# The Importance and the Developability of Interpersonal Competency at Work: Implications for Higher Education

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#### **ABSTRACT**

The purpose of this study was to derive behavior indicators of interpersonal competency based on competency model used by business organizations in Korea and to explore the importance and the developability of those indicators. Five interviewees who were Human Resource Development(HRD) professionals provided behavior indicators of interpersonal competency according to the competency model of the organizations. Three experts examined the set of statements for redundancies and synthesized the ideas for identifying representative indicators. Finally, 36 participants were asked to rate the importance and the developability of each statement upon the organizational situation on a 5-point Likert-type scale ranging from 1 to 5. Descriptive statistics, mean difference profile analysis, and the Go-Zone analysis were used to represent the importance and the developability of interpersonal competency at work. The findings provided practical indicators of interpersonal competency in Korean business organizations and understandings of their importance and developability perceived by HR professionals in Korea. Applications of the findings to organizations and implications for higher education were discussed.

Key words: interpersonal competency, behavior indicators, competency model

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#### I. Introduction

The competency approach has been widely utilized and applied not only to corporate human resource development, but also to vocational education and training(Smith, 1999), primary and secondary education (Murnane & Levy, 1996), and higher education(Barnett, 1996; Grant et al., 1979). White (1959) first introduced the term competency meaning human trait. Later in 1973, McClelland criticized the validity of intelligence tests in terms of its limited predictive power of success in working and social life and he used the term competency in a broad psychological perspective referring to and behavioral characteristics influencing working and social life. In the 1980's, Boyatiz (1982) defined competency in a more specific way referring to it as underlying characteristics differentiating superior and average performers. In the 1990's, Spencer and Spencer (1993) defined competency as underlying characteristics causally related to effective performance in specific task criteria.

As societies become in some ways more fragmented and also more diverse, it becomes more important to manage well interpersonal relationships both for the benefit of individuals and for building new forms of co-operation at work. Therefore, the interpersonal ability has been concerned more in the competency approach. The concept of interpersonal competency has been construed under a broad ability category including social intelligence (Thorndike, 1920), interpersonal intelligence (Gardner, 1983), practical intelligence (Sternberg, 1985, 1997), etc. In addition, interpersonal competency has been also discussed with similar labels such as social skill (Meichenbaum, Butler, & Gruson, 1981), social competence (Schneider, Kanfer, & Ackerman, 1996), or political skill (Mintzberg, 1983), etc. Zaccaro, Gilbert, Thor, and Mumford (1991) found that social intelligence is directly related with leader effectiveness and necessary to effectively develop and implement visions for organizations. Snyder (1974) suggested that social effectiveness is linked with abilities to cope with diverse social roles, while sensitizing individuals with varying situational demands. Specifically,

Wayne, Liden, Graf, and Ferris (1997) found that interpersonal effectiveness is the best predictor for job performance rating of managerial, professional, and technical employees. In addition, Wagner and Sternberg (1985) showed that individuals who express positive emotions in organizations are more likely to receive higher performance evaluations from their supervisors. Thus, interpersonal competency needs to be paid greater attention to as an important concept in organization studies in that it is the core phenomenon in leadership, organization development, and human resource development (Ferris, Perrewe, & Douglas, 2002).

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 is challenging to the investigation of the psychometrical attributes (Ferris, et. al, 2002). With the difficulty, many researchers have tried to provide definitions of interpersonal competencies and related concepts. OECD's definitions of interpersonal competencies are 1) the ability to relate well to others, 2) the ability to cooperate, 3) the ability to manage and resolve conflicts (Rychen & Salganik, 2001). According to DeSeCo Project, the ability to relate well to others requires empathy and effective management of emotion. The ability of cooperation includes 1) the ability to present ideas and listen to those of others, and understanding of the dynamics of debate and 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 be also defined by a collection of interpersonal skills such as abilities to 1) initiate relationships, 2) assert oneself negatively, 3) disclose personal information, 4) provide emotional support, and manage conflict (Buhrmester, Furman, Wittenberg,

& Reis, 1988). Reio and Sutton (2006) noted that the interpersonal competency comprises communication, critical thinking, resource utilization, responsibility, self-management, integrity or ethics, self-esteem, team skills, customer service, leadership, learning or training, and openness to change. Riggio (1989) presented a model for basic emotional and social skills. Kanning (2006) developed a German-language version of the interpersonal competence questionnaire and identified five factors consisting of interpersonal competency; initiation, assertion, self-disclosure, emotional support, and conflict management.

