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Leadership Predictors of Proactive Organizational Behavior:
Facilitating Personal Initiative, Voice Behavior,
and Exceptional Service Performance

by

Johannes Rank

A dissertation submitted in partial fulfilment
of the requirements for the degree of
Doctor of Philosophy
Department of Psychology
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Date of Approval:
March 8, 2006

Keywords: Participation, transformational leadership, task performance, contextual performance, action orientation, organizational commitment, trust, autonomy

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Dedication

To my parents who taught me the importance of pursuing an exciting career that truly reflects my interests, the value of questioning the mainstream and thinking out of the box, and the pleasure of taking many breaks, helping others, and enjoying life as much as possible.

Acknowledgements

First of all, I would like to thank my adviser Paul Spector for his continuous support since I first came to the United States in 1998. He has always responded to my questions and concerns with incredible competence, promptness, and politeness and convinced me that an academic career is a feasible goal. The rare combination of achievement and modesty that he impersonates has been a true source of inspiration. I am also indebted to Tammy Allen for her invaluable substantive recommendations as well as priceless career advice. Her challenging leadership and motivation courses sparked my interest in the type of research presented here. I am grateful to Walter Borman and Walter Nord for all the insights they allowed me to gain about performance and management research. I would also like to acknowledge committee member Jonathan Rottenberg and Jane Jorgenson, the chair of my dissertation defense, for their availability, interest, and support, Jeanne Carsten for encouraging me to conduct this research and for being the best internship supervisor one can imagine, and Laura Fowler Pierce as well as the other wonderful staff members at USF who helped me navigate the administrative process. My thanks also go to numerous colleagues, fellow students, and long-time friends as well as my relatives, particularly my mother Margarete, my aunt Anita, and my grandparents Anna and Karl. Finally, I acknowledge the great support that I received from the Fulbright Commission and the German Academic Exchange Service.

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ABSTRACT

Proactive organizational behavior is characterized by self-started and long-term oriented activities involving forward thinking and the intention to effect change in one's work environment. The primary objective of this research was to investigate relationships of supervisory behaviors with subordinates' personal initiative, voice behavior, and proactive service performance and to reveal moderators and mediators of these associations. Whereas personal initiative represents a wide range of proactive behaviors, voice behavior specifically reflects challenging and constructive forms of change-oriented communication. Drawing on the proactivity, service, and performance literatures, the proactive service performance construct was newly conceptualized as self-started and long-term oriented service behavior exceeding prescribed requirements.

Twelve hypotheses were developed based on the implications of several leadership, performance, and motivation theories as well as previous empirical studies. Data from 229 supervisor-subordinate dyads were collected in a large financial services organization across three lines of business and ten U.S. states. Confirmatory factor

analyses demonstrated that proactive service performance, voice behavior, and task performance were distinguishable performance dimensions. Participative leadership related positively and active-corrective transactional leadership negatively to supervisor ratings of subordinate proactivity. Transformational leadership was positively associated with personal initiative, proactive service performance, and task performance. In hierarchical regression analyses, the block of leadership variables explained significant increments in the variance of all criteria, after several control, subordinate, and task variables were accounted for.

Moderated hierarchical regressions revealed that transformational leadership positively predicted voice only when combined with high participation or low levels of corrective leadership. Similarly, transformational leadership was more strongly and positively associated with initiative when corrective leadership was low. Participative leadership more strongly and positively related to voice for action-oriented subordinates low in hesitation and to all proactivity criteria for subordinates low in affective organizational commitment. Mediated regression analyses as well as structural equation modelling identified trust in leadership as a mediator of most of the relationships between the leadership predictors and the proactivity criteria. The discussion focuses on practical implications for leadership development, conceptual implications for the distinction between task performance and proactivity, and directions for future research on the antecedents and consequences of proactive behavior.

Chapter One

Introduction

Formal organizations of the twenty-first century will need members who exercise independent initiative, autonomous judgment and decision making, analytical thinking, and innovative approaches to tasks and problems. Consequently, leaders will need to stimulate followers intellectually and develop their competence and independence. (House, 1995, p. 425)

It is the confluence of individual differences, contextual factors, and perceptual sense-making through mediating and moderating processes that ultimately determines one's propensity to engage in proactive behavior. More complex designs that allow researchers to capture this complexity would be a useful step in furthering our understanding of proactive behavior. (Crant, 2000, p. 458)

Since the early 1990s, organization scientists have devoted increasing attention to various forms of proactive behavior in organizations (Bateman & Crant, 1993; Frese, Kring, Soose, & Zempel, 1996; LePine & Van Dyne, 1998; Morrison & Phelps, 1999; Van Dyne, Cummings, & McLean Parks, 1995). Individuals exhibiting proactive organizational behavior engage in self-started and long-term oriented activities and effect change in their work environments (Frese & Fay, 2001; Parker & Collins, 2004; Seibert, Kramer, & Crant, 2001). In his review of proactivity research, Crant (2000) emphasized the power of different proactivity concepts in predicting numerous desirable outcomes, including individual and team performance, career advancement, stress management, idea championing, organizational change, leadership effectiveness, and entrepreneurial

success. However, relatively little research has explored antecedents of proactive organizational behavior, particularly situational precursors such as supervisory behaviors (Parker & Collins, 2004). Therefore, the major objective of this dissertation is to investigate leadership predictors of proactivity and to reveal moderators and mediators illuminating when and why these predictors are associated with proactive behavior.

Proactive behavior in organizations

Among the various proactivity constructs developed in recent years are broad concepts such as personal initiative (Frese & Fay, 2001) and proactive personality (Bateman & Crant, 1993) as well as relatively narrow concepts, including voice behavior (LePine & Van Dyne, 2001), taking charge (Morrison & Phelps, 1999), issue selling (Dutton & Ashford, 1993), proactive coping (Aspinwall & Taylor, 1993), proactive feedback seeking (Ashford, 1986), and proactive career management behaviors such as networking and consulting behavior (Claes & Ruiz-Quintanilla, 1998). Whereas the first group of broad variables represents domain-nonspecific proactivity, the second group encompasses domain-specific forms aiming at distinct outcomes (i.e., initiating innovation in one's work group, facilitating organizational change, influencing strategy, managing stress, improving one's performance, or advancing one's career, respectively).

