

A Systems Approach to Mentoring: A Review of Literature

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Numerous studies about mentoring have been conducted, and this paper reviews current studies on mentoring programs from a systems approach. To understand current studies about mentoring, the paper identified three major research questions and reviewed how those questions have been examined in each area: mentoring input, mentoring process, and mentoring outcome. The paper also identified two emerging questions, which are not answered but need to be studied in each area.

Keywords: Mentoring, Systems Approach, Training and Development

A number of individuals and organizations have participated in mentoring programs, and numerous impacts of mentoring relationships have been perceived. The impacts of mentoring programs are varied, but forms of mentoring are also becoming diversified. Mentoring programs vary in their purpose, approach, ideology, and philosophy. The attitude and level of the individual, the organization's commitment, and advanced information technology contribute to this diversity. While mentoring programs have been implemented in numerous ways, there have been also numerous studies conducted about mentoring. These studies have focused on topics such as what is mentoring, how mentoring can be successfully utilized, and what benefits mentoring brings to the workplace.

However, how can HRD practitioners be confident in considering all factors related to mentoring program planning, implementation, and evaluation? How do HRD scholars identify research questions, which are significant but have not been answered? This paper reviews current studies on mentoring programs from a systems approach—input, process, and outcome—to understand current studies about mentoring and to identify future research needs. Most of the literature does not cover a single area among input, process, and outcome. Instead, it discusses relationships between areas such as input and outcome or relationships between process and outcome. Consequently, literature on mentoring cannot be clearly divided into three categories in a systems approach. However, since a systems approach allows HRD scholars and practitioners to view one training program from a comprehensive perspective covering all aspects and relationships between factors, this paper provides an understanding of current studies and insights related to potential future areas of further study. By analyzing current studies from the systems perspective, this paper identifies emerging research questions to be studied in mentoring input, mentoring process, and mentoring outcome.

The paper is based on a literature review, most of which was published in the last decade, and a critical assessment of the literature. The databases searched are Business Source Premier, Educational Resources Information Center (ERIC), and Proquest. ERIC was used to gain education and training perspectives. Business Source Premier was used to gain individual performance, business, and organizational perspectives. Proquest resources provided additional information regarding application and perspectives various fields' such as military, teacher's development, healthcare industry, and community.

Mentoring Input

Participant's Characteristics

A number of studies have examined the influence of both the mentor's and protégé's characteristics on the satisfaction of mentoring relationships. The characteristics examined included demographic information such as race, gender, age, and position; and cognitive tendency such as learning style and transformational leadership style. Some studies illustrated that mentor's recognition of the protégé's learning style increases the protégé's development (Koberg et al., 1998). Another study conducted with 53 mentor-protégé dyads examined the effects of the cognitive style of mentors and protégés. This study found that mentors who are more analytic enhance the quality of the mentoring relationship (Armstrong et al., 2002). Clutterbuck and Megginson (1999) illustrated the difference in mentoring relationships by studying the role of positions using 21 cases of mentoring executives and directors.

Ragins and Scandura (1994) conducted a study of 80 male and 80 female executives to see if any difference existed between genders in the costs and benefits of mentoring. To measure costs and benefits of being a mentor, the authors developed a survey instruments using a seven-point Likert-type scales after pilot a test with 110 executives and upper-ranking managers. The results showed that female executives were as likely to be willing to serve as

mentors as male executives. They also found that there was no significant gender difference in mentoring experience, intentions to mentor, or the costs and benefits associated with mentoring relationships. The study supported that gender difference may occur in different ranks, positions, and resources, but not from the structured perspective.

One of the interesting studies about inputs of mentoring programs examined the level of mentor-protégé agreement about mentor leadership rating on the quality of a mentoring relationship (Godshalk & Sosik, 2000). The mentor-protégé agreement level was determined by the difference between the mentor's self rating and the protégé's rating of the mentor's transformational leadership skills. The quality of the mentoring relationship was measured by career development, psychosocial support, and mentoring effectiveness. Based on Godshalk and Sosik's review of the literature, it supports the premise that the greater the agreement between the mentor and protégé regarding leadership skills, the higher the satisfaction about quality of mentoring. However, the study also found that underestimators, whose self-ratings were lower than their protégé's, experienced the highest quality of mentoring relationships. They interpreted this to mean that contrary to the current study about leadership—the self-confident leaders are more effective—the most effective in the mentoring relationship are the mentors who are generally humble and modest. The authors also interpreted the results by proposing that those who set high standards of performance, might be overly critical in their evaluations both in leadership and in quality of the mentoring relationship (Godshalk & Sosik, 2000). However, because the sample units are MBA students who tend to be more aggressive than non-MBA, the protégé's characteristics might influence their preference in that they feel more satisfied with a modest mentor. Thus, before generalizing the results to a broader context, it is necessary to examine a non-MBA group of people.