Studies presented above provide general understanding of various factors in interpersonal competencies required at work, but there is a multiplicity of definitions of interpersonal competency and they are all theoretical, metaphysical and speculative, not concrete. Since key competencies are often proposed based on various tasks and roles required by work, interpersonal competency is also related to job performance and should be defined concretely and practically in terms of work and organizations. Considering the importance of interpersonal relationship at work, developing interpersonal competency of employees is a very interesting issue in the human resource management and competency-based education.

In this study, we tried to explore behavior indicators of interpersonal competency practically used in competency models in Korean companies and surveyed what indicators were considered as important for the work and how much HR professionals perceive the indicators developable throughout education. The findings are expected to provide practical and concrete indicators of Korean interpersonal competency and their importance and developability.

#### II. Method

#### A. Participants

1. Competency behavior indicators providers

Five interviewees who were human resource development (HRD) professionals provided us competency behavior indicators

in relation to interpersonal competency of their companies' competency models. Types of industries, which they work for, are various; Electronics, Chemistry, Consulting, and Internet Services, and the companies are leading ones of each industry. Each interviewee provided competency behavior indicators with a condition that we use them only for this study.

#### 2. Ideas Synthesizers

Three professionals who were doctoral candidates of education examined the set of statements for data reduction. One of them was majoring in continuing education with a career as a HRD manager. Another was majoring in assessment with a career as a consultant. The third was one of the researchers, who was majoring in counseling psychology.

#### 3. Raters

A sample of 36 participants who were currently working for HRD-related division at their companies answered questions. Most of the subjects were men(80.6%) and ranged in age from 29 to 45 years(M=36.08, SD=3.70). 12 of them work for local products, 9 for airlines, 4 for manufacturing, 4 for electronics, 4 for steel industry, and others. 80.5% of them were managers and rest of them were assistant managers.

#### B. Procedures

# 1. Competency behavior indicators collection

Five HRD experts were asked to provide competency behavior indicators in relation to interpersonal competency of their companies' competency models. For clarity, a statement with two or more distinct ideas among the collected behavior indicators was split into its component parts. The set of statements were generated as 80 interpersonal competency ideas from behavior indicators.

#### 2. Ideas synthesis

Three experts (including one of the present researchers) examined the set of statements for redundancies or one that can

be chosen to represent a set of others. They grouped the ideas for reduction purposes on the basis of keywords, topics, or other conceptual areas. Within a similar group of ideas, they formed a consensus on which ideas to keep within a statement group. Differences were resolved through discussion and consensus and duplicate factors were combined, and factors not related to interpersonal competencies were excluded. After these reductive processes, 19 statements representing interpersonal competency were generated as a final set of statements and classified in four categories; communication, managing problems, leadership, and relating to others.

#### 3. Ratings of importance and developability

Thirty-six participants were asked to rate the importance and the developability of each statement for the company affairs on a 5-point Likert-type scale ranging from 1(not important or difficult to develop) to 5(very important or easy to develop).

#### C. Analysis

Descriptive statistics were presented and the mean differences between the perceived importance and developability for the indicators were plotted and analyzed with profiles. In addition, the Go-Zone analysis was used to represent the importance and the developability of interpersonal competency at work. The Go-Zone analysis is an easy evaluative method frequently used in importance-performance analysis to effectively identify relative priority among diverse attributes. This method has been a prevalent technique in marketing studies to best meet customer satisfaction (Martilla & James, 1977), and nowadays has begun to be applied to human resources management and development studies (Aram, 1995). The Go-Zone display is a simple bivariate X-Y graph of ratings, shown within quadrants constructed by dividing above or below the overall mean for two rating scales. The vertical line describes the mean of values on the X axis, and the horizontal line describes the mean of the values on the Y axis, thus dividing cluster contents into four quadrants. Hollenhorst, Olsen, and Fortney (1992) noted that

respondents tend to rate high for most attributes and therefore little information may be provided relative to areas requiring attention. For this reason, adapting Go-Zone can provide the relations to all others in a single display to identify the importance and the developability perceived by HR professionals in that it would be hard to differentiate the relativity of attributes, if with absolute values. The Go-Zone was used in this study to see the rating data from participants on each idea and to identify the relative values of the ratings together. The term go-zone spring from the fact that upper-right quadrant displays statements that were rated above average on both variables (Kane & Trochim, 2006).