Although the various lines of proactivity research are not fully integrated (Parker & Collins, 2004), several scholars have argued that individuals demonstrating proactive organizational behavior engage in self-started activities and interact dynamically with their environments, whereas nonproactive individuals tend to engage only in prescribed activities and to respond passively to situational demands (Crant, 2000; Morrison & Phelps, 1999; Parker & Collins, 2004). In particular, both American (e.g., Bateman &

Crant, 1993) and European (e.g., Frese & Fay, 2001) researchers have emphasized that individuals exhibiting proactivity distinguish themselves from passive individuals by adopting a long-term orientation involving forward thinking, by showing persistence in overcoming barriers, and by changing the conditions under which they work.

Five gaps in proactivity research

Despite the impressive set of studies demonstrating positive consequences of proactive organizational behavior (e.g. Becherer & Maurer, 1999; Crant & Bateman, 2000; Crant, 2004; Fay & Frese, 2001; Kirkman & Rosen, 1999; Parker, 1998; Seibert et al., 2001), several specific gaps still need to be filled. Five of the major current needs in the proactivity domain are (1) to analyze associations of leadership variables with proactive organizational behavior, (2) to identify potential moderators and mediators of such relationships, (3) to compare different proactivity criteria with each other and with prescribed task performance, (4) to investigate proactive behavior relevant to work group innovation, and (5) to examine proactive behavior in the domain of customer service performance. In the following paragraphs, I will describe these five challenges and briefly discuss how this dissertation will address each of them.

Leadership predictors of proactive behavior. First, one of the major gaps in current proactivity research is the lack of research on leadership predictors of proactive organizational behavior. Recently, Parker and Collins (2004) noted that we generally have insufficient knowledge of the facilitators of proactive behavior. Although several studies have examined personality and motivational predictors of proactivity (e.g., Frese et al., 1997; LePine & Van Dyne, 2001; Morrison & Phelps, 1999), less research has examined contextual predictors. As is evident in the first quote preceding this

dissertation, House (1995) suggested that managers in twenty-first century organizations would be particularly successful if they demonstrated leadership behaviors conducive to subordinates' initiative. As House further concluded, "the role of leaders in introducing and implementing change remains an important topic for future research" (p. 441). The present research investigates how leadership relates to individual-level proactive behaviors that contribute to change. Despite the proposition that certain supervisory behaviors such as transformational leadership may support subordinates' change-oriented proactivity (Frese & Fay, 2001), little research has empirically tested such propositions.

Moderators and mediators. Second, organization scientists have expended insufficient efforts to uncover moderation and mediation phenomena illuminating when and why certain situational predictor variables are associated with proactive organizational behavior. The second introductory quote, one of the major conclusions in Crant's (2000) proactivity review, implies that proactive behavior is determined by an interplay of contextual, individual, and perceptual factors. As Crant further concluded, "very few studies have examined moderators of the relationship between proactive behavior and its antecedents" (p. 458). Notable exceptions are studies showing that employees' self-esteem and self-efficacy determine the degree to which managerial factors and task characteristics influence employees' proactive behavior (LePine & Van Dyne, 1998; Speier & Frese, 1997). However, almost no research has examined other trait or attitudinal moderators, including action-state orientation and affective organizational commitment, the two individual moderators considered in the present research. Because even fewer studies have addressed Crant's (2000) suggestion to examine perceptual factors as mediators, this study also incorporates perceived trust and

perceived autonomy as two of the potential intermediate variables linking the leadership predictors to the proactivity criteria.

Comparison of constructs. Third, another challenge is to compare different proactivity criteria with each other and with prescribed task performance. Although a few conceptual contributions have stressed differences between various proactivity variables and emphasized that proactive behavior is distinct from task performance or “in-role behavior” (Crant, 2000; Frese & Fay, 2001), there is a lack of empirical evidence demonstrating these differences. Conceptually, proactive behavior is self-started and change-oriented, whereas “in-role behavior” reflects the completion of assigned duties that are part of the job requirements and are explicitly recognized by formal reward systems (O’Reilly & Chatman, 1986; Williams & Anderson, 1991). Similarly, task performance represents the fulfilment of prescribed requirements that relate directly to an organization’s technical core (Motowidlo & Van Scotter, 1994; Motowidlo, Borman, & Schmit, 1997). In general, the proactivity literature is disjointed, because most studies included only one proactivity variable rather than investigating several proactivity variables simultaneously.

In contrast, the present research incorporates not only the broadest proactivity variable developed in recent years (i.e., personal initiative), but also an innovation-specific proactivity criterion (i.e., voice behavior) and a service-specific proactivity criterion (i.e., proactive service performance). To capture the full range of organizationally functional individual-level proactivity, it includes the domain-independent personal initiative concept, which reflects all constructive forms of self-started, long-term oriented, and persistent work behavior (Frese & Fay, 2001). The

selection of the two domain-specific variables is motivated by the fourth and fifth challenge in proactivity research, the need for research on proactive behaviors relevant to two increasingly important domains of organizational behavior, work group innovation and customer service performance.

Proactive behavior relevant to innovation. The fourth gap addressed in this research is the need to investigate proactive behavior relevant to work group innovation (Anderson & King, 1993; West, 2003). Innovation is “the intentional introduction and application within a role, group or organization of ideas, processes or procedures, new to the relevant unit of adoption, designed to significantly benefit the individual, the group, organization, or wider society” (West & Farr, 1990, p. 9). According to several researchers (e.g., Agrell & Gustafson, 1996; West, 2003), particularly little is known about the facilitators of innovative processes in work groups. The type of individual-level proactivity that is most relevant to work group innovation is voice behavior, which implies that individuals constructively challenge the status quo in their group and communicate innovative suggestions for change (LePine & Van Dyne, 2001). Although change-oriented communication may contribute to organizational success in today’s economy with its emphasis upon constant improvement, innovation, and information sharing (Kessler & Chakrabarti, 1996; Tushman & Anderson, 1997), few studies have investigated facilitators of voice.

