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Mentoring: What Organizations Need to Know to Improve Performance

in the 21st Century Workplace

by

Lisa Kahle-Piasecki

Submitted to the Graduate Faculty as partial fulfillment of the
requirements for the Doctor of Philosophy Degree in Curriculum and Instruction

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An Abstract of

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Mentoring programs are frequently used in companies as a systemic solution to increase the performance of employees. Although the concept of mentoring dates back to the time period of Greek Mythology, the study of mentoring and its role in the 21st century workplace is vital due to the changing business climate, which involves an expected large exodus of executives, increase in the use of technology, and global competition. This study conducted a performance gap analysis of current mentoring programs in Fortune 1000 companies using an electronic survey targeted to human resource directors. The results of the study show that significant performance gaps exist in mentoring practices and purposes of mentoring programs. Additionally, in utilizing the systems viewpoint of performance and human performance technology techniques, data from this study on the features of mentoring programs and levels of evaluation show that adjustments to mentoring programs should be made in order to achieve the desired results. A little more than half of the companies in this study were not satisfied with their current mentoring program, desiring more features, time, and support to expand mentoring within their company. Results of this study will be valuable to companies,
other organizations, and human performance specialists, because this study provides companies with the data necessary to begin the process of evaluating their current mentoring program and also provides companies with data necessary to develop a mentoring program.
To my family – Bill, Lorna, and Carter. Without your support, understanding, and patience this work would not have been possible. Thank you for letting me pursue my goals!
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I am extremely appreciative for all of those human resource directors from Fortune 1000 companies who took the time to complete my survey. Your participation has contributed to the study of mentoring and will help improve mentoring programs for years to come. I am also thankful to those of you who sent good luck e-mails and extended offers of availability for further discussions on mentoring.

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Chapter One

Introduction

A large percentage of the leadership population in organizations is between the ages of 46 and 64 (Field, 2007). According to one estimate (Field, 2007), 50% of executives in the United States are eligible to retire within the next several years. In 2010, 37% of the United States’ workforce will be made up of these workers known as the Baby Boom Generation,” born between the years 1946 and 1964 (Callanan & Greenhaus, 2008). Many of these workers are currently occupying critical leadership and management positions in organizations. Of Chief Executive Officers (CEOs), 51% have spent 20 or more years working for companies they now head (Todaro, 2003). Despite the current economic downturn and the number of baby boomers postponing retirement, it is expected that this population will begin retiring in 2010, when the first group of the boomers is eligible for retirement (Callanan & Greenhaus, 2008). As these workers retire, they will take with them knowledge that is needed by organizations to continue to grow, be profitable, and sustain performance levels.

Mass retirement of organizational leadership is viewed as problematic, according to a survey conducted of 247 senior executives and leaders (Criswell & Martin, 2007). This study found that 30% of the leaders believed institutional vision, knowledge, external and internal personal networks, skills, and historical context will be lost when these individuals leave the organization. It is not just senior executives with whom organizations should be concerned. The baby boom generation is so large that they hold positions up to four levels down from senior executives (Field, 2007). Therefore, the need to transfer this knowledge to the next generation of business leaders, managers, and other
employees is significant, and organizations will need to introduce practices and strategies to address the great loss of knowledge that is anticipated to occur. One of these practices increasingly used in organizations is mentoring. A mentoring program is often used to increase performance by transferring knowledge from a mentor, who is considered an experienced employee, to a mentee, who may be an inexperienced employee, new hire, or an employee needing further career development.

A mentor-mentee relationship often provides both parties with benefits, offering support and knowledge in performing a job, increasing admiration in the office, and navigating the politics of an organization. Benefits of a mentoring relationship, however, extend beyond those for the mentor and mentee. At the organizational level, mentoring programs are increasingly being offered as a strategy for the transfer of knowledge between senior employees and less experienced employees. The programs are also offered to high-potentials. High-potentials are those employees who consistently and significantly outperform their peer groups in a variety of settings (Ready, Conger, Hill, & Stecker, 2010). Frequently, these relationships lead to organizational benefits, including an increase in productivity and competence (Kram, 1985), stronger organizational commitment from the mentor and mentee, lower turnover, achievement of strategic goals, enhanced image (Murray, 2006), and in some cases, attraction of potential employees (Horvath, Wasko, & Bradley, 2008; Murray, 2006; Nancherla, 2008). Because of these strong benefits, organizations are recognizing that mentoring programs can offer a considerable return on investment (ROI).

Today’s business climate is one of fierce competition. Research shows that professional service firms (PSF); large, global, multifunction organizations; and even
small businesses are faced with increasing professional workloads and risks brought on in part by globalization (DeLong, Gabarro, & Lees, 2008). The increase in professional workloads has led to mentors in some firms being assigned as many as 20 mentees. This is despite an increase in firms hiring human resource (HR) leadership development specialists to teach and recruit mentors for mentoring programs (DeLong et al., 2008).

Mentoring programs in organizations have grown in popularity in recent years and are frequently touted as a benefit to organizational and leadership development (Lawrence, 2008). Mentoring programs in business organizations are also often considered performance interventions. Sanders and Thiagarajan (2005) classify performance interventions based on the root cause the intervention is trying to address. In mentoring, the root cause category is “improving knowledge” with the purpose of enhancing the performance and the productivity of the mentee and the overall productivity of the organization.

Mentoring programs do not exist in isolation from the overall organizational performance of employees. They should be used as one component of a systemic solution set of enhancing performance. The use of the word systemic is important here (Kahle-Piasecki, 2011). Systemic means affecting the entire system. In a system, everything is connected to everything else. Systemic interventions address “organizational needs as a whole, especially with regard to an organization’s vital processes and functions” (Pershing, 2006, p. 13). In order to determine the effectiveness of a systemic intervention, evaluation is necessary. Evaluation of existing mentoring programs can take several forms. A popular evaluation model frequently used by specialists with backgrounds in improving human performance is Kirkpatrick’s Model (1994), first developed in 1959
and 1960 and updated in 1994 (Goldstein & Ford, 2002). This model focuses on four levels of training evaluation and is widely used in the evaluation of both training and nontraining performance interventions (Dessinger & Moseley, 2006). The four levels of Kirkpatrick’s Model are: (1) participant reaction, (2) participant learning, (3) on-the-job change in behavior, and (4) final results of the training. Organizations can use the model in the evaluation of an existing mentoring program. The evaluation may show positive or negative results that an organization can use to determine the ongoing sustainability of a program.

Another approach to use in planning, implementing, and modifying performance interventions is analysis. Analysis can provide organizations with a direction for their mentoring programs and lead to determining the measurable business impact the program is bringing to the organization (Rossett, 2006). Analysis, although similar to evaluation, differs from evaluation in several ways. Program analysis is an approach to planning that can answer the question of what should be happening in an organization. Program evaluation, on the other hand, is conducted on what has already occurred. In mentoring, analysis can assist an organization to develop the right program, while evaluation can provide data on how well the program worked (Rossett, 2006).

**Statement of the Problem**

The problem addressed in this study is that mentoring programs and processes currently offered in organizations may not be meeting the needs of the organization or their employees and may not be achieving the desired results. Mentoring programs in organizations are increasingly being offered and explored as a way to increase employee retention (Payne & Huffman, 2005) and job satisfaction (Allen, Smith, Mael, Gavan
O’Shea, & Eby, 2009), to help in career advancement (Bozionelos, 2004; Kram, 1985; & Liu, Liu, Kwan, & Mao, 2009; Simonetti, Ariss, & Martinez, 1999), and to decrease work-related stress. Considering the large percentage of workers expected to leave the workforce, the need to transfer knowledge through mentoring programs is great. However, benefits of mentoring programs can be intangible and difficult to measure (Laff, 2009). Research studies on mentoring are largely limited to the last 26 years beginning with Kram’s (1985) published research on mentoring in the workplace. Additionally, much of the research on mentoring programs in organizations focuses on specific benefits to the mentors, mentees and organizations but does not address possible performance gaps related to 21st century mentoring.

Since the earlier studies on mentoring, much has changed in the workplace. New methods of communicating related to technology and the Internet are being used, organizations are more fast-paced and global, and employees are expected to utilize constant and creative communications while increasing performance. The workplace has expanded networks of contacts, oftentimes global, and there is an expectation for lifelong learning and continued development.

Despite all of the changes in the workplace, the science of mentoring is still young (Horvath et al., 2008). The focus of mentoring research should move beyond the basics of mentoring to the use and significance of new forms of mentoring. Early research in mentoring explored the specific benefits of mentoring to mentors and mentees, how to successfully match individuals in the mentoring relationship, and how to train mentors and mentees. Different forms of mentoring such as group mentoring, peer-to-peer mentoring, and electronic mentoring are now being explored. Organizations in the
21st century are expected to compete globally and quickly (Francis, 2009). Mentoring programs may not currently be moving beyond the basics of mentoring relationships—typically intended to offer encouragement and support—to advanced views of sharing and transferring knowledge (Francis, 2009) as a method of staying competitive in the global environment that exists today.

Mentoring programs used in organizations without careful evaluation, analysis, and monitoring may result in a performance gap. Desautels (2006) defines a performance gap as the difference between the ideal program and the current program. One way to identify a performance gap is by conducting a performance analysis. Conducting a performance gap analysis on mentoring programs can assist organizations in determining what specific areas of a mentoring program should be developed and/or redesigned to improve the performance of future leaders, managers, and other employees.

**Purpose and Research Questions**

The purpose of this research is to conduct a performance gap analysis on mentoring programs currently offered in Fortune 1000 companies, thereby determining what the companies are currently offering versus what is desired and most important. Fortune 1000 companies have been selected because their business practices are influential to other companies throughout the world.

Specific research questions addressed in this study are listed below:

R1. Is there a significant difference between what human resource directors or the designee report to be effective mentoring practices and what mentoring practices are actually employed in Fortune 1000 companies?
R2. Is there a significant difference between what human resource directors or the
designee in Fortune 1000 companies report to be the purpose(s) of their mentoring
program and what the purpose(s) of a mentoring program actually is (are), as it relates to
their industry?

R3. Is there a significant difference between the features of a mentoring program and the
overall levels of evaluation of the mentoring program in Fortune 1000 companies?

R4. How satisfied are human resource directors or their designee in Fortune 1000
companies with the mentoring programs they are currently using?

Significance of the Problem

As previously stated, the need to transfer knowledge from senior employees to
new hires and high potentials is great given the large number of employees expected to
leave the workforce in the very near future. Findings from this study may be used to
assist in maintaining high organizational quality in a time of managerial transformation
and flux by providing information needed to improve mentoring programs, management
development, and organizational change initiatives.

By analyzing their current mentoring programs, organizations will better
understand any deficiencies that may exist with their mentoring program. Information
obtained from this research study will be valuable to leaders, managers, and human
resource specialists in organizations currently operating a mentoring program and those
organizations considering implementing mentoring as a performance improvement
intervention. Consultants, such as human performance technologists who explore
mentoring as a performance improvement intervention, will also find value in the results
of this study.
Definition of Terms

Employee Onboarding: The adoption, development, and retention of employees (Friedman, 2006).

High-Potential: An employee who consistently and significantly outperforms his or her peer groups in a variety of settings (Ready et al., 2010).

Human Performance Technology: The study and ethical practice of improving productivity in organizations by designing and developing effective performance interventions that are results-oriented, comprehensive, and systemic (Pershing, 2006).

Knowledge Transfer: For this study, the information exchange between a mentor and mentee.

Mentee: An individual who is less knowledgeable and inexperienced in a subject area or job-related task that is guided by a more knowledgeable and experienced employee (Kram, 1985; Murray, 2006).

Mentor: An individual who is considered knowledgeable and experienced about a subject area or job-related task that guides another individual who is less knowledgeable and experienced (Kram, 1985; Murray, 2006).

Mentoring Practices: The features of a mentoring program used in a company.

Mentoring Purposes: The reason a mentoring program is used in a company.

Mentoring Relationship: Interpersonal exchange or relationship between a mentor and a mentee that helps with career development (Kram, 1985).

Performance Gap Analysis: The difference between the ideal program and the current program (Desautels, 2006).
**Performance Intervention:** A solution introduced in an organization to improve and enhance productivity by improving human performance (Pershing, 2006).

**Program Evaluation:** Determining the effectiveness of a program or performance intervention in an organization.

**Systems View of Performance:** A view of performance that considers the total organization as a system with components all related to each other. When performance improvement is needed in one component, all components are considered because of their relation to each other (Pershing, 2006; Rummler & Brache, 1988).
Chapter Two

Review of the Literature

The term *mentor* first appears in the Greek Mythology work of literature the *Odyssey*, by Homer. In this story, King Odysseus, before leaving to fight in the Trojan War, entrusts his older friend Mentor to educate his son, Telemachus (Gentry, Weber, & Sadri, 2008). Telemachus benefits from Mentor’s teaching and his passing along of knowledge. Today, the word “mentor” has come to reflect a teacher or coach of another individual.

The concept of transferring knowledge from an older, wiser adult to another inexperienced individual can also be considered in the apprenticeship model. Apprenticeship as a form of job training is common in European countries (Grollman & Rauner, 2007). It is also common in higher education with research apprenticeships, which offer mentoring through the publication and presentation process (Carr-Chellman, Gursoy, Almeida, & Beabout, 2007). Apprenticeship programs, defined by Ryan and Unwin (2001) as structured programs sponsored by an employer, that provide vocational preparation, part-time education, on-the-job training and work experience also appear in classic literature. In Charles Dickens’ *A Christmas Carol*, Ebenezer Scrooge, visiting a warehouse with the Ghost of Christmas Past, proclaims, “I was apprenticed here” (Dickens, 1843/1990 version, p. 80).

Despite these early references to mentoring and apprenticeship, mentoring in organizations is considered an innovation in performance improvement (Murray, 2006). If the concept of mentoring has existed for many years, going back as early as Homer’s the *Odyssey*, questions remain then as to what new research on mentoring in
organizations is relevant and what this research may show for understanding this long-used concept. In addition, research that provides organizations with data to either improve an existing mentoring program or introduce a mentoring program into the organization can be helpful and valuable in determining how mentoring may differ in the 21st century from 20th century mentoring programs.