#### III. Results

Nineteen statements of behavior indicators related to interpersonal competency were generated as a final set of statements. The statements are presented in Table 1. The statements were described somehow concretely and practically in comparison with other definitions of interpersonal competency. For example, statement 6, 'Actively participate in events and activities of company', statement 15, 'Efficiently make use of various means of communications (documents, memos, verbal reports)', or statement 17, 'Explain with proper grounds and examples about the intended message' were representative.

#### Statements

- 1. Organize a network with an influential individual and/or a group of people to obtain improvement for the system.
- 2. Perform a role as an adviser(informant) for internal/external clients.
- 3. Build and keep up cooperative relationships with other departments.
- 4. Take a constant interest in teammates and be a reliable adviser.

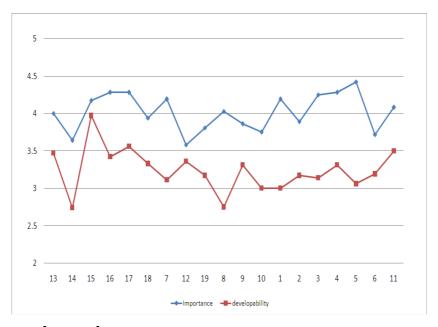
- 5. Build and keep up good relationship with teammates.
- 6. Actively participate in events and activities of the company.
- 7. When conflict arises, reasonably mediate an agreement between different groups.
- 8. Be an opinion leader by taking initiative in forming relationships which are needed for productive results of the system.
- 9. Create an atmosphere for active communication and positively lead a meeting to reach a conclusion.
- 10. Make a plan for company activities and present the scheme.
- 11. Share information, ideas, and opinions with members.
- 12. Predict obstacles and prepare appropriate solutions for them in advance while communicating.
- 13. Attentively listen to others' opinions and positively receive them.
- 14. Listen and sense another person's reaction (feelings, emotions, and intentions) as well as intended messages, and act accordingly.
- 15. Efficiently make use of various means of communications (documents, memos, verbal reports)
- Deliver the purpose (get the point across) in a concrete and clear manner.
- 17. Explain with proper grounds and examples about the intended message.
- 18. Focus on the customers when thinking and acting.
- 19. Solve customers' problem promptly and actively with a long-term view.

### <Table 1> Behavior indicators related interpersonal competency

As shown in Table 2, the average of importance of statements was 4.02(SD=0.42) and the average of developavility was 3.24(SD=0.66). Consistently, participants rated importance of statements higher than developability of them. Importance values of all statements were rated higher than 3, but developability of values were not.

Category	Behavior Indicator	Importance		Developability		Mean
		М	S.D.	M	S.D.	difference
Communication	Average	4.05	.50	3.42	.69	.63
	13	4.00	.68	3.47	1.11	.53
	14	3.64	.87	2.74	.95	.90
	15	4.17	.74	3.97	.94	.20
	16	4.28	.66	3.42	1.00	.86
	17	4.28	.66	3.56	.77	.72
	18	3.94	.89	3.33	.89	.61
Managing problems	Average	3.86	.67	3.21	.77	.65
	7	4.19	.71	3.11	1.12	1.08
	12	3.58	.97	3.36	1.07	.22
	19	3.81	.82	3.17	.85	.64
Leadership	Average	3.88	.59	3.02	.80	.86
	8	4.03	.70	2.75	.94	1.28
	9	3.86	.64	3.31	1.04	.55
	10	3.75	.87	3.00	.89	.75
Relating to others	Average	4.12	.43	3.19	.89	.93
	1	4.19	.67	3.00	1.04	1.19
	2	3.89	.75	3.17	1.03	.72
	3	4.25	.65	3.14	1.15	1.11
	4	4.28	.74	3.31	1.17	.97
	5	4.42	.55	3.06	1.22	1.36
	6	3.72	.88	3.19	1.14	.53
	11	4.08	.69	3.50	1.06	.58
	Total Average	4.02	.42	3.24	.66	.78