As Van Dyne and colleagues (1995) have argued, numerous studies examined “affiliative-promotive extra-role behaviors” that sustain the status quo (i.e., organizational citizenship behaviors such as altruism and courtesy; Organ, 1988) rather than “challenging-promotive behaviors” that change the status quo. The importance of

voice has been emphasized not only in the fields of management and psychology, but also in other disciplines such as political science and communication (Eisenberg & Goodall, 2001; Graham, 1991). According to two communication scholars (Albrecht & Hall, 1991), “nowhere is the role of the interpersonal communication process more vividly relevant to the organization than in the context of talk about innovation” (p. 273).

Proactive behavior in the domain of customer service. Fifth and finally, none of the established proactivity concepts or measures explicitly captures the behaviors inherent to proactivity in the domain of customer service (Van Dyne, Jehn, & Cummings, 2002). Considering that the service sector accounts for the majority of all employees and more than three quarters of all new jobs created in recent decades in North America and other regions (Applebaum & Batt, 1994; Van Dyne et al., 2002), research on proactive service behavior is practically useful, especially because actual enhancements in service quality may lead to competitive advantage (Schmit & Allscheid, 1995). Service researchers (e.g., Liao & Chuang, 2004) have argued that front-line service employees play a vital role in shaping crucial outcomes including customer satisfaction and retention, purchase decisions, and perceptions of service quality. Although a meta-analysis (Harter, Schmidt, & Hayes, 2002) identified positive relationships between unit-level employee engagement (broadly defined as involvement and enthusiasm for work) and customer satisfaction, little research has analyzed the specific individual-level behaviors that may reflect such engagement.

Furthermore, previously developed service measures (e.g. Borucki & Burke, 1999; Butcher, Sparks, & O’Callaghan, 2003; Parasuraman, Zeithaml, & Berry, 1988; Tsai, 2001) do not thoroughly or adequately assess individual-level service proactivity,

which goes beyond prescribed service behaviors. Consequently, this research involves the development of a concept and measure capturing proactive service performance. To establish validity evidence, proactive service performance will be distinguished from voice as well as task performance and will be related to several of the predictors included in the present study.

Purpose of this dissertation

In summary, due to the five gaps in proactivity research outlined above, the purpose of this dissertation is to investigate associations of leadership variables with personal initiative, voice behavior, and proactive service performance, and to identify moderators and mediators of these relationships. Because the proactive service performance concept and measure need to be newly developed, a subgoal of this study is to establish evidence of the reliability and validity of the proactive service performance measure. Another subgoal of this study, emanating from the third challenge described above, is to examine whether voice behavior, proactive service performance, and prescribed task performance are distinct from each other and whether these criteria are differentially associated with some of the predictors.

Concordant with House's (1995) call for a consideration of leadership effects on subordinate initiative, this research involves an analysis of relationships between three relevant types of supervisory behaviors (participative, transformational, and active-corrective transactional leadership) and subordinate proactivity. Consistent with Crant's (2000) call for more complex studies examining moderation and mediation effects, this study is also designed to identify interactions and to reveal some of the underlying mechanisms connecting the predictors to the proactivity criteria. Before developing the

specific research hypotheses, I will introduce the three proactivity criteria included in the present research.

Chapter Two

The Criterion Variables

The criterion variables assessed in this dissertation are voice behavior, personal initiative, and proactive service performance. The presentation of these variables in the following sections is ordered by the degree of attention these performance constructs have received in North America so far. Clearly, North American researchers have devoted the greatest attention to voice behavior, as is evident by several publications in leading applied psychology and management journals (e.g., LePine & Van Dyne, 1998, 2001; Stamper & Van Dyne, 2001; Van Dyne & LePine, 1998). Although a few German studies on personal initiative have appeared in North American journals (e.g., Frese et al., 1996, 1997), a literature search using PsychInfo revealed that very little published research involving personal initiative as a performance criterion has used a North American sample. Finally, the proactive service performance construct is newly introduced in the present study. In response to the third gap in proactivity research, which included the need to compare proactive behavior to prescribed task performance, this dissertation also incorporates task performance. This variable is briefly defined and discussed in the end of the section on voice behavior, when the first proactivity concept will be compared to task performance.

Voice behavior

The first proactivity variable included in this study, voice behavior, is defined as “promotive behavior that emphasizes expression of constructive challenge intended to improve rather than merely criticize” (Van Dyne & LePine, 1998, p. 109). Voice behavior, also described as “constructive change-oriented communication” (LePine & Van Dyne, 2001), implies that employees challenge the status quo in their work group, state their personal opinion even if others disagree, encourage others in their group to articulate their points of view, develop recommendations for improvement, and speak up with innovative suggestions for change (LePine & Van Dyne, 1998, 2001). Although this conceptualization has dominated our understanding of voice in the fields of management and organizational psychology in recent years, it should be noted that similar descriptions have been developed in other organization sciences, most notably in the field of organizational communication. According to Eisenberg and Goodall (2001), for example, “voice manifests itself in the ability of an individual or group to participate in the ongoing organizational dialogue” (p. 38). Consistent with Hirschman’s (1970) and Gorden’s (1988) earlier conceptualizations, Eisenberg and Goodall noted that voice “refers to an employee’s decision to speak up against the status quo rather than keep quiet and stay or give up and leave” (p. 38).

Despite the obvious relevance of voice to change processes, surprisingly little work has specified the exact implications of the voice construct for organizational change. Considering recent theoretical reviews of the organizational change and development literature (e.g., Weick & Quinn, 1993; Van De Ven & Poole, 1995), it is likely that individual employees’ voice behavior has the potential of affecting

incremental or continuous as opposed to radical or episodic forms of organizational change. With respect to the different approaches to organizational change identified by Van de Ven and Poole (1995), highly challenging forms of voice may trigger dialectical types of change (i.e., change resulting from confrontation and subsequent synthesis of opposing interests), whereas less challenging forms of voice may contribute to teleological types of change (i.e., change emanating from purposeful cooperation guided by commonly shared goals and envisioned end states).

In particular, voice may facilitate innovation, a subform of change (West & Farr, 1993), because “innovation begins with recognition and generation of novel ideas or solutions that challenge past practices and standard operating procedures” (Van Dyne & LePine, p. 865). Voice behavior may be considered not only a starting point for innovation, but also an organizationally relevant outcome of creative processes, because the final stage in Amabile’s (1996) componential theory of creativity is the communication of creative ideas. Concordant with these assumptions, recent studies conducted in software development companies as well as research departments of large corporations (Rank, Boedeker, Linke, & Frese, 2004) identified voice behavior as a mediator of the relationship between idea generation (i.e., creativity) and effective idea implementation (i.e., innovation).