The literature review will include five areas: (a) human performance technology, (b) systems viewpoint, (c) mentoring programs and new methods, (d) evaluation, and (e) performance gap analysis.

**Human Performance Technology**

The terms human performance technology (HPT) and human performance improvement (HPI) are sometimes used to define the same field. For consistency purposes, the term HPT will be used throughout this dissertation.

Human performance technology as defined by Pershing (2006) is the study and ethical practice of improving productivity in organizations by designing and developing effective interventions that are results-oriented, comprehensive, and systemic” (p. 6). Rothwell (1996) defines HPT as a field focused on systematically and holistically improving present and future work results achieved by people in organizational settings” (p. 29). The International Society for Performance Improvement (ISPI) (2011) defines HPT as a systematic approach to improving productivity and competence, which uses a set of methods and procedures along with a strategy for solving problems in order to realize opportunities related to the performance of people (para.1). The ISPI also defines HPT as a:

process of selection, analysis, design, development, implementation, and evaluation of programs to most cost-effectively influence human behavior and
accomplishment. It is a systematic combination of three fundamental processes: performance analysis, cause analysis, and intervention selection, and can be applied to individuals, small groups, and large organizations (ISPI, 2011, para.1).

Several words are consistent in these definitions: systematically, systemic, productivity, interventions, results-oriented, analysis, and organizations. The fundamental principles in the practice of HPT can be applied in any organization and to any performance intervention, such as mentoring, introduced in an organization. The practice and implementation of HPT principles in organizations can be very effective in organizations that are data-driven and results-oriented (Crossman, Cangelosi Crossman, & Lovely, 2009; Pershing, 2006). On the other hand, the practice of HPT can be ineffective in the following situations: (a) if a predetermined intervention is selected, (b) if the organization is not goal-driven, and (c) if the organization is not results-oriented.

All organizations use four kinds of resources from their environment: human, financial, physical, and informational (Griffin, 2008). These resources are combined in an organization to achieve the goals most efficiently and effectively – this is the process of management. HPT views organizations and their members as one with the ultimate goal of creating value “for an organization, its members, and the society it serves” (Pershing, 2006, p. 28). In order to remain competitive, organizations must optimize their use of resources, time, materials, and equipment (Sasson, Alvero, & Austin, 2006) and HPT practices can be one of the ways organizations gain a competitive edge (Crossman et al., 2009). The use of HPT in an organization can not only diagnose a problem and offer a solution but also more importantly, identify what works well and incorporate that into the solution (Laff, 2008). It can help to increase profitability in businesses by reducing operating costs or increasing profit streams. Human performance technology techniques
have been used in organizations of all types for various interventions including law enforcement and tactical teams (Hathaway, 2008), process task improvement (Sasson et al., 2006), hospital libraries (Brown, 2008), and safety programs (Crossman et al., 2009). Human performance technology is a systematic combination of three fundamental processes: performance analysis, cause analysis, and intervention.

Although there are clear benefits to using principles of HPT in organizations, there are also challenges. One challenge in particular is in how management views HPT and the confusion on what HPT actually is. This unclear focus has created obstacles in collaborating with management. Once management clearly understands what HPT is and what an HPT professional can bring to the organization, then partnerships with management can be established. How partnerships are established can be complex. In general, HPT has not yet “become management’s ongoing partner” (Langdon, 2006, p. 925). It has been suggested by Langdon (2006) that management would want to partner with HPT professionals if they were able to do two things for them regarding work: (1) provide a work performance model of what work is to be accomplished and how it should get done, and (2) provide management with access to the work performance model that they can continuously use to understand and improve work.

Current models used by HPT professionals and advocated by ISPI and the American Society for Training and Development (ASTD) have been criticized for not considering a model of performance that mirrors or reflects how business executes work, supports the work, and uses HPT interventions to make improvements” (Langdon, 2006, p. 925). These models also put the control of the process in the hands of the HPT professional instead of management. Langdon (2006) proposes a different model that
builds on the current HPT model. The model, “Language of Work” has been used successfully in business to improve work performance and has been rated by management as being user-friendly (Langdon, 2006). He suggests that using this model will increase the value and effectiveness of HPT professionals by allowing them to partner with management.

The HPT Model is defined as five-stages, which use the systems approach. The stages or steps are; (1) performance analysis, (2) cause analysis, (3) intervention selection, design, and development, (4) intervention implementation and change, and (5) evaluation (Langdon, 2006). Under the performance analysis area, the HPT model emphasizes a results-only approach to defining performance or work. On the other hand, the Language of Work model expands this area to look at not only how work is defined for results but also the cause or work execution of the performance – the description of how the work will be executed to get results (Langdon, 2006). Essentially, a sixth step - work execution - is added into the HPT model.

Langdon encourages HPT professionals to use his Language of Work model in order to have management use HPT professionals as partners. He states the "key to partnering with management at the worker level is to have a way for the individual and teams of individuals to know specifically how they are supposed to execute the work” (Langdon, 2006, p. 934).

**Systems Viewpoint**

One way that HPT professionals differentiate themselves from other disciplines is with the systems viewpoint (Addison & Haig, 2006, p. 40; ISPI, 2002). When a performance improvement is needed in one component, HPT professionals consider all in
their analysis. Taking a systems view is considered vital to the practice of HPT because organizations are very complex systems (ISPI, 2002). The systems model is a result of Ludwig von Bertalanffy’s (1968) general systems theory and thinking of an organization as a sum of its parts (Andreadis, 2009; Fitzgerald, 1999).

The concept of an organization as a system is best viewed by thinking of an organization as an integrated whole (Andreadis, 2009). When one unit takes an action, another unit somewhere else in the system is affected (Andreadis, 2009). The systems model describes a culture of an organization as a whole system with conditions in operation that affect the performance. These conditions include the inputs—such as customer requests and processes, processes and results, or performance feedback, and the receiver—such as society, the workplace, work or the worker (Addison & Haig, 2006). The HPT professional uses this model but starts at the end of it by identifying the desired results of the initiative and then working backward through the systems model to the inputs. Taking a systems approach considers the larger environment that affects process and work and considers the inputs and the “pressures, expectations, constraints, and consequences” (ISPI, 2002, p. 3).

Every organization has four subsystems that are interrelated and overlapping. The four subsystems: governance, management, work, and people “mimic the behavior of the larger system in which it is nested” (Andreadis, 2009). The people system influences the way people think, feel, and act on the job and is usually associated with the human resource department (Andreadis, 2009), which is where mentoring programs are usually placed and managed.
Systems way of thinking is thought to create a paradigm shift among management (Crossman et al., 2009). The paradigm shift here is related to the reverse order of the model and the definition of HPT as a discipline. For example, HPT has evolved as a discipline over the past 50 years (Mueller, 2006). The application of the research is ongoing. Using the systems model in a backwards design strategy to improve performance is a paradigm shift from the traditional way of thinking of performance as the result of a training initiative based on behaviorist principles (Pershing, 2006).

In the early days of the field, much of the practice of HPT was developed using programmed instruction and influenced by Skinner (Pershing, 2006) and behavioral psychology approaches (Crossman et al., 2009). The experience resulted in well-designed instruction that had no impact on employees’ performance. From the continued research, the field of HPT evolved from utilizing programmed instruction without achieving results, to using the systems model and focusing first on the performance results desired.

Part of the systems viewpoint is to gain information about the quality of a performance intervention from within the system and then make adjustments that will improve the results (Addison & Haig, 2006). A systematic approach can ensure that any factors creating performance deficiencies can be addressed and lead to an economic benefit for an organization. For example, Abernathy (2010) surveyed 63 organizations on management practices. In one case, a bank applied a systematic performance improvement initiative, and reported a 52.3% average improvement in various performance areas.

In recent years, mentoring programs are being developed and implemented in a systematic way (Armstrong, Allison, & Hayes, 2002; Pisimisi & Ioannides, 2005).
Mentors and mentees are brought together for a specific period and for purposeful development. The following section will review current forms and practices of mentoring in organizations.

**Mentoring Programs**

Mentoring is described as “a deliberate pairing of a more skilled or experienced person with a lesser skilled or experienced one, with the agreed-upon goal of having the lesser skilled person grow and develop specific competencies” (Murray, 1991). This definition allows for the possibility that a mentor may be younger than a mentee.

Mentoring programs in organizations can lead to the establishment of a mentoring culture (Bozionelos, 2004; Francis, 2009) within the organization. Establishing a culture of mentoring can encourage managers at all ranks to provide mentoring to less senior colleagues, help organizations retain employees (Kram, 1985; Wanberg, Welsh, & Hezlett, 2003), and with employee onboarding. Successful onboarding is the adoption, development, and retention of employees (Friedman, 2006). It is also defined as —the process of acquiring, accommodating, assimilating and accelerating new team members” (Bradt & Vonnegut, 2009).

Mentoring has become a core strategy in leading and managing many organizations today (Lavin Colky & Young, 2006). Mentoring programs in the 21st century are no longer thought of in just the traditional pairing such as the teacher and student but now non-traditional relationships can be formed either electronically, with groups or peers, or a combination of several types. The programs now usually extend beyond face-to-face mentoring and are frequently supported by technology (Muller, 2009).
Distinguishing Formal and Informal Mentoring Programs. Organizations with mentoring programs may offer either formal or informal programs or both. Formal mentoring programs have a structured or systematic approach to the mentoring process and are usually arranged by the organization. A formal mentoring program will have specific goals and a set of practices (Kram, 1985). Formal programs typically include training for mentors, a structured matching process for the mentor and mentee relationship, tying the mentoring program to business goals with measurable results, and conducting periodic evaluations and coordination while offering ongoing support for the mentoring pairs (Lawrence, 2008). While studies find that formal mentoring programs in organizations are very effective, one usual attribute of formal mentoring programs - forced pairing of mentors and mentees - can however, be a source of discontent and suspicion (Cox, 2005) and lead to feelings of being undermined, smothered or abandoned (Kram, 1985). Additionally, ineffective matching of mentors and mentees can be troublesome for an organization and even contribute to perpetuating a "good old boy" network when matching is done informally (Lawrence, 2008).

Some organizations allow the mentee to select a mentor from a database or list of possibilities (Thorndyke, Gusic, & Milner, 2008); others rely on a matching process where the decision is made by the organization. Due to the costs of running a mentoring program a careful selection of matching mentors with mentees can be crucial to the success of the experience but also contribute to the difficulty of establishing and maintaining a formal mentoring program (Armstrong et al., 2002).

Informal mentoring relationships as opposed to formal mentoring relationships are those relationships that develop on their own (Allen & Eby, 2004). They sometimes
occur spontaneously, with the choice for a mentor influenced by the situation the individual is in at that particular time in his or her career (Cox, 2005). The mentee will seek out a mentor based on his or her knowledge or career needs at a given point in time. This can both be a positive feature of mentoring and a negative one. Individuals tend to seek out others with whom they are similar. Mentees also will seek out mentors with whom there is a mutual attraction and rapport and as a result; will tend to have a significant enhancement in the quality of the mentoring relationship (Armstrong et al., 2002). However, maximum learning can occur when dissimilarity is evident (Cox, 2005). On the other hand, frustration may occur when there are differences in interest, values and problem-solving techniques in a working relationship (Lawrence, 2008). Mentors tend to seek mentees who remind them of themselves and mentees seek mentors who are more powerful and influence their careers, rather than those people who they can learn from (Cox, 2005).

Informal mentoring relationships can be thought of as serendipitous or coincidental (Cox, 2005; Zachary, 2009) and grassroots (Lawrence, 2008). There is usually not a tracking system for the informal mentoring relationship in an organization, nor is there any training for the mentors or structured support (Murray, 2006). For those organizations that need to transmit knowledge from retiring leaders in little time, informal mentoring may not be the best choice (Lawrence, 2008) due to time constraints. However, studies have shown that mentees with informal mentors report higher levels of satisfaction with the relationship (Chao, Walz, & Gardner, 1992; Ragins & Cotton, 1999).
Organizations exploring mentoring for knowledge transfer then should consider the structure of both formal and informal programs to decide what type is most effective for their knowledge transfer needs.

**Role of a Program Facilitator.** Research on mentoring in organizations shows that the programs are effective and beneficial to mentors, mentees, and organizations. Some of the negative factors that can occur, such as a mismatch between a mentor and mentee can be avoided or minimized if an organization plans and prepares for a formal mentoring program. In order to facilitate a successful mentoring program in an organization, an appointee from top management could be designated as a program administrator.

In a survey of HR managers, Longenecker & Fink (2002) found that the ability to coach employees to improve performance, train employees, and offer good employee development practices were all key HR activities. These types of activities are related to mentoring programs.

Recent reviews of two dissertations show attempts to explore the relationship between a human resource specialist and mentor – mentee partnership. In Cole’s dissertation (2004), findings show that formal mentoring programs are linked to HR development and should be coordinated through this area of an organization. A HR director is critical to the success of a program for training mentors, matching mentors and mentees, facilitation, and overall evaluation of the program.

Grace-Rowland (2008) found that the manager of the mentoring program in an organization plays a very significant role in the mentoring relationship and organizational culture surrounding mentoring and leadership development. Her study explored a triadic
relationship of mentoring – mentor, mentee, and HR director – and attempted to
determine how the relationship can be of assistance in the career advancement of mentees
and the overall success of the program. Her findings suggest that mentoring in the
workplace should be approached by considering the social environment in which the
program takes place. A HR director plays a key role in determining the culture of the
mentoring program in an organization and mentoring programs need an appointed
facilitator to coordinate this part of an organization’s learning and retention of talent
strategy.

**New Methods and Forms of Mentoring.** With the increased use of technology,
and the exploration of ways to get results from performance interventions, organizations
are looking at various methods to efficiently offer and deliver training and management
and leadership development programs. The purpose of mentoring programs is also
changing from one of encouragement and support of the mentee to knowledge transfer.