Match and Mismatch

How to match a mentor and protégé has been studied as a key factor in successful mentoring programs. Several studies were found to investigate the effects of gender composition of mentoring relationships on mentoring processes and outcomes. However, these efforts have produced somewhat inconsistent results. Some findings state that the characteristics of the mentoring composition and protégé characteristics had significant effects on psychosocial outcomes. They found that same gender composition provides more psychosocial support to a protégé than diversified composition (Koberg et al., 1998). In contrast, other findings found that female mentors provided more friendship, counseling, personal support, and sponsorship in same gender composition (Sosik & Godshalk, 2000).

Ragins and McFarline (1990) surveyed 181 protégés in three organizations to compare perceptions of mentor roles in cross-gender and same gender mentoring relationships. The results found that gender interaction significantly influenced role modeling and social roles while remaining independent for difference in other demographic variables, organizational level, and prior experience with mentors. Cross-gender protégés reported that they were less likely to be involved in after-work social activities than same gender protégés, which implied that sexual concerns might result in some distance in cross-gender relationships. In addition, since after-work activities are more related to networking and further enhance mentoring relationships, cross-gender protégés are more likely restricted in the development of the mentoring relationship than same-gender protégés. Thus, in general, female protégés may have more restrictions since they have higher probability of having cross-gender mentors than male protégés. The results also showed that female protégés perceived female mentors served a role modeling function more than male mentors.

Sosik and Godshalk (2000) conducted a survey of 230 adult students enrolled in an MBA program, who had full-time work experience and who reported participating in either a formal or informal mentoring relationship to examine the role of gender in mentoring. In this study, the composition of the relationship was categorized with four kinds of dyads: (1) mentor who is in the majority group and protégé who is in the minority group and a different gender, (2) mentor who is in the minority group and protégé who is in the majority group and a different gender, (3) both mentor and protégé are the same gender and in the same majority group, and (4) both mentor and protégé are the same gender and in the same minority group. The results indicated that female mentors with either female protégés or male protégés provided more role modeling and psychosocial support than male mentors. However, male mentors provided more career development than female mentors, and male mentors supported female protégés with more career development than any other combination of mentoring relationships.

Experience Level

The mentor's experience has been considered an important input to mentoring program. However, in contrast from the conventional mentor's experience level, co-mentoring, or so-called peer mentoring, was recently studied in terms of its impact as an alternative mentoring form. Equality replaces hierarchy in the relationship as peer-mentorship differs from conventional mentorship, and by Rymer (2002)'s paper, the concept of "co-mentoring" can be supported from various disciplines such as social network theory, organizational behavior, and feminist studies. The benefits of peer mentoring are recognized in that there is more open communication (not hierarchical

communication), mutual support and feedback, and cooperative learning efforts (Woodd, 1997; Knouse & Webb, 2000; and Rymer, 2002).

Allen, Russell, and Maetzke (1997) described factors related to a protégé's satisfaction and willingness to serve as a mentor by surveying first-year MBA students as part of an evaluation of a formal, peer, team mentoring program. Protégés were a first-year, five-MBA student team, while mentors were one or two second-year MBA student(s). However, it could be argued that the mentors were not exactly peers since they were in the second year. Measures included time with mentor, satisfaction with current mentor, willingness to serve others as a mentor in the future, satisfaction with previous mentoring relationships, and demographic information. Based on the hierarchical multiple regression analysis, the results showed that higher protégé's satisfaction level from the mentoring relationship, the resulted in better performance in career and psychosocial functions. The more time they spent together, the more satisfied protégés were regarding the mentoring relationship. The results also indicated that protégés who were highly satisfied with the current mentoring relationship were more willingly to mentor others in the future.