Voice behavior and citizenship performance. In the mid-1990s, one of the major causes triggering the wave of studies on change-oriented proactivity constructs such as voice behavior in American management research was the observation that most studies of organizational citizenship behavior (OCB) did not address challenging and innovative forms of self-started work behavior (Frese et al., 1996; Morrison & Phelps, 1999; Van

Dyne, Graham, & Dienesch, 1994; Van Dyne et al., 1995). In general, citizenship or contextual performance encompasses behaviors that are voluntary, relate more strongly to social circumstances than to technical task contents, and occur similarly over a wide variety of jobs (Borman & Motowidlo, 1993; Motowidlo, Borman, & Schmit, 1997; Organ, 1997). The fact that most OCB researchers have focused on “affiliative-promotive behaviors” (Van Dyne et al., 1995) rather than challenging and innovative behavior is somewhat surprising considering that Organ (1988) originally subsumed change-oriented behaviors such as “speaking up” under the civic virtue category of OCB and was inspired by Katz and Kahn’s (1966) notion that organizational effectiveness is aided by employees’ “innovative and spontaneous activities that are beyond the prescribed role requirements” (p. 146).

Later, Organ (1997) explained “how civic virtue was garbled in the process of operationalization” (p. 92). Because early measures of OCB were derived from interview studies asking managers which subordinate behaviors they like but cannot enforce (Smith, Organ, & Near, 1983), “one could have bet that the behaviors identified would tend toward the mundane – rather than, say, bold innovative suggestions” (Organ, 1997, p. 93). One of the most frequently used OCB scales includes only civic virtue items referring to relatively trivial behaviors such as reading company mail and attending meetings (Podsakoff, MacKenzie, Moorman, & Fetter, 1990). Criticizing this development, Van Dyne and colleagues (1994) argued that the scale developed by Podsakoff and associates represented only half of the content domain of civic virtue, because items capturing “courageous communications that challenge norms or support unpopular views were not included” (p. 794). To help fill this gap, Van Dyne and

associates developed a new OCB taxonomy following Graham's (1991) political science framework. The dimension that best reflects challenging communication in this taxonomy is the factor "advocacy participation", which comprises behaviors typical of an internal change agent. Subsequently, Van Dyne et al. (1995) proposed the highly similar "voice behavior" construct.

Empirical findings on voice behavior. Recently, Van Dyne and colleagues contrasted voice with helping behavior, demonstrating that certain variables differentially predict these two types of voluntary work behavior. For example, the personality trait agreeableness positively predicted helping and negatively predicted voice (LePine & Van Dyne, 2001), and work status differentially related to these two criteria such that part-time employees exhibited less helping, but not less voice behavior than full-time employees (Stamper & Van Dyne, 2001). Applying the theory of individual differences in task and contextual performance (Motowidlo, Borman, & Schmit, 1997), LePine and Van Dyne (2001) showed that extraversion and conscientiousness were more strongly and positively associated with voice than with task performance.

With respect to future research on voice predictors, LePine and Van Dyne (1998) explicitly suggested that "researchers broaden their focus and examine additional variables as well as the underlying processes that lead to voice" (p. 866). Particularly few studies have examined leadership predictors of voice. In a field study of American work groups, LePine and Van Dyne (1998) found no significant overall relationship between general style of management (i.e., traditional versus self-managed) and employees' voice. An interaction effect indicated that self-management was more positively associated with voice for low self-esteem employees. In a study of Dutch

police officers, subordinates with an innovative (rather than adaptive) cognitive style (Kirton, 1976) voiced more ideas if their supervisors were approachable and responsive (Janssen, de Vries, & Cozijnsen, 1998). However, almost no research has examined links between voice and theory-based leadership constructs such as transformational, transactional, and participative leadership.

It is important to note that previous studies on relationships between such leadership variables and task performance or OCB do not substitute for research examining leadership predictors of voice behavior. Particularly noteworthy is the fact that all of the published studies included in a meta-analysis of relationships between leadership and OCB (Podsakoff, MacKenzie, Pain, & Bachrach, 2000) employed the OCB measure by Podsakoff et al. (1990), which does not capture change-oriented proactivity. Furthermore, even the most integrative recent taxonomies of citizenship performance do not represent challenging behaviors. Based on the results of multidimensional scaling, cluster, and factor analyses of twenty-seven citizenship behaviors derived from the literature on OCB, contextual performance, and prosocial behavior, Coleman and Borman (2000) proposed a threefold citizenship performance taxonomy comprised of the factors interpersonal support, organizational support, and job/task dedication, with the latter factor being named “conscientious initiative” in later publications (e.g., Borman, Penner, Allen, & Motowidlo, 2001). Coleman and Borman (2000) explicitly concluded that “the more assertive, challenging elements of citizen participation in organizational life are not well reflected in certain conceptualizations of OCB (e.g. Podsakoff et al., 1990). The same could be said of our model” (p. 42). Overall, change-oriented types of employee behavior have received considerably less

attention than core components of OCB such as altruism and courtesy (Frese & Fay, 2001; Morrison & Phelps, 1999; Van Dyne et al., 1995).

Voice behavior and task performance. While a few authors (e.g., Coleman & Borman, 2000; Van Dyne et al., 1995) have discussed the extent to which voice may be related to citizenship performance, even fewer researchers have addressed differences between voice and in-role behavior or task performance. In-role behavior comprises behaviors that are part of the job requirements and are explicitly recognized by formal reward systems (Williams & Anderson, 1991). O'Reilly and Chatman (1986) explained that it includes behaviors such as completing assigned duties and complying with rules and regulations. The in-role behavior concept is highly similar to the task performance concept (Borman & Motowidlo, 1993; Motowidlo, Borman, & Schmit, 1997). In contrast to citizenship performance, task performance relates directly to an organization's technical core (Motowidlo & Van Scotter, 1994), either by executing its technical processes (e.g., cashing checks) or by maintaining its technical requirements (e.g., replenishing supplies).