**Electronic or E-mentoring.** Businesses are offering more training and learning
online or through e-learning to cut down on the operating costs of delivering traditional
classroom-based learning. A fairly new form of e-learning is electronic mentoring.
Electronic mentoring or e-mentoring is a mentoring relationship that exists and develops
primarily through virtual and digital communications. E-mentoring relies on electronic
communication such as e-mail, wikis, blogs, and other virtual worlds to transfer
knowledge and skills from a mentor to a mentee (Gieskes, 2010). Companies utilizing an
e-mentoring approach find that knowledge sharing goes beyond geographic and business
unit boundaries (Francis, 2009). This can be a strong benefit for organizations that have
global business units and also a large number of employees. Even though there has been
an explosion of e-mentoring programs in business, research investigating e-mentoring is lacking (Janasz, Ensher, & Heun, 2008).

As the technology used in the workplace changes, no longer does time, space, and geography define organizations and modern practices of mentoring (Lavin Colky & Young, 2006). In a study conducted by web-based mentoring company Triple Creek Associates, Inc. (2009), 88% of respondents agreed that their productivity and effectiveness at work increased due to e-mentoring. The study surveyed 13 client organizations with a total of 1,323 participants. Rockwell Collins (Francis, 2009) conducted two surveys of their e-mentoring program in 2007 and 2009. In the 2007 survey, mentees were asked to rate the ways mentoring allowed them to contribute to the company. The top three areas were, (1) receiving encouragement or support, (2) helping to understand a different point of view, and (3) gaining valuable knowledge, skills or experience. When the survey was repeated in 2009 with the same questions, mentees said the top three areas were (1) gaining valuable knowledge, skills or experience, (2) building or expanding the business network, and (3) helping to understand a different point of view. The change in the results may be explained by the increase in the use of social learning and social media by employees and the ability to learn from others by connecting virtually (Gieskes, 2010; Janasz et al., 2008).

Learning in the workplace is becoming blended, occurring in structured ways and virtually (Rossett & Marshall, 2010). This trend is expected to continue with the increase in wireless Internet and mobile technologies. Although e-mentoring has shown some promising results by expanding business networks and sources of information, reducing travel time and costs (Nancherla, 2009; Francis, 2009), one area that is hard to replicate
in the virtual world is role modeling. In a traditional mentoring relationship, mentees learn by observing their mentors’ behavior and also discussing professional challenges and receiving performance feedback (Janasz et al., 2008). The role modeling function is less likely to exist in an e-mentoring relationship because of the limited or non-existent personal contact. However, this can be a positive outcome. Janasz et al. (2008) found that using electronic communications can diminish some of the challenges of cross-gender and cross-ethnic pairing (Moore, Miller, Pitchford, & Jeng, 2008) because it increases perceived similarity and reduces observable differences.

**Peer Mentors.** Peer mentoring occurs when one person provides information or advice to another usually expecting reciprocity (Lavin Colky & Young, 2006). It can be explored by considering the benefits of a peer relationship in an organization. Kram (1985) describes this in terms of developmental functions and psychosocial functions. Developmental functions of peer relationships are (1) information sharing, (2) career-strategizing, and (3) job-related feedback. The psychosocial functions of a peer relationship are (1) confirmation of perceptions and beliefs related to work, (2) emotional support through listening and counseling, (3) personal feedback on how one is doing in the organization, and (4) friendship (Kram, 1985). Although peer relationships in the workplace can offer many opportunities, they can also be a threat (Kram, 1985). Peers are also frequently competitors for the same positions in an organization and may contribute to an employee’s fear that he or she may work for that person one day. Peers may also express points of view that may not be in the best interest of an individual (Kram, 1985).

Job applicants in a study by Horvath et al. (2008) were found to be more attracted to those organizations that offered mentoring by supervisors rather than peers. The
practice of peer mentoring is thought to be especially applicable in virtual organizations where collaboration is necessary (Lavin Colky & Young, 2006).

**Reverse Mentoring.** Reverse mentoring, where senior managers are mentored by employees who are younger than them, is becoming a more common option especially in areas where younger workers may have more expertise such as in diversity (Clutterbuck, 2005) or technology.

**External Mentoring.** External mentoring is the process of matching high-potential individuals with mentors outside their organization (Mentor Resources, 2009) or across different departments. Collaboration across different departments has been encouraged in some mentoring programs (Thorndyke et al., 2008). However, research has shown that mentoring which occurs from an individual outside of the organization may not provide as much career support or psychosocial support to the mentee as mentoring that occurs from within the organization (Baugh & Fagenson-Eland, 2005). External mentors can be perceived as more objective and safer confidants however, because they are removed from the mentee’s organization (Muller, 2009). This type of external mentoring is less likely to be found in a formal mentoring program.

**Evaluation**

A fundamental principle of effective interventions is the process of evaluation—determine the work or value of a performance improvement initiative (Pershing, 2006). Evaluation is a key component in HPT systems.

Each solution introduced in an organization must be looked at systematically and carefully evaluated to achieve the benefits of higher performance (Darby, 2010). The data
obtained can provide management with the ability to organize and address priority problem areas (Crossman et al., 2009).

The slow economic recovery is forcing companies to reevaluate their current business practices and explore ways to enhance productivity (Darby, 2010). An HPT professional could be instrumental in the latter option by becoming actively involved in all stages of planning and implementing change initiatives, through conducting organizational analyses and identifying performance gaps, designing and managing the change process, evaluating organizational performance during change implementation” (Malopinsky & Osman, 2006).

In order for a performance intervention to be effective in an organization, the process of evaluation is imperative. Evaluation involves asking questions and collecting data to help answer the questions (Brinkerhoff, 2006). The timely and accurate data collected in response to these and other questions will help all parties involved in the HPT process do their best work and get the best results” (Brinkerhoff, 2006, p. 290).

As previously mentioned, a popular evaluation model used is Kirkpatrick’s model (1994), first developed in 1959 and 1960 and updated in 1994 (Goldstein & Ford, 2002). The four levels of Kirkpatrick’s model are: (1) participant reaction, (2) participant learning, (3) on-the-job change in behavior or transfer, and (4) final results of the training. The first level, reaction, is the lowest form of evaluation; final result is the highest level. In a survey of 704 HR managers, the majority of respondents (92%) said they measure learning programs, which could include a mentoring program, at least at a level one and only 37% measure learning programs at a level four (Patel, 2010). Training professionals may not believe it is necessary or do not know how to evaluate at the higher
levels of three and four even though it is necessary in today's business climate to link learning initiatives to business goals (Kirkpatrick, 2010).

Most mentoring programs evaluate the program's effectiveness on a short-term reaction and satisfaction level. In the case of e-mentoring, “little is known about the processes and outcomes related to e-mentoring beyond descriptive statistics collected about participant reactions to and satisfaction with e-mentoring programs” (Janasz et al., 2008), despite the fact that continually evaluating a mentoring program is critical (Lawrence, 2008).

However, Thorndyke, et al. (2008), conducted a longitudinal study on the effectiveness of a mentoring program that is part of the Penn State College of Medicine Junior Faculty Development Program. In the study, researchers wanted to measure the outcomes of the mentoring program at multiple levels and move beyond measuring just the satisfaction level in a mentoring relationship, a common method of evaluation of mentoring programs.

The study considered the long-term effectiveness of mentoring in a mixed methods longitudinal study. Functional mentoring was defined as the purposeful pairing of mentors with mentees for a yearlong curriculum in career development, research, clinical practice, and education. Each mentee undertakes an individual project relevant to his or her professional responsibilities. They are then matched with a faculty member who provides expert guidance in a structured and supportive environment.

After committing to the mentoring program for nine months, the relationship was evaluated for effectiveness with a questionnaire collecting both quantitative and qualitative data. The primary outcome of the mentoring relationship is the work
accomplished on the project. Longitudinal data were collected up to 18 months after the program was completed and then collected up to five years later after completion of the project. The study explored the long-term effects of the mentoring program in terms of career success and perceived increase in capabilities and persistence of mentoring relationships. These factors were considered positive outcomes of the program. The researchers' conclusions were that functional mentoring provides an effective strategy for structured mentoring programs and that evaluation of mentoring programs must include multilevel assessment of outcomes to demonstrate impact and return on investment (ROI).

**Evaluation and Cost.** Costs of undertaking any learning initiative in an organization are always at the forefront and the ROI should be evaluated. A common formula for calculating a ROI is the ROI formula. In this formula, the costs of a program are subtracted from the total benefits to produce the net benefits, which are then divided by the costs (Phillips, 1996). Measuring the actual impact of learning in performance can be accomplished by increasing the benefit derived from the learning solution and reducing the learning solution costs (SkillSoft, 2005). In mentoring, the costs of administering the mentoring program would be subtracted from the benefits of retention and knowledge transfer.

Another method for calculating ROI used by PrimeLearning, Inc. (2001), relies on Kirkpatrick’s model (Dessinger & Moseley, 2006). Kirkpatrick’s four levels of evaluation; reaction, learning, transfer and results can be used by a business to determine if the training has impacted and taught the learners —reaction and learning, if learners have applied the learning back on the job —behavior or transfer of training, and if there
is any measurable business impact — performance change or results (PrimeLearning, Inc., 2001).

Combining the calculation of ROI with Kirkpatrick’s model will allow companies to determine if a mentoring program provides a benefit to the organization and will help the organization achieve the business results it desires by essentially adding a fifth level of evaluation to the model. The consequences of not evaluating a mentoring program are poorly trained employees and wasted money and time.

**Performance Gap Analysis**

The goal of a program performance analysis is to measure the gap between what is desired in a program and what is actually occurring (ASTD, 2010). An intervention, such as a mentoring program, introduced in an organization without careful analysis may not be meeting the needs intended. Conducting an analysis can help close any gap that may exist. Gap analysis has been used recently to gauge the quality of architectural practices and architectural services (Chow & Ng, 2007), to assess communication skills, to train hospital librarians (Brown, 2008), and to provide self-insight in medical school training and patient relations (Calhoun, Rider, Peterson, & Meyer, 2010). Researchers frequently find gaps between HR strategy and programs (Longenecker & Fink, 2002). Thus, HPT experts can identify what works well and incorporate that into a solution (Laff, 2008).

Gap analysis can enhance any data-driven evaluation of programs because it can uncover additional information. It is a systematic comparison between what is desired and what is actually happening (Calhoun et al., 2010). Performance analysis is one tool used within the context of a system (Brown, 2008) and analyzing quantitative data can
uncover a performance gap. Discovering a gap does not mean, however, that the gap will be addressed (Hathaway, 2008) it does provide a beginning point for addressing selections of performance intervention.

Organizations in the 21st century are experiencing a rapid rate of change and therefore exploring causes and consequences of failure of managers and other top officials. Studies on leaders in companies have shown that the majority of them attribute their success in whole or in part to the mentoring they received (Zachary & Fischler, 2010). Longenecker, Neubert, & Fink (2007), found that managers’ performance would suffer when there is a failure by the organization to select, promote, and develop talented people, and a failure to monitor actual performance and provide feedback. Mentoring programs that are evaluated and analyzed can help address this.
Chapter Three

Methodology

This study used a survey to conduct a performance gap analysis on mentoring programs currently offered in organizations. The analysis will determine what the organizations are currently offering versus what is desired and most important. The survey instrument was modeled after an instrument used in a study of top management development practices (Longenecker & Neubert, 2003) and was developed from the literature and interviews with mentoring experts in the field.

The research questions that were addressed in this study are as follows:

R1. Is there a significant difference between what human resource directors or the designee report to be effective mentoring practices and what mentoring practices are actually employed in Fortune 1000 companies?

R2. Is there a significant difference between what human resource directors or the designee in Fortune 1000 companies report to be the purpose(s) of their mentoring program and what the purpose(s) of a mentoring program actually is(are), as it relates to their industry?

R3. Is there a significant difference between the features of a mentoring program and the overall levels of evaluation of the mentoring program in Fortune 1000 companies?

R4. How satisfied are human resource directors or their designee in Fortune 1000 companies with the mentoring programs they are currently using?

This chapter will discuss the research design and methodology of the study and summarize the instrumentation and procedures.
Research Design and Methodology

This research study utilized a mixed methods approach with a cross-sectional survey research design. Burke Johnson & Onwuegbuzie (2004) define mixed methods research as a type of research where the researcher mixes or combines quantitative and qualitative research methods, approaches, concepts, or language into a single study offering the benefit of utilizing the strengths of each type of method and minimizing the weaknesses. Using both quantitative and qualitative methods can provide a better understanding of the research problem and questions than either method by itself (Creswell, 2008). Today's research is becoming more complex and dynamic, researchers who complement one method with another can provide superior research that offers the best chance of answering research questions (Burke Johnson & Onwuegbuzie, 2004).

A mixed methods study is conducted when both quantitative and qualitative data are collected in order to better understand a research problem more thoroughly rather than using either quantitative or qualitative data by itself to examine a research problem (Creswell, 2008). Both quantitative and qualitative data were collected at the same time in this study using a survey instrument. Thus, this study can be described as a triangulation mixed method design (Creswell, 2008), defined as simultaneously collecting both quantitative and qualitative data, merging the data, and using the results to understand the research problem. Quantitative and qualitative data were gathered concurrently, then analyzed separately, and results compared from both datasets. The advantage of this design in analyzing the overall satisfaction of the mentoring programs in Fortune 1000 companies is that it combines the strengths and the generalizability of the
quantitative data with the qualitative data and could lead to a deeper understanding of mentoring programs in Fortune 1000 companies.

Survey research is a widely used research design for measuring attitudes, opinions, self-reported behaviors, and characteristics of a population (Creswell, 2008). The ultimate goal of survey research is to learn about a large population by surveying a sample of that population (Leedy & Ormrod, 2005). The design of a survey allows the researcher to ask a series of questions to participants, summarize their responses using statistical indices, and then draw inferences about a particular population from the responses in a sample (Leedy & Ormrod, 2005).

One type of survey research is a cross-sectional design. Survey researchers use cross-sectional designs to collect data about current attitudes, opinions, or beliefs by collecting data at one point in time (Creswell, 2008). This study is a cross-sectional design that examined current practices (actual behaviors), as well as attitudes and beliefs (the ways individuals think about issues) of HR directors regarding mentoring programs.

