal characteristics themselves (e.g., confident, responsible, sociable, out-going) that could be preferred by others, whereas those in the bilateral domain are the characteristics which are experienced in close relationships (e.g., caring, considerate, kind).

To understand the perception of interpersonal competence more thoroughly, we also examined the elements of perceived importance in two ways. The importance of each statement describing interpersonal competence was rated according to how it is important to succeed at work as well as how important it is to consider a person as a co-worker so that we could examine whether there is a difference in participants' perception in this regard. Rating values were from 1 to 7, representing high values as more important statements and low values as less important statements.

The rating values of clusters and statements are presented in Table 1. Using a t-test, we found that there was a difference in ratings between importance for career success and importance as a co-worker, as presented in Table 2 and Figure 2. As seen in Figure 2, a large difference was found in cluster 1 (Caring & Considerate). The participants perceived cluster 1 (Caring & Considerate) as highly important when they consider a person as a co-worker; however, it was perceived to be less important as a competence necessary to succeed at work. A further examination of importance rating reveals that participants considered the competencies 'reliable & leadership skill' and 'confident & responsible' as the most important characteristics to succeed at work, and considered the competencies 'sociable & out-going' and 'caring & considerate' as less important. The results were somewhat different when they were asked to rate the importance of the same statements in relation to preferred characteristics of a co-worker. The characteristics of 'reliable & leadership' was also considered as important aspects, however, 'caring & considerate', which was considered as less important for career success was also

Table 2
Ratings of Importance of Clusters of Interpersonal Competence at Work

	<i>N</i>	<i>M</i>	<i>SD</i>	Mean Difference	<i>t</i>
Importance for career Success	79	5.25	.53	0.09	3.10**
Importance for a co-worker	79	5.34	.50		

Note. ** $p < .01$

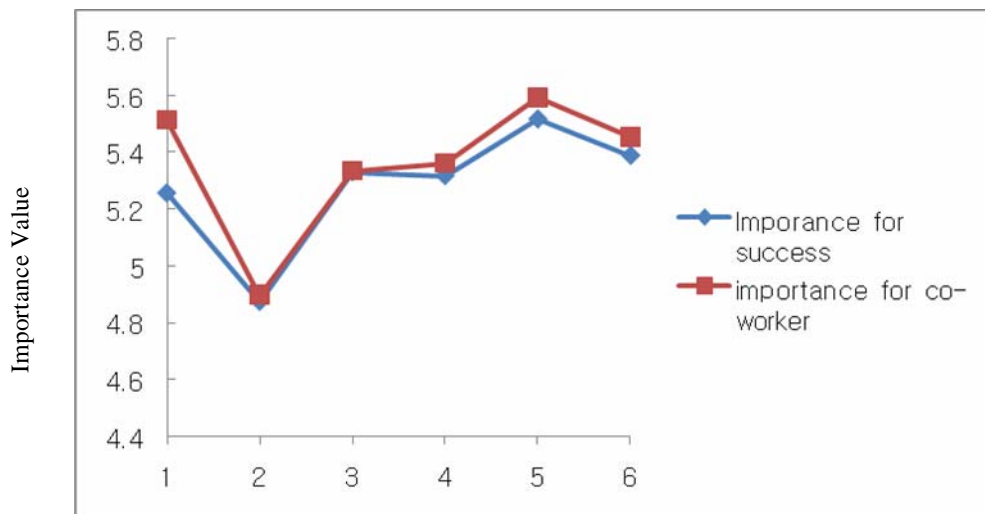


Figure 2. Rating of importance for success and importance for co-worker

Note. Cluster 1: Caring & Considerate, Cluster 2: Sociable & Out-going, Cluster 3: Kind & Gentle, Cluster 4: Gregarious & Friendly, Cluster 5: Reliable & Leadership, and Cluster 6: Confident & Responsible

considered as important. However, 'sociable & out-going' was consistently considered as least important for career success as well as for when stating preference as a co-worker.

Discussion

A key goal of this study was to identify empirically elicited components of interpersonal competencies from employees' perspectives and explore how they conceptualize this concept. The results provided specific indicators compromising interpersonal competences in the work environment in Korea. Specially, the concept map generated in this study extended theoretical models of interpersonal competence by examining employees' perceptions. In particular, it was an interesting finding those employees' perceptions of interpersonal competence in the work environment was multidimensional. First, they conceptualized interpersonal competence along a continuum from bilateral-close relationship aspects to unilateral-social group aspects. This result was consistent with the studies that examined a similar concept, 'social competence, in various age groups (e.g., Bukowski, Hoza, & Boivin, 1993; Furman & Buhrmester, 1985; Larson, Whitton, & Hauser, 2007).