<Table 2> Importance and Developability of Behavior indicators

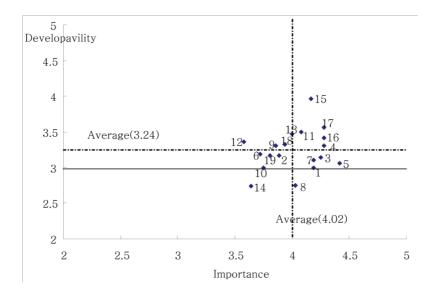


[Figure 1] Mean profiles of Importance and developability of behavior indicators

As shown in Figure 1, statements rated below 3 in developability were statement 8, 'Be an opinion leader by taking initiative in forming relationships which are needed for productive results of the system' and statement 14, 'Listen and sense another person's reaction (feelings, emotions, and intentions) as well as intended messages, and act accordingly'. In all categories, 'relating to others' was rated the highest in importance, while 'communication' was rated the most developable by HR professionals. In addition, all behavior indicators in 'managing problems' category and 'leadership'category were rated less developable below 3.5.

Regarding the mean difference between the perceived importance and developability, statement 15 and statement 12 have the two least difference. Specifically, it is notable that statement 15, 'Efficiently make use of various means of communications', and statement 12, 'Predict obstacles and prepare appropriate solutions for them in advance while

communicating'were perceived as highly important and as highly developable. In contrast, statement 5, statement 8, statement 1, statement 3, and statement 7 have considerable mean difference larger than 1.0, indicating large difference between the perceived importance and developability. Specifically, HR professionals perceived statement 5, 'Build and keep up good relationship with teammates', statement 8, 'Be an opinion leader by taking initiative in forming relationships which are needed for productive results of the system', statement 1, 'organize a network with an influential individual and/or a group of people to obtain improvement for the system', statement 3, 'build and keep up cooperative relationships with other departments', and statement 7, 'when conflict arises, reasonably mediate an agreement between different groups'are the least developable compared to their importance. Among all categories, 'leadership' was rated as the least developable.



[Figure 2] The Go-Zone grid of the perceived importance and developability of interpersonal competencies

The Go-Zone as represented in Figure 2, displays visually the relativity of the importance and the developability of all attributes in a single map. Attributes located in Quadrant I (the upper-right quadrant) indicate high importance and high developability. Statements 4, 11, 15, 16, and 17 are included in Quadrant I and presented in Table 3. Among the attributes included in this quadrant, statements 15, 16, and 17 belong to 'communication' category and statements 4 and 11 belong to 'relating to others' category. Attributes located in Quadrant II (the upper-left quadrant) indicate high developability but relatively low importance. Statements 9, 12, 13, and 18 are included in Quadrant II. Attributes located in Quadrant III (the lower-left quadrant) indicate both low importance and low developability. Statements 2, 6, 10, 14, 19 are included in Quadrant III. Lastly, attributes located in Quadrant IV (the lower-right quadrant) indicate high importance but low developablility. Statements 1, 3, 5, 7, 8 are included in Quadrant IV and presented in Table 4. This result is consistent with the result of mean difference profiles in that all the attributes belonging to Quadrant IV have mean difference between importance and developability larger than 1.0.

- 4. Take a constant interest in teammates and be a reliable adviser.
- 11. Share information, ideas, and opinions with members.
- 15. Efficiently make use of various means of communications (documents, memos, verbal reports)
- 16. Deliver the purpose (get the point across) in a concrete and clear manner.
- 17. Explain with proper grounds and examples about the intended message.

< Table 3> Statements with high importance and high developability

- 1. Organize a network with an influential individual and/or a group of people to obtain improvement for the system.
- 3. Build and keep up cooperative relationships with other departments.
- 5. Build and keep up good relationship with teammates.
- 7. When conflict arises, reasonably mediate an agreement between different groups.
- 8. Be an opinion leader by taking initiative in forming relationships which are needed for productive results of system.

<Table 4> Statements with high importance but low developability

# IV. Discussion

#### A. Categorizing constructs of interpersonal competencies

Some statements among 19 statements representing interpersonal competency were comparable with interpersonal competencies represented by the DeSeCo Project but others were not. For example, statement 1, 'Organize a network with an influential individual and/or a group of people to obtain improvement for the system', statement 3, 'Build and keep up cooperative relationships with other departments', statement 4, 'Take a constant interest in teammates and be a reliable adviser', and statement 5, 'Build and keep up good relationship with teammates' came under 'the ability to construct tactical or sustainable alliances'. Statement 9, 'Create an atmosphere for active communication and positively lead a meeting to reach a conclusion' and statement 17, 'Explain with proper grounds and examples about the intended message' were kin to 'the ability to present ideas and understanding of the dynamics of debate and following an agenda'. However, the ability about customer service, for instance statement 18, 'Focus on the customers when thinking and acting' and statement 19, 'Solve customers' problem promptly and actively with a long-term view'were not

represented at all in DeSeCo. Also, concerning 'the ability to resolve conflicts', statement 7 explained to 'mediate an agreement between different groups' but DeSeCo focused on 'analyze and identify areas of agreement and disagreement'. This difference seemed to reflect that Koreans regard a compromise than expression of solid opinion as a virtue.