**Instrumentation and Procedures**

**Pilot Test Procedures.** A pilot test of a survey is a procedure in which a researcher makes changes to an instrument based on feedback from a small number of individuals who complete and evaluate the instrument (Creswell, 2008). The participants in a pilot test can assist the researcher in fine-tuning the questions before data-collection begins by alerting the researcher to any problems with or misunderstanding of questions on the survey (Leedy & Ormrod, 2005). For this study, a pilot test was conducted with experts familiar with mentoring programs and practices. Specifically, a cognitive interviewing approach was used to pilot test the survey.
The cognitive interviewing approach is attributable to Tourangeau (Noel & Prizeman, 2005; Willis, 1999) and is used to evaluate sources of response error in survey questionnaires (Willis, 1999). This approach focuses on the cognitive processes that respondents use to answer survey questions such as the comprehension of the questions, retrieval from memory of relevant information, decision processes, and response processes used to answer the questions (Willis, 1999). The researcher’s goal is to prompt the individual to reveal information that provides clues as to the types of processes used to answer the survey questions (Willis, 1999). This can provide insight into how respondents formulated their answers and how misunderstandings might have biased their answers (Collins, 2003). Cognitive interviews can provide a way to address difficulties in designing questionnaires and reduce response error due to the wording of questions, format of questionnaire and order of questions (Noel & Prizeman, 2005).

In this pilot, the cognitive interviews were conducted using a combination of two methods: think-aloud interviewing and verbal probing. For the think-aloud interview, the respondents were instructed to “think aloud” as they read the question and answered it. The researcher listened to the respondents and took notes as to what the respondents were saying. Then, using retrospective probing, the researcher asked the respondents questions at the end of the interview for further clarification in their responses. Advantages of using the think-aloud method are (a) freedom from interviewer-imposed bias, (b) minimal interviewer training, and (c) open-ended format of the interview, which can provide information that is unanticipated by the interviewer. Disadvantages are: (a) the need for subject training, (b) subject resistance, (c) burden on subject, (d) tendency for the subject to stray from the task, and (e) bias in subject information processing (Willis, 1999).
Using the verbal probing technique, the researcher asked the respondent for further information relevant to question items that were previously answered using the think-aloud technique. This technique offers two advantages (Willis, 1999): (a) control of the interview by using targeted probing, and (b) ease of training of the subject. There are some disadvantages in the artificiality of the verbal probing that may produce some information that is not meaningful and the potential for bias because of the use of probes by the researcher.

**Pilot Test Training.** The volunteers in the pilot study were first trained in the think-aloud exercise (see Appendix A) before they received the instrument. The researcher had two copies of the questionnaire: one for the respondent and one for the researcher to use to take notes. At the end of the think-aloud exercise, the researcher asked the volunteers for suggestions on how the instrument could be revised.

**Pilot Test Sample.** Four volunteers, two males and two females participating in the pilot study represented expert faculty in the college of business from a midwestern university and from human resource directors in the corporate setting. Their experience varied from one year of teaching (with 15 years of industry experience) to 32 years in academia and from ten to 15 years in industry. The final survey instrument incorporated the feedback from the academic and industry experts.

**Instrumentation.** The survey instrument (see Appendix B) was modeled after an instrument used in a research study of top management development practices (Longenecker & Neubert, 2003). Changes were made in the format of the instrument for ease of reading and completion, the wording of the mentoring practices and purposes to
eliminate unclear items, and the formatting of sections of questions on the instrument to make the survey easier to complete.

The computer version of the electronic survey consisted of 14 screens and 19 questions. Major themes on the instrument included questions on mentoring practices, mentoring program features, level of evaluation of a mentoring program, purposes of mentoring programs and mentoring program satisfaction. Demographic questions concluded the survey.

Data Collection. For the questions on the instrument, data were collected from the HR directors‘ responses on the instrument. The survey was electronic, with two reminders sent to all individuals who did not submit initial responses. The web-based survey site, SurveyMonkey, was used to conduct the survey and collect responses.

A list of e-mail addresses of HR directors employed by companies listed in the annual ranking of Fortune 1000 companies by business magazine, Fortune, was obtained from Dun & Bradstreet. Dun & Bradstreet is considered the world’s leading source of commercial information on businesses. The company’s global commercial database contains more than 177 million business records (Dun & Bradstreet, 2011). Research studies on Fortune 1000 companies frequently use Dun & Bradstreet to obtain accurate business information (Garrison, 2009). The 2010 list was used, which was the most current list available. Companies appearing on the list are the largest American companies based on annual revenues (Demand Media, 2011).

Contact with participants took two forms: E-mail notification and follow-up. Potential respondents first received an e-mail invitation asking for their participation in the survey (see Appendix C). The initial e-mail invitation informed potential participants
that they should respond within one week to avoid an additional e-mail. Informing potential respondents that they will receive a reminder e-mail has been shown to be effective in increasing the response rate to electronic surveys (Klofstad, Boulianne, & Basson, 2008). If a response was not received within seven days, a follow up e-mail was sent (see Appendix D). One week after the first follow-up, another e-mail was sent encouraging participation to those who have not completed the survey (see Appendix E). Individuals with the title “Human Resource Director” were targeted as the survey respondent. The survey instrument gave the respondent the option of selecting a different position title if the title was not “Human Resource Director.”

**Sample and Target Population.** A database from Dun and Bradstreet was used to contact the participants from the population of interest. An attempt to survey the entire population of Fortune 1000 corporations headquartered in the United States was made. Out of a possible 1000 companies, a total of 819 company e-mail addresses were available to receive e-mail contacts. Of those 818 contacts, 14 had previously opted out of receiving communications through SurveyMonkey. A total of 804 e-mail invitations were sent. Out of those, 79 businesses with e-mail contacts were unavailable due to invalid e-mail addresses bringing the initial population size to 725. After the second e-mail, an additional eleven e-mail contacts were invalid bringing the population size to 714. After the third e-mail an additional five e-mail contacts were invalid bringing the population down to 709 companies.

The initial e-mail produced 38 responses (10 partial), representing a 5% return. The second e-mail sent to 687 contacts produced 20 responses (one partial). After the second e-mail, four companies contacted the researcher to decline participating in the
study and eleven additional e-mail contacts were invalid. The third e-mail was sent to 661 contacts. Of those, five additional e-mails were invalid. The third e-mail invitation produced 21 responses (four partial) for a final survey response rate of 11% across the three survey administrations.

The final sample represents a convenience sample as it was expected that many potential participants from the population would not respond. Surveys of Fortune 500 and Fortune 1000 companies have traditionally reported very low response rates, i.e., 4% (Modern Healthcare, 2009), 5-10% (Keller & Piotrowski, 1987), 15% (Information Today, 2006), and 18.25% (Garrison, 2009). The types of companies completing the survey were service \((n = 18, 37\%)\), manufacturing \((n = 13, 27\%)\), healthcare \((n = 8, 16\%)\), retail \((n = 5, 10\%)\) or other \((n = 5, 10\%)\). The overall size, by number of employees, as reported by respondents, ranged from 130 to 200,000.

**Data Analysis.** The statistical software, SPSS (Version 17.0) was used for all quantitative analyses. Table 1 depicts the research questions, variables, survey-research question-item alignment, and analysis. Specific quantitative analyses conducted were Chi-Squares and Frequencies.

The Chi-square test is used to test for differences in a relationship between two categorical variables. If the variables are independent of one another, then there is no relationship. It is used to determine how closely observed frequencies or probabilities match expected frequencies or probabilities (Leedy & Ormrod, 2005). Assumptions of Chi-square tests are that the sample is random (Vannatta, 2005), and the sample size must be large enough so that the expected count in each cell is greater than or equal to five (Minitab, 2011).
Descriptive statistics are used to describe trends in the data to a single variable or question on an instrument (Creswell, 2008). In this study, frequency count and percentages were used to compare how one result relates to all others.

**Qualitative Analysis.** Content analysis was used as a method to analyze the qualitative data. As a research tool it is a systematic and objective means to interpret the data. Content analysis is often used to analyze written, verbal or visual communications (Elo & Kyngas, 2007). In this study it was used to attain a condensed and broad description of the concepts and categories HR directors listed on their satisfaction with the mentoring program used in their company. When using content analysis to organize qualitative data, a researcher may choose to use an inductive or deductive approach. Deductive content analysis is used when the purpose of a study is to test a theory. In this study, the researcher used inductive content analysis, which includes open coding, creating categories and abstraction.

When using the inductive approach to content analysis, the researcher first reads through all the written material and creates headings to describe all aspects of the content. This method is also known as constant comparative analysis (Leech & Onwueguzie, 2007). These headings are then grouped under higher order headings in order to reduce the number of categories by collapsing those that are similar or dissimilar and chunking the data into smaller meaningful parts (Elo & Kyngas, 2007; Leech & Onwueguzie, 2007). The categories are a means of describing and understanding the information. The final step used in the qualitative analysis was abstraction. Abstraction means formulating a general description of the research topic by classifying each category using content-characteristic words (Elo & Kyngas, 2007).
Table 1

Research Questions – Variables – Survey Item – Analysis Matrix

<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Variables</th>
<th>Survey Item(s)</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQ1: Is there a significant difference between what human resource directors or the designee report to be effective mentoring practices and what mentoring practices are actually employed in Fortune 1000 companies?</td>
<td>IV: Mentoring practices employed&lt;br&gt;DV: Effective mentoring practices</td>
<td>Q2 Q4</td>
<td>Chi-square and Descriptive Analysis</td>
</tr>
<tr>
<td>RQ2: Is there a significant difference between what human resource directors or the designee in Fortune 1000 companies report to be the purpose(s) of their mentoring program and what the purpose(s) of a mentoring program actually is(are), as it relates to their industry?</td>
<td>IV: Purpose of the mentoring program as it relates to their industry&lt;br&gt;DV: What organizations report to be the purpose of their mentoring program</td>
<td>Q7 Q8</td>
<td>Chi-square and Descriptive Analysis</td>
</tr>
<tr>
<td>RQ3: Is there a significant difference between the features of a mentoring program and the overall levels of evaluation of the mentoring program in Fortune 1000 companies?</td>
<td>IV: Overall levels of evaluation of the mentoring program&lt;br&gt;DV: Features of the mentoring program</td>
<td>Q5 Q6</td>
<td>Chi-square and Descriptive Analysis</td>
</tr>
<tr>
<td>RQ4: How satisfied are human resource directors or their designee in Fortune 1000 companies with the mentoring programs they are currently using?</td>
<td>Qual. Var: Mentoring Program Satisfaction</td>
<td>Q12</td>
<td>Content Analysis</td>
</tr>
</tbody>
</table>

Note. RQ = research question; IV = independent variable; DV = dependent variable
Delimitations

This research will not consider mentoring programs offered in educational institutions such as universities, colleges, or school districts, nor will it consider business organizations other than the sample of Fortune 1000 firms headquartered in the United States (e.g., small businesses, nonprofit organizations, government agencies, healthcare organizations, etc.).

The research will also not consider organizations headquartered outside of the United States of America.

Limitations

In any research study, quantitative or qualitative, the validity of the research project and the extent that a researcher can draw meaningful and defensible conclusions from the data is subject to limitations (Leedy & Ormrod, 2005) and threats to the internal and external validity of the study. This study will offer important findings to the literature, to organizations currently operating a mentoring program, and to those organizations considering implementing mentoring as a performance improvement intervention. Yet, there are some limitations to the proposed study.

Quantitative Limitations. First, by sampling Fortune 1000 firms headquartered in the United States, the results may not be generalizable to employees in organizations outside of the sample. Another limitation could be in the response rate from the HR directors. Those HR directors not responding to the survey may differ in some way or the mentoring program at the organization may differ in some way from the responses received.
A final limitation of the study is the use of self-report data. Self-report data can have perception differences by the respondent and also be intentionally misrepresented to reflect socially acceptable responses. To combat the limitation of self-report data, cognitive interviews were used to modify the instrument before data collection.

Identifying threats to internal and external validity helps to provide direction in future research (Onwuegbuzie, 2000). Internal validity is the extent to which the research design and the data it yields allow the researcher to draw accurate conclusions. External validity addresses a study’s ability to draw correct inferences from the sample data to other persons, settings, and situations (Creswell, 2008). In this study, four threats to internal validity are acknowledged: (a) instrumentation, (b) maturation bias, (c) confounding variables, and (d) behavior bias. Five threats to external validity are acknowledged: (a) population, and (b) ecological, (c) inadequate sampling, (d) low response rate, and (e) nonresponse bias. The last three threats are common to survey research.

**Internal Threats to Validity**

**Instrumentation.** The instrumentation threat can occur when scores from the research have low reliability, are not valid scores, and have inadequate content, criterion, and/or construct-related validity. This threat can never be fully eliminated because outcome measures can never yield scores that are perfectly reliable or valid (Onwuegbuzie, 2000). The threat can however be minimized. Through the pilot testing process, and use of a panel of experts, this threat was minimized. For the qualitative portion of the instrument, responses were analyzed using content thematic analysis, a
process that involves coding and segregating the data into themes and codes (Glesne, 2006).

**Maturation bias.** The maturation bias or the biological, intellectual, emotional maturity of the respondent can be a factor in this study, particularly in the years of experience that a HR director may have. In an effort to minimize this threat, a demographic question on years of experience is listed on the instrument to allow the researcher to look for patterns in responses based on the years of experience to see if this is in fact a major limitation.

**Confounding Variables.** In this threat, some type of outside factor could occur while the survey is sent to the sample. For example, a study could be released on mentoring showing that the programs are ineffective. Thus, HR directors may be less likely to report or report favorably on their program.

**Behavior Bias.** Behavior bias can occur when an individual completing a survey has a strong personal bias in favor or against the items being measured. It is possible that HR directors responding to the survey may have a strong opinion towards mentoring and those that respond may in some way differ from those that do not because of their strong opinion on mentoring. In an effort to minimize this threat, a qualitative question was added at the end of the instrument to look for this pattern. It is also possible that HR directors who do not have a mentoring program in place, or feel their mentoring program is deficient in some way may not respond.

**External Validity**

**Population Validity.** Population validity refers to the extent that the findings are generalizable from the sample of individuals in the study to the larger population of
individuals and exists in nearly all studies (Onwuegbuzie, 2000). Results of this study may not be generalizable to employees in organizations outside of the population of Fortune 1000 companies. In an effort to reduce this threat, the study could be replicated with individuals with other roles in an organization outside of human resources and/or training and development directors. However, since a broad population of Fortune 1000 corporations was targeted, these results should be considerably representative of most business organizations.