Two of the differences between task and contextual performance discussed by Borman and Motowidlo (1993, 1997) also apply to a comparison of task performance with voice behavior: In contrast to task performance, voice is voluntary and involves similar behaviors across a wide range of jobs, whereas task performance is prescribed and varies across occupations. Furthermore, voice is not necessarily linked to the technical aspects of the work and not limited to one's own job, but refers to the questioning and improvement of any type of work-related issue in one's entire work group. Besides,

voice behavior does not reflect compliance with extant rules and regulations, but rather implies that employees challenge the status quo (Van Dyne & LePine, 1998).

One may argue that the development and articulation of suggestions for change may be part of the requirements in specific jobs and settings, such as certain roles in marketing or research and development departments. However, Van Dyne and LePine (1998) argued that such prescribed forms of change-oriented communication should not be considered voice behavior. Therefore, voice behavior should be distinguishable from task performance. The accuracy of this expectation will be assessed via confirmatory factor analysis. Additionally, the following sections will include the generation of a few hypotheses implying that certain predictors will be related to only one of these two criteria (e.g., transformational leadership as a predictor of task performance, but not voice, and active-corrective transactional leadership as a negative predictor of voice, but not task performance).

Hypothesis 1: Voice behavior will be factorially distinct from prescribed task performance.

Personal initiative

Discussing their meta-analytic findings concerning OCB predictors, LePine, Erez, and Johnson (2002) explicitly mentioned not only voice behavior, but also personal initiative as a variable that should be included in future studies examining predictors of different employee behavior dimensions. Therefore, and because this research is designed to identify predictors of a broad range of proactive behaviors rather than only

innovation-related and service-specific proactivity, personal initiative is also included as a criterion in the present study. Since the conceptual development of the new service-specific proactivity variable will be largely based on previous work on initiative, I first provide a brief review of research on personal initiative and then proceed with the derivation of the proactive service performance concept.

According to the most recent definition provided by Frese and Fay (2001), “personal initiative (PI) is work behavior characterized by its self-starting nature, its proactive approach, and by being persistent in overcoming difficulties that arise in the pursuit of a goal” (p. 134). Specifically, personal initiative is characterized by the following five components: "it (1) is consistent with the organization's mission, (2) has a long-term focus, (3) is goal-directed and action-oriented, (4), is persistent in the face of barriers and setbacks, and (5) is self-starting and proactive" (Frese et al., 1996, p. 38). Personal initiative is self-started, because it is exhibited without an explicit role requirement and involves self-set rather than assigned goals. It is long-term oriented, as it implies that individuals deal with potential future problems and take advantage of opportunities. It is persistent, because it involves perseverance in overcoming barriers and setbacks (Frese & Fay, 2001).

Facets and correlates of personal initiative. In concordance with their broad definition of personal initiative, Frese and associates (1996, 1997) have demonstrated that personal initiative comprises a wide range of proactive behaviors such as going beyond the prescribed contents of one’s job (qualitative initiative), spending additional time and energy at work (quantitative initiative), demonstrating perseverance in the face of obstacles (overcoming barriers), and taking charge oneself instead of delegating problems

prematurely (active approach). As Fay, Sonnentag and Frese (1998) argued, job incumbents typically do not self-start their work activities but complete tasks on the basis of external requests, i.e., based on job descriptions or demands by supervisors. “If, however, an individual develops an additional goal and executes it without being asked to do so, this is an act of initiative” (p. 171). The authors provided the example of a computer technician implementing a procedure enabling others to save paper when printing, although this goes beyond prescribed task requirements. Frese and colleagues (1996) gave the example of a worker in an automotive company who repairs a broken machine instead of calling the repairperson.

It is important to note that Frese and colleagues primarily consider personal initiative as a behavioral performance construct rather than a personality trait, although they also developed a self-report inventory assessing the trait component of initiative, which strongly overlaps with the proactive personality construct (Crant, 2004; Frese & Fay, 2001). Previous research has examined various predictors and consequences of personal initiative as a performance variable. As such, it has been shown to predict various desirable outcomes, including grades, employability, career development, entrepreneurial success, and the effective implementation of process innovations (Baer & Frese, 2004; Fay & Frese, 2001; Frese & Fay, 2001).

Considering initiative precursors, longitudinal research revealed two motivational variables (need for achievement and self-efficacy) and two job characteristics (complexity and control) as the strongest predictors of personal initiative (Frese et al., 1996, 1997; Frese & Fay, 2001; Speier & Frese, 1997). However, little research has examined leadership predictors of personal initiative. Frese and Fay (2001) suggested

that personal initiative “may be the important variable to be affected” (p. 177) by transformational leadership and argued that supervisors may frequently fail to support subordinates’ initiative. By including transformational leadership as a potential facilitator and corrective supervision as a potential negative predictor of initiative, the present study empirically addresses these issues.

Personal initiative and citizenship performance. According to Frese et al. (1996, 1997), personal initiative is related but not identical to other constructs such as OCB (Organ, 1988, 1997) and organizational spontaneity (George & Jones, 1997). In contrast to organizational spontaneity, initiative involves a long-term focus and more action planning (Frese et al., 1996). Compared to OCB, initiative is less strongly related to the social sphere, may lead to greater changes in tasks, is more active and long-term oriented, and may involve more anti-authoritarian behavior (Frese et al., 1996; Frese & Fay, 2001). Whereas initiative may disrupt social relationships in the short term, “OCB is more oriented toward a short-term, positive social orientation at the workplace” (Frese et al., 1996, p. 40). It should be noted, however, that a few specific OCB models (e.g., Moorman & Blakely, 1995; Van Scotter & Motowidlo, 1996) and comprehensive citizenship taxonomies include facets that overlap with personal initiative. For example, in the original five-dimension taxonomy of contextual performance, initiative may be subsumed under the categories “persisting with enthusiasm and extra effort” and “volunteering to carry out task activities that are not formally part of the job” (Borman & Motowidlo, 1993, 1997).