#### B. Applications to organizations

The findings that all statements were rated important for work confirmed that interpersonal competencies are very important for the business outcome. Specifically, statements in the upper-right quadrant or "Go-Zone", with high importance and high developability represent the most actionable - important and developable attributes. Most of these statements describe concrete knowledge, skills, and actions. Participants rated these factors as important and also easily developable. However, it is important to consider the impact of these statement ratings, inside or outside this Go-Zone. Statements rated with high importance and low developability seemed to embrace interpersonal relationship in a broad sense. For example, statement 3, 'Build and keep up good relationship with teammates' was rated very important but not so easily developable. These factors related to a fairy deep and enduring part of a person's personality, such as self-concept, traits, and motivation. Raters thought of them as difficult to develop. Therefore, companies might have preference for the education of interpersonal competencies with high importance and high developability for the business outcome. They would consider interpersonal competency indicators with high importance but low developability as key factors in selection and recruiting.

Although leadership and problem control and management have been frequently suggested as essential virtues of interpersonal competency for higher positions (Riggio & Lee, 2007; Ferris et al., 2002), the findings of this study is discussable in that the perceived importance of statements belonging to leadership category and problem-managing category was slightly lower than other competency categories. This result may come

from the possibility that the HR respondents were asked of general competency without considerations of relative importance of each behavior indicator according to the requirement of the positions, roles, or tasks. Considering that leadership is a highly necessary competency for higher positions (Riggio & Lee, 2007), importance questions specifying degrees of positions could provide deeper understanding of the differential characteristics of leadership importance. In addition, it is also notable that only a small number of statements in total were rated as highly developable. This result may be related to the attributes of statements of the behavior indicators represented in this study. For example, statements 11, 13, 15, and 17 were rated above 3.5 for their developability and it is plausible that these statements were stated as highly concrete, therefore may enable HR professionals to consider those behavior indicators as more manageable and adequately trainable. In contrast, statements with larger mean difference were 1, 3, 5, 7, and 8, and these statements were in common stated comprehensively, we suspect. Therefore, the negative results of the developability of these indicators may mean a lack of clarity in the definition as well as the perceived difficulty in actual developability. Thus, we can expect that the perceived developability for the interpersonal competencies can be enhanced considerably with more concrete and clearer operational definition for the behavior indicators.

#### C. Implications for higher education

With the result that some interpersonal competencies are important for work but difficult to develop, higher education professionals might use these findings to focus on interventions to develop interpersonal competency in the long term. While factors related to a fairly deep and enduring part of a person's personality cannot be developed by short interventions on the spot, they might be developed through well-designed competency-based education. We need to develop these factors which a company could not intervene in a short of time and get some remarkable outcome. It would be one of the directions of higher education for students, employees in the future and

companies.

As the concepts of emotional intelligence defined by Goleman (1998) and Bar-On (1998), some theorists related to interpersonal competency viewed emotional and social competency as a mixture of mental ability and personality traits. This idea reflects interpersonal competency may cover some skills and techniques trainable in a relatively short-term period and diverse competencies requiring long-term development as well, which would be perceived as innate individual traits and therefore considered almost impossible to win through education for grown-up adults. Thus, these trait-like competencies can be noted as key attributes to develop through character education for adolescents and young adults in secondary and higher education, since the period of adolescence and young adulthood is that of identify development. Diverse programs to facilitate their interpersonal competency need to be provided in school, colleges, and universities, about relating to others and conflict management and interpersonal problem solving effectiveness.

#### D. Limitations and Suggestions for future research

Although the findings were from practically used behavior indicators in competency models in some companies, there is still conceptual ambiguity regarding competency. Without clarifying definitional components of the concept of competency, it is hard to identify causal relationship between competency and performance and to conclude whether competency is universal or specific.

Future research may find importance of interpersonal competency concerning department and type of industries. In addition, there may be cultural differences as we find the difference concerning conflict management between ours and DeSeCo. It will be interesting to consider the cultural differences in future research.