**Ecological Validity.** Ecological validity refers to the extent the findings from the study can be generalized across settings, conditions, variables, and contexts. Like population validity, this threat exists in nearly all studies (Onwuegbuzie, 2000). Businesses can differ substantially, and therefore, the findings in this study may not apply to other businesses outside of the Fortune 1000 firms or other types of organizations like small businesses, nonprofit organizations, government agencies, and healthcare organizations. However, since a broad population of Fortune 1000 corporations was targeted, these results should be considerably representative of most business organizations.

**Survey Research Limitations**

In survey research, certain errors can limit a researcher’s ability to draw valid inferences from the sample to the population (Creswell, 2008). The four errors are: (a) coverage, (b) measurement, (c) nonresponse, and (d) sampling. The errors and attempts to reduce them will be explained below.

Coverage error refers to not having a complete list of the intended population. A list of all Fortune 1000 companies with e-mail addresses (target population) was obtained
from Dun & Bradstreet and an attempt was made to target the survey to the human resource director at the corporation and keep the instrument brief. The sampling frame and target population were kept the same to reduce this error.

Measurement error refers to limitations from confusing items in the instrument. To reduce measurement error, the instrument was pilot tested with a panel of experts before sending to the sample. Participants considered if the questions were poorly worded, ambiguous, or if there were questions that did not make sense. Questions on the instrument were combined into sections to allow the researcher to use statistical techniques to look for patterns.

In order to increase the survey response rate and reduce the nonresponse error, HR directors, who typically have the responsibility of overseeing a mentoring program, were the targeted recipients. Also, the instrument was kept as brief as possible. The survey was in an electronic survey format and sent to HR directors at corporations. As an incentive to participants, an executive summary of the results of the study will be made available to all respondents to use as an evaluation and analysis tool for their mentoring program. The contact with participants took two forms: e-mail invitation and follow-up. Potential respondents first received the survey through e-mail. If they did not respond in one week, a follow up e-mail was sent. One week after the first follow-up e-mail an additional follow-up e-mail was sent. One final e-mail invitation was sent after the second follow-up e-mail. Individuals with the title “Human Resource Director” were targeted as the survey respondent. The survey instrument gave the respondent the option of selecting a different position title if the title is not “Human Resource Director.”
All samples are subject to sampling error (Onwuegbuzie, 2000). To reduce sampling error, the entire population of Fortune 1000 companies with HR directors e-mail addresses was selected to participate in this study.

**Qualitative Limitations**

Qualitative researchers frequently use triangulation—comparing multiple data resources in search of common themes—to support the validity of their findings. Additionally, qualitative researchers use extensive time in the field, thick description, feedback from others and respondent validation (Leedy & Ormrod, 2005). Qualitative limitations of this study include the absence of an opportunity to discuss with the participants their responses. Due to the nature of the electronic survey, the researcher could not go back and check with the respondent to authenticate the data and verify any unclear or written responses.

Clarification of researcher bias or the subjectivity of the researcher is a limitation in qualitative research (Glesne, 2006). For this study, the researcher may see themes in the data which support the researchers’ own feelings towards mentoring. The researcher reflected upon the personal subjectivity of mentoring programs and used this reflection to monitor it in the research study to reduce this limitation.
Chapter 4

Results

The purpose of this chapter is to present the results of the survey used for a performance gap analysis on mentoring programs currently offered in Fortune 1000 companies. The performance gap analysis results describe what the companies are currently offering versus what is desired and most important. The results of the data analysis are organized by four research question themes. The quantitative research question themes include; (a) mentoring practices, (b) purposes of a mentoring program and (c) features of a mentoring program as they relate to levels of evaluation and finally the qualitative research question regarding (d) mentoring program satisfaction.

Quantitative Research Questions

Mentoring Practices. In order to determine if there was a performance gap analysis in mentoring programs offered in Fortune 1000 companies, HR directors were first asked to select from a list of eight mentoring practices, those practices currently being used in their company to help employees improve their performance with mentoring. Those responses were crosstabulated with what HR directors selected as the top five most important and effective mentoring practices in their industry. Chi-square tests for independence were used to test for differences between variables of the mentoring practice use and its effectiveness as a practice as it relates to the industry of the HR director’s company. Table 2 displays the mentoring practice, associated p-value, and practical significance of the mentoring practices based on the Chi-square category with the highest percentage of response.
Table 2

Significance of Mentoring Practice and Effectiveness

<table>
<thead>
<tr>
<th>Mentoring Practice</th>
<th>p-Value</th>
<th>Practical Significance</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal Mentoring</td>
<td>0.004</td>
<td>Use it X effective</td>
<td>56</td>
</tr>
<tr>
<td>Informal Mentoring</td>
<td>0.000</td>
<td>Use it X effective</td>
<td>64</td>
</tr>
<tr>
<td>Electronic Mentoring</td>
<td>0.014</td>
<td>Do not use it X not effective</td>
<td>62</td>
</tr>
<tr>
<td>External Mentoring</td>
<td>0.002</td>
<td>Do not use it X not effective</td>
<td>54</td>
</tr>
<tr>
<td>Group Mentoring</td>
<td>0.382</td>
<td>Do not use it X not effective</td>
<td>52</td>
</tr>
<tr>
<td>Reverse Mentoring</td>
<td>0.024</td>
<td>Do not use it X not effective</td>
<td>80</td>
</tr>
<tr>
<td>Superior-to-Subordinate Mentoring</td>
<td>0.004</td>
<td>Use it X effective</td>
<td>36</td>
</tr>
<tr>
<td>Peer-to-Peer Mentoring</td>
<td>0.005</td>
<td>Do not use it X not effective</td>
<td>38</td>
</tr>
<tr>
<td>Other</td>
<td>0.837</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. N = 50. Use it = a current practice in the company. Do not use it = as a current practice in the company.

**Formal Mentoring.** A formal mentoring relationship was a mentoring practice in 64% (n = 32) of Fortune 1000 companies. A significant difference was found between formal mentoring use and formal mentoring effectiveness; \( x^2 (1, n = 50) = 8.42, p < .01 \). More HR directors responded that formal mentoring is an effective practice and they use it in their company compared to other categories (n = 28, 56%).

**Informal Mentoring.** Informal mentoring relationships were used in 74% (n = 37) of Fortune 1000 companies. A significant difference was found between informal mentoring use and informal mentoring effectiveness; \( x^2 (1, n = 50) = 14.81, p < .01 \). More HR directors responded that informal mentoring is an effective practice and they use it compared to other categories (n = 32, 64%).
**Electronic Mentoring.** Electronic mentoring relationships were used in 18% \((n = 9)\) of the Fortune 1000 companies. A significant difference was found between electronic mentoring use and electronic mentoring effectiveness; \(x^2(1, n = 50) = 6.062, p < .05\). More HR directors did not use electronic mentoring and believed that it was not effective as a practice more than any other category \((n = 31, 62\%)\). When electronic mentoring was used \((n = 9, 18\%)\), it was reportedly effective 67% of the time, and not effective 33% of the time.

**External Mentoring.** External mentoring relationships were used in 28% \((n = 14)\) of Fortune 1000 companies. A significant difference was found between external mentoring use and external mentoring effectiveness; \(x^2(1, n = 50) = 9.223, p < .05\). More HR directors did not use external mentoring and believed it was not effective as a practice more than any other category \((n = 27, 54\%)\). When external mentoring was used \((n = 14, 28\%)\), it was reportedly effective 71% of the time, and not effective 29% of the time.

**Group Mentoring.** Group mentoring relationships were used in 20% \((n = 10)\) of Fortune 1000 companies. No significant difference was found between group mentoring use and group mentoring effectiveness; \(x^2(1, n = 50) = .764, p > .05\). More HR directors did not use group mentoring and believed it was not effective as a practice than any other category \((n = 26, 52\%)\). When group mentoring was used \((n = 10, 20\%)\), it was reportedly effective 50% of the time, and not effective 50% of the time.

**Reverse Mentoring.** Reverse mentoring relationships were used in 6% \((n = 3)\) of Fortune 1000 companies. A significant difference was found between reverse mentoring use and reverse mentoring effectiveness; \(x^2(1, n = 50) = 5.121, p < .05\). More HR
directors did not use reverse mentoring and believed it was not effective as a practice than any other category \((n = 40, 80\%)\). When reverse mentoring was used \((n = 3, 6\%)\), it was reportedly effective 67\% of the time, and not effective 33\% of the time.

**Superior-to-subordinate Mentoring.** Superior-to-subordinate mentoring relationships were used in 48\% \((n = 24)\) of Fortune 1000 companies. A significant difference was found between superior-to-subordinate mentoring use and superior-to-subordinate mentoring effectiveness; \(x^2(1, n = 50) = 8.194, p < .01\). Although a little more than half of HR directors \((n = 26, 52\%)\) do not use superior-to-subordinate mentoring, more HR directors who used superior-to-subordinate mentoring and believed it was effective as a practice were slightly larger by percentage than any other category \((n = 18, 36\%)\) compared to those who do not use it and believe it is not effective \((n = 17, 34\%)\).

**Peer-to-Peer Mentoring.** Peer-to-peer mentoring relationships were used in 46\% \((n = 23)\) of Fortune 1000 companies. A significant difference was found between peer-to-peer mentoring use and peer-to-peer mentoring effectiveness; \(x^2(1, n = 50) = 7.936, p < .01\). More HR directors do not use peer-to-peer mentoring and believed it was not effective as a practice than any other category \((n = 19, 38\%)\). When peer-to-peer mentoring was used \((n = 23, 46\%)\), it was reportedly effective 70\% of the time, and reportedly not effective 30\% of the time.

**Other Mentoring Practices.** Only one HR director from the sample \((n = 50)\) responded that another mentoring practice was used. Therefore, no statistical significance could be determined.
**Performance Gap Analysis of Mentoring Program Practices.** After the Chi-square tests for independence were completed, an analysis of mentoring practices by percentages of differences of effectiveness as a practice and the percentage of companies actually employing the practice was computed (see Table 3). The top five most effective mentoring practices reported by HR directors by percentage of response were formal mentoring, informal mentoring, superior-to-subordinate mentoring, peer-to-peer mentoring and equally reported external mentoring and group mentoring. The top five mentoring practices actually used in Fortune 1000 companies \((N = 50)\) as reported by HR directors were formal mentoring, informal mentoring, superior-to-subordinate mentoring, peer-to-peer mentoring and external mentoring. The top three largest performance gaps were found in group mentoring (18%), electronic mentoring (14%) and reverse mentoring (12%).

Table 3

**Performance Gap Analysis of Mentoring Practices**

<table>
<thead>
<tr>
<th>Mentoring Program Practice</th>
<th>% Effective</th>
<th>% Used</th>
<th>% Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal Mentoring</td>
<td>74</td>
<td>64</td>
<td>10</td>
</tr>
<tr>
<td>Informal Mentoring</td>
<td>72</td>
<td>74</td>
<td>-2</td>
</tr>
<tr>
<td>Electronic Mentoring</td>
<td>32</td>
<td>18</td>
<td>14</td>
</tr>
<tr>
<td>External Mentoring</td>
<td>38</td>
<td>28</td>
<td>10</td>
</tr>
<tr>
<td>Group Mentoring</td>
<td>38</td>
<td>20</td>
<td>18</td>
</tr>
<tr>
<td>Reverse Mentoring</td>
<td>18</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>Superior-to-Subordinate Mentoring</td>
<td>54</td>
<td>48</td>
<td>6</td>
</tr>
<tr>
<td>Peer-to-Peer Mentoring</td>
<td>48</td>
<td>46</td>
<td>2</td>
</tr>
</tbody>
</table>

*Note.* \(N = 50.\)
**Purposes of a Mentoring Program.** In order to determine if a performance gap existed in the purposes of mentoring programs offered in Fortune 1000 companies, HR directors were asked to describe the importance of each purpose of a mentoring program as it would relate to their industry. Those responses were cross tabulated to what HR directors said the purpose of their current mentoring program was. Chi-square tests for independence were used to test for differences between variables of the importance of a mentoring practice and its purpose as it would relate to their industry. Table 4 displays the purpose of a mentoring program, associated p-value, and practical significance of the mentoring program purpose as it relates to the industry and the percentage of response.

Table 4

*Significance of Mentoring Program Purposes within Industry*

<table>
<thead>
<tr>
<th>Mentoring Program Purposes</th>
<th>p-Value</th>
<th>Practical Significance</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Onboarding-Management</td>
<td>0.296</td>
<td>Important industry X company use</td>
<td>59</td>
</tr>
<tr>
<td>Employee Onboarding-Non-Management</td>
<td>0.020</td>
<td>Important industry X company use</td>
<td>51</td>
</tr>
<tr>
<td>Management &amp; Leadership Development-Informal</td>
<td>0.007</td>
<td>Important industry X company use</td>
<td>68</td>
</tr>
<tr>
<td>Management &amp; Leadership Development-Formal</td>
<td>0.090</td>
<td>Important industry X company use</td>
<td>74</td>
</tr>
<tr>
<td>Knowledge Transfer</td>
<td>0.439</td>
<td>Important industry X company use</td>
<td>61</td>
</tr>
<tr>
<td>Recruitment</td>
<td>0.174</td>
<td>Important industry X company use</td>
<td>49</td>
</tr>
<tr>
<td>Retention</td>
<td>0.198</td>
<td>Important industry X company use</td>
<td>53</td>
</tr>
</tbody>
</table>

*Note. N = 50.*

**Employee Onboarding – Management Positions.** Employee onboarding for management positions was a reported purpose of mentoring programs in 62% \((n = 24)\) of
Fortune 1000 companies. No significant statistical difference was found between the importance of employee onboarding for management positions in the industry and the actual use of employee onboarding for management positions as a current purpose of a mentoring program; \( x^2(1, n = 39) = 1.092, p > .05 \). This means that the expected proportion of importance of employee onboarding for management positions in the industry when crossed by the actual use of employee onboarding for management positions does not significantly differ from what was expected. Although the majority of HR directors \( (n = 36, 92\%) \) felt employee onboarding for management positions was important for their industry, only 59\% \( (n = 23) \) who believe it is important are also using it.