Obviously, personal initiative may also overlap with the factor “conscientious initiative” in the more recently developed three-factor taxonomy of citizenship

performance (Borman et al., 2001). Despite a substantial conceptual overlap, personal initiative may also be compared to voice (Rank, Pace, & Frese, 2004). Whereas initiative is a broad proactivity construct, voice is a narrow concept representing change-oriented communication (LePine & Van Dyne, 2001). Since voice implies that employees articulate their ideas for change (LePine & Van Dyne, 1998), it may be considered a particularly communicative and innovative form of initiative. On the contrary, employees may exhibit initiative without explicitly communicating opinions or ideas. Considering that voice may be a component of initiative, the empirical overlap between the two constructs may be substantial. However, voice as an innovation-specific proactivity construct should be more clearly distinguishable from proactive service performance, the second specific proactivity variable included in this study.

Proactive service performance

Because the proactive service performance construct represents the conceptual overlap between the proactivity, service, and performance domains, its development should be driven by previous work conducted in these three areas. Figure 1 illustrates a few of the implications of these literatures for service proactivity. Together, these implications suggest the definition of proactive service performance as individual service employees' self-started, long-term oriented and persistent service behaviors that goes beyond explicitly prescribed basic service requirements. In the following section, I describe major implications of these literatures for the development of the proactive service performance concept. Embedded in this discussion will be the development of two discriminant validity hypotheses explicating that proactive service performance is distinguishable from voice behavior and prescribed task performance.

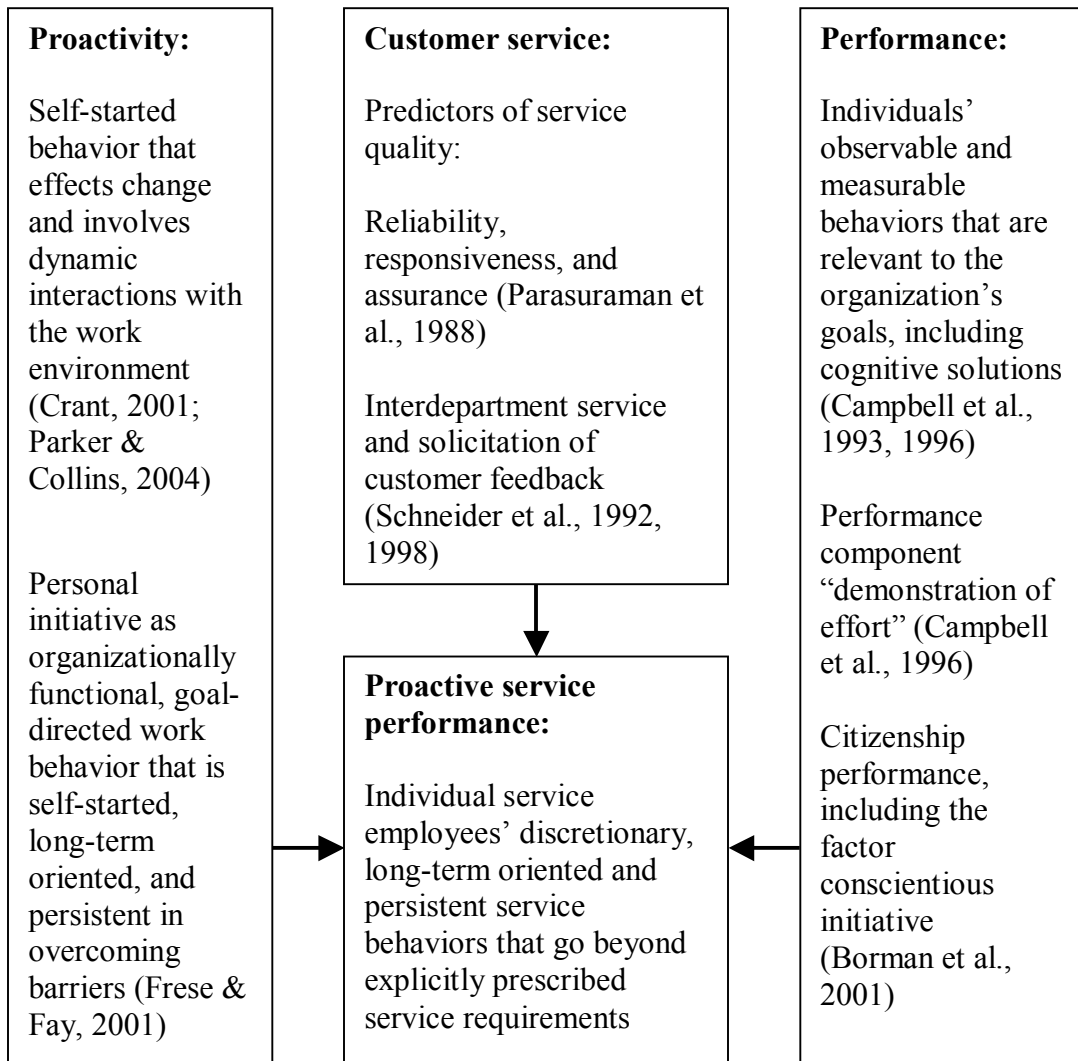


Figure 1. Conceptual derivation of the proactive service performance construct on the basis of selected implications of the proactivity, service, and performance literatures.

Implications of the proactivity literature. Within the proactivity research domain, the initiative research by Frese and associates (Frese et al., 1996, 1997) bears particularly strong implications for the service domain, because their personal initiative construct represents a broad proactivity concept that is applicable across jobs and situations, whereas other proactivity constructs such as voice behavior, taking charge (Morrison & Phelps, 1999), issue selling (Dutton & Ashford, 1993), and proactive coping (Aspinwall & Taylor, 1997) are designed to capture specific forms of proactivity. Although these specific types of proactive behavior may be partially reflected in proactive service performance, none of these concepts is tailored to the service domain or suited to explain the full range of proactive service performance.

As a proactivity construct, proactive service performance may be conceived of as service initiative, reflecting the characteristics of personal initiative (Frese et al., 1996, 1997; Frese & Fay, 2001) as they may be demonstrated by customer service employees. Consequently, proactive service performance is characterized not only by its discretionary character, but also by its future orientation and by its perseverance. First, it entails self-started behaviors (e.g. exhibiting service behaviors exceeding those demanded by customers or supervisors) that go beyond prescribed standard service activities. Second, it encompasses long-term oriented (i.e., forward thinking) behaviors, such as anticipating future customer needs and establishing potentially beneficial intra- and interdepartmental partnerships with other representatives.

