

# SECTION III

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## PERFORMANCE IMPROVEMENT MANAGEMENT

- A. Organization and Work Design**
- B. Human Factors and Ergonomics**

# III.A

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## Organization and Work Design

# CHAPTER 32

## Leadership, Motivation, and Strategic Human Resource Management

**TALY DVIR**

Tel Aviv University

**YAIR BERSON**

Polytechnic University

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## 1. INTRODUCTION

Most definitions of leadership reflect the assumption that it involves a social influence process whereby intentional influence is exerted by one person over other people to structure the activities and relationships in a group or organization (Yukl 1998). Leadership occurs when one group member modifies the motivation and competencies of others in the group (Bass 1990). Work motivation is the willingness of an individual to invest energy in productive activity. Thus, leadership and motivation are interwoven, inseparable concepts; a core outcome of effective leadership is a higher willingness on the part of the employees to invest energy in performing their tasks. A new genre of leadership and motivation theories has been shown to affect organizational effectiveness in ways that are quantitatively greater than, and qualitatively different from, the effects specified by previous theories (House and Shamir 1993; for a meta-analytic review see Lowe et al. 1996). These theories have led to new applications in human resource management. As shown in Figure 1, we first review the early vs. the most recent paradigms of leadership, namely the shift from transactional to transformational, charismatic, or visionary leadership. This shift is manifested by changes in the bases for work motivation from an emphasis on calculative, individualistic, extrinsic, short-term motivators toward more expressive, collectivistic, intrinsic, long-term motivators. Taken together, these new approaches have been shown to positively impact organizational outcomes, including performance and employee development. The impact of the new leadership and motivation paradigm on organizational outcomes has implications for strategic human resource management, specifically recruiting, performance management, training and development, and compensation.

## 2. LEADERSHIP AND MOTIVATION

### 2.1. The Classic Paradigm of Leadership: A Transactional Approach

I was his loyal friend, but no more. . . . I was so hurt when I discovered that in spite of my loyalty, he always preferred Arie Dery to me. I asked him: 'Bibi, why?' and he answered: "He brings me 10 seats in the parliament while you don't have such a bulk of voters behind you."

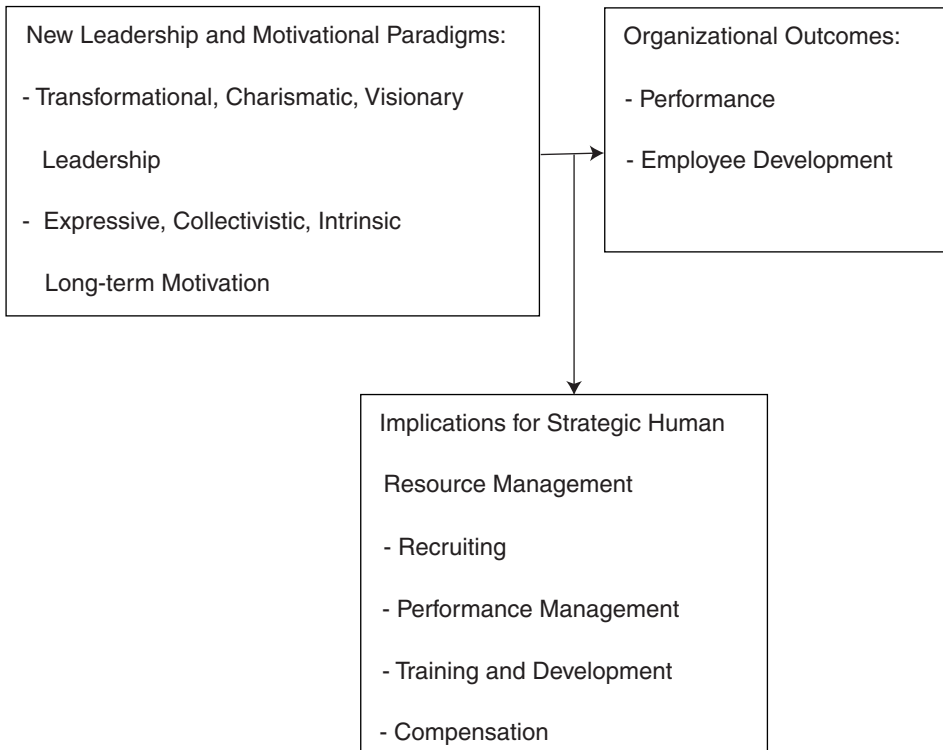
—Itzhak Levi, former Minister of Education, on Benjamin Netanyahu, former Prime Minister of Israel

Many of the classic approaches to leadership concentrated on how to maintain or achieve results as expected or contracted between the leader and the employees. These transactional theories and practices viewed leadership in terms of contingent reinforcement, that is, as an exchange process in which employees are rewarded or avoid punishment for enhancing the accomplishment of agreed-upon objectives.

Figure 2 shows the process by which transactional leaders affect their employees' motivation and performance. Transactional leaders help employees recognize what the role and task requirements are to reach a desired outcome. The transactional leader helps clarify those requirements for employees, resulting in increased confidence that a certain level of effort will result in desired performance. By recognizing the needs of employees and clarifying how those needs can be met, the transactional leader enhances the employee's motivational level. In parallel, the transactional leader recognizes what the employee needs and clarifies for the employee how these needs will be fulfilled in exchange for the employee's satisfactory effort and performance. This makes the designated outcome of sufficient value to the employee to result in his or her effort to attain the outcome. The model is built upon the assumption that the employee has the capability to perform as required. Thus, the expected effort is translated into the expected performance (Bass 1985).

There is support in the literature for the effectiveness of transactional leadership. Using contingent reinforcement, leaders have been shown to increase employee performance and job satisfaction and to reduce job role uncertainty (Avolio and Bass 1988). For example, Bass and Avolio (1993) report results collected from 17 independent organizations indicating that the correlations between the contingent reward leadership style and employees' effectiveness and satisfaction typically ranged from 0.4 to 0.6, depending on whether it was promises or actual rewards. Similarly, Lowe et al. (1996), in their meta-analysis of 47 studies, report that the mean corrected correlation between contingent reward and effectiveness was 0.41.

Although potentially useful, transactional leadership has several serious limitations. First, the contingent rewarding, despite its popularity in organizations, appears underutilized. Time pressure, poor performance-appraisal systems, doubts about the fairness of the organizational reward system, or lack of managerial training cause employees not to see a direct relationship between how hard they work and the rewards they receive. Furthermore, reward is often given in the form of feedback from the superior, feedback that may also be counterproductive. What managers view as valued feedback is not always perceived as relevant by the employees and may be weighted less than feedback received from the job or coworkers. In addition, managers appear to avoid giving negative feedback to employees. They distort such feedback to protect employees from the truth. Second, transactional leadership may encourage a short-term approach toward attaining organizational objec-



**Figure 1** Linkages between Leadership and Motivational Paradigms, Organizational Outcomes, and Strategic Human Resource Management.

tives. A transactional leader who views leadership solely from a contingent reinforcement perspective may find that employees will circumvent a better way of doing things to maximize short-term gain to reach their goals in the most expeditious manner possible, regardless of the long-term implications. Third, employees do not always perceive contingent reinforcement as an effective motivator. The impact may be negative when the employees see contingent rewards given by the superior as manipulative (Avolio and Bass 1988).

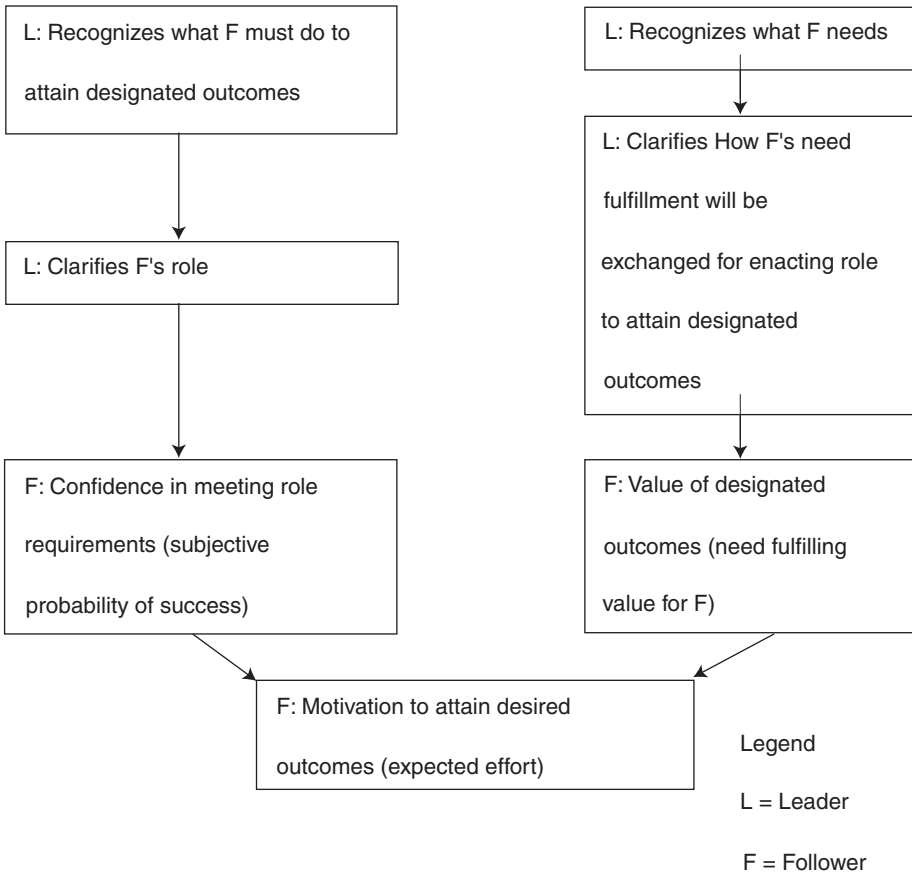
Finally, one of the major criticisms directed toward this contract-based approach to leadership has been that it captures only a portion of the leader-follower relationships. Scholars like Hemphill (1960) and Stogdill (1963) (in Seltzer and Bass 1990) felt long ago that an expanded set of factors was necessary to fully describe what leaders do, especially leader-follower relationships that include motivation and performance that go beyond contracted performance. Bass and Avolio (1993) state that the “transaction” between a leader and a follower regarding the exchange of rewards for achieving agreed-upon goals cannot explain levels of effort and performance of followers who are inspired to the highest levels of achievement. There are many examples of leadership that do not conform to the ever-popular notion of a transaction between leader and follower. As Howell (1996) points out, the notion of leaders who manage meaning, infuse ideological values, construct lofty goals and visions, and inspire was missing entirely from the literature of leadership exchange. A new paradigm of leadership was needed to account for leaders who focus the attention of their employees on an idealized goal and inspire them to transcend themselves to achieve that goal. The actions of such leaders result in higher-order changes in employees and therefore in higher performance.

## 2.2. The New Paradigm of Leadership: A Transformational Approach

Head in the clouds, feet on the ground, heart in the business.

—Anita Roddick, founder of The Body Shop

Pat Summitt has been called the best basketball coach since the famed John Wooden. Just some



**Figure 2** Transactional Leadership and Follower Motivation. (Adapted with the permission of The Free Press, a Division of Simon & Schuster, from *Leadership and Performance beyond Expectations*, by Bernard M. Bass, Copyright © 1985 by The Free Press.)

of her credentials include winning the first-ever Olympic gold medal in U.S. women’s basketball history; six national championships; an .814 winning percentage, fifth among all coaches in college basketball history; and so many trips to basketball’s Final Four that her record in all likelihood will never be equaled. Her 1997–1998 University of Tennessee team finished the regular season 30 and 0 and won its third consecutive national title. Beyond coaching records, however, what is Summitt like as a person? Among other things, when she walks into a room, her carriage is erect, her smile confident, her manner of speaking direct, and her gaze piercing. Her calendar documents her pressured schedule. But she is also a deeply caring person, appropriate for a farm daughter who grew up imitating her mother’s selfless generosity in visiting the sick or taking a home-cooked dinner to anyone in need. Summitt clearly has many extraordinary qualities as a coach, but perhaps most striking is the nature of the relationship she develops with her players (Hughes et al. 1998). Pat Summitt does not rely only on her players’ contracts to gain their highest levels of motivation and performance. The best transactional, contract-based leadership cannot assure such high performance on the part of the players. Summitt clearly has the additional qualities of what is referred to as transformational leadership.

Indeed, the past 15 years have seen some degree of convergence among organizational behavior scholars concerning a new genre of leadership theory, alternatively referred to as “transformational,” “charismatic,” and “visionary.” Transformational leaders do more with colleagues and followers than set up simple transactions or agreements (Avolio 1999). Transformational leadership theory explains the unique connection between the leader and his or her followers that accounts for extraordinary performance and accomplishments for the larger group, unit, and organization (Yammarino and Du-

binsky 1994), or, as stated by Boal and Bryson (1988, p. 11), transformational leaders “lift ordinary people to extraordinary heights.” Transformational leaders engage the “full” person with the purpose of developing followers into leaders (Burns 1978). In contrast to transactional leaders, who seek to satisfy the current needs of followers through transactions or exchanges via contingent reward behavior, transformational leaders (a) raise the follower level of awareness about the importance of achieving valued outcomes, a vision, and the required strategy; (b) get followers to transcend their own self-interests for the sake of the team, organization, or larger collectivity; and (c) expand the followers’ portfolio of needs by raising their awareness to improve themselves and what they are attempting to accomplish. Transformational leaders encourage followers to develop and perform at levels above what they may have felt was possible, or beyond their own personal expectations (Bass and Avolio 1993).