**Employee onboarding non-management positions.** Employee onboarding for non-management positions was a reported purpose of mentoring programs in 54\% \( (n = 21) \) of Fortune 1000 companies. A significant difference was found between the importance of employee onboarding for non-management positions in the industry and the actual use of employee onboarding for non-management as a current purpose of a mentoring program; \( x^2(1, n = 39) = 5.372, p < .05 \). This means that the expected proportion of importance of employee onboarding for non-management positions in the industry when crossed by the actual use of employee onboarding for non-management positions significantly differs from what was expected. Although the majority of HR directors \( (n = 32, 82\%) \) felt employee onboarding for non-management positions is important for their industry, only 51\% \( (n = 20) \) who believe it is important are also using it.
Management and leadership development (informal). The informal development of management and leadership was a reported purpose of mentoring programs in 71% \((n = 27)\) of Fortune 1000 companies. A significant difference was found between the importance of informal management and leadership development in the industry and the actual use of informal management and leadership development; \(x^2(1, n = 38) = 7.296, p < .01\). This means that the expected proportion of importance of informal management and leadership development in the industry when crossed by the actual use of informal management and leadership development significantly differs from what was expected. Although the majority of HR directors \((n = 33, 87\%)\) felt that informal management and leadership was important for their industry, only 68% \((n = 26)\) who believe it is important are also using it.

Management and leadership development (formal). Formal development of management and leadership was a reported purpose of mentoring programs in 74% \((n = 28)\) of Fortune 1000 companies. No statistical significant difference was found between the importance of formal management and leadership development in the industry and the actual use of formal management and leadership development; \(x^2(1, n = 38) = 2.876, p > .05\). This means that the expected proportion of importance of formal management and leadership development in the industry when crossed by the actual use of informal management and leadership development does not significantly differ from what was expected. Although the majority of HR directors \((n = 37, 97\%)\) felt formal management and leadership is important for their industry, only 74% \((n = 28)\) who believe it is important are using it.
Knowledge Transfer. Knowledge transfer was a reported purpose of mentoring programs in 63% \((n = 24)\) of Fortune 1000 companies. No statistical significant difference was found between the importance of knowledge transfer in the industry and the actual use of knowledge transfer as a reported purpose; \(x^2(1, \ n = 38) = .599, \ p > .05\). This means that the expected proportion of importance of knowledge transfer in the industry when crossed by the actual use of knowledge transfer does not significantly differ from what was expected. Although the majority of HR directors \((n = 37, \ 97\%)\) felt knowledge transfer is important for their industry, only 61% \((n = 23)\) who believe it is important are using it.

Recruitment. Recruitment of new employees was a reported purpose of mentoring programs in 22% \((n = 8)\) of Fortune 1000 companies. No statistical significant difference was found between the importance of recruitment of new employees in the industry and the actual use of recruitment as a mentoring program purpose; \(x^2(1, \ n = 37) = 1.851, \ p > .05\). This means that the expected proportion of importance of recruitment in the industry when crossed by the actual use of recruitment does not significantly differ from what was expected. The majority \((n = 25, \ 68\%)\) of HR directors said the purpose of a mentoring program for recruitment is important in their industry; however most \((78\%)\) are not using it as a reported purpose of their current mentoring program and 49% \((n = 18)\) of HR directors not using it, do not believe it is important for their industry.

Retention. Retention of current employees was a reported purpose of mentoring programs in 55% \((n = 21)\) of Fortune 1000 companies. No statistical significant difference was found between the importance of using a mentoring program for retention of current employees in the industry and the actual use of a mentoring program for
retention of new employees; \( x^2(1, n = 38) = 1.656, p > .05 \). This means that the expected proportion of importance of retention in the industry when crossed by the actual use of retention does not significantly differ from what was expected. The majority \((n = 34, 90\%)\) of HR directors said the purpose of a mentoring program for retention is important in their industry; however only 53\% \((n = 20)\) of HR the directors who believe it is important for their industry are using it.

**Other Mentoring Program purpose.** No measures of association were computed for the crosstabulation of another purpose of mentoring programs in the industry and the current purpose of a mentoring program in the companies. Therefore, no statistical significance could be computed.

**Performance Gap Analysis of Mentoring Programs’ Purposes.** After the Chi-square tests for independence were completed, an analysis of mentoring purposes by percentages of differences of important purposes of a mentoring program for the industry and the percentage of companies actually employing the purpose within their company was computed (see Table 5). All listed purposes had performance gaps (see Table 5). The top three largest performance gaps in mentoring programs’ purposes were found in recruitment (46\%), retention (35\%), and knowledge transfer (34\%).
Table 5

*Performance Gap Analysis of Mentoring Program Purposes*

<table>
<thead>
<tr>
<th>Mentoring Program Purpose</th>
<th>% Important for Industry</th>
<th>% Using It</th>
<th>% Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Onboarding-Management</td>
<td>92</td>
<td>62</td>
<td>30</td>
</tr>
<tr>
<td>Employee Onboarding-Non-Management</td>
<td>82</td>
<td>54</td>
<td>28</td>
</tr>
<tr>
<td>Management &amp; Leadership Development-Informal</td>
<td>87</td>
<td>71</td>
<td>16</td>
</tr>
<tr>
<td>Management &amp; Leadership Development-Formal</td>
<td>97</td>
<td>74</td>
<td>23</td>
</tr>
<tr>
<td>Knowledge Transfer</td>
<td>97</td>
<td>63</td>
<td>34</td>
</tr>
<tr>
<td>Recruitment</td>
<td>68</td>
<td>22</td>
<td>46</td>
</tr>
<tr>
<td>Retention</td>
<td>90</td>
<td>55</td>
<td>35</td>
</tr>
</tbody>
</table>

*Note. N = 50.*

**Features of a Mentoring Program and Levels of Evaluation**

*Quantitative Results for Features of a Mentoring Program and Levels of Evaluation*

**Evaluation.** As stated earlier, without careful evaluation, analysis, and monitoring, performance gaps may occur. Simple frequency analysis can be useful to compare how one response relates to all others. Frequency tables of HR directors’ responses were computed for each of the three program features: (a) training for mentors on mentoring, (b) forced matching and pairing of mentors and mentees, and (c) ongoing organizational support for mentoring relationships. A frequency table was also computed for HR directors’ responses of the overall highest level of evaluation conducted on the current mentoring program using Kirkpatrick’s model (1994). Additionally, Chi-square tests for independence were used to test for differences between the features of a mentoring program and the overall levels of evaluation of the mentoring program.
Training for Mentors on Mentoring. Human resource directors \((n = 42)\) were asked to describe the features of their current mentoring program using a scale as displayed in Table 6. Three program features were given with the option of specifying a program feature not listed. Results of the first program feature, training for mentors on mentoring, are displayed in Table 6. The largest response chosen was Yes, Required \((YR)\), \((n = 16, 38\%)\), the least response chosen was No, and would not like to offer \((NO)\), \((n = 4, 9.5\%)\).

Table 6

Mentoring Program Features Training for Mentors on Mentoring

<table>
<thead>
<tr>
<th>Feature</th>
<th>%</th>
<th>((f))</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO = No, and would not like to offer</td>
<td>9.5</td>
<td>((n = 4))</td>
</tr>
<tr>
<td>NL = No, but would like to offer</td>
<td>26.2</td>
<td>((n = 11))</td>
</tr>
<tr>
<td>YO = Yes, optional</td>
<td>26.2</td>
<td>((n = 11))</td>
</tr>
<tr>
<td>YR = Yes, required</td>
<td>38.1</td>
<td>((n = 16))</td>
</tr>
</tbody>
</table>

Note. \(N = 42\).

No statistical significant difference was found between training for mentors on mentoring and levels of evaluation of the mentoring program; \(\chi^2(4, n = 41) = .510, p > .05\). The largest category of HR directors reporting training and evaluation \((n = 26, 63\%)\), evaluate the mentoring program at level one \((n = 8, or 31\%)\).

Forced Matching and Pairing of Mentors and Mentees. Results \((n = 41)\) of the second program feature, forced matching and pairing of mentors and mentees, are displayed in Table 7. The largest response chosen was NO or \(f = 20\), the least response chosen was NL or \(f = 1\) (see Table 7).
Table 7

*Frequency of Forced Matching and Pairing of Mentors and Mentees*

<table>
<thead>
<tr>
<th>Response</th>
<th>%</th>
<th>(f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO = No, and would not like to offer</td>
<td>48.8</td>
<td>(n = 20)</td>
</tr>
<tr>
<td>NL = No, but would like to offer</td>
<td>2.4</td>
<td>(n = 1)</td>
</tr>
<tr>
<td>YO = Yes, optional</td>
<td>12.2</td>
<td>(n = 5)</td>
</tr>
<tr>
<td>YR = Yes, required</td>
<td>36.6</td>
<td>(n = 15)</td>
</tr>
</tbody>
</table>

*Note. N = 41.*

No statistical significant difference was found between forced matching and pairing of mentors and mentees and levels of evaluation of the mentoring program; $x^2 (4, n = 40) = .293, p > .05$. Of HR directors reporting forced matching and pairing of mentors and mentees and evaluation of the mentoring program ($n = 19, 48\%$), the largest category of HR directors evaluates the mentoring program at level one ($n = 7, 37\%$).

**Ongoing organizational support for mentoring relationships.** Results ($n = 42$) of the third program feature, ongoing organizational support for mentoring relationships are displayed in Table 8. The largest response was YO or $f = 20$. Only one HR director did not want to offer this feature.

Table 8

*Frequency of Ongoing Organizational Support for Mentoring Relationships*

<table>
<thead>
<tr>
<th>Response</th>
<th>%</th>
<th>(f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO = No, and would not like to offer</td>
<td>2.4</td>
<td>(n = 1)</td>
</tr>
<tr>
<td>NL = No, but would like to offer</td>
<td>16.7</td>
<td>(n = 7)</td>
</tr>
<tr>
<td>YO = Yes, optional</td>
<td>47.6</td>
<td>(n = 20)</td>
</tr>
<tr>
<td>YR = Yes, required</td>
<td>33.3</td>
<td>(n = 14)</td>
</tr>
</tbody>
</table>

*Note. N = 42.*
No statistical significant difference was found between ongoing organizational support for mentoring relationships and levels of evaluation of the mentoring program; $x^2 (4, n = 41) = .336, p>.05$. Of HR directors reporting ongoing organizational support as a feature of the mentoring program and levels of evaluation ($n = 33, 81%$), the largest category of HR directors evaluate the mentoring program at level three ($n = 10, 30%$).

Only one HR director specified a program feature, an annual intern program, not listed on the survey instrument, and therefore no frequency table is shown.

**Highest Level of Evaluation.** Table 9 shows the frequency and percentage of the highest level of evaluation for the mentoring program conducted within the company.

<table>
<thead>
<tr>
<th>Highest Level of Evaluation</th>
<th>%</th>
<th>(f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1 = Reaction</td>
<td>26.2</td>
<td>(n = 11)</td>
</tr>
<tr>
<td>Level 2 = Learning</td>
<td>14.3</td>
<td>(n = 6)</td>
</tr>
<tr>
<td>Level 3 = Behavior</td>
<td>23.8</td>
<td>(n = 10)</td>
</tr>
<tr>
<td>Level 4 = Results</td>
<td>21.4</td>
<td>(n = 9)</td>
</tr>
<tr>
<td>Not at all</td>
<td>14.3</td>
<td>(n = 6)</td>
</tr>
</tbody>
</table>

*Note. N = 42.*

As previously stated, the four levels of Kirkpatrick's model (1994) are: (1) participant reaction, (2) participant learning, (3) on-the-job change in behavior or transfer, and (4) final results of the training. The lowest form of evaluation is level one and level four is the highest level. Overall, results of this study show the largest number of companies ($n = 11, 26\%$) evaluate their mentoring program at level one followed by
level three on-the-job change in behavior \((n = 10, 24\%)\), level four results \((n = 9, 21\%)\) and level two participant learning \((n = 6, 14\%)\) or not at all \((n = 6, 14\%)\).

**Qualitative Research Question**

**Mentoring Program Satisfaction Results.** Thirty-seven (74% of total respondents) HR directors taking the survey answered the question regarding mentoring program satisfaction. The results were almost evenly split. A total of 18 HR directors (48.6%) stated they were satisfied with their current mentoring program and 19 HR directors (51.4%) stated they were *not* satisfied with their current mentoring program.

Of the 18 HR directors who responded that they were satisfied with their current mentoring program, only four (22.2%) gave responses to explain their satisfaction. Two of the HR directors stated the program was in its early and developing stage and they are not sure if they will stay satisfied with the mentoring program. The third HR director stated that the mentoring program is “on the right track” and “in pockets, we are excelling”. The last HR director stated the company “continuously analyzes the effectiveness of the program” and is working to update it with current employee expectations.

Using content analysis as a qualitative method to interpret the responses from HR directors who were *not* satisfied with their current mentoring program, five major themes or categories were identified as shown in Table 10.
Table 10

**HR Directors Responses of Non-satisfaction of Current Mentoring Program**

<table>
<thead>
<tr>
<th>Category and Illustrative Response</th>
<th>Respondents who were not satisfied f (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needs More Features</td>
<td>6 (31.6)</td>
</tr>
<tr>
<td>&quot;It is a formal program and needs to be more open to other ways to use mentoring.&quot;</td>
<td></td>
</tr>
<tr>
<td>More Time and Support are Needed</td>
<td>6 (31.6)</td>
</tr>
<tr>
<td>&quot;Need more time and investment to take it to the next level.&quot;</td>
<td></td>
</tr>
<tr>
<td>Needs to be Expanded</td>
<td>4 (21.1)</td>
</tr>
<tr>
<td>&quot;Not available broadly.&quot;</td>
<td></td>
</tr>
<tr>
<td>New Program</td>
<td>3 (15.8)</td>
</tr>
<tr>
<td>&quot;Just getting started over the last couple of years. Lots of potential.&quot;</td>
<td></td>
</tr>
<tr>
<td>Lack of Awareness on the Importance of Mentoring</td>
<td>2 (10.5)</td>
</tr>
<tr>
<td>&quot;We need to ensure that all leaders believe they have a responsibility to formally mentor and we need to develop learning programs for mentors and mentees.&quot;</td>
<td></td>
</tr>
</tbody>
</table>

*Note. N = 19. Total percentage does not equal 100% as some participants reported multiple reasons.*

The majority of responses from the 19 HR directors who were not satisfied with the current mentoring program offered in their company are associated with needing more features, time, support and desire to expand the program. No responses, however, were made that showed negativity toward the concept of mentoring or mentoring programs within the company.
Chapter 5

Conclusions, Implications, and Recommendations

Summary of Study

The current decade is expected to bring an enormous need for skills to keep productivity high due to the planned retirement of the baby boom generation (Kaye & Cohen, 2008). The expected mass retirement of executives in US companies has lead many organizations to plan for a transfer of knowledge between top level executives and the next generation of business leaders. Mentoring programs are becoming more popular and pervasive in companies as one way to transfer this knowledge and provide future business leaders with the institutional knowledge and skills necessary to maintain and increase performance levels. Additionally, the interest in mentoring among learning professionals is high. The second most viewed article of the year on ASTD’s web site was “Shifting the Shape of Mentoring” (Francis, 2009).