Third, proactive service performance involves persistent behaviors such as following through with the delivery of exceptional services, collaborating with peers until special customer issues are fully addressed, and proactively seeking feedback to verify

customer satisfaction. Although the initiative construct aids in describing the different aspects of proactive service, it should be noted that the measurement of actually exhibited service-specific initiative cannot be accomplished by employing any of the established initiative measures by Frese and colleagues (i.e., self-report and spouse-report scales assessing the trait rather than the behavioral component of initiative, a group-level initiative scale assessing unit-level climate for initiative, and an interview procedure involving low-fidelity simulations; Frese et al., 1996, 1997).

Although the proactive service performance concept should overlap with personal initiative, initiative is a broader concept entailing proactive behaviors that are unrelated to service performance. However, proactive service performance should be clearly distinct from the other specific proactivity concept included in this study, voice behavior. In comparison with voice (Van Dyne & LePine, 1998; Le Pine & Van Dyne, 1998, 2001), employees may perform proactive service without challenging the status quo and without explicitly articulating opinions or suggestions. On the other hand, proactive service performance implies that service representatives actually pursue a persistent course of action instead of merely communicating ideas. Furthermore, the target of voice behavior is the initiation of innovation in one's work group, whereas proactive service performance aims at providing exceptional service to individual customers.

Potential differential relationships with certain predictor variables also suggest that voice may be distinct from proactive service performance. Although the personality trait agreeableness, for example, negatively predicted voice in a previous study (LePine & Van Dyne, 2001), it is unlikely that this would be the case for proactive service performance, taking into account the generally positive relationship between

agreeableness and overall service performance (Frei & McDaniel, 1997). In contrast to voice, proactive service performance is explicitly service-oriented and involves persistent behavior, but does not necessarily entail the communication of critical opinions or ideas for change. Due to these conceptual differences, proactive service performance should be distinct from voice behavior. In addition to a test of this hypothesis via confirmatory factor analysis, the subsequent sections will include a few hypotheses implying that some of the predictors (e.g., transformational leadership, task autonomy) are expected to positively predict only proactive service performance, but not voice.

Hypothesis 2: Proactive service performance will be factorially distinct from voice behavior.

Implications of the customer service literature. As a service construct, proactive service performance captures those individual-level proactive service behaviors that may contribute to perceived service quality (Schneider, Wheeler, & Cox, 1992; Schneider, White, & Paul, 1998). In a longitudinal study conducted in 134 branches of a US bank (Schneider et al., 1998), two organizational-level factors reported by employees (the quality of interdepartment service and the solicitation and use of customer feedback) directly predicted customer perceptions of service quality. Similarly, content analyses of almost 100 interviews with employees and managers from three financial services organizations (Schneider et al., 1992) revealed that panelists tended to describe their unit as having a positive passion for service (indicated by high frequency and favorability ratings of service themes in the interviews) when the unit solicited customer opinions and

when there were constructive task-related interactions between functional units. Furthermore, these two factors were significantly associated with service quality ratings provided by employees and managers. Hence, the proactive service performance concept reflects individual-level behaviors (e.g., taking initiative to communicate client needs to other service areas, proactively seeking customer feedback) that may contribute to such beneficial unit-level and organization-wide outcomes.

The conceptual model of service quality (Zeithaml & Berry, 1985; Zeithaml, Parasuraman & Berry, 1990) specifies several service gaps, including the gap between expected service and perceived service, which may diminish when employees demonstrate proactive service performance. Broad definitions of service performance (e.g. as behaviors of serving and helping customers; Liao & Chuang, 2004) and previously developed measures (e.g., Borucki & Burke, 1999; Hogan, Hogan, & Busch, 1984) do not specifically capture the proactive component of service performance. Similarly, the service quality concept has been described as abstract and elusive because of its intangibility (its subjective nature), its heterogeneity (i.e., variability of different interactions), and the inseparability (i.e., simultaneous occurrence) of production and consumption (Liao & Chuang, 2004).

In general, organization-level research (Parasuraman et al., 1988) has shown that the three service quality dimensions reliability (performing service dependably), responsiveness (willingness to help and deliver prompt service), and assurance (displaying confidence that customer issues will be fully addressed) positively predicted outcomes such as customer satisfaction. Reliability has proven to be particularly important, whereas empathy has emerged as a somewhat less important dimension,

especially in the financial services sector (Parasuraman et al., 1988; Zeithaml et al., 1990). Because proactive service performance may enhance perceptions of responsiveness, reliability, and assurance, it may be at least as important as empathy-related "beyond core service" concepts such as social regard (i.e., demonstrating genuine respect, deference, and personal interest in the customer; Butcher, Sparks, & O'Callaghan, 2003). Whereas these authors consider social regard as one way that service employees may go beyond core service, proactive service performance may represent an additional path to desirable customer outcomes.

Implications of the performance literature. As a performance construct, proactive service performance reflects the definition of performance as observable behaviors or actions that are relevant to the organization's goals and that can be measured in terms of each individual's contribution (Campbell, McCloy, Oppler, & Sager, 1993; Campbell, Gasser, & Oswald, 1996). Consistent with the work by Campbell and associates, I also consider articulated solutions or responses resulting from covert cognitive behavior that are under the individual's control as performance (e.g., proactively developing long-term solutions to anticipated future customer demands). Applying the taxonomy of higher-order performance components (Campbell et al., 1996), proactive service performance may be placed primarily under the category "demonstration of effort", which implies that employees expend extra effort and work at a high level of intensity. Particularly relevant is the issue that proactive service performance goes beyond customer service representatives' prescribed task performance (Borman & Motowidlo, 1993; Williams & Anderson, 1991). Because proactive service performance reflects self-started initiative rather than the fulfilment of assigned duties, it is critical to demonstrate that it is

distinguishable from prescribed service behavior representing in-role behavior or task performance (O'Reilly & Chatman, 1986; Motowidlo & Van Scotter, 1994; Williams & Anderson, 1991).