Perhaps the major difference between the new paradigm of leadership and the earlier classic approaches mentioned above lies in the nature of the relationships that are built between leaders and employees, that is, the process by which the leaders energize the employees’ effort to accomplish the goal, as well as in the type of goals set. According to the new genre of leadership theory, leaders transform the needs, values, preferences, and aspirations of the employees. The consequence of the leader’s behaviors is emotional and motivational arousal of the employees, leading to self-reinforcement mechanisms that heighten their efforts and bring performance above and beyond the call of duty or contract (Avolio and Bass 1988; House and Shamir 1993).

### **2.3. Differences in the Motivational Basis for Work between the Classic and the New Leadership Paradigms**

Individuals may approach social situations with a wide range of motivational orientations. The classic transactional and the new transformational paradigms of leadership differ in their assumptions about the core underlying bases for motivation to work. The main shifts in the motivational basis for work concentrate on three dimensions. The first deals with a transition from a calculative–rational toward an emotional–expressive motivation. The second concerns the shift from emphasizing individualistic-oriented motivation toward stressing the centrality of collectivistic-oriented motivation. The third dimension refers to the importance given to intrinsic motivators in addition to the traditional extrinsic incentives.

#### ***2.3.1. From a Calculative–Rational toward an Emotional–Expressive Motivation to Work***

The transactional approach to leadership is rooted in behavioral and contingency theories. This transactional paradigm is manifested in the long fixation on the dimensions of consideration or people-orientation and initiating structure or task-orientation (review in Yukl 1998). Leadership behavior, as measured by the indexes of initiating structure and consideration, is largely oriented toward accomplishing the tasks at hand and maintaining good relationships with those working with the leader (Seltzer and Bass 1990). When the superior initiates structure, this enhances and reinforces the employees’ expectancy that their efforts will succeed. Consideration by the superior is a desired benefit reinforcing employee performance (Bass 1985). This transactional approach was also carried into contingency theories such as the path–goal theory of leadership developed by House (1971). The path–goal theory took as its underlying axioms the propositions of Vroom’s expectancy theory, which was the prevailing motivational theory at that time. According to expectancy theory, employees’ efforts are seen to depend on their expectancy that their effort will result in their better performance, which in turn will result in valued outcomes for them (Yukl 1998). The path–goal theory to leadership asserted that “the motivational function of the leader consists of increasing personal payoffs to subordinates for work-goal attainment and making the path to these payoffs easier travel by clarifying it, reducing roadblocks and pitfalls, and increasing the opportunities for personal satisfaction en route” (House 1971, p. 324). The common denominator of the behavioral and contingency approaches to leadership is that the individual is assumed to be a rational maximizer of personal utility. They all explain work motivation in terms of a rational choice process in which a person decides how much effort to devote to the job at a given point of time. Written from a calculative-instrumental perspective, discussions and applications of work motivation have traditionally emphasized the reward structure, goal structure, and task design as the key factors in work motivation and deemphasized other sources of motivation. Classic theories assume that supervisors, managers, leaders, and their followers are able to calculate correctly or learn expected outcomes associated with the exercise of theoretically specified behaviors. These theories, then, make strong implicit rationality assumptions despite substantial empirical evidence that humans are subject to a myriad of cognitive biases and that emotions can be strong determinants of behavior (House 1995).

The new motivation and leadership paradigms recognize that not all of the relevant organizational behaviors can be explained on the basis of calculative considerations and that other considerations may enrich the explanation of human motivation (Shamir 1990). Transformational and charismatic leadership approaches assume that human beings are not only instrumental-calculative, pragmatic,

and goal-oriented but are also self-expressive of feelings, values, and self-concepts. We are motivated to do things because it makes sense to do them from a rational-instrumental point of view, but also because by doing so we can discharge moral obligations or because through such a contribution we can establish and affirm a cherished identity for ourselves. In other words, because it is useful, but also because it is right, or because it “feels right.” Making the assumption that humans are self-expressive enables us to account for behaviors that do not contribute to the individual self-interest, the most extreme of which is self-sacrifice (House and Shamir, 1993; Shamir 1990; Shamir et al. 1993). Huy (1999), in discussing the emotional dynamics of organizational change, refers to the emotional role of charismatic and transformational leaders. According to Huy, at the organizational level, the emotional dynamic of encouragement refers to the organization’s ability to instill hope among its members. Organizational hope can be defined as the wish that our future work situation will be better than the present one. Transformational leaders emotionally inspire followers through communication of vivid images that give flesh to a captivating vision so as to motivate them to pursue ambitious goals. The most important work for top managers is managing ideology and not strategy making. Transformational leaders can shape an ideological setting that encourages enthusiasm, nurtures courage, reveals opportunities, and therefore brings new hope and life into their organizations.

Thus, classic leadership theories addressed the instrumental aspects of motivation, whereas the new paradigm emphasizes expressive aspects as well. Such emotional appeals can be demonstrated by the words of Anita Roddick, founder and CEO of The Body Shop:

Most businesses focus all the time on profits, profits, profits . . . I have to say I think that is deeply boring. I want to create an electricity and passion that bond people to the company. You can educate people by their passions . . . You have to find ways to grab their imagination. You want them to feel that they are doing something important . . . I’d never get that kind of motivation if we were just selling shampoo and body lotion. (Conger and Kanungo 1998, pp. 173–174)

### 2.3.2. *From an Individualistic-Oriented toward a Collectivistic-Oriented Motivation to Work*

Nearly all classic models of motivation in organizational behavior, in addition to being calculative, are also hedonistic. These classic approaches regard most organizational behavior as hedonistic and treat altruistic, prosocial, or cooperative behavior as some kind of a deviation on the part of the organizational members. This trend may be traced in part to the influence of the neoclassical paradigm in economics and psychology, which is based on an individualistic model of humans. American psychology, from which our work motivation theories have stemmed, has strongly emphasized this individualistic perspective (Shamir 1990).

The recent recognition that not all relevant work behaviors can be explained in terms of hedonistic considerations has led to the current interest in prosocial organizational behaviors, those that are formed with the intent of helping others or promoting others’ welfare. However, between totally selfish work behavior and pure altruistic behaviors, many organizationally relevant actions are probably performed both for a person’s own sake and for the sake of a collectivity such as a team, department, or organization. Individuals may approach social situations with a wide range of motivational orientations that are neither purely individualistic (concerned only with one’s satisfaction) nor purely altruistic (concerned only with maximizing the other’s satisfaction). Deutsch (1973, in Shamir, 1990) uses the term *collectivistic* to refer to a motivational orientation that contains a concern with both one’s own satisfaction and others’ welfare.

The importance of discussing the linkages between individual motivations and collective actions stems from the increasing recognition of the importance of cooperative behaviors for organizational effectiveness. During the 1990s, hundreds of American companies (e.g., Motorola, Cummins Engine, Ford Motor Co.) reorganized around teams to leverage the knowledge of all employees. Now it appears that the concept is going global, and recent research conducted in Western Europe has supported the wisdom of teams. For example, the Ritz-Carlton Hotel Co. has created “self-directed work teams” with the goal of improving quality and reducing costs. In the hotel’s Tysons Corner, Virginia, facility, a pilot site for the company’s program, the use of these teams has led to a decrease in turnover from 56 to 35%. At a cost of \$4,000 to \$5,000 to train each new employee, the savings were significant. At Air Products, a chemical manufacturer, one cross-functional team, working with suppliers, saved \$2.5 million in one year. OshKosh B’Gosh has combined the use of work teams and advanced equipment. The company has been able to increase productivity, speed, and flexibility at its U.S. manufacturing locations, enabling it to maintain 13 of its 14 facilities in the United States, which made one of the few children’s garment manufacturers able to do so (Gibson et al. 2000). This shift in organizational structure calls for higher cooperation in group situations. Cooperation, defined as the willful contribution of personal effort to the completion of interdependent jobs, is essential whenever people must coordinate activities among differentiated tasks. Individualism is the condition in which personal interests are accorded greater importance than are the needs of groups.



Collectivism occurs when the demands and interests of groups take precedence over the desires and needs of individuals. Collectivists look out for the well being of the groups to which they belong, even if such actions sometimes require that personal interests be disregarded. A collectivistic, as opposed to an individualistic orientation should influence personal tendencies to cooperate in group situations (Wagner 1995).

A core component incorporated in the new paradigm of leadership is that transformational leaders affect employees to transcend their own self-interests for the sake of the team, organization, or larger collectivity (Bass and Avolio 1990; Burns 1978). The effects of charismatic and transformational leaders on followers' relationships with the collective are achieved through social identification, that is, the perception of oneness with, or belonging to, some human aggregate (Shamir 1990). People who identify with a group or organization take pride in being part of it and regard membership as one of their most important social identities. High social identification may be associated with a collectivistic orientation in the sense that the group member is willing to contribute to the group even in the lack of personal benefits, places the needs of the group above individual needs, and sacrifices self-interest for the sake of the group (Shamir 1990; Shamir et al. 1998). A charismatic or transformational leader can increase social identification by providing the group with a unique identity distinguishing it from other groups. This can be achieved by the skillful use of slogans, symbols (e.g., flags, emblems, uniforms), rituals (e.g., singing the organizational song), and ceremonials. In addition, transformational and charismatic leaders raise the salience of the collective identity in followers' self-concepts by emphasizing shared values, making references to the history of the group or organization, and telling stories about past successes, heroic deeds of members, and symbolic actions by founders, former leaders, and former members of the group (Shamir et al. 1993). Frequent references by the leader to the collective identity and presentation of goals and tasks as consistent with that identity further bind followers' self-concepts to the shared values and identities and increase their social identification (Shamir et al. 1998).

Collectivistic appeals are illustrated by comments from Mary Kay Ash to her sales force at the company's annual convention:

There was, however, one band of people that the Romans never conquered. These people were the followers of the great teacher from Bethlehem. Historians have long since discovered that one of the reasons for the sturdiness of this folk was their habit of meeting together weekly. They shared their difficulties and they stood side by side. Does this remind you of something? The way we stand side by side and share our knowledge as well as our difficulties with each other at our weekly unit meetings? . . . What a wonderful circle of friends we have. Perhaps it is one of the greatest fringe benefits of our company.

—(Conger and Kanungo 1998, p. 160)

By implication, Mary Kay is saying that collective unity can work miracles in overcoming any odds.

### **2.3.3. From Extrinsic toward Intrinsic Motivation to Work**

A classic categorization for work motivation is the intrinsic–extrinsic dichotomy. Extrinsic needs demand gratification by rewards that are external to the job itself. Extrinsic motivation derives from needs for pay, praise from superiors and peers, status and advancement, or physically comfortable working conditions. Intrinsic needs are satisfied when the activities that comprise the job are themselves a source of gratification. The desire for variety, for meaning and hope, and for challenging one's intellect in novel ways are examples of intrinsic motivation. When one engages in some activity for no apparent external reward, intrinsic motivation is likely at work. There is evidence that extrinsic rewards can weaken intrinsic motivation and that intrinsic rewards can weaken extrinsic motivation. However, intrinsic job satisfaction cannot be bought with money. Regardless of how satisfactory the financial rewards may be, most individuals will still want intrinsic gratification. Money is an important motivator because it is instrumental for the gratification of many human needs. Fulfilling basic existence needs, social needs, and growth needs can be satisfied with money or with things money can buy. However, once these needs are met, new growth needs are likely to emerge that cannot be gratified with money. Pay, of course, never becomes redundant; rather, intrinsic motivators to ensure growth-stimulating challenges must supplement it (Eden and Globerson 1992).

Classic motivational and leadership theories have emphasized both extrinsic and intrinsic rewards. However, transformational leadership theory goes beyond the rewards-for-performance formula as the basis for work motivation and focuses on higher-order intrinsic motivators. The motivation for development and performance of employees working with a transformational leader is driven by internal and higher-order needs, in contrast to the external rewards that motivate employees of transactional leaders (Bass and Avolio 1990). The transformational leader gains heightened effort from employees as a consequence of their self-reinforcement from doing the task. To an extent, transformational leadership can be viewed as a special case of transactional leadership with respect to exchanging effort for rewards. In the case of transformational leadership, the rewarding is internal (Avolio and Bass 1988).

The intrinsic basis for motivation enhanced by transformational and charismatic leaders is emphasized in Shamir et al.'s (1993) self-concept theory. Self-concepts are composed, in part, of identities. The higher the salience of an identity within the self-concept, the greater its motivational significance. Charismatic leaders achieve their transformational effects through implicating the self-concept of followers by the following four core processes:

1. By increasing the intrinsic value of effort, that is, increasing followers' intrinsic motivation by emphasizing the symbolic and expressive aspects of the effort, the fact that the effort itself reflects important values.
2. By empowering the followers not only by raising their specific self-efficacy perceptions, but also by raising their generalized sense of self-esteem, self-worth, and collective efficacy.
3. By increasing the intrinsic value of goal accomplishment, that is, by presenting goals in terms of the value they represent. Doing so makes action oriented toward the accomplishment of these goals more meaningful to the follower in the sense of being consistent with his or her self-concept.
4. By increasing followers' personal or moral commitment. This kind of commitment is a motivational disposition to continue a relationship, role, or course of action and invest effort regardless of the balance of external costs and benefits and their immediate gratifying properties.