Mentoring Process

Just as inputs greatly affect outcomes of mentoring programs, the process also significantly influences outcomes. Mentoring has been implemented in various ways. Mentoring is similar to management, as it can be implemented in a variety of styles and with varying degrees of skill, and is very dependent on the beliefs and values of the day (Woodd, 1997). This paper also found that recent studies presented alternative forms of mentoring compared with classical mentoring. Alternative forms of mentoring discussed consisted of one-to-one, face-to-face relationships between more a experienced person and a less experienced person as a means of implementation. Although the purpose of mentoring—development of person who receives mentoring—might not change, implementation of mentoring has changed and expanded its boundaries as table 1 presents.

Table 1. *Mentoring Process Criteria*

<i>Process Criteria</i>	<i>Examples</i>
Formality	Formal mentoring vs. Informal mentoring
Communication channel	Virtual mentoring vs. Face to face mentoring
Number of participants	One-on-One mentoring vs. Team/Group mentoring

Formality

Formal and informal mentoring relationships differ in many ways. While the purpose of a formal mentoring relationship is assigned by the organization (usually a short-term career goal like skill improvement), the purpose of an informal one is often driven by developmental needs, which is a much longer-tem career goal. The duration of formal mentoring is relatively short and forms are structured, while informal mentoring lasts relatively longer and forms are constructed freely. It is believed that informal mentoring is more effective for a protégé's development than formal mentoring, but recently because organizations are attempting to implement more mentoring program as part of their HRD strategy, studies have examined how formal mentoring programs could adopt more characteristics of informal mentoring (Rosser & Egan, 2003). Several researchers studied differences between formal and informal mentoring relationships (Armstrong et al., 2002; Ragins & Cotton, 1999; Chao et al., 1992).

Chao, Walz, and Gardner (1992) performed a longitudinal study of 549 individuals from nine graduating classes of a large Midwestern university and a small private institute to examine mentoring outcomes by types of mentorship participation—212 formal protégés, 53 informal protégés, and 284 non-mentored individuals. All three groups were compared in terms of three outcome measures—organizational socialization, job satisfaction, and salary. The findings indicated that protégés participating in informal mentorship had slightly more career related support than those in formal mentorship. However, there was no significant difference in receiving psychosocial support between formal and informal mentorship. Chao, Walz, and Gardner interpreted that psychosocial supports such as counseling, confirmation, and acceptance roles could be performed easily by a supervisor or coworker so those are not unique functions of mentoring; however, the career related roles such as coaching, visibility, exposure, and sponsorship required a more intimate relationship like informal mentorship. Significant differences were found between informal protégés and non-mentored individuals in terms of all scales of organizational socialization, job satisfaction, and salary. Thus, they concluded that organizations should support more mentoring relationships within an organization and should support the transformation from formal mentoring to informal mentoring relationships.

However, individuals who reported not having either formal or informal mentoring relationships, might have had someone who tried to be at least informal mentors. Those individuals may have had a tendency toward low

interest in their professional or career development and refused to have mentors. Additionally, they might have low progress in their professional career life as well, not because they had no mentors, but because they originally had low interest in their professional development.

Team/Group Mentoring

Another attempt of expanded implementation of mentoring is team or group mentoring rather than one-to-one mentoring. From the 1993 study (Gibb & Megginson, 1993) conducted to describe the current status of mentoring programs in the practical world, there were no instances of group mentoring. One of the first studies about group mentoring was published in mid of 1990s (Dansky, 1996). Dansky (1996) describes benefits of group mentoring as opportunities offered through group participation that may complement or serve as a substitute for individual mentors. Knous and Webb (2000) also describe benefits of team mentoring and professional group mentoring by presenting several military mentoring types to apply to the complex business world with mixed populations on competitive task environment. They illustrated that “team mentoring can provide a sense of identity that can enhance the self-esteem of individual team members. Team members can also provide insight into training needs and the ongoing learning processes of individuals and the team as a whole. In addition, they can provide perspectives on diagnosing process shortcomings, solving problems, finding scarce resources, and dealing with difficult customers” (p. 50). They also stated that group mentoring from professional organizations can provide role modeling for career development, networking, and psychosocial aspect such as belonging for support.