Even though mentoring programs are increasingly offered in companies, the current practices and features of the mentoring programs are not different from traditional forms of mentoring. New mentoring practices and features of mentoring programs for the 21st century workplace could achieve better results for companies in today’s business climate of global competitiveness. Conducting a performance gap analysis is one way to determine the specific areas of mentoring programs that should be developed and/or redesigned in order to keep organizations competitive.

This study was a performance gap analysis of mentoring programs currently offered in Fortune 1000 companies. These companies were selected because their business practices influence other companies throughout the world. Findings from this
study are valuable to any organization with a current mentoring program or any organization considering implementing a mentoring program. Leaders, managers, HR directors and human performance consultants will find the results of this study helpful for improving performance with mentoring in any organization.

**Summary and Discussion of Findings**

This study approached the research on mentoring programs utilizing a system’s viewpoint of performance (Addison & Haig, 2006; Andreadis, 2009; ISPI, 2002) and applying HPT techniques, specifically the first step in the HPT model – performance analysis (Langdon, 2006). Previous research on mentoring programs has looked at specific benefits to mentors, mentees, and organizations (Chao et al., 1992; Kram, 1985; Ragins & Cotton, 1999), matching mentors and mentees (Kram, 1985; Tennant, 1988), types of mentoring (Lawrence, 2008; Muller, 2009) and systems theory as applied to mentoring (Cole, 2004). This research is helpful to the study of mentoring, because no other study on mentoring has conducted a performance gap analysis on large corporations, specifically Fortune 1000 companies, utilizing a mixed methods approach and applying HPT techniques. This study is helpful for improving mentoring practices by determining what organizations need to know regarding mentoring in order to improve performance in the 21st century workplace.

The immediate goal of any performance intervention is to improve performance. Utilizing the systems model is important because the model focuses first on the performance results desired and then makes adjustments. This study applied the systems viewpoint by surveying HR directors to determine what they thought was effective and important in their industry—the results desired. Additionally, part of the systems
viewpoint is to gain information about the quality of a performance intervention from within the system and then make adjustments. Information was obtained from within Fortune 1000 companies by asking HR directors their opinion on what practices, programs, and features existed within their current mentoring program and the current levels of evaluation of their mentoring program.

The performance gap analysis conducted in this study analyzed the differences between what HR directors reported to be effective mentoring program practices versus practices actually employed; the importance of mentoring programs purposes versus the use of mentoring for that purpose; the features of a mentoring program; and the overall levels of evaluation of a mentoring program. Results of the study found performance gaps in each of the mentoring programs’ practices listed in the study and performance gaps within each of the mentoring program purposes. Results of the study also revealed important data on the features of mentoring programs and differences in levels of evaluation.

Human performance technology as defined earlier by Pershing (2006) can improve productivity in an organization by designing and developing interventions that are results-oriented, comprehensive, and systemic. A necessary component of interventions is evaluation (Pershing, 2006). As reported by HR directors in this study, the levels of evaluation of mentoring programs, using Kirkpatrick’s model (1994) were low, with some HR directors reporting no evaluation at all taking place. These results are consistent with earlier research of HR managers and the levels of evaluation for learning programs (Patel, 2010). This is, however, a significant barrier in improving performance in today’s business climate, where it is necessary to link learning programs with business
goals to prove the value of a program in the workplace (Kirkpatrick, 2010) and to show the ROI.

A little more than half (51%) of the companies in this study were not satisfied with their current mentoring program and some of the companies lack features of mentoring programs that they wish to offer. This study provides companies with the data necessary to begin the process of evaluating their current mentoring program and also provides companies with data necessary to develop a mentoring program.

**Conclusion and Implications**

**Performance Gap Analysis of Mentoring Programs Practices.** Even though mentoring programs are increasingly offered in companies, the practices employed are not different from the traditional forms of mentoring such as formal and informal mentoring programs. The performance gap analysis of mentoring programs’ practices revealed the top three largest gaps occurring in group mentoring (18%), electronic mentoring (14%), and reverse mentoring (12%). These practices were reported by HR directors to be the least used and reportedly the least effective in companies compared to other practices listed. This indicates that companies are not expanding their mentoring programs to offer new forms of mentoring and do not believe it would be effective to do so. Companies with large numbers of employees and global operations could benefit from offering mentoring electronically and through groups by using tools such as social networks to expand into social learning and the use of technology important for the 21st century workplace (Bixby 2010; Francis, 2009). It is surprising that these practices were not widespread in this study. The need for knowledge transfer is expected to grow and the way in which it occurs should shift to reflect the growing importance that technology and
social learning play in today’s workforce (Francis, 2009; Lavin Colky & Young, 2006; Nancherla, 2009; Rosett & Marshall, 2010); however this same sentiment was not necessarily shared by those participating in this study. They did not highly endorse the use of electronic mentoring, because they did not believe it to be effective. Electronic communications make companies vulnerable to possible data breaches and security risks. The privacy and confidentiality issues with sharing sensitive information through e-mail, could help explain why electronic mentoring is not reported to be used or effective by the majority of HR directors in this study \((n = 31, 62\%)\).

While it may not be surprising that formal (74%) and informal (72%) mentoring practices were reported as effective by the majority of participants, it is noteworthy that both practices were the top two reported most effective mentoring program practices in this study and the top two practices actually employed. A gap was found between both of these practices, however, with formal mentoring reportedly more effective as a practice than was actually used in the company (10% gap). A reverse gap (-2%) was found for informal mentoring with less HR directors reportedly using it than believed it to be effective as a practice. This may indicate that HR directors have experienced some difficulty with informal mentoring, which typically does not involve the use of a mentoring program facilitator and therefore no system of tracking or evaluation (Murray, 2006).

The ability to use technology for knowledge management and peer networking is predicted to continue (Meister & Willyerd, 2010). One of the top ten trends of the workplace of this decade is predicted to be peer-to-peer learning (Meister & Willyerd, 2010). A beneficial aspect of training is the ability to network and learn from peers. Peer-
to-peer mentoring then could play an important role as a mentoring practice, especially in virtual organizations (Lavin Colky & Young, 2006). However, it was not used in the majority of companies in this study. This could mean companies do not yet recognize the benefits of this type of mentoring practice or do not know how to implement it as part of their mentoring program. It could also mean that companies are reluctant to use this type of practice because of security, privacy, and confidentiality issues for both employee and company information.

**Performance Gap Analysis of Mentoring Program Purposes.** Each of the mentoring program purposes, as reported by HR directors, showed significant performance gaps between the importance of mentoring programs purposes in the industry and the actual purpose of the mentoring program within their company. Only one program purpose—recruitment—had a larger number of HR directors not using it (78%) than HR directors who reported the purpose was important for their industry (68%). This indicates that mentoring programs are largely not being used by companies for purposes that the HR directors feel are important. The importance of HR directors’ opinions is relevant, since mentoring programs are linked to HR activities; and the role of a program facilitator, usually from HR, is essential in the management of a mentoring program (Cole, 2004; Longenecker & Fink, 2002).

The largest performance gaps in mentoring program purposes were found in recruitment (46% gap), retention (35% gap), and knowledge transfer (34% gap). While 68% of HR directors reported that using a mentoring program for recruitment, was important for their industry, only 22% are using mentoring for that purpose. A large percentage of HR directors thought using mentoring for retention (90%) and knowledge
transfer (97%) was important for the industry versus the percentage using it, which resulted in large gaps. Again, this indicates that mentoring programs are not being used by companies for purposes that the HR directors feel are important. This could indicate that management outside of HR does not clearly understand the benefits of mentoring and does not support the purpose of the program being expanded for these reasons.

**Features of Mentoring Programs.** Many research studies have focused on matching the mentor and mentee effectively. Studies suggest that matches based on personality, temperament, cognitive style (Armstrong et al., 2002; Tennant, 1988) or gender (Armstrong et al., 2002) should be considered to avoid ineffective mentoring and allow for the optimum mentoring relationship. Of the three features of mentoring programs listed on the survey, the forced matching of mentors and mentees feature, provided the most essential analysis. The results of this study indicate that in practice, HR directors are not interested in forced matching, of mentors and mentees. Even though some companies have required forced matching, 40% of HR directors from the study indicated they do not want to offer it. This finding is in opposition to earlier studies, which researched how to successfully pair mentors and mentees in a forced matching program. The findings from this study indicate that HR directors do not have the support to monitor a forced matching program, or knowledge in the best way to pair mentors and mentees. It could also be possible that HR directors do not feel it is important for a mentoring program's success to force a match between a mentor and mentee.

**Evaluation.** Evaluation is essential to any performance improvement intervention and part of the HPT process and systems viewpoint (Darby, 2010; Pershing, 2006). In order for a mentoring program to be effective in an organization, evaluation must take
place (Lawrence, 2008). The results of this study show that while the majority (86%) of companies are evaluating their mentoring program, only a small percentage are doing so using the highest level, or level four, of Kirkpatrick’s model (1994). Additionally, 14% of companies do not evaluate their mentoring program at all. While this appears to be consistent with other surveys of HR directors and levels of evaluation of programs (Kirkpatrick, 2010; Patel, 2010), it shows that evaluation is not being conducted to determine if the final results intended for the mentoring program were accomplished. This implies that companies using mentoring programs often cannot be certain if the programs are working well or meeting the objectives of the program.

**Program Satisfaction.** While mentoring programs were offered in the majority \((n = 50, 64\%)\) of the Fortune 1000 companies in this study, a total of 36% \((n = 28)\) of the companies responding to the survey do not have a mentoring program in place, despite the fact that mentoring dates back to the 7th and 8th centuries BC. Considering the analysis of the qualitative data, the following are some possible explanations for the lack of mentoring programs in companies responding to the survey: (a) a lack of resources to devote to implementing and administering mentoring programs, (b) a lack of awareness of the importance of mentoring, and (c) a lack of commitment by top leadership to the mentoring concept. It could also mean that some companies have tried mentoring programs before without success.

**Recommendations for Future Research**

Even if the planned mass retirements of the baby boom generation were not expected, mentoring as a performance intervention has been shown to have many positive benefits for preparing future managers, non-managers, and other employees in the
workforce (Horvath et al., 2008; Kram, 1985; Murray, 2006; Nancherla, 2008) Although mentoring programs have become increasingly popular in recent years, the results of this study indicate significant performance gaps between what HR directors report to be effective uses of a mentoring program in their industry and the actual mentoring program in place. A limitation in the use of the performance gap analysis, however, is that it considers aggregate results rather than individual companies’ performance gaps.

- With newer forms of mentoring emerging, such as e-mentoring, group mentoring, and peer-to-peer mentoring, future research should be conducted to explore the benefits of these specific practices. The results of this study indicate that only a small number of companies are actually using these techniques.

- The importance of technology, which includes social networking, online collaboration, and mobile applications, could play a part in developing and maintaining a mentoring relationship. Research on the actual use of these technologies should explore their significance in current and future mentoring relationships.

- Although a total response rate of 11% could be considered high for a survey of Fortune 1000 companies (Keller & Piotrowski, 1987; Modern Healthcare, 2009), the sample size in this study was low. One HR director contacted the researcher and declined participation due to the large number of e-mail requests received daily by researchers with interest in studying Fortune 1000 companies. Future research on expanding the population and exploring mentoring programs in smaller businesses, non-profit organizations, and universities should be considered. Differences could be examined between mentoring program practices, features, and levels of evaluation.
• There are a large percentage of companies (36%) in this study that indicated they do not have mentoring programs in place. Future research is necessary on those companies without mentoring programs in place to (a) determine how those companies are developing their future leaders and transferring knowledge between employees and to (b) explore possible reasons mentoring is not being considered as an option.

• There are a large percentage (51%) of HR directors who are not satisfied with their current mentoring program. Future research should also be considered on those companies with HR directors that are not satisfied with their current mentoring programs to determine the largest obstacles to implementing mentoring.

Mentoring can be a very effective performance intervention for transferring knowledge between leaders, managers, and other employees. In order for mentoring to work, careful evaluation and analysis is required. Although, performance gap analysis has some limitations when reporting aggregate results, it can be a strong tool to use at the individual company level and across organizations to enhance the evaluation of programs by determining what is desired versus what is actually happening.

Human performance technology specialists would be beneficial for strengthening mentoring programs in organizations, since the field focuses on systematically improving present and future performance and organizational results. Human performance technology specialists could also be instrumental in increasing management support and awareness of the value of results-oriented, data-driven and goal-driven mentoring in the 21st century workplace.
References


Field, A. (2007, April). When the boomers leave, will your company have the leaders it needs? *Harvard Management Update*, 3-6.


doi:10.1108/03074801011027646


doi:10.1080/13611260802433775


Appendix A

Cognitive Interview Training Script

Introduction

→Thinking aloud may be new and unfamiliar to you, but please know there are no wrong answers. I am only interested in knowing what is going through your mind. Any information you provide during this pre-interview will not be used in the project; this session is merely to help you become familiar and comfortable with the ‘think aloud’ process.”