#### 2.4. The Full Range Leadership Model: An Integrative Framework

Bass and Avolio (1994) propose an integrative framework that includes transformational, transactional, and nontransactional leadership. According to Bass and Avolio's "full range leadership model," leadership behaviors form a continuum in terms of activity and effectiveness. Transformational leadership behaviors are at the higher end of the range and are described as more active-proactive and effective than either transactional or nontransactional leadership. Transformational leadership includes four components.

*Charismatic leadership or idealized influence* is defined with respect to both the leader's behavior and employee attributions about the leader. Idealized leaders consider the needs of others over their own personal needs, share risks with employees, are consistent and trustworthy rather than arbitrary, demonstrate high moral standards, avoid the use of power for personal gain, and set extremely challenging goals for themselves and their employees. Taken together, these behaviors make the leader a role model for his or her employees; the leader is admired, respected, trusted, and ultimately identified with over time. Jim Dawson, as the president of Zebco, the world's largest fishing tackle company, undertook a series of initiatives that would symbolically end the class differences between the workforce and management. Among other actions, he asked his management team to be role models in their own arrival times at work. One executive explained Dawson's thinking:

What we realized was that it wasn't just Jim but we managers who had to make sure that people could see there were no double standards. As a manager, I often work long hours. . . Now the clerical and line staff don't see that we are here until 7 because they are here only until 4:45 p.m. As managers, we don't allow ourselves to use that as an excuse. . . Then it appears to the workforce that you have a double standard. An hourly person cannot come in at 7:05 a.m. He has got to be here at 7:00 a.m. So we have to be here at the same time.

(Conger and Kanungo 1998, pp. 136–137)

Similarly, Lee Iacocca reduced his salary to \$1 in his first year at Chrysler because he believed that leadership means personal example.

*Inspirational motivation* involves motivating employees by providing deeper meaning and challenges in their work. Such leaders energize their employees' desire to work cooperatively to contribute to the collective mission of their group. The motivational role of vision is achieved through the selection of goals meaningful to followers. For example, Mary Kay Ash articulates her company's mission as enhancing women's role in the world and empowering them to become more self-confident. This is a highly appealing message to an organization made up of women for whom selling Mary Kay Cosmetics may be their first working career. The importance of giving meaning to work is also illustrated in the speech of Orit Gadiesh, the vice chairman of Bain and Co., a well-known Boston management consulting firm. After a period of crisis, the financial picture of the company had turned around, but Gadiesh sensed that the organization had lost pride in itself. She chose the company's annual meeting in August 1992 to convey in words what she felt the organization had to realize, a "pride turnaround." Gadiesh said, "We've turned around financially, and we've turned around the business. . . . Now it's time to turn around what they [competitors] really fear, what they have always envied us for, what made them most uneasy—as crazy as this sounds. It's time to turn around our collective pride in what we do!" (Conger and Kanungo 1998, p. 182).

*Intellectual stimulation* entails the leader's and the employees' questioning of assumptions, re-framing problems, and thinking about concepts using novel approaches or techniques. For instance, Richard Branson, the charismatic British entrepreneur who built the diversified, multibillion dollar business of Virgin, sets an example of an innovative and unconventional approach to business. Time after time, Branson has found opportunities in established industries by going against conventions. One of his earliest successful initiatives was in discount stores. When approximately 20 years old, he observed that despite the abolition of a government policy allowing manufacturers and suppliers to "recommend" prices to retail outlets (which had ensured high prices for records), music records remained overpriced. He decided to challenge norms around pricing by offering records through the mail, discounting them some 15% from retail stores. When he entered the airline business in 1984, he distinguished himself from competitors in various ways from lower fares to in-flight masseurs, fashion shows to musicians, and motorcycle transportation to the London airport. Anita Roddick of The Body Shop also expresses a hard-line stance against the traditional practices of the cosmetics industry: "It turned out that my instinctive trading values were dramatically opposed to the standard practices in the cosmetic industry. I look at what they are doing and walk in the opposite direction" (Conger and Kanungo 1998, p. 185).

*Individualized consideration* represents the leader's effort to understand and appreciate the different needs and viewpoints of employees while attempting continuously to develop employee potential. A soldier in the Israel Defense Forces (IDF) describes his platoon leader's individualized treatment

On the way back, there was a very steep slope. I finished it with no air in my lungs. We still had 400 meters to run. I was last and I couldn't walk anymore. Then, K., the platoon commander came and said "run." I can't walk and he is talking to me about running. Ten meters before the end he said "now sprint." I did it and got to the camp. I felt great. I felt I had done it. Suddenly I discovered that K. was able to get me to do things that I never thought I could do.

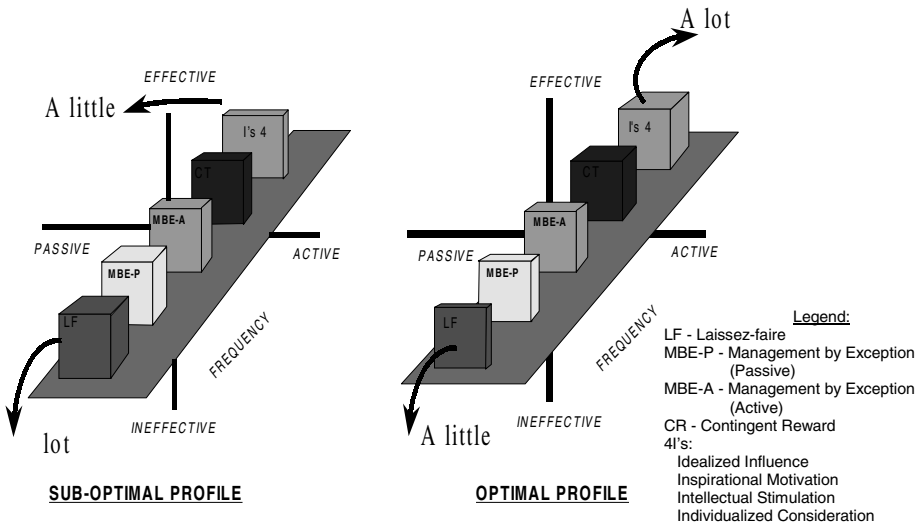
(Landau and Zakay 1994, pp. 32–33)

Donald Burr, the former CEO of People Express Airlines, who was deeply interested in creating a humane organization and was guided by a fundamental belief in people, summarizes his view: "The people dimension is the value added to the commodity. Many investors still don't fully appreciate this point" (Conger and Kanungo 1998, p. 144).

Conversely, transactional leaders exert influence on employees by setting goals, clarifying desired outcomes, providing feedback, and exchanging rewards for accomplishments. Transactional leadership includes three components. With the *contingent reinforcement* style, the leader assigns or secures agreements on what needs to be done and promises or actually rewards others in exchange for satisfactorily carrying out the assignments. Alternatively, using the *management-by-exception—active* style, the leader arranges actively to monitor deviations from standards, mistakes, and errors in the employees' assignments and takes corrective action as necessary. With the *management-by-exception—passive* style, the leader waits for problems to emerge and then takes corrective action. Nontransactional leadership is represented by the *laissez-faire* style, in which the leader avoids intervention, transactions, agreements, or setting expectations with employees (Bass 1996; Bass and Avolio 1993).

One of the fundamental propositions in Bass and Avolio's model is that transformational leadership augments transactional leadership in predicting leader effectiveness. Transformational leadership cannot be effective if it stands alone. Supporting most transformational leaders is their ability to manage effectively, or transact with followers, the day-to-day mundane events that clog most leaders' agenda. Without transactional leadership skills, even the most awe-inspiring transformational leaders may fail to accomplish their intended missions (Avolio and Bass 1988). Indeed, several studies (Hater and Bass 1988; Howell and Frost 1989; Seltzer and Bass 1990) have confirmed this "augmentation hypothesis" and shown that transformational or charismatic leadership explained additional variance in leader effectiveness beyond either transactional leadership or leadership based on initiating structure and consideration. Sometimes, with highly transformational or charismatic leaders, there is a need to find a complementary top manager with a more transactional-instrumental orientation. For example, Colleen Barrett, the executive vice president of Southwest, is the managerial complement to Herb Kelleher's charismatic, loosely organized style. She is a stickler for detail and provides the organizational counterweight to Kelleher's sometimes chaotic style (Conger and Kanungo 1998).

Thus, according to the full range leadership model, every leader displays each style to some degree. Three-dimensional optimal and suboptimal profiles are shown in Figure 3. The depth *frequency* dimension represents how often a leader displays a style of leadership. The horizontal *active* dimension represents the assumptions of the model according to which the *laissez-faire* style is the most passive style, whereas transactional leadership incorporates more active styles and transformational leadership is proactive. The vertical *effectiveness* dimension is based on empirical results that



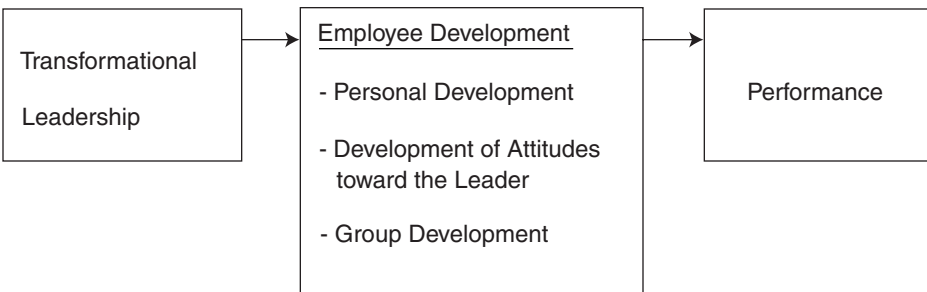
**Figure 3** Full Range Leadership Model: Optimal and Suboptimal Profiles as Created by the Frequency of Displaying the Leadership Styles' Behaviors. (Adapted from B. J. Avolio, *Full Leadership Development: Building the Vital Forces in Organizations*, p. 53, copyright © 1999 by Sage Publications, Inc., reprinted by permission of Sage Publications, Inc.)

have shown active transactional and proactive transformational leadership to be far more effective than other styles of leadership. The frequency dimension manifests the difference between optimal and suboptimal profile. An optimal managerial profile is created by more frequent use of transformational and active transactional leadership styles along with less frequent use of passive transactional and laissez-faire leadership. The opposite directions of frequency create a suboptimal profile.

**3. LEADERSHIP OUTCOMES**

My message was, and will always be, "There are no limits to the maximum."  
 —T., an exemplary infantry platoon commander in the Israel Defense Forces

"Transformational leaders encourage follower to both *develop* and *perform* at levels above what they may have felt was possible, or beyond their own personal expectations" (Bass and Avolio 1990, p. 234, emphasis in original). Thus, achieving certain levels of performance as well as development become a targeted outcome. The linkages between transformational leadership, employee development, and performance are presented in Figure 4.



**Figure 4** Linkages among Transformational Leadership, Employee Development, and Performance.

### 3.1. Performance

Numerous studies have examined the relationships between various components of the full range leadership model and performance outcomes. Overall, these studies confirmed the positive impact of transformational leadership on perceived effectiveness as well as on hard measures of performance.

The most commonly studied perceived outcomes were perceived effectiveness of the leader and the work unit, extra effort, and satisfaction with the leader. In the majority of the studies, both transformational/transactional leadership and the outcome variables were evaluated by the same source, usually the immediate followers. For example, Hater and Bass (1988) found positive high correlations between transformational leadership and perceived effectiveness and satisfaction, both rated by the leaders' immediate followers, whereas the correlations between the transactional factors and followers' ratings were low to moderate. Seltzer and Bass (1990) studied 138 followers and 55 managers and confirmed that transformational leadership adds to transactional leadership (as represented by the dimensions of initiating structure and consideration) in explaining the variance of followers' satisfaction and ratings of leader effectiveness. Several studies have expanded the spectrum of outcome variables. Thus, for example, Bycio et al. (1995) conducted a study among 1376 nurses who evaluated both their superior's leadership style and the outcome variables. They found that in addition to the strong positive relationships between transformational leadership and followers' extra effort, satisfaction with the leader, and perceived leader effectiveness, transformational leadership also had positive correlations with followers' organizational commitment and negative correlations with followers' intentions to leave the profession and the job. Podsakoff et al.'s (1990) study among 988 exempt employees of a large petrochemical company confirmed that "core" transformational leadership behaviors and individualized support had positive effects on followers' trust and satisfaction with the leader. Bass and Avolio (1993) summarize the findings of this type from studies conducted in industrial, military, educational, and religious organizations. The pattern of relationships was consistent across 17 independent samples and pointed to a clear hierarchy. The correlations with perceived effectiveness and satisfaction with the leader typically ranged from 0.60 to 0.80 for transformational leadership, from 0.40 to 0.60 for contingent reward, from -0.30 to 0.30 for management-by-exception, and from -0.30 to -0.60 for laissez-faire leadership.

Fewer studies have collected survey measures of both leadership and outcomes from multiple sources. In these studies, different sources subjectively evaluated transformational/transactional leadership and organizational outcomes. The most frequent additional source used was the evaluation of managers' performance by their superiors. For example, Keller (1992) studied 66 project groups containing professional employees from three industrial research and development organizations. He showed that transformational leadership, as rated by immediate followers, was more predictive of project quality, as evaluated by the management, in research vs. development teams. Yammarino and Dubinsky (1994) collected leadership and perceived effectiveness data from various sources, including 105 salespersons and their 33 sales supervisors, in a \$1 billion multinational medical products firm. They confirmed an individual-level positive relationship between transformational leadership, as perceived by followers, and extra effort and perceived performance of followers, as perceived by their superiors.