Bukowski and others (1993) defined and differentiated peer dyadic experiences and peer group experiences in child studies literature. The term describing dyadic relationships in their study was similar to friendship, and peer group acceptance was similar to popularity. This conceptualization was further confirmed in Larson and his colleagues' research (2007) that developed scales of young adult social competencies in two domains, close relationships and social groups. In our study, the concept map reveals this dimensional distinction with a continuum from the upper side to the bottom side on the map. The bilateral domain was associated with the indicators necessary for intimate dyadic relationships, such as being caring, considerate, gentle, and kind. In contrast, the unilateral domain was associated with indicators for group acceptance or popularity, such as being sociable, out-going and gregarious.

We also found that the employees conceptualize interpersonal competence in the work-specific domain and the general domain as well. This result expands our understanding of interpersonal competence in a context specific way and reveals employees' interpersonal experiences in work environments more thoroughly. We identified more context specific interpersonal competences, capturing the particular social interaction of the work environment. The

employees' perception of interpersonal competences appeared to include the abilities related to work as well as general abilities to engage in healthy relationships with others and to be well adjusted to social interactions, but conceptualize these two domains in a distinctive way. The competencies more related to work included the abilities such as being reliable and responsible and possessing leadership skills, whereas the general competence domain included the abilities necessary to engage in healthy relationships with others and to be well adjusted in social interactions, such as developing proper social skills, caring for others, and engaging in social involvements. In addition, the results of participants' ratings were consistent with the finding that they conceptualized these two domains distinctively. There was a mean difference between which competencies were important for career success and for preferring someone as a co-worker. Specially, we found that there was a difference of ratings between importance for career success and importance as a co-worker. Employees in this study considered 'reliable & leadership skill' and 'confident & responsible' - which can be placed in the work-related domain - as the most important competences to succeed at work.

An examination of the importance rating identified what kinds of competencies employees consider more important. As it is consistent with the previous research (e.g., Ferris, Perrew, & Douglas, 2002), it was found that being reliable and having leadership skills (e.g., "Keep a promise well", "Exercise positive leadership") was the most important element of interpersonal competence in the work environment. Among the clusters of competencies, being sociable and out-going (e.g., "Have frequent personal meetings or activities after work") was considered to be relatively less important. With these results, which indicate that some interpersonal competencies are perceived as more important than others, higher education professionals and employee training professionals might use these findings to focus on interventions for developing interpersonal competencies. The results showed being reliable and having leadership skills were perceived as the most important characteristics of interpersonal competencies. Thus, educational professionals need to conduct research into how such competencies might be further developed.

The interpersonal competencies in this study covered some skills and techniques which are suitable for relatively

short-term training programs and diverse competencies requiring long-term development as well. Educational professionals need to develop programs for short-term goals and long-term goals with different target objectives. Developing an individual's innate traits would be difficult through education for adults. Thus, these trait-like competencies can be noted as key attributes for development through character education programs for adolescents and young adults in secondary and higher education, since the period of adolescence and young adulthood is that of identity development. However, more specific skills and techniques, such as leadership skills could be the focus of a relatively short-term program.

There are several limitations to this study. Although MDS analysis does not require a large sample size for its statistical stability, the results of this study should not be understood as static. Specially, the participants of this study were recruited from one of the large technology companies in Korea. Therefore, careful consideration must be taken when generalizing these findings given possible differences in social contexts. Future research using different samples, varied in company size and industrial type as well as in region and culture could expand our results and lead to developing more concrete empirically proven models of interpersonal competence in the work environment.

In this study, we asked employees to elicit the characteristics compromising interpersonal competence based on their actual experiences, and they also participated in the sorting task. This process may prevent possible bias on the part of the researchers from interfering with an accurate understanding of the employees' perceptions. Using concept mapping as our research methodology, we identified employees' unknown latent perceptions and cognitive structures. The statements generated from this study could be used as a basis to develop a scale measuring employees' interpersonal competence. In addition, the results of this study could be used as a first step toward implementing needs assessments for educational program development.

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Received November 12, 2007

Revision received February 20, 2008

Accepted March 14, 2008