Dansky (1996) described the impact of group mentoring on two career outcomes—salary and job title—by surveying 88 management and supervisory staff from home health agencies, 86% of whom were women. Dansky defined group mentoring as, “a group influence that emerges from the social norms and roles that are characteristic of a specific group and results in the career enhancement of an individual member” (p. 7). She first identified four types of group mentoring: role modeling, inclusion/belonging, networking, and psychosocial support. The results showed that there was a significant positive relationship between group behavior of feelings of inclusion and job title after controlling for the effects of individual mentoring. The study also found that role modeling group behavior was a significant predictor of salary. From this study, though it cannot be concluded definitely that group mentoring promotes job title and increased salary. It may be there was a positive relationship between group mentoring and an individual’s career outcomes. It may be more valid if the study examined non-group mentored management and supervisory staff from home health agencies.

Virtual Mentoring

As virtual communication increased, a way of virtual mentoring, so called e-mentoring, emerged in conventional face-to-face mentoring as an alternative method of communication. The notion of the boundaryless career creates the possibility of the virtual mentor—one who is outside the organization of the protégé and who only rarely encounters the protégé face to face (Megginson, 2000). Hamilton and Scandura (2003) stated that e-mentoring may not be a substitute for traditional, face-to-face mentoring, but it can supplement learning and development by providing timely needed advice and coaching. E-mentoring creates a larger pool of mentors and protégés who may face difficulties in commuting time, geographic barrier, and other commitments. In the case of pure online mentoring programs, most online mentoring programs match mentors and protégés who can communicate through a central site for security, privacy, and monitoring or filtering inappropriate communication (Field, 2003). There seems to be many e-mentoring approaches conducted, but few of empirical studies have been published.

Roles of Mentor

Much of the literature on mentoring describes the functions mentors performed to provide benefits to-protégés. Many researchers explained the roles of the mentor and described mentor’s functions. For example, Clutterbuck (1991) outlined five key roles played by the mentor, namely, coach, coordinator, supporter, monitor, and organizer. Overseer, teacher, counselor, provider of psychological support, promoter and sponsor were roles outlined by Zey (Zey, 1984). Fisher reported that mentors perform the roles of advocate, expert, trainer, alternatives identifier, collaborator, learning process specialist, fact finder, and partner (Fisher, 1994). Clutterbuck and Kram found that confidant, coach, networker, facilitator and challenger described the mentors they evaluated (Clutterbuck, 1991; Kram, 1983). Other researchers described mentors as a monitor, problem solver, and assessor (McIntyre et al., 1993); and role model, advisor, and motivator (Knouse & Webb, 2000). Since one of the classical studies in mentoring identified two mentor functions from an in-depth interview with 15 managers (Kram, 1983), most identified roles are belong to those two functions—career-related and psychosocial functions.

Mullen (1998) studied the relationship of roles of the mentor with the mentor’s characteristics. Mullen studied the characteristics of mentors who serve both vocational and psychosocial mentoring functions by surveying 160 mentors and 140 protégés in seventeen Midwestern organizations. The author used hierarchical multiple regression of three steps. In the first step, she tested age, educational level, and gender. In the second set of *relationship characteristics*, she tested hierarchical distance between mentor and protégé, who initiated the relationship, and the

amount of time spent together. In the third set of *mentor attitude and perceptions*, she tested how much a protégé influenced the mentor, how well the mentor perceived the protégé's competence, and the mentor's organizational-based self-esteem (OBSE). The results showed that mentors who initiated the relationship, who had high OBSE, who had their protégé influence them, who perceived their protégés as competence, and who spent more time with their protégés were identified as serving both functions at the greatest level. The results also indicated that older mentors performed both combined functions more than younger mentors.

Mentoring Outcome

Benefits to Protégé

Because the purpose of mentoring is to develop protégés, most of the literature on mentoring outcomes has been examining the benefits and impact to a protégé rather than discussing the benefits to the mentor or organization. Benefits to the protégé have been identified in mainly both career and psychosocial development areas, but increasing individual performance is also one of the biggest beneficial areas, which can be linked to organizational performance (Jacobs & Washington, 2003).

Benefits related to a protégé's professional development are found as protégés increase learning (Sullivan, 2000; Summer-Ewing, 1994; Joinson, 2001), teamwork (Messmer, 2003), and mobility (Scandura, 1992). Benefits from the protégé's professional/career performance perspective are promotion (Scandura & Schriesheim, 1994; Kram, 1986; Ragins et al., 2000), recognition (Aryee et al., 1996), increasing income (Chao et al., 1992), higher career satisfaction (Ragins et al., 2000; Aryee et al., 1996), career development (Rosser & Egan, 2003; Kram, 1986), and career commitment and higher retention (Ragins et al., 2000; Verdejo, 2002). Benefits related to the protégé's psychosocial development are self-esteem (Ragins et al., 2000), greater intimacy, strength of interpersonal bond, confidence, identity (Mullen, 1998; Verdejo, 2002; Summer-Ewing, 1994), and socialization (Mullen, 1998).