A growing number of studies have examined the impact of transformational leadership on objective performance measures. For example, Onnen (1987, in Bass and Avolio 1993) reports that transformational leadership of Methodist ministers, as evaluated by their district members, was positively related to Sunday church attendance and to growth in church membership. Avolio et al. (1988) found that transformational leadership and active transactional leadership were positively related to financial measures and productivity among MBA students engaged in a complex, semester-long competitive business simulation. Bryant (1990, in Bass and Avolio 1993) confirms that nursing supervisors who were rated by their followers as more transformational managed units with lower turnover rates. Howell and Avolio (1993) found positive relationships between transformational leadership and objective unit performance over a one-year interval among managers representing the top four levels of management in a large Canadian financial institution. German bank unit performance over longer vs. shorter time periods was higher in banks led by leaders who were rated by their employees as more transformational (Geyer and Steyrer 1998 in Avolio 1999).

However, "even when predictions regarding objective performance outcomes support the model, we are still faced with plausible alternative cause-and-effect relationships" (Bass and Avolio 1993, p. 69). Therefore, to establish causal effects, several experiments (Barling et al. 1996; Crookall 1989; Dvir et al. in press; Howell and Frost 1989; Kirkpatrick and Locke 1996; Sosik et al. 1997) were conducted either in the field or in the laboratory. Overall, these experiments confirmed the causal impact of transformational or charismatic leadership on performance outcomes. Such an experimental design can confirm that the direction of causal flow is indeed from transformational leadership to the hypothesized performance outcomes as opposed to instances where enhanced follower performance cause the higher transformational leadership ratings. Howell and Frost (1989) found that experimentally induced charismatic leadership positively affected task performance, task adjustment, and ad-

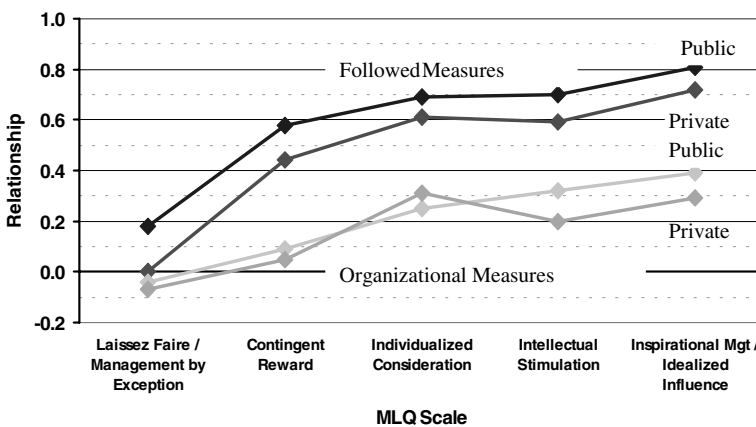
justment to the leader and the group. Kirkpatrick and Locke (1996) manipulated three core components common to charismatic and transformational leadership in a laboratory simulation among 282 students. They found that a vision of high quality significantly affected several attitudes, such as trust in the leader, and congruence between participants' beliefs and values and those communicated through the vision. Vision implementation affected performance quality and quantity. Barling et al. (1996), in a field experiment among 20 branch managers in a large Canadian bank, confirmed the positive impact of transformational leadership training on employees' organizational commitment and on two aspects of branch-level financial performance. Dvir et al. (in press) conducted a longitudinal randomized field experiment among military leaders and their followers. They confirm the positive impact of transformational leadership, enhanced through a training intervention, on direct followers' personal development and on indirect followers' objective performance.

Two meta-analytic studies have been conducted recently. Lowe et al. (1996) found that significantly higher relationships were observed between transformational scales and effectiveness than between transactional scales and effectiveness across 47 samples. This pattern held up across two levels of leadership and with both hard (number of units) and soft (performance appraisals) measures of performance (see Figure 5). Coleman et al. (1995) found that, across 27 studies, the transformational leadership styles were more strongly related to performance than the transactional styles. The average relationship across studies for the transformational leadership factors and performance ranged from 0.45 to 0.60; for transactional leadership, 0.44; for management-by-exception—active, 0.22; for management-by-exception—passive, 0.13; and for laissez-faire, -0.28.

To sum up, there is sufficient empirical evidence to conclude that transformational leadership has a positive impact on both perceived and objective performance and that this impact is stronger than the effects of transactional leadership.

### 3.2. Employee Development

Rather than solely focusing on the exchange with an eye toward performance, transformational leaders concentrate on developing employees to their full potential. Indeed, one of the most prominent aspects of transformational leadership compared to transactional leadership concerns employee developmental processes (Avolio and Gibbons 1988). The transformational leader evaluates the potential of all employees in terms of their being able to fulfill current commitments and future positions with even greater responsibilities. As a result, employees are expected to be more prepared to take on the responsibilities of the leader's position, and to be "transformed," as Burns (1978) originally argued, from followers into leaders. In contrast, working with the transactional leader, employees are expected to achieve agreed upon objectives but are not expected to undergo a developmental process whereby they will assume greater responsibility for developing and leading themselves and others. Follower



**Figure 5** The Relationships between the Full Range Leadership Model's Styles and Leader Effectiveness in Public and Private Organizations in Lowe et al.'s (1996) Meta-analysis of 47 Samples. (MLQ = multifactor leadership questionnaire, which measures transformational, transactional, and nontransactional leadership; Relationship = correlations between leadership style and leader effectiveness; Follower measures = subordinate perceptions of leader effectiveness; organizational measures = quasi-institutional measures of leader effectiveness including both hard measures [e.g., profit] and soft measures [e.g., supervisory performance appraisals].)

developmental variables were classified here into the three broad categories of personal development, development of attitudes toward the leader, and group development.

### 3.2.1. *Employee Personal Development*

Most general references in the literature to follower development actually refer to an intrapersonal, developmental change that followers of transformational leaders presumably undergo; the leader transforms followers by serving as a coach, a teacher, and a mentor. Dvir et al. (in press) propose a conceptual framework for examining developmental aspects of transformational leadership theory on the basis of the sporadic theoretical discussions and empirical examinations in the literature. Their framework for follower personal development includes the three domains of motivation, morality, and empowerment. Dvir et al. found evidence of the impact of transformational leaders upon their direct followers' development in at least one measure of each category.

*Motivation* The emphasis in transformational leadership theory on employee motivational development can be traced back to Burns's (1978) references to two continuums of follower development. The first dealt with motivation and was based on Maslow's (1954) hierarchy of needs. Maslow conceived a hierarchy of human needs according to the following order: physiological, security, social, self-esteem, and self-actualization needs. Self-actualization, the realization of one's potential to become what one has the capacity to become, is at the highest level of need. According to Maslow, only upon satisfaction of the lower level needs does the motivation to satisfy a higher level need arise, and self-actualization needs are infinite. Burns (1978) proposes that transforming compared to transactional leaders motivate followers to achieve the highest possible level of need satisfaction such that the primary motive becomes the desire to satisfy *self-actualization needs* rather than lower needs. Based on Burns, Bass (1985, 1996) suggests that transformational leaders elevate the level of needs along Maslow's hierarchy or expand the employees' portfolio of needs. Unlike transactional leaders, who concentrate on fulfilling current employee needs, transformational leaders arouse needs that may have lain dormant.

Another motivational aspect associated with transformational leadership is the emphasis on employees' *extra effort*. Bass (1985) originally posited extra effort as a manifestation of employee motivation. He claimed that employees' extra efforts show how highly a leader motivates them to perform beyond expectations. Thus, it can be concluded that the emphasis on satisfying self-actualization needs reflects the type of need underlying the employees' motivation, whereas extra effort reflects the level of their motivation. Shamir et al. (1993), in discussing the motivational effects of charismatic leadership, propose that charismatic leaders increase employee effort by increasing the intrinsic value of their efforts through links to valued aspects of the employee's self-concept. Forming these linkages to the employee's self-concept helps to harness the motivational forces of self-expression, self-consistency, self-esteem, and self-worth. Extra effort is one of the most widely confirmed correlates of transformational leadership. Dvir et al. (in press) conducted a randomized field experiment in a military organization and confirmed the positive impact of transformational leadership, enhanced through training, on direct followers' perceived extra effort.

*Morality* Burns's (1978) second developmental continuum relates to the employees' moral development, based on Kohlberg's (1973) theory. Burns summarizes that "transforming leadership ultimately becomes moral in that it raises the level of human conduct and ethical aspiration of both leader and led, and thus it has a transforming effect on both" (p. 20). Bass (1985) purposely omitted the moral element from his original theory, apart from emphasizing the importance of collective interests. Recent articles have decried the omission of the moral element from transformational and charismatic leadership theories, and have called for its inclusion as part of the developmental process undergone by employees of transformational leaders. Bass (1996) came to agree with Burns that to be transformational, a leader must be morally uplifting. One of the difficulties in applying this part of the theory is that, according to Kohlberg, moving from one moral stage to the next may take years, a time span too long to wait for results to appear in typical leadership studies. Therefore, moral development in the short-term can be represented by the employees' *internalization of organizational moral values* (Dvir et al. in press).

The transition from a desire to satisfy solely personal interests to a desire to satisfy the broader collective interests is part of moral development, according to Kohlberg (1973). Bass (1985) places special emphasis on this aspect of moral development and suggests that transformational leaders get their employees to transcend their own self-interest for the sake of the team or organization. In Shamir's (1991) self-concept theory, the *collectivistic orientation* of the employees is one of the central transformational effects of charismatic leaders. Dvir et al. (in press) confirm the causal impact of transformational leaders on their direct followers' collectivistic orientation.

*Empowerment* Transformational leadership theory, in contrast to early charismatic leadership theories (e.g., House 1977), never assumed that leadership relationships are based on regression or weakness on the part of the employees. On the contrary, transformational leadership theory has

consistently emphasized employees' development toward autonomy and empowerment over automatic followership. Neocharismatic leadership theories have ceased conceptualizing the employees as weak (House 1995; Shamir 1991).

The literature has referred to critical-independent thinking as one of the essential empowerment-related processes undergone by employees of transformational leaders. Bass and Avolio (1990) state that transformational leaders enhance employees' capacities to think on their own, develop new ideas, and question operating rules and systems that no longer serve the organization's purpose or mission. Avolio and Gibbons (1988) posit that a primary goal of transformational leadership is to develop employee self-management and self-development. Shamir's (1991) self-concept theory emphasized the transformational effects of charismatic leaders on employee autonomy, independence, and empowerment. A critical-independent employee as an outcome of transformational leadership also accords Kelley's (1992) conceptualization regarding styles of followership perceived within organizations as good followership. Kelley's respondents described the best followers as those who "think for themselves," "give constructive criticism," "are their own person," and "are innovative and creative." The worst followers were characterized as "must be told what to do" and "don't think." In between were the typical followers who "take direction" and "don't challenge the leader or group." Although Kelley labels this dimension critical-independent thinking, he actually refers to thinking and action, or in his words, "to become a full contributor, you need to cultivate independent, critical thinking and develop the courage to *exercise* it" (p. 114, emphasis added). Thus, it is more appropriate to label this developmental outcome of transformational leadership *critical-independent approach*. Howell and Avolio (1989) confirm the hypothesized relationships between transformational leadership and employee innovation, risk-taking, and creativity among Canadian executives. Dvir et al. (in press) found a positive effect of transformational leadership on direct followers' critical-independent approach toward the self, peers, superiors, and the organizational system.

Kelley's (1992) review of best, worst, and typical follower characteristics reveals a second dimension, namely active engagement in the task. The best followers "take initiative," "participate actively," "are self-starters," and "go above and beyond the job." The worst ones are "passive," "lazy," "need prodding," and "dodge responsibility." The typical followers basically "shift with the wind." Active engagement in the task involves the investment of energy into the followership role, usually toward a mutually shared dream or goal. Thus, *active engagement in the task* is defined as the energy invested in the employee role as expressed by high levels of activity, initiative, and responsibility taken by the employee, and is expected to be positively affected by transformational leadership.

Transformational and charismatic leadership theorists have emphasized the impact of the leader on employees' self-perceptions. Shamir et al. (1993) specify increased employee self-efficacy as one of the transformational effects of charismatic leaders. According to Conger and Kanungo (1988), self-efficacy can be tied to charismatic leadership through empowerment. Avolio and Gibbons (1988, p. 298) stated that "a significant part of developing or transforming followers is developing their feelings of self-efficacy." Eden (1988) argues about the difference between general and specific self-efficacy (GSE and SSE, respectively). GSE is relatively a stable trait and is resistant to change, whereas SSE represents a more labile state. Direct followers of transformational leaders were found to have higher levels of SSE (Dvir et al. in press). Based on the importance given to self-efficacy as an empowerment-related outcome of transformational and charismatic leadership, we posited *specific self-efficacy* as a malleable developmental outcome that is enhanced among employees of transformational leaders.

### 3.2.2. *Development of Employee Attitudes toward the Leader*

According to Yukl (1998), transformational leaders influence followers by arousing strong emotions and identification with the leader. The notion of follower development going in the direction of strong emotional attachment or favorable attitudes toward the leader is deeply rooted in charismatic and transformational leadership theory. For example, House (1977) asserts that followers in charismatic relationships feel affection toward the leader. According to Conger and Kanungo (1987), charismatic leaders are more likable and honorable than noncharismatic leaders. Shamir et al. (1993) suggest that personal commitment to the leader is part of the transformational effects of charismatic leaders. Favorable attitudes toward the leader have been the most commonly studied outcomes of transformational leadership. There is a considerable amount of evidence to conclude that transformational leadership enhances employees' *satisfaction with the leader* and *perceived effectiveness of the leader* (Bass and Avolio 1990).