Warm-up

→Before we begin the actual pre-interview, I’d like to ask you a ‘warm-up’ question to introduce you to the think aloud process.”

→Try to visualize the place where you live, and think about how many windows there are in that place. As you count the windows, tell me what you are seeing and thinking about” (Willis, 1994).
Appendix B

Survey Instrument

<table>
<thead>
<tr>
<th>Mentoring Development Tool Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Consent</td>
</tr>
</tbody>
</table>

The following survey is being used for research and evaluation purposes and is voluntary. You may choose not to participate or stop participating at any time without consequence. For confidentiality purposes, please do not put your name anywhere on this survey. You are giving consent to participate in this research by completing and submitting the survey.
Mentoring Development Tool Kit

2. Mentoring Programs

Mentoring programs are increasingly used in organizations to develop managers, new hires, and employees with high potential. Mentoring programs are defined as "the practice of pairing a more skilled person with a lesser skilled person for the purpose of increasing knowledge or developing specific competencies." For purposes of this study, mentoring does NOT include training and/or orientation.

* 1. Is a mentoring program used at your current company?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
</tr>
</tbody>
</table>
Mentoring Development Tool Kit

3. Mentoring Practices

2. Please select all of the mentoring practices below, by design, that you are actually using in your organization to help your employees improve their performance with mentoring.

- Formal Mentoring Program (specific goals and practices)
- Informal Mentoring Program (relationships are encouraged to develop on their own)
- Electronic Mentoring (communication is mostly digital and virtual)
- External Mentoring (individuals in different organizational departments)
- Group Mentoring (individuals meet as a group)
- Reverse Mentoring (younger aged worker as mentor, older aged worker as mentee)
- Superior-to-Subordinate Mentoring (direct report)
- Peer-to-Peer Mentoring (mentoring between two equal level employees)
- Other (please specify)


## Mentoring Practices: Proportion of Time Used with Employees

3. Indicate the percentage of time that the mentoring practice listed below is used with those employees who are in mentoring relationships (the % do not have to add up to 100).

<table>
<thead>
<tr>
<th>Mentoring Practice</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal Mentoring Program (specific goals and practices)</td>
<td></td>
</tr>
<tr>
<td>Informal Mentoring Program (relationships are encouraged to develop on their own)</td>
<td></td>
</tr>
<tr>
<td>Electronic Mentoring (communication is mostly digital and virtual)</td>
<td></td>
</tr>
<tr>
<td>External Mentoring (individuals in different organizational departments)</td>
<td></td>
</tr>
<tr>
<td>Group Mentoring (individuals meet as a group)</td>
<td></td>
</tr>
<tr>
<td>Reverse Mentoring (younger aged worker as mentor, older aged worker as mentee)</td>
<td></td>
</tr>
<tr>
<td>Superior-to-Subordinate Mentoring (direct report)</td>
<td></td>
</tr>
<tr>
<td>Peer-to-Peer Mentoring (mentoring between two equal level employees)</td>
<td></td>
</tr>
<tr>
<td>Other (as described in question #2)</td>
<td></td>
</tr>
</tbody>
</table>
4. Please rank the top five (5) practices that you believe are the most important in mentoring: one (1) being the MOST important and five (5) being the LEAST important. Answer the question as the practice relates to your industry. These practices may or may not currently be a feature of your mentoring program. Please mark ONLY the top 5.

<table>
<thead>
<tr>
<th>Practice</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal Mentoring Program (specific goals and practices)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Informal Mentoring Program (relationships are encouraged to develop on their own)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electronic Mentoring (communication is mostly digital and virtual)</td>
<td></td>
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<td></td>
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<td>External Mentoring (individuals in different organizational departments)</td>
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<tr>
<td>Group Mentoring (individuals meet as a group)</td>
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</tr>
<tr>
<td>Reverse Mentoring (younger aged worker as mentor, older aged worker as mentee)</td>
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</tr>
<tr>
<td>Superior-to-Subordinate Mentoring (direct report)</td>
<td></td>
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</tr>
<tr>
<td>Peer-to-Peer Mentoring (mentoring between two equal level employees)</td>
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<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If you selected "Other" above, please specify here.
**5. Please indicate the response that best describes the features of your current mentoring program using the following scale:**

- No, and would not like to offer = NO
- No, but would like to offer = NL
- Yes, Optional = YO
- Yes, Required = YR

<table>
<thead>
<tr>
<th>Feature</th>
<th>NO</th>
<th>NL</th>
<th>YO</th>
<th>YR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training for Mentors on Mentoring</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forced Matching and Pairing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On-going organizational support for mentoring relationships</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other, please specify below.
A commonly used method for evaluating programs is Kirkpatrick’s Model of Training Evaluation.

6. Using Kirkpatrick’s Model of Training Evaluation as defined next to each choice, please indicate the HIGHEST level of overall mentoring program evaluation that is conducted within your company.

- Level 1 = REACTION (what the participants thought of the mentoring program)
- Level 2 = LEARNING (did the participants learn the objectives of the program)
- Level 3 = BEHAVIOR (did participants’ job performance improve)
- Level 4 = RESULTS (were the company’s objectives and goals of the program met and did the results relate to the overall company’s objectives and goals)
- NOT AT ALL
Mentoring Development Tool Kit

8. Purposes of Mentoring Program

*7. Please indicate the response that in your opinion, describes the importance of each purpose of a mentoring program, as it would relate to your industry, using the following scale:

Not important = not many in the industry should do this [0-25%]
Somewhat Important = less than 50% in the industry should do this [26-50%]
Important = most in the industry should do this [51-75%]
Very Important = almost all or all in the industry should do this [76-100%]

<table>
<thead>
<tr>
<th>Purpose</th>
<th>NI</th>
<th>SI</th>
<th>I</th>
<th>VI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Onboarding - Management Positions (process of assimilating &amp; accelerating new managers)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee Onboarding - Other Positions Non-Management (process of assimilating &amp; accelerating new employees)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management and Leadership Development-Informal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management and Leadership Development-Formal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge Transfer (moving information from one person in the organization to another person within the organization)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recruitment (of new employees)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retention (of current employees)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If you selected "Other" above, please describe the purpose here.
8. Please review the list of purposes of a mentoring program below. Check all of the purposes by design of your mentoring program that you are ACTUALLY using in your organization to help your employees improve their performance with mentoring.

- Employee Onboarding - Management Positions (process of assimilating & accelerating new managers)
- Employee Onboarding - Other Positions Non-Management (process of assimilating & accelerating new employees)
- Management and Leadership Development-Informal
- Management and Leadership Development-Formal
- Knowledge Transfer (moving information from one person in the organization to another person within the organization)
- Recruitment (of new employees)
- Retention (of current employees)
- Other

If you selected "Other" above, please specify here.

---

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## Mentoring Development Tool Kit

### 10. Purposes of Mentoring Program

9. Indicate the proportion of time (0% - 100%) that the practice by design is used with those employees who are in mentoring relationships (the % do not have to add up to 100).

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Onboarding - Management Positions (process of assimilating &amp; accelerating new managers)</td>
<td></td>
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<td>Employee Onboarding - Other Positions Non-Management (process of assimilating &amp; accelerating new employees)</td>
<td></td>
</tr>
<tr>
<td>Management and Leadership Development-Informal</td>
<td></td>
</tr>
<tr>
<td>Management and Leadership Development-Formal</td>
<td></td>
</tr>
<tr>
<td>Knowledge Transfer (moving information from one person in the organization to another person within the organization)</td>
<td></td>
</tr>
<tr>
<td>Recruitment (of new employees)</td>
<td></td>
</tr>
<tr>
<td>Retention (of current employees)</td>
<td></td>
</tr>
<tr>
<td>Other (as specified in question #6)</td>
<td></td>
</tr>
</tbody>
</table>
11. Purposes of Mentoring Program: Top 5 Most Important Purposes

* 10. Section 7 — Please rank the top five (5) most important purposes of mentoring programs: one (1) being the most important and five (5) being the least important.

Please mark ONLY the top 5.

<table>
<thead>
<tr>
<th>Purpose</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Onboarding - Management Positions (process of assimilating &amp; accelerating new managers)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee Onboarding - Other Positions Non-Management (process of assimilating &amp; accelerating new employees)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management and Leadership Development - Informal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management and Leadership Development - Formal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge Transfer (moving information from one person in the organization to another person within the organization)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recruitment (of new employees)</td>
<td></td>
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</tr>
<tr>
<td>Retention (of current employees)</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If you selected "Other" above please specify it here.

12. Mentoring Program Satisfaction

* 11. Are you satisfied with your company's mentoring program.

   Yes

   No

Please explain why or why not
<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. Please indicate your gender.</td>
<td>Female, Male</td>
</tr>
<tr>
<td>13. What is your type of organization?</td>
<td>Manufacturing, Service, Wholesale, Retail, Other (please specify)</td>
</tr>
<tr>
<td>14. What is your position?</td>
<td>Human Resource Director, Training Director, Other (please specify)</td>
</tr>
<tr>
<td>15. What is the overall size of your organization by number of employees?</td>
<td>Number</td>
</tr>
<tr>
<td>16. In what state is your Company Headquarters located?</td>
<td>State: GA</td>
</tr>
<tr>
<td>17. What percentage of new hires receives mentoring while they are still new hires?</td>
<td></td>
</tr>
<tr>
<td>18. How many years of Managerial Experience do you have? Please answer to the closest year.</td>
<td></td>
</tr>
<tr>
<td>19. How many years have you worked in this position at your current company? Please answer to the closest year.</td>
<td></td>
</tr>
</tbody>
</table>
Thank you for your input and time. The survey is complete.
Appendix C

First E-mail Invitation to Participate in Survey

Subject: Survey of Mentoring Practices

I am a Ph.D. student at The University of Toledo (Ohio, USA). I am conducting a survey of mentoring practices in Fortune 1000 companies as part of my dissertation. You have been selected to participate in my study because of your leadership role in human resources and your company's ranking in the Fortune 1000 list.

The purpose of the research is to conduct a performance gap analysis on mentoring programs currently offered in Fortune 1000 companies, versus what is desired and most important. Fortune 1000 companies have been selected because their business practices have such a great influence on other companies throughout the world.

Your assistance in completing the survey is very valuable. The survey is expected to take 10 minutes to complete. In return for your investment of time and courtesy of replying to my survey, an executive summary of the study will be provided to you when the study is complete. Individual results will be kept confidential and no identifying information (participants name or company name) will be used. Responses will only be reported as an aggregate summary. Please complete the survey by March 29 to eliminate a follow-up e-mail. If you have any questions, please feel free to contact me through e-mail (lisa.kahle@utoledo.edu) or by phone, 419.000.000a.

[SurveyLink]

This link is uniquely tied to this survey and your e-mail address. Please do not forward this message.

a Note. The contact phone number was removed for privacy.
Thank you for your interest and participation in this study. I sincerely appreciate your time!

Lisa Kahle-Piasecki
lisa.kahle@utoledo.edu
http://www.utoledo.edu/
419.000.0000b

[RemoveLink]

bNote. The contact phone number was removed for privacy.
Appendix D

Second E-mail Invitation to Participate in Survey

Subject: Ph. D. Student Seeks your Input - Survey of Mentoring Practices

I am a Ph.D. student at The University of Toledo (Ohio, USA). I am conducting a survey of mentoring practices in Fortune 1000 companies as part of my dissertation. You have been selected to participate in my study because of your leadership role in human resources and your company's ranking in the Fortune 1000 list.

The purpose of the research is to conduct a performance gap analysis on mentoring programs currently offered in Fortune 1000 companies, versus what is desired and most important. Fortune 1000 companies have been selected because their business practices have such a great influence on other companies throughout the world.

Your assistance in completing the survey is very valuable. The survey is expected to take 10 minutes to complete. Your complete response to the survey and each question is very important. In return for your investment of time and courtesy of replying to my survey, an executive summary of the study will be provided to you when the study is complete. Individual results will be kept confidential and no identifying information (participants name or company name) will be used. Responses will only be reported as an aggregate summary. Please complete the survey by April 5 to eliminate a follow-up e-mail. If you have any questions, please feel free to contact me through e-mail (lisa.kahle@utoledo.edu) or by phone, 419.000.0000c.

[SurveyLink]

c Note. The contact phone number was removed for privacy.
This link is uniquely tied to this survey and your e-mail address. Please do not forward this message.

Thank you for your interest and participation in this study. I sincerely appreciate your time!

Lisa Kahle-Piasecki

lisa.kahle@utoledo.edu

http://www.utoledo.edu/

419.000.0000

[RemoveLink]

\[Note.\] The contact phone number was removed for privacy.
Appendix E

Third E-mail Invitation to Participate in Survey

Subject: University of Toledo Ph.D. Student seeks your input for research on mentoring.

I am a Ph.D. student at The University of Toledo (Ohio, USA). I am conducting a survey of mentoring practices in Fortune 1000 companies as part of my dissertation. You have been selected to participate in my study because of your leadership role in human resources and your company's ranking in the Fortune 1000 list.

The purpose of the research is to conduct a performance gap analysis on mentoring programs currently offered in Fortune 1000 companies, versus what is desired and most important. Fortune 1000 companies have been selected because their business practices have such a great influence on other companies throughout the world.

Your assistance in completing the survey is very valuable. The survey is expected to take between one and 10 minutes to complete. You can complete the survey even if you do not have a mentoring program at your company. Your complete response to the survey and each question is very important. In return for your investment of time and courtesy of replying to my survey, an executive summary of the study will be provided to you when the study is complete. Individual results will be kept confidential and no identifying information (participants name or company name) will be used. Responses will only be reported as an aggregate summary. Please complete the survey by April 12.

If you have any questions, please feel free to contact me through e-mail (lisa.kahle@utoledo.edu) or by phone, 419.000.0000.°

[SurveyLink]

° Note. The contact phone number was removed for privacy.
This link is uniquely tied to this survey and your e-mail address. Please do not forward this message.

Thank you for your interest and participation in this study. I sincerely appreciate your time!

Lisa Kahle-Piasecki
lisa.kahle@utoledo.edu
http://www.utoledo.edu/
419.000.0000\textsuperscript{f}

\textsuperscript{f}Note. The contact phone number was removed for privacy.