Scandura and Schriesheim (1994) conducted a study of 183 supervisor-subordinate dyads in a large, high-technology Midwestern manufacturing firm to integrate research of the leader-member exchange approach with research on mentoring. Based on the authors' review of literature, the leader-member exchange model is a transactional leadership approach that "describes how leaders use their position power [organizational resources] to develop different exchange relationships with different subordinates" (p.1590). On the other hand, the career mentoring model is a transformational leadership approach in which "leaders get followers to act as they desire by transforming or changing the followers" (p. 1588), and by devoting personal resources such as time, knowledge, and experiences. The authors examined the relationship between individual development and leader-member exchange model/career mentoring. The dependent variables were promotion rate, salary growth, and supervisor ratings of performance improvement. The results indicated that the leader-member exchange model had a positive relationship with increased supervisor ratings of performance but not for salary and advancement rate, while career mentoring had a positive relationship with salary and advancement but not performance.

Aryee, Wyatt, and Stone (1996) surveyed graduate employees working full-time in Hong Kong to examine the effect of career-oriented mentoring on their career success. The measure of career success included salary, number of promotions, and career satisfaction. The results showed that while there was no significant relationship between career-oriented mentoring and compensation increasing, the mentoring was significantly related to the number of promotions received and career satisfaction that protégés perceived.

Quality of Relationship

Several mentoring scholars attempted to the study relationship between the quality of the mentoring relationship and its impact on mentoring outcomes. Although *quality* can be operationally defined in various ways, in this instance, it means how much protégés are satisfied in mentoring relationships. While other factors such as mentor's characteristics and type of mentoring relationship are mentoring input or process, the quality of relationship is another outcome of mentoring. Thus, in this area, scholars tried to examine whether one outcome can be explained or predicted by another.

Ragins, Cotton, and Miller (2000) conducted a national survey of 1,162 employees, using mailing lists of professional associations representing social workers, engineers, and journalists in order to examine the effects of mentor presence, type of mentor, quality of relationship, and program design on work and career attitudes. To measure career and work attitude, seven items were used, "career commitment, job satisfaction, satisfaction for promotion, organizational commitment, procedural justice, organization-based self-esteem, and intentions to quit" (p.1182). The authors defined marginal mentors as those are who provide limited functions of a mentor so they might disappoint the protégé or might not be helpful to the protégé's individual development. The results indicated that protégés who had high satisfaction in a mentoring relationship reported a more positive attitude than non-mentored individuals, but protégés who had marginal mentors reported equivalent attitudes with non-mentored

individuals. In addition, the results showed that the degree of satisfaction in a mentoring relationship was a more a result of work and career attitudes than the type of mentor. Thus, the authors concluded that the mentoring outcomes may depend on the quality of the mentoring relationship rather the presence of a mentor or the design of the mentoring program.

Benefits to Mentor

Mentors also gain benefits as a consequence of mentoring programs. Not many studies have examined the impact on a mentor, but the need to study this area has increased since a mentor's willingness and attitude toward participating are believed to be significant for improving the overall quality of the program, whether it is formal or informal mentoring. By recognizing the benefits for the mentors, the mentor's participatory level can be intensified, and an organization is able to recognize more benefits through a mentoring program—not only to develop novices but also to develop experts. In addition, recognizing both the protégé's and mentor's benefits enables organizations to make strategic HRD plans by actively utilizing expected outcomes from both participants (Hegstad, 1999).

Mentor's benefits from mentoring relationships are found to be related to professional identity and psychosocial aspect, while some are related to the development of leadership and communication skills. Mentor's benefits are professional identity along with respect and organizational power (Hegstad, 1999); building leadership, supervisory, and training ability (Messmer, 2003); networking opportunity and performance improvement (Scandura & Schriesheim, 1994); and job satisfaction and retention (Messmer, 2003). Mentors not only gain loyal followers, but also earn the respect and admiration of peers (Ragins & Scandura, 1994).