The full range leadership model (Avolio and Bass 1988) suggests that having a shared sense of purpose and common norms between follower and leader should assist transformational leaders in successfully completing and communicating their mission. Furthermore, if norms are not common to both leader and follower, then the first step toward transforming followers may involve the leader's unfreezing followers' attitudes and values and then gaining conformity with his or her own value



system. Many writers have emphasized the importance of the similarity between leaders and followers. For example, House and Baetz (1979, in Conger and Kanungo 1987) postulate that the followers of charismatic leaders are characterized by the similarity of their beliefs to those of the leader. The self-concept theory (Shamir 1991; Shamir et al. 1993) posits that the values and identities of followers within charismatic relationships are congruent with the leaders' vision. According to this theory, one of the two classes of charismatic leaders' behaviors is frame alignment, which refers to the linkage of follower and leader interpretive orientations so that the followers' interests, values, and beliefs and the leaders' activities, goals, and ideology become congruent and complementary. Some level of demonstrated and moral superiority is likely to be necessary for the leader to become a representative character, but the leader should also emphasize his or her similarity to the followers on certain dimensions. The main processes of psychological attachment through which the leader's behaviors of frame alignment influence their followers in the charismatic relationships are personal identification and value internalization. Personal identification refers to the followers' desire to emulate or vicariously gain the qualities of the leader. Such identification increases with the extent to which the leader represents desirable identities, values, and attributes in his or her behaviors. Value internalization refers to the incorporation of the leader's or group's values within the self as guiding principles. The self-concept theory stresses that personal identification is consistent with the theory, but a stronger emphasis is put on value internalization.

Several empirical studies have been conducted on the relationships between *leader-follower similarity or value congruence* and various outcome variables. Turban and Jones (1988) found that superior-follower similarity was related to followers' perceived performance. Megalino et al. (1989) showed that workers were more satisfied and committed when their values were congruent with the values of their superior. Enz (1988) found that perceived value congruity between department members and top managers, examined from the perspectives of both groups, accounted for unique variance in departmental power. Kirkpatrick and Locke (1996) found in a laboratory experiment that articulation of a vision emphasizing quality by the leader positively affected the followers' perceived congruence with the beliefs and values communicated through the vision.

### 3.2.3. *Employee Group Development*

Several models have explicitly considered leadership to be one determinant of team effectiveness. In addition, recent references to transformational and charismatic leadership have begun to emphasize the importance of group-level outcomes (Avolio 1999; Shamir et al. 1998). For example, Guzzo et al. (1993) suggest that transactional leadership might have indirect effects on group potency and effectiveness, whereas transformational leadership has both indirect and direct effects. Klein and House (1995) recently extended charismatic theory to the group level by conceiving groups as constellations of dyadic relationships. In their extension, groups and organizations vary along the dimension of homogeneity or heterogeneity of group members' charismatic relationships with the leader. Shamir (1990) suggests that leaders can enhance collectivistic motivation, that is, the individual contributions to collective work efforts, through calculative considerations, the internalization of values and personal norms, or the maintenance and affirmation of relevant identities. In his self-concept theory, Shamir (1991) posits collectivistic orientation as an important transformational effect on followers of charismatic leaders. In spite of the emphasis on follower group development in recent frameworks of transformational leadership, very few empirical investigations have connected transformational and transactional leader behaviors and group-level outcomes. Sivasubramaniam et al. (1997, in Avolio 1999) found that transformational leadership directly predicted the performance of work groups while also predicting performance indirectly through levels of group potency. In a longitudinal laboratory experiment, Sosik et al. (1997) largely confirm that transformational leadership affected group potency and group effectiveness more strongly than transactional leadership. Shamir et al. (1998) confirm that the leaders' emphasis on the collective identity of the unit was associated with the strength of the unit culture, as expressed in the existence of unique symbols and artifacts, and with unit viability as reflected by its discipline, morale, and cooperation. More research is needed on the effects of transformational leaders on follower group development.

## 4. IMPLICATIONS FOR STRATEGIC HUMAN RESOURCE MANAGEMENT

This section will introduce central implications of the implementation of the new genre of leadership theories in organizations. Our goal is to focus on the implications of leadership research in the framework of the major functions of human resource management (HRM). As with other aspects of organizational behavior, leadership and motivation research has contributed to the development of sophisticated HRM tools and techniques that have been shown to improve organizational effectiveness (e.g., Jackson and Schuler 1995). The major functions of HRM, discussed below, are recruiting, performance appraisal, training, and compensation. For each function, we provide a background based on a strategic approach to HRM. We then describe the utility of the above research findings, regarding leadership and motivation, to strategic HRM and provide examples.

#### 4.1. A Strategic Approach to Human Resource Management

As traditional sources of competitive advantage, such as technology and economies of scale, provide less competitive leverage now than in the past, core capabilities and competence, derived from how people are managed have become more important. A strategic perspective of human resource management is critical for creating and sustaining human resource-based competitive advantage (Sivasubramaniam and Ratnam 1998). A strategic approach to HRM implies a focus on “planned HRM deployments and activities intended to enable the firm to achieve its goals” (Wright and McMahan 1992, p. 298). Strategic HRM involves designing and implementing a set of internally consistent policies and practices that ensure that a firm’s human capital (employees’ collective knowledge, skills, and abilities) contributes to the achievement of its business objectives. Internal consistency is achieved by creating vertical and horizontal fit. Vertical fit involves the alignment of HRM practices and strategic management, and horizontal fit refers to the alignment of the different HRM functions (Wright and Snell 1998).

Strategic HRM is concerned with recognizing the impact of the outside environment, competition, and labor markets, emphasizes choice and decision making, and has a long-term focus integrated in the overall corporate strategy. For instance, companies like General Motors that emphasize a re-trenchment or cost reduction strategy will have an HRM strategy of wage reduction and job redesign, while the growth corporate strategy of Intel requires that it will aggressively recruit new employees and rise wages (Anthony et al. 1998). Similarly, cost-reduction policies may require that leaders emphasize equity and contingent reward, while growth strategy should enhance transformational leadership. Cost-reduction and growth strategies, as well as other strategies, have clear implications for how companies should recruit employees, evaluate their performance, and design training and compensation systems.

Considerable evidence has shown the performance implications of HRM. These studies indicate that high-performing systems are characterized by careful selection, focus on a broad range of skills, employ multisource appraisals focused on employee development, employ teams as a fundamental building block of the organization’s work systems, provide facilitative supervision, include human resource considerations in strategic decision making, and link rewards to performance that focuses the employees on the long-term goals of the firm. These findings have been fairly consistent across industries and cultures (Sivasubramaniam and Ratnam 1998).

#### 4.2. Recruiting: From Hiring to Socialization

Recruiting, the process by which organizations locate and attract individuals to fill job vacancies, should be matched with company strategy and values as well as with external concerns, such as the state of the labor market. Recruiting includes both pre- and post-hiring goals. Among the pre-hiring goals are attracting large pools of well-qualified applicants. Post-hiring goals include socializing employees to be high performers and creating a climate to motivate them to stay with the organization (Fisher et al. 1996). Another major decision in the recruiting philosophy of a firm is whether to rely on hiring outside candidates or to promote from within the organization.

The above decisions and goals have implications for how organizations can benefit from recent research on leadership and motivation. Organizations that recruit from their internal labor market and accept candidates for long-term employment may seek candidates with leadership skills who can be potential managers. Such organization may use mentoring programs as a way of enhancing employee socialization. Other organizations may benefit from using leadership skills as part of the selection procedures they employ, though the use of leadership characteristics as a criterion for selection is highly controversial (e.g., Lowery 1995).

##### 4.2.1. Implications for Selection

While good leadership qualities could be a criterion for selecting employees at all levels, if used at all, it is more common in managerial selection. Managerial selection is a particularly difficult task because there are many different ways to be a successful manager. Managing requires a wide range of skills, one of which could be leadership. Leadership effectiveness was found to relate to common selection criteria, such as practical intelligence, reasoning, creativity, and achievement motivation (Mumford et al. 1993). However, many HRM professionals are reluctant to use leadership as a criterion for selection, citing reasons, such as lack of definition, complexity of the construct, and difficulty in validating selection tools (Lowery 1995). These challenges pose a threat to the validity of the selection process. An invalid selection system may be illegal, as well as strategically harmful for the organization. Consequently, our discussion of leadership as a selection tool is mainly exploratory.

The most common use of leadership criteria in selection is as part of an assessment center (e.g., Russell 1990). Assessment centers are work samples of the job for which candidates are selected (mostly candidates for managerial positions). They can last from one day to one week and have multiple means of assessment, multiple candidates, and multiple assessors. Assessment centers are

considered relatively valid predictors of both short- and long-term success in managerial positions (e.g., Russell 1987).

Many assessment centers include leadership evaluation in the form of leaderless group discussions, where candidates are evaluated on small-group management activities (Lowery 1995). In the simple form of leaderless group discussion, the initially leaderless group is assigned a problem to discuss to reach a group decision. Assessors judge who emerges as a leader, initiatives displayed by each participant, and other aspects of interpersonal performance (Bass 1990). Assessors are required to identify behaviors, such as gatekeeping, facilitate support, and evaluate the candidate's ability to accomplish the "tasks." Although assessment centers are generally more suitable for evaluating candidates for promotion, they are also used with candidates for entry (Lowery 1995). In Lowery's review of the applicability of measuring leadership in an assessment center, he argues that we still do not know how to assess leadership as an independent performance dimension in assessment centers.

Recognizing the limitations of assessment centers, Russell (1990) suggested using biodata to select top corporate leaders. According to Kunhert and Lewis (1987), biodata captures early life events, which are hypothesized to impact leadership performance in adulthood. They argued that transformational leaders derive meaning from personal experience in a significantly different way than transactional leaders based on early development. Identifying the life experiences that lead to the development of transformational leaders may contribute to selecting such leaders based on their biodata reports. Indeed, Russell (1990) obtained correlations between prior life experiences and contribution to fiscal performance of candidates for top managerial positions at a Fortune 50 firm. According to Russell, transformational leadership measures may be a good source of anecdotal behavioral examples that correlate with biodata and can serve as tools for executive selection.

More recent attempts to utilize findings from the new genre of leadership theory in selection use both biodata and assessment center procedures. Avolio and colleagues from South Africa have developed a preliminary tool to assess the leadership potential of candidates to the South African police force. This tool is based on the multifactor leadership questionnaire (MLQ) developed by Bass and Avolio (1996) to measure the full range leadership styles. The assessment center also includes a biodata survey that has been used in previous research (Avolio 1994). Similarly, researchers from the Center for Creative Leadership examined the process of executive selection and identified that success in the top three jobs in large organizations was predicted mostly by "relationships with subordinates" and "expressed affection" (Kouzes 1999).

The above are examples of early application of the new genre of leadership theory in selection. However, since selection procedures require serious legal considerations, the application of findings from recent research to selection is relatively slow. However, recent leadership approaches may provide insights for other recruiting-related functions, such as mentoring.

#### ***4.2.2. Implications for Mentoring and Socialization***

A strategic HRM approach requires that the staffing process not end once applicants are hired or promoted. To retain and maximize human resources, organizations must emphasize socializing newly hired/promoted employees. A thorough and systematic approach to socializing new employees is necessary if they are to become effective workers. Good socialization is essential to ensure employee understanding of the company's mission and vision. It includes a realistic job preview (RJP) that allows the creation of appropriate expectations for the job (Breaugh 1983). RJP includes presenting realistic information about job demands, the organization's expectations, and the work environment. At a later stage, when employees begin to feel part of the organization, a mentoring program, in which an established worker serves as an adviser to the new employee, may help in the socialization process. Mentoring programs are especially necessary in environments of high turnover, such as high technology (Messmer 1998).

Mentoring programs have both short- and long-term benefits. In addition to developing the skills, knowledge, and leadership abilities of new and seasoned professionals, these programs strengthen employee commitment (Messmer 1998). Mentoring programs have been successful in developing new talent, as well as recruiting junior level staff and bringing them up to speed on policies and procedures. Mentors provide more than company orientation; they become trusted advisors on issues ranging from career development to corporate culture. At a time when many executives are managing information instead of people, mentoring may offer a welcome opportunity to maintain the kinds of critical interpersonal skills that can further a manager's career. Although the mentors in most mentoring programs are not the supervisors of the mentees, the characteristics of good mentors are very similar to the characteristics of good leaders, especially transformational leaders (Bass 1985).

Bass (1985) argues that effective transformational leaders emphasize individualized consideration that involves the leader's service as a counselor for their proteges. Such leaders have more knowledge and experience and the required status to develop their proteges. Johnson (1980) found that two thirds of 122 recently promoted employees had mentors. Bass (1985) claims that since mentors are seen as

authorities in the system, their reassurance helps mentees be more ready, willing and able to cooperate in joint efforts. Moreover, mentoring is an efficient method for leadership development because followers are more likely to model their leadership style on that of their mentor, as compared with a manager who is not seen as a mentor (Weiss 1978). To be effective, mentors need to be successful, competent, and considerate (Bass 1985). Companies like Bank of America and PricewaterhouseCoopers' employ mentoring mostly to increase retention. In competitive labor markets, such as the high-technology industry, increasing retention is a major HR goal. In PricewaterhouseCoopers', mentoring has led to an increase in female retention (Messmer 1998). Clearly, transformational leadership, and individualized consideration in particular, can provide a strategic advantage to organizations that employ mentoring programs.