#### References

Aram, A. (1996). *Using importance-performance analysis to evaluate teaching effectiveness*. Paper presented at the International

- Conference on Outdoor Recreation and Education.
- Bar-On, R. (1997). BarOn Emotional Quotient Inventory(EQ-I): Technical Manual. Toronto: Multi-Health Systems.
- Barnett, R. (1996). The limits of competence: Knowledge, higher education and society. The society for research into higher education & open university press.
- Boyatzis, A. R. (1982). The competent manager: A model for effective performance. New York: J. Wiley.
- Buhrmester, D., Furman, W., Wittenberg, M. T., & Reis, H. T. (1988). Five domains of interpersonal competence in peer relationships. *Journal of Personality and Social Psychology*, 55, 991–1008.
- Ferris, G. R., Perrewe, P. L., Douglas, C. (2002). Social effectiveness in organizations: Construct validity and research directions. *Journal of Leadership and Organizational Studies*, 9, 49-63.
- Gardner, H. (1983). Frames of mind: The theory of multiple intelligence. *Human Relations*, 53, 1027-1056.
- Grant, G. et. al. (1979). On competence: A critical analysis of competence-based reforms in higher education. CA: San Francisco, Jossey-Bass, Inc.
- Hollenhorst, S., Olsen, D., & Fortney, R. (1992). Use of importance-performance analysis to evaluate state park cabins: The case of the West Virginia state park system. *Journal of Park and Recreation Administration*, 10, 13-22.
- Kane, M., & Trochim, W. (2006). *Concept mapping for planning and evaluation*. SAGE Publications.
- Kanning, U. P. (2006). Development and validation of a German-language version of the interpersonal competence questionnaire. *European Journal of Psychological Assessment, 22,* 43-51.
- Martilla, J. A., James, J. C. (1977). Importance-performance analysis. *Journal of Marketing, 41,* 77-79.
- Meichenbaum, D., Butler, L., & Gruson, L. (1981). Toward a conceptual model of social competence. In J. D. Wine & D. Smye (Eds.), Social competence (pp. 36-60). New York: Guilford Press.
- Mintzberg, H. (1983). Power in and around organizations.

- Englewood Cliffs, NJ: Prentice-Hall.
- Murnane, R. J., & Levey, F. (1996). Teaching the new basic skills: Principles for educating children to thrive in a changing economy, New York: Free Press. providers in Australia. *International Journal of Training and Development*, 3(2), 106-117.
- Reio, T. G., & Sutton, F. C.(2006). Employer assessment of work-related competencies and workplace adaptation. Human Resource Development Quarterly, 17(3), 305-324.
- Riggio, R. E., & Lee, J. (2007). Emotional and interpersonal competencies and leader development. *Human Resource Management Review*, 17, 418-426.
- Rychen, D. S., & Salganik L. H. (Eds.). (2001). *Defining and selecting key competencies (DeSeCo)*. Gottingen, Germany: Hogrefe & Huber.
- Schneider, R. J., Ackerman, P. L., & Kanfer, R. (1996). To "act wisely in human relations: Exploring the dimensions of social competence. *Personality and Individual Differences, 21*, 469–481.
- Smith, E. (1999). Ten years of competency-based training: the experience of accredited training
- Spencer, L., & Spencer, S. (1993), *Competency at work: Models for superior performance*. New York: John Wiley and Sons, Inc.
- Sternberg, R. J. (1997). *Thinking Style*. New York: Cambridge University Press.
- Sternberg, R. J. (1985). Beyond IQ: A triarchic theory of human intelligence. New York: Cambridge University Press.
- Thorndike, E. L. (1920). Intelligence and its uses. *Harpers' Magazine*, 140, 227-235.
- Wagner, R. K., & Sternberg, R. J. (1985). Practical intelligence in real-world pursuits: The role of tacit knowledge. *Journal of Personality and Social Psychology, 49*, 436-458.
- Wayne, S. J., Liden, R. C., Graf, I. K., & Ferris, G. R. (1997). The role of upward influence tactics in human resources decisions. *Personal Psychology*, *50*, 979-1006.
- Zaccaro, S. J., Gilbert, J. A., Thor, K. K., & Mumford, M. D. (1991). Leadership and social intelligence: Linking social perceptiveness and behavioral flexibility to leader effectiveness. *Leadership Quarterly*, 2, 317-342.