Benefits to Organization

Historically, the research of mentoring has been studied at the individual level of development and education. As some HRD scholars asserted, to examine the linkage between individual development and organizational performance (Jacobs & Washington, 2003), the outcome of mentoring relates to the organizational level of outcome. As economic competition becomes more intense in the global economy, *knowledge and learning* is very significant to an organization's performance. One of the major organizational impacts from implementing a mentoring program is the transfer of learning and knowledge (O'Reilly, 2001; Swap et al., 2001). Mentoring stimulates organizational learning by providing indirect and direct information flow among organizational members. Mentoring is also found to intensify organizational commitment (Ragins et al., 2000) and employees' retention and motivation (Hegstad, 1999). One study showed that mentoring has a significant impact on expatriate's training, job satisfaction, and creates a bridge between the parent company and local company, particularly for international or multination firms (Downes et al., 2002). Although it is believed that mentoring brings organizational impact, there are few studies, in particular empirical studies, found that examined mentoring outcome at the organizational level.

Conclusion and Suggestion for Future Research

In the practical world, a greater number of organizations are implementing mentoring programs as its benefits become more recognized. Academically, numerous studies have been conducted about mentoring in various fields of study. However, this research found that most studies have focused on the impact at the individual level, while few studies have been conducted from the organizational view. An analysis of the current literature from a systems approach identified three major research questions that have been studied and two emerging questions to be studied in each area: mentoring input, mentoring process, and mentoring outcome. Table 2 illustrates those questions.

From this respect, this analysis contributes to the enrichment of HRD research and the improvement of HRD practice. It helps HRD researchers and practitioners understand mentoring programs from the comprehensive perspective based on a systems approach. It also provides emerging questions for future research, and research about those questions will ultimately help HRD practitioners implement mentoring programs in a more organizationally effective way.

Table 2. *Research Questions and Emerging Questions in Mentoring*

	<i>Mentoring Input</i>	<i>Mentoring Process</i>	<i>Mentoring Outcome</i>
Research question 1.	Do participants' characteristics influence the satisfaction of the mentoring relationship?	Is impact of mentoring different in the formal process from the informal process?	What are the benefits of mentoring to protégés?
Research question 2.	Do gender and race match and mismatch influence mentoring outcome?	What roles do mentors play to provide career and psychosocial functions?	Is quality of relationship a predictor of mentoring outcome?
Research question 3.	Does mentor's experience level influence mentoring?	Does mentoring change when conducted in a group setting?	What are the benefits of mentoring to mentors?

Emerging question 1.	Does cross-cultural or cross-national influence mentoring relationship?	Does mentoring change when conducted in a virtual setting?	What are the benefits of mentoring to the organization?
Emerging question 2.	What is the importance of mentor training?	Does mentoring change when conducted in a cross-national, virtual setting?	What are the unexpected effects of mentoring? What impact if mentoring fails?

In the area of mentoring input, researchers conducted studies about participants' characteristics, match and mismatch in gender and race, and mentor's experience level. However, there are few mentoring studies about cross-national and cross-cultural issues, which should be studied as environmental input to mentoring programs since organizations increasingly operate on a multinational basis (Higgins & Kram, 2001). Training issues about mentoring (Cox, 2000) should be examined, as well whether a trained mentor is more effective than an untrained mentor. Additionally what aspects of training are the most effective should also be researched.

In the area of mentoring process, formal and informal mentoring, career functions and psychosocial functions, and mentoring in group and team settings have been studied. Although virtual mentoring has been widely implemented, it also lacks empirical study about the impact of pure virtual mentoring compared with classical mentoring. In addition, since currently many mentoring relationships depend on virtual communication, it also needs to be studied how virtual mentoring enhances cross-national mentor and protégé relationships.

In terms of mentoring outcome, more empirical studies are necessary in proving organizational benefits from mentoring, and unanticipated effects of mentoring outcome such as negative impact or impact of failed mentoring relationships. HRD scholars believe that mentoring supports career development (Gilley & Egglund, 1994) rather than employee development (training and development) or organizational development. However, due to its diversified programs and perceived impacts, some recent studies show that mentoring programs support not only career development, but also training and development functions, and even support organizational development (Hegstad, 1999). As the impact of mentoring programs on organizations, becomes more widespread, it is critical to link the role of mentoring to HRD areas such as organizational development and training (Hegstad, 1999).

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