The development of mentoring programs should include a review of needs for mentoring, a buy-in from senior management, and constant updating of all managers involved with the mentee. Such programs should also include a selection of mentors based on the above principles, a careful match of participants, and company events to demonstrate the importance of the mentoring program for the organization (Messmer 1998). Top managers, such as the long-time CEO of the Baton Rouge Refinery of Exxon, are seen as more effective if they develop their followers. In the case of Exxon, these followers were later promoted more than their mentor.

We chose to demonstrate the contribution of effective leadership to recruiting using the examples of selection and mentoring. However, leadership and motivation are important parts of other recruiting processes, such as in interviewer skills and assessment of candidates' motivation. We chose those aspects that we feel benefit especially from the new genre of leadership theories. We continue to use this approach with the HRM function of performance management.

### **4.3. From Performance Appraisal to Performance Management**

Performance appraisal is the process by which an employee's contribution to the organization during a specific period of time is assessed. Performance feedback provides the employees with information on how well they performed. If used inappropriately, performance appraisal can be disastrous and lead to a decrease in employee motivation and performance. Performance appraisal has a significant strategic role in HRM. It provides strategic advantage by allowing the organization to monitor both its individual employees and the extent to which organizational goals are met. From a strategic HRM perspective, performance appraisal involves more than assessment or measurement. Rather, it is a method for performance management, including defining performance, measuring it, and providing feedback and coaching to employees (Fisher et al. 1996). In sum, performance management has three major strategic functions. First, it signals to employees which behaviors are consistent with organizational strategy. Second, if used appropriately, it is a useful method for organizational assessment. Finally, it is a feedback mechanism that promotes employee development. The movement from a focus on appraisal to performance management allows for better application of the new genre of leadership and motivation theory.

While the traditional performance-appraisal systems emphasized uniform, control-oriented, narrow-focus appraisal procedures that involved supervisory input alone, strategic performance management emphasizes customization, multipurpose, and multiple raters, focusing on development rather than past performance. Similarly, whereas traditional approaches to leadership and motivation (e.g., House 1971) emphasized control and exchange based on extrinsic motivators, more recent approaches emphasize development and influence through intrinsic motivators (e.g., Bass 1985; Shamir et al. 1993). Indeed, even during the 1980s and the beginning of the 1990s, employees and managers viewed performance appraisal negatively. Longnecker and Gioia (1996, in Vickers and Fulmer 1996) found that out of 400 managers, only one quarter were satisfied with appraisal systems and the higher a manager rose in the organization, the less likely he or she was to receive quality feedback. Nevertheless, they indicated that when used as a strategic tool for executives, systematic feedback was crucial for them. Many of them were also willing to be evaluated personally. According to Vickers and Fulmer (1996), performance-management processes are highly linked with leadership development. We chose to focus on the contributions of leadership research to two aspects of performance management: feedback from multiple raters (360°) and alignment of strategic goals.

#### **4.3.1. Implications for Feedback**

As we mentioned above, strategic performance-management systems involve more than the traditional supervisory evaluation. Current appraisal systems often include peer ratings, follower ratings, and self-ratings. Each source seems to contribute differently and their combination (a 360° approach) is used mainly for developmental reasons (Waldman et al. 1998). About 12% of American organizations are using full 360° programs for reasons such as management development, employee involvement, communication, and culture change (Waldman et al. 1998). Advocates of 360° systems believe that they contribute to leadership development by allowing managers to compare their self-perceptions with those of their employees (Yammarino and Atwater 1997).

The gaps between self and other ratings were found to predict the perceived performance of the leader. Agreement between self and other reports on *high* ratings predicted high performance (Yammarino and Atwater 1997). Gaps between self and other ratings may also relate to the leadership style of the targeted manager. Transformational executives who had ratings congruent with those of their followers were seen as highly considerate, emphasized meetings with their employees, and associated individual employee goals with organizational goals.

Nontransformational leaders, who had little congruence with their followers' ratings, were seen as detached and as having little or no impact (Berson and Avolio 1999). These findings may contribute to a better understanding of the gaps between raters and provide insight into the type of training and development that can be given to managers following performance appraisal. This is especially important given recent criticism of the use of 360° in performance management. Waldman et al. (1998) argued that 360° feedback, in addition to being a high cost, has become a fad rather than a systematically and appropriately used tool. Rather, 360° systems should be tailored to organizational needs.

#### ***4.3.2. Implications for Alignment and Signaling of Strategic Goals***

A major strategic advantage of performance management is that it is a method by which managers signal to employees the mission of the unit or the organization. Managers can use performance management to align their employees' behaviors with organizational goals or strategy. Employees want to be rewarded and will engage in behaviors that their supervisors emphasize. We expect transactional leaders to use performance appraisal as a mechanism of contingent reward (Bass 1985; Bass and Avolio 1994). Such leaders will mostly benefit from performance appraisal in the short term. In order to achieve a long-term alignment with organizational goals, supervisors need to have followers who identify with them. Transformational or charismatic leaders may be able to use performance management to align followers with organizational goals and inspire and motivate them to achieve these goals. These leaders will be better communicators of organizational goals. Indeed, effective appraisal depends on the supervisor's ability to communicate organizational goals.

In a study of a large telecommunication company, Berson and Avolio (2000) found that employees of transformational leaders viewed their managers as more open and informal and as better conveyers and receivers of information than employees of nontransformational leaders. Moreover, employees of effective communicators were more aware of strategic organizational goals than employees who reported to less effective communicators. These findings hint that supervisors who are transformational leaders will be able to utilize performance-management systems to communicate strategic goals more effectively than transactional supervisors for whom performance management may serve as a contract with employees. In addition to better communication of organizational goals, charismatic leaders may also use performance-management systems to sense the environment. Such leaders can use performance management to assess the capabilities of the organization and determine quality goals (Conger and Kanungo 1998).

In summary, evidence from studies in the new genre of leadership theories offers insights regarding the strong impact of transformational or charismatic leaders on their followers. We believe that performance management is an excellent tool for such leaders to communicate strategic goals and sense followers' needs for personal development.

#### **4.4. From Training to Development**

With the rapid developments in technology and the changing nature of jobs, the provision of training and development exercises has become a major strategic objective for the organization. Organizations provide training for many reasons, from orientation to the organization and improving performance on the job to preparation for future promotion. Like other HRM functions, training should be aligned with the strategic goals of the organization. Organizations that rely on a highly committed, stable workforce will have to invest more in individuals than will organizations that employ unskilled temporary employees (Fisher et al. 1996).

When a company changes strategy, as Xerox did when it became "the Document Company," it begins intensive training to equip employees with the new skills. Xerox spent \$7 million on developing a training center. In a world of networking and alliances between organizations, Xerox needs this center not only to train its employees but to train suppliers, customers, and other constituencies. Xerox, like other employers, has a long-term perspective on its workforce and is using training to increase employee retention. More and more professionals seek jobs that will provide them with the opportunity for professional development. Many engineers who work in high-technology industries have multiple job opportunities and are constantly in the job market (Messmer 1998). Consequently, organizations that wish to decrease turnover move from emphasizing short-term training for specific purposes to long-term development.

We believe that the shift to development calls for more leadership of the new genre type. While the short-term emphasis on training, where employees are trained to learn a new skill that they need for their current task or job, required mainly task-oriented transactional leadership, the move to long-

term development entails transformational leadership. The need for more transformational or charismatic leaders in organizations is a consequence of several trends that reflect the shift from training to development. First, in addition to sending employee to off-the-job training workshops, more companies emphasize individual coaching. Coaching, like other types of on-the-job training, ensures maximized transfer between what was learned in the training and the actual job (Ford 1997). On-the-job training also allows for maximum trainee motivation because trainees see this type of training as highly relevant.

Second, as managerial jobs become more complex, there is an increased need for managerial training. Most typologies of managerial tasks emphasize that managers need to have leadership skills. Specifically, skills such as providing feedback, communication, motivation, aligning individual goals with organizational goals, and having good relationships with colleagues and followers should be the focus of development (Kraut et al. 1989).

Finally, as discussed above regarding socializing employees, coaching and mentoring programs have become more popular, sometimes as spontaneous mentor-protégé relationship and sometimes as an organized mentoring program (Messmer 1998).

These shifts in training, together with the emphasis on long-term development, highlight the importance of developing transformational leadership in the organization. Transformational leaders develop significant relationships with their followers and thus have a chance to be seen as coaches and to provide practical on-the-job training. These leaders are also intellectually stimulating and can constantly challenge employees and develop them. Personal development involves individualized consideration, another major style of transformational leaders. More specifically, individualized consideration consists of mentoring (Bass 1985).

Furthermore, both intellectual stimulation and individualized consideration can be cultivated and nurtured not only at the individual level but also at the team and organizational levels (Avolio and Bass 1995). Organizations can create cultures that encourage coaching and development while providing consideration and recognition of individual needs. Paul Galvin, a CEO of Motorola, created a culture, based on his leadership style, where risk-taking is advocated and seen as the most secure approach (Avolio 1999). Employees are encouraged to be creative and develop new products.

Intellectually stimulating leaders also empower their followers (Bass 1985). Empowerment is an effective method of training because employees learn more tasks and are responsible for problem solving. It is especially important in innovative environments where employees have to learn to take risks. Organizations that employ empowering techniques try to applaud both successful and unsuccessful risk-taking behavior. For example, Lockheed Martin takes a team approach to empowerment. Employees who have knowledge regarding an aspect of a project are encouraged to speak up (Wolff 1997, in Anthony et al. 1998). In this way, employees get to experience managerial roles.

Several studies using the transformational leadership paradigm have demonstrated the relationships between transformational leadership and empowerment. Masi (1994, in Avolio 1999) reported positive correlations between transformational leadership and empowering organizational culture norms. Moreover, transformational leadership at the top may filter to lower levels of the organization. Bass and Avolio (1994) suggested the "falling dominoes effect," where leaders who report to transformational leaders tend to be transformational as well. Bryce (1988, in Avolio 1999) found support for this effect in a study of Japanese senior company leaders. Finally, Spreitzer and Jansaz (1998, in Avolio 1999) found that empowered managers are seen as more intellectually stimulating and charismatic than nonempowered managers. These findings demonstrate that by being transformational, executives can create a culture that facilitates professional development for their employees. Even when their managers are empowered by other managers, followers seem to attribute charisma and intellectual stimulation to the empowered leader.

In addition to the contribution of transformational leaders to employee and managerial development, organizations can use transformational leadership as a model for training leadership. There seems to be agreement that leadership is to some extent innate but to some extent trainable (e.g., Avolio 1999). From the models of the new genre of leadership, training using the full range leadership model has been the most extensive. Crookall (1989) compared the effectiveness of training Canadian prison shop supervisors in transformational leadership and in situational leadership using a control group that did not receive any training. Crookall concluded that the transformational leadership workshop had a significant positive impact on two of the four performance measures subjectively evaluated by superiors, and the situational leadership training had significant positive influence on one of the four subjective performance measures. There was no change in the perceived performance of the untrained group. In addition, a significant positive impact was found in both training groups on turnover, work habits, and managers' evaluations regarding the personal growth of prisoners. Significant improvement regarding respect for superiors, professional skills, and good citizenship as evaluated by the manager, were found only for the transformational leadership workshop.

A more recent study (Barling et al. 1996) demonstrated that bank branch managers who received transformational leadership training had a more positive impact on follower commitment and unit financial performance than did those who did not receive training. Finally, Dvir et al. (in press)

conducted a comprehensive randomized field experiment comparing the impact of military leaders who received training in transformational leadership vs. leaders who participated in an eclectic leadership training program. Indirect followers of leaders who participated in the transformational training demonstrated superior performance on a battery of objective measures. Direct followers of leaders who got the transformational training showed higher levels of personal development over time. The above findings, together with the extensive training conducted with the transformational leadership model in a wide range of organizations (Avolio 1999), suggest that organizations can benefit from the advantages of the new-genre leaders by training managers at all levels to become transformational (Bass 1990).

#### 4.5. Compensation: From Transactional to Intrinsic Reward Systems

We conclude our discussion of HRM functions with compensation systems. Our goal is to demonstrate that although compensation systems seem to be a classic example of contractual or transactional conduct between employees and the organization, transformational leaders can utilize this strong rewarding agent to motivate employees to perform beyond expectations (Bass 1985).

Organizations expect employees to provide their services and in return to be compensated. Compensation exists to help employees fulfill their own needs. Consequently, classic compensation systems are based on pure exchange or contractual relationships between employees and the organization. In effect, innovative organizations use compensation systems as a strategic tool. Compensation, like performance-management systems, can help signal to employees the major objectives of the organization (e.g., customer focus), to attract and retain employees, encourage skill development, motivate employees to perform effectively, and help shape organizational culture (Fisher et al. 1996). Compensation is considered the most important HRM function and is seen as crucial by all employees. It includes different aspects of pay and benefits. Although compensation systems are supposed to motivate employees, there is high variability in their effectiveness.

HRM professionals and researchers have been using motivation theory to examine compensation systems. Most of these theories view compensation as a transaction and its components as extrinsic motivators. However, these theories tend to explain why employees do not just work for money (Fisher et al. 1996). For example, according to equity theory, individuals determine whether they are being fairly treated by comparing their input/outcome ratio to the input/outcome ratio of someone else. However, individuals may be motivated to work by factors beyond the direct input/output ratio of their peers. For example, the success of the software company SAS, which is growing at an annual rate of more than 25%, cannot be explained using equity models. Although most software companies pay their employees with bonuses and stock options, SAS offers an intellectually rewarding environment and a family corporate culture. SAS has a 4% turnover rate and is the largest privately owned software company (Pfeffer 1998). According to equity theory, there is little equity between SAS employees and other software employees in similar positions. However, based on turnover rates, it seems that SAS employees are quite motivated. Theories that make motivation contingent on compensation are, according to Pfeffer (1998), a myth that has little or no supporting evidence.

The intellectually engaging work and friendly environment as well as the ability to work using state-of-the-art technology (Pfeffer 1998) that SAS provides its employees can explain their extra effort according to the new genre of leadership theories. SAS employees and other employees do indeed expect monetary rewards, but their extra effort relates to intrinsic factors such as leadership and organizational culture. As Bass and Avolio (1994) suggest, this is an example of how transformational leadership augments transactional or contingent reward behaviors.

Transformational leaders have employees who trust them and are committed to work for more than short-term goals. Transactional leaders, who rely on contingent reward and management by exception, teach employees that they should work only when rewarded or when they are closely monitored. Such leaders signal to their followers that they do not trust them. Consequently, these employees will be less motivated than employees who feel that their supervisors do trust them. Indeed, companies like Southwest Airlines recognize these issues and highlight managing through trust and respect rather than exceptional compensation packages (Bass 1985; Pfeffer 1998).

Moreover, transformational leaders provide a personal example to employees. Executives who get paid over 80 times more than their employees do not signal to employees that pay is motivating. For example, Whole Food Markets pays nobody in the company more than 8 times the average company salary. Similarly, when the CEO of Southwest Airlines asked pilots to freeze their salaries for another year, he froze his own salary for four years. On the other hand, paying executives bonuses when employees are being laid off, as was done by GM in the 1980s, sends the wrong message to employees (Pfeffer 1998). Motivating employees using compensation has to be aligned with other organizational practices, including exemplification of top managers. By providing an example, executives send a message that they share a common fate and that the organization emphasizes a culture of cooperation and teamwork rather than competition.

Compensation systems often highlight individual incentives (Fisher et al. 1996). Among these incentives are commissions, bonuses, and merit pay. Although these methods lead to employee satisfaction, they have little relationship with organizational outcomes that can be measured only at the unit or the organizational levels. Indeed, when organizations want to encourage teamwork, rewarding individuals may be extremely harmful. They end up with a compensation system that undermines teamwork and focuses on short-term goals. Such compensation systems send a mixed message to employees regarding organizational goals. As the director of corporate industrial relations at Xerox said, "if managers seeking to improve performance or solve organizational problems use compensation as the only lever, they will get two results: nothing will happen, and they will spend a lot of money. That's because people want more out of their jobs than just money" (Pfeffer 1998). Transformational leaders appeal to collective needs of employees and help align their individual goals with organizational goals (Shamir et al. 1993). Organizations need to emphasize collective rewards, such as profit-sharing and gain-sharing plans, where employees share organizational gains. These methods may motivate teamwork to a certain extent, but effective teamwork will still depend on leaders and the culture or environment that they create. Rather, transformational leaders may be able to use compensation and its components to signal what is important and thus shape company culture.

In summary, the traditional notion that compensation systems are effective motivators is based on a transactional contractual approach to employee-management relations. More recent approaches to compensation emphasize rewarding at least at the team if not the organizational level and posit that monetary rewards should accompany intrinsic rewards, such as trust and recognition. These recent approaches also emphasize decentralizing pay decisions (Gomez-Mejia et al. 1998). We argue here that these new compensation procedures can be better applied by transformational or charismatic leaders. Applying the full range leadership model, we argue that such leaders may also exhibit contingent reward and management by exception to support the basic compensation contract. However, aligned with transformational leadership, the above compensation procedures can lead to maximum motivation.

#### **4.6. Involvement-Transformational vs. Inducement-Transactional HRM Systems: An Integrative Framework**

One common characteristic of most extant research is the use of the "parts view" of HRM. Typically, researchers identify dimensions of HRM to identify the dimensions that were significantly related to performance. New approaches to HRM argue that to be considered strategic, the set of practices should be part of a system, interrelated, interdependent, and mutually reinforcing. HRM systems are best viewed as configurations, systems of mutually reinforcing and interdependent set of practices that provide the overarching framework for strategic actions. The configurational approach to HRM has gained support in recent empirical studies (review in Sivasubramaniam and Ratnam 1998). Dyer and Holder (1988) have proposed three clusters of human resource strategies, labeled inducement, investment, and involvement.

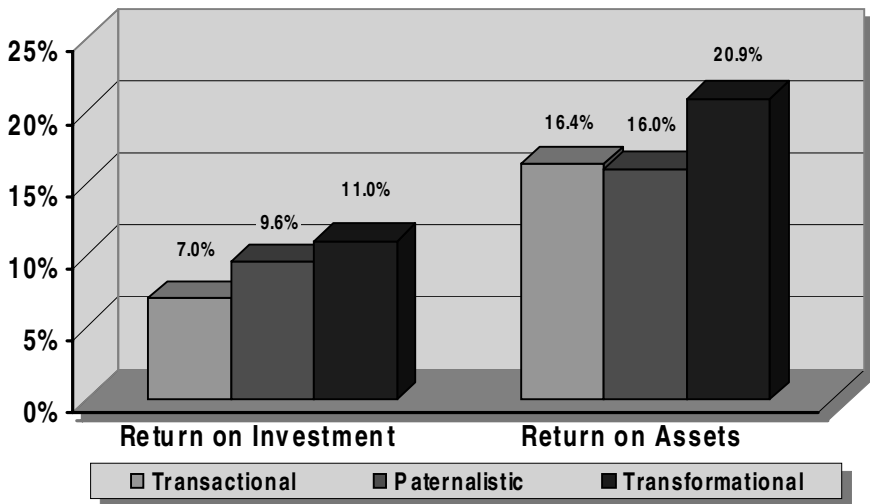
*Inducement human resource strategy* is based on the concept of motivation through rewards and punishment. Companies following this philosophy tend to emphasize pay and benefits, perquisites, or assignment to nontraditional work environments as inducement to perform and remain with the firm. In addition, such firms demand high levels of reliable role behaviors, define jobs narrowly, hire on the basis of meeting minimum qualifications, and provide directive supervision. The inducement strategy is most closely linked to transactional leadership (Kroeck 1994).

*Investment human resource strategy* is built around extensive training and development. Companies adhering to this strategy place a premium on the long-range education of employees and expect employees to exercise a fair amount of initiative and creativity in carrying out their tasks. Dominant corporate values are personal growth, respect, equity, justice, and security, not autonomy and empowerment. Due to the developmental aspects of this strategy, some (e.g., Kroeck 1994) link it to the individualized consideration style in the full range leadership model. However, because this strategy often takes on a paternalistic approach to management, and because of the lack of emphasis on autonomy and empowerment, core elements in the relationships between transformational leaders and their followers, we will refer to this strategy as paternalistic.

*Involvement human resource strategy* is built around creating a very high level of employee commitment. Employees are motivated by the stimulus of autonomy, responsibility, and variety and of being able to see their contribution to the final product or service. The employees at these companies are expected to exercise considerable initiative and creativity as well as display a high degree of flexibility to adapt to rapid change. Team-based work systems are the building blocks of the organization, and supervision is facilitative and minimal. The involvement strategy calls for all four styles of transformational leadership (Kroeck 1994).

It was found that in general, firms following an involvement strategy outperformed firms pursuing inducement strategy. For example, Sivasubramaniam, et al. (1997, in Avolio 1999) conducted a study among 50 Indian firms and found higher correlations between involvement-transformational human





**Figure 6** Relationships between Type of Human Resource Management System and Financial Performance among 50 Indian Firms According to Sivasubramaniam, et al.'s (1997) Findings.

resource strategy and the firm's return on investment and return on assets compared to the inducement-transactional and investment-paternalistic strategies (see Figure 6). Sivasubramaniam and Ratnam (1998) found that firms pursuing an involvement-transformational human resource strategy outperformed the other firms in actual accounting returns. Specifically, adopting an involvement human resource strategy translated into nearly a 4.5% edge in return on investment. For a typical firm in this study, this would mean an additional profit of nearly \$400,000 per year, a sustainable advantage accrued due to superior human resource practices. It should be noted that these results were obtained after controlling for past year's profitability and hence cannot be dismissed as possibly due to profitable firms having the resources to invest in innovative human resource practices. These firms also reported lower levels of employee turnover as compared to their closest competitors, as well as superior human resource performance. In contrast, inducement-transactional type firms outperformed other firms in labor productivity because their primary focus is on efficiency.

## 5. CONCLUSION

An overwhelming body of evidence supports the notion that transformational leadership exists at many hierarchical levels, in a variety of organizational settings, and across many cultures. This new genre of leadership theories holds different assumptions on human motivation than traditional leadership theories. The emphasis has shifted from calculative, individualistic, short-term, extrinsic motivation to work toward more expressive, collectivistic, long-term, intrinsic motivators. Numerous studies have supported the greater effectiveness of transformational leadership compared to transactional and nontransactional leadership in enhancing employees' development and performance.

The advantages of transformational leadership have contributed to practical applications in the major HRM functions. Beginning with recruiting, transformational leaders emphasize long-term socialization rather than focusing on hiring alone. Moreover, the commitment of such leaders to employee growth transcends performance appraisal to become developmentally oriented performance-management systems. Furthermore, such systems can be used as a basis for programs that view employee skills and potential contribution rather than training for specific tasks. Finally, while transactional leaders rely mostly on monetary rewards that build contractual relations with employees, transformational leaders augment these rewards with intrinsic motivators that lead to building a highly committed workforce.

As the market conditions get tougher and competitors attempt to duplicate every single source of advantage, what may be sustainable and inimitable by competition is the human resource-based advantage (Sivasubramaniam and Ratnam 1998). Therefore, an integrated, interdependent, and mutually reinforcing HRM system that represents the new leadership and motivational paradigms may contribute to organizational effectiveness.

## REFERENCES

- Anthony, W. P., Perrewe, P. L., and Kacmar, K. M. (1998), *Human Resource Management: A Strategic Approach*, Dryden, Fort Worth, TX.
- Avolio, B. J. (1994), "The 'Natural': Some Antecedents to Transformational Leadership," *International Journal of Public Administration*, Vol. 17, pp. 1559–1580.
- Avolio, B. J. (1999), *Full Leadership Development: Building the Vital Forces in Organizations*, Sage, Thousand Oaks, CA.
- Avolio, B. J., and Bass B. M. (1988), "Transformational Leadership, Charisma and Beyond," in *Emerging Leadership Vistas*, J. G. Hunt, H. R. Baliga, H. P. Dachler, and C. A. Schriesheim, Eds., Heath, Lexington, MA.
- Avolio, B. J., and Bass. B. M. (1995), "Individual Consideration Viewed at Multiple Levels of Analysis: A Multi-Level Framework for Examining the Diffusion of Transformational Leadership," *Leadership Quarterly*, Vol. 6, pp. 199–218.
- Avolio, B. J., and Gibbons, T. C. (1988), "Developing Transformational Leaders: A Life Span Approach," in *Charismatic Leadership: The Elusive Factor in Organizational Effectiveness*, J. A. Conger and R. N. Kanungo, Eds., Jossey-Bass San Francisco.
- Avolio, B. J., Waldman, D. A., and Einstein, W. O. (1988), "Transformational Leadership in a Management Simulation: Impacting the Bottom Line," *Group and Organization Studies*, Vol. 13, pp. 59–80.
- Barling, J., Weber, T., and Kelloway, K. E. (1996), "Effects of Transformational Leadership Training on Attitudinal and Financial Outcomes: A Field Experiment," *Journal of Applied Psychology*, Vol. 81, pp. 827–832.
- Bass B. M. (1985), *Leadership and Performance Beyond Expectations*, Free Press, New York.
- Bass B. M. (1990), *Bass and Stogdill's Handbook of Leadership: Theory, Research and Management Applications*, Free Press, New York.
- Bass B. M. (1996), *A New Paradigm of Leadership: An Inquiry into Transformational Leadership*, Army Institute for the Behavioral and Social Sciences, Alexandria, VA.
- Bass B. M., and Avolio, B. J. (1990), "The Implications of Transactional and Transformational Leadership for Individual, Team, and Organizational Development," *Research in Organizational Change and Development*, Vol. 4, pp. 231–272.
- Bass B. M., and Avolio, B. J. (1993), "Transformational Leadership: A Response to Critiques," in *Leadership Theory and Research: Perspectives and Directions*, M. M. Chemers and R. Ayman, Eds., Academic Press, San Diego.
- Bass B. M., and Avolio, B. J. (1994), "Introduction," in B. M. Bass and B. J. Avolio, Eds., *Improving Organizational Effectiveness Through Transformational Leadership*, Sage, Thousand Oaks, CA.
- Bass B. M., and Avolio, B. J. (1996), *Manual for the Multifactor Leadership Questionnaire*, Mind Garden, Palo Alto, CA.
- Berson, Y., and Avolio, B. J. (1999), "The Utility of Triangulating Multiple Methods for the Examination of the Level(s) of Analysis of Leadership Constructs," Paper presented at the Annual Meeting of the Society for Industrial and Organizational Psychology (Atlanta, April).
- Berson, Y., and Avolio, B. J. (2000), "An Exploration of Critical Links between Transformational and Strategic Leadership," Paper presented at the Annual Meeting of the Society for Industrial and Organizational Psychology (New Orleans, April).
- Boal, K. B., and Bryson J. M. (1988), "Charismatic Leadership: A Phenomenological and Structural Approach," in *Emerging Leadership Vistas*, J. G. Hunt, B. R. Baliga, H. P. Dachler, and C. A. Schriesheim, Eds., Lexington Books, Lexington, MA.
- Breaugh, J. A. (1983), "Realistic Job Previews: A Critical Appraisal and Future Research Directions," *Academy of Management Review*, Vol. 8, pp. 612–620.
- Burns, J. M. (1978), *Leadership*, Harper and Row, New York.
- Bycio, P., Hackett, R. D., and Allen, J. S. (1995), "Further Assessments of Bass's (1985) Conceptualization of Transactional and Transformational Leadership," *Journal of Applied Psychology*, Vol. 80, pp. 468–478.
- Coleman, E. P., Patterson, E., Fuller, B., Hester, K., and Stringer, D. Y. (1995), "A Meta-Analytic Examination of Leadership Style and Selected Follower Compliance Outcomes," University of Alabama.
- Conger, J. A., and Kanungo, R. N. (1987), "Toward a Behavioral Theory of Charismatic Leadership in Organizational Settings," *Academy of Management Review*, Vol. 12, pp. 637–647.

- Conger, J. A., and Kanungo, R. N. (1988), "Behavioral Dimensions of Charismatic Leadership," in *Charismatic Leadership: The Elusive Factor in Organizational Effectiveness*, J. A. Conger and R. N. Kanungo, Eds., Jossey-Bass San Francisco.
- Conger, J. A., and Kanungo, R. N. (1998), *Charismatic Leadership in Organizations*, Sage, Thousand Oaks, CA.
- Crookall, P. (1989), "Leadership in Prison Industry," Doctoral dissertation, University of Western Ontario, London, ON, Canada.
- Dvir, T., Eden, D., Avolio, B. J., and Shamir, B. (in press), "Impact of Transformational Leadership on Follower Development and Performance: A Field Experiment," *Academy of Management Journal*.
- Dyer, L., and Holder, G. W. (1988), "A Strategic Perspective of Human Resource Management," in *Human Resource Management: Evolving Roles and Responsibilities*, L. Dyer, Ed., BNA, Washington, DC, pp. 46.
- Eden, D. (1988), "Pygmalion, Goal Setting, and Expectancy: Compatible Ways to Raise Productivity," *Academy of Management Review*, Vol. 13, pp. 639–652.
- Eden, D., and Globerson, S. (1992), "Financial and Nonfinancial Motivation," in *Handbook of Industrial Engineering*, 2nd Ed., G. Salvendy, Ed., John Wiley & Sons, New York.
- Enz, C. A. (1988), "The Role of Value Congruity in Intraorganizational Power," *Administrative Science Quarterly*, Vol. 33, pp. 284–304.
- Fisher, C. D., Schoenfeldt, L. F., and Shaw, J. B. (1996), *Human Resource Management*, 3rd Ed., Houghton Mifflin, Boston.
- Ford, J. K. (1997), "Advances in Training Research and Practice: An Historical Perspective," in *Improving Training Effectiveness in Work Organizations*, K. J. Ford, S. W. J. Kozlowski, K. Kraiger, E. Salas, and M. S. Teachout, Eds., Lawrence Erlbaum, Mahwah, NJ.
- Gibson, J. L., Ivancevich, J. M., and Donnelly, J. H. (2000), *Organizations: Behavior, Structure, Processes*, 10th Ed., Irwin/McGraw-Hill, Boston.
- Gomez-Mejia, L. R., Balkin, D. B., and Cardy, R. L. (1998), *Managing Human Resources*, Prentice Hall, Upper Saddle River, NJ.
- Guzzo, R. A., Yost, P. R., Campbell, R. J., and Shea, G. P. (1993), "Potency in Groups: Articulating a Construct," *British Journal of Social Psychology*, Vol. 32, pp. 87–106.
- Hater, J. J., and Bass B. M. (1988), "Superiors' Evaluations and Subordinates' Perceptions of Transformational and Transactional Leadership," *Journal of Applied Psychology*, Vol. 73, pp. 695–702.
- House, R. J. (1971), "A Path Goal Theory of Leader Effectiveness," *Administrative Science Quarterly*, Vol. 16, pp. 321–338.
- House, R. J. (1995), "Leadership in the Twenty-First Century," in *The Changing Nature of Work*, A. Howard, Ed., Jossey-Bass, San Francisco.
- House, R. J., and Shamir, B. (1993), "Toward the Integration of Transformational, Charismatic, and Visionary Theories," in *Leadership Theory and Research: Perspectives and Directions*, M. M. Chemers and R. Ayman, Eds., Academic Press, San Diego, CA.
- Howell, J. M. (1996), *Organization Contexts, Charismatic and Exchange Leadership*. Unpublished manuscript, University of Western Ontario, London, ON.
- Howell, J. M., and Avolio, B. J. (1989), "Transformational versus Transactional Leaders: How They Impart Innovation, Risk-Taking, Organizational Structure and Performance," Paper presented at the Annual Meeting of the Academy of Management (Washington, DC, August).
- Howell, J. M., and Frost, P. J. (1989), "A Laboratory Study of Charismatic Leadership," *Organizational Behavior and Human Decision Processes*, Vol. 43, pp. 243–269.
- Hughes, R. L., Ginnett, R. C., and Curphy, G. J. (1998), *Leadership: Enhancing the Lessons of Experience*, Irwin, Chicago.
- Jackson, S. E., and Schuler, R. S. (1995), "Understanding Human Resource Management in the Context of Organizations and Their Environments," *Annual Review of Psychology*, Vol. 46, pp. 237–264.
- Johnson, M. C. (1980), "Speaking from Experience: Mentors—the Key to Development and Growth," *Training and Development Journal*, Vol. 34, pp. 55–57.
- Keller, R. T. (1992), "Transformational Leadership and the Performance of Research and Development Project Groups," *Journal of Management*, Vol. 18, No. 3, pp. 489–501.
- Kelley, R. E. (1992), *The Power of Followership*, Currency Doubleday, New York.
- Kirkpatrick, S. A., and Locke, E. A. (1996), "Direct and Indirect Effects of Three Core Charismatic Leadership Components on Performance and Attitudes," *Journal of Applied Psychology*, Vol. 81, pp. 36–51.

- Klein, K. J., and House, R. J. (1995), "On Fire: Charismatic Leadership and Levels of Analysis," *Leadership Quarterly*, Vol. 6, pp. 183–198.
- Kohlberg, L. (1973), "Stages and Aging in Moral Development: Some Speculations," *Gerontologist*, Vol. 13, No. 4, pp. 497–502.
- Kouzes, J. M. (1999), "Getting to the Heart of Leadership," *Journal for Quality and Participation*, Vol. 22, p. 64.
- Kraut, A. I., Pedigo, P. R., McKenna, D. D., and Dunnette, M. D. (1989), "The Roles of the Manager: What's Really Important in Different Management Jobs," *Academy of Management Executive*, Vol. 3, pp. 286–292.
- Kroeck, G. K. (1994), "Corporate Reorganization and Transformations in Human Resource Management," in *Improving Organizational Effectiveness Through Transformational Leadership*, B. M. Bass and B. J. Avolio, Eds., Sage, Thousand Oaks, CA.
- Kunhert, K. W., and Lewis, P. (1987), "Transactional and Transformational Leadership: A Constructive/Developmental Analysis," *Academy of Management Review*, Vol. 12, pp. 648–657.
- Landau, O., and Zakay, E. (1994), *Ahead and with Them: The Stories of Exemplary Platoon Commanders in The Israel Defense Forces*, IDF School for Leadership Development, Netania, Israel (in Hebrew).
- Lowe, K. B., Kroeck, G. K., and Sivasubramaniam, N. (1996), "Effectiveness Correlates of Transformational and Transactional Leadership: A Meta-Analytic Review of the MLQ Literature," *Leadership Quarterly*, Vol. 7, pp. 385–425.
- Lowery, P. E. (1995), "The Assessment Center Process: Assessing Leadership in the Public Sector," *Public Personnel Management*, Vol. 24, pp. 443–450.
- Maslow, A. H. (1954), *Motivation and Personality*, Harper, New York.
- Megalino, B. M., Ravlin, E. C., and Adkins, C. L. (1989), "A Work Values Approach to Corporate Culture: A Field Test of the Value Congruence and Its Relationship to Individual Outcomes," *Journal of Applied Psychology*, Vol. 74, pp. 424–432.
- Messmer, M. (1998), "Mentoring: Building Your Company's Intellectual Capital," *HR Focus*, Vol. 75, pp. 11–12.
- Mumford, M. D., O'Connor, J., Clifton, T. C., Connelly, M. S., and Zaccaro, S. J. (1993), "Background Data Constructs as Predictors of Leadership Behavior," *Human Performance*, Vol. 6, pp. 151–195.
- Pfeffer, J. (1998), "Six Dangerous Myths about Pay," *Harvard Business Review*, Vol. 76, pp. 108–119.
- Podsakoff, P. M., Mackenzie, S. B., Moorman, R. H., and Fetter, R. (1990), "Transformational Leader Behaviors and Their Effects on Followers' Trust in Leader, Satisfaction, and Organizational Citizenship Behaviors," *Leadership Quarterly*, Vol. 1, pp. 107–142.
- Russell, C. J. (1987), "Person Characteristics versus Role Congruency Explanations for Assessment Center Ratings," *Academy of Management Journal*, Vol. 30, pp. 817–826.
- Russell, C. J. (1990), "Selecting Top Corporate Leaders: An Example of Biographical Information," *Journal of Management*, Vol. 16, pp. 73–86.
- Seltzer, J., and Bass B. M. (1990), "Transformational Leadership: Beyond Initiation and Consideration," *Journal of Management*, Vol. 16, No. 4, pp. 693–703.
- Shamir, B. (1990), "Calculations, Values, and Identities: The Sources of Collectivistic Work Motivation," *Human Relations*, Vol. 43, No. 4, pp. 313–332.
- Shamir, B. (1991), "The Charismatic Relationship: Alternative Explanations and Predictions," *Leadership Quarterly*, Vol. 2, pp. 81–104.
- Shamir, B., House, R. J., and Arthur, M. B. (1993), "The Motivational Effects of Charismatic Leadership: A Self-Concept Based Theory," *Organization Science*, Vol. 4, No. 2, pp. 1–17.
- Shamir, B., Zakai, E., Breinin, E., and Popper, M. (1998), "Correlates of Charismatic Leader Behavior in Military Units: Individual Attitudes, Unit Characteristics and Performance Evaluations," *Academy of Management Journal*, Vol. 41, pp. 387–409.
- Sivasubramaniam, N., and Ratnam, C. S. V. (1998), "Human Resource Management and Firm Performance: The Indian Experience," Paper presented at the Annual Meeting of The Academy of Management (San Diego, August).
- Sosik, J. J., Avolio, B. J., and Kahai, S. S. (1997), "Effects of Leadership Style and Anonymity on Group Potency and Effectiveness in a Group Decision Support System Environment," *Journal of Applied Psychology*, Vol. 82, pp. 89–103.
- Vicere, A. A., and Fulmer, R. M. (1996), *Leadership by Design*, Harvard Business School Press, Boston.

- Wagner, J. A. (1995), "Studies of Individualism–Collectivism: Effects on Cooperation in Groups," *Academy of Management Journal*, Vol. 38, pp. 152–172.
- Waldman, D. A., Atwater, L. E., and Antonioni, D. (1998), "Has 360 Degree Feedback Gone Amok?," *Academy of Management Executive*, Vol. 12, pp. 86–96.
- Weiss, H. M. (1978), "Social Learning of Work Values in Organizations," *Journal of Applied Psychology*, Vol. 63, pp. 711–718.
- Wright, P. M., and McMahan, G. C. (1992), "Theoretical Perspectives for Strategic Human Resource Management," *Journal of Management*, Vol. 18, pp. 295–320.
- Wright, P. M., and Snell, S. A. (1998), "Toward a Unifying Framework for Improving Fit and Flexibility in Strategic Human Resource Management," *Academy of Management Review*, Vol. 23, pp. 756–772.
- Yammarino, F. J., and Atwater, L. E. (1997), "Do Managers See Themselves as Others See Them? Implications for Self–Other Rating Agreement for Human Resource Management," *Organizational Dynamics*, Vol. 25, pp. 35–44.
- Yammarino, F. J., and Dubinsky, A. J. (1994), "Transformational Leadership Theory: Using Levels of Analysis to Determine Boundary Conditions," *Personnel Psychology*, Vol. 47, pp. 787–811.
- Yukl, G. A. (1998), *Leadership in Organizations*, Prentice Hall, Englewood Cliffs, NJ.

### ADDITIONAL READING

- House, R. J., "A 1976 Theory of Charismatic Leadership," in *Leadership: The Cutting Edge*, J. G. Hunt and L. L. Larson, Eds., Southern Illinois University Press, Carbondale, IL, 1977.
- Howell, J. M., and Avolio, B. J., "Transformational Leadership, Transactional Leadership, Locus of Control, and Support for Innovation: Key Predictors of Consolidated Business-Unit Performance," *Journal of Applied Psychology*, Vol. 78, pp. 891–902, 1993.
- Huy, Q. H., "Emotional Capability, Emotional Intelligence, and Radical Change," *Academy of Management Review*, Vol. 24, pp. 325–345, 1999.
- Turban, D. B., and Jones, A. P., "Superior–Subordinate Similarity: Types, Effects, and Mechanisms," *Journal of Applied Psychology*, Vol. 73, pp. 228–234, 1988.