Proactive service performance may at least partially fall into the domain of citizenship performance. Borucki and Burke (1999) explicitly suggested that customer satisfaction scales sometimes include items that may be seen as indicators of citizenship performance on part of the customer service representative. Considering the three-factor citizenship taxonomy (personal support, organizational support, and conscientious initiative) by Borman et al. (2001), service proactivity may be subsumed in part under the conscientious initiative factor, which includes the dimensions initiative and persistence. However, no established scale fully captures the concept of conscientious initiative or job/task dedication (Coleman & Borman, 1990) in the customer service domain. Since customer service is characterized by its intangibility and high levels of role ambiguity (Liao & Chuang, 2004; Parasuraman et al., 1998), the exact degree to which proactive service performance falls into the citizenship versus task performance domains is difficult to determine. However, the preceding rationale clearly suggests that proactive service performance includes behaviors that exceed prescribed task performance.

Hypothesis 3: Proactive service performance will be factorially distinct from service representatives' prescribed task performance.

Chapter Three

Leadership Predictors of Proactive Behavior

As previously discussed, surprisingly little research has dealt with leadership predictors of proactive organizational behavior. This study analyzes relationships of voice, initiative, and proactive service performance with participative leadership (Vroom & Jago, 1988), active-corrective transactional leadership (Howell & Avolio, 1993), and transformational leadership (Bass & Avolio, 1993). Rather than assuming that leadership variables similarly influence different types of performance, this research additionally addresses the necessity to analyze specific performance components as opposed to overall productivity (Campbell et al., 1993, 1996). In particular, it involves an analysis of differential relationships of the leadership predictors with the proactivity criteria as compared to prescribed task performance. Additionally, hypothesis six suggests that one of the leadership predictors (transformational leadership) may be positively related with only two of the three proactivity criteria (personal initiative and proactive service performance), but not with the third (voice behavior).

It should be noted that I deliberately included not only the two supervisory behaviors (participative and transformational leadership) that may most clearly facilitate subordinate proactivity, but also one type of supervision (i.e., active-corrective transactional leadership) that may be detrimental to proactive organizational behavior.

Recently, Crant (2004) noted that proactive behavior may not only be facilitated, but also be constrained through the management of context. Frese and Fay (2001) noted that supervisors may sometimes limit rather than support subordinate initiative, because challenging types of proactivity frequently involve an antiauthoritarian element. Similarly, Seibert and colleagues (2001) suggested that supervisors may sometimes punish employees high in voice, “whom they perceive to be too critical” (p. 867). Hence, it is important to investigate both positive and negative leadership predictors of proactive behavior. Figure 2 illustrates the three hypotheses developed in the subsequent section.

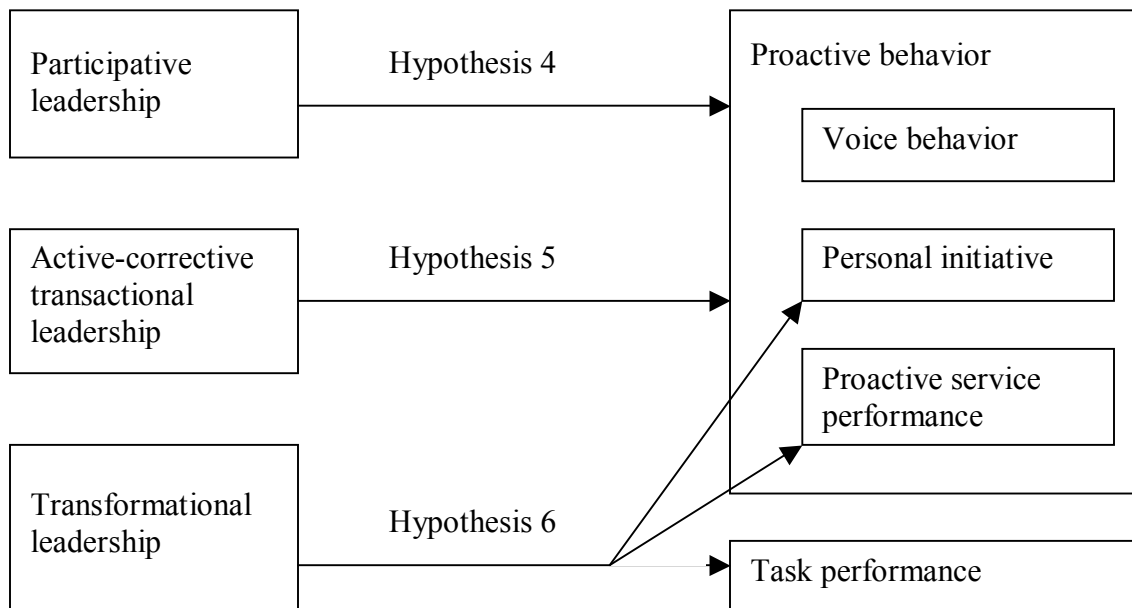


Figure 2. Overview of hypotheses 4-6 relating the leadership variables to proactive behavior and task performance.

Participative leadership and proactive behavior

Participative leadership, which encompasses involvement in decision-making and emphasizes the value of subordinate contributions (Vroom & Jago, 1988; Wall & Lischeron, 1977), likely facilitates proactive employee behavior. A participatory leadership style is characterized by the “sharing of problem solving by a leader with followers by consulting them before making a decision” (Kahai, Sosik, & Avolio, 1997, p. 125-126). Considering the low meta-analytic correlations of about .20 between participation and overall job performance (Spector, 1986; Wagner, 1994), participation may not substantially enhance task performance. In laboratory studies, Americans participating in the goal-setting process did not show higher task performance than those whose performance goals were assigned (Erez & Earley, 1987).

However, participation may be more critical to change-oriented proactivity. Spector (1986) pointed to a seminal study (Coch & French, 1948) showing that participation reduced resistance to change. Moreover, Spector found a correlation of .65 between participation and job involvement, which is relevant to proactivity. According to Ganster and Fusilier (1989) “participation represents a potential opportunity for the worker to exert influence” (p. 243), a prerequisite if employees wish to effect change. Considering Weick’s (1995) work on sensemaking in organizations, it may also be argued that participative leaders facilitate a form a belief-driven sensemaking referred to as “sensemaking as arguing”, which involves confrontational idea exchanges as a means of integrating diverse opinions.

Theoretically, contingency models such as Path-Goal-Theory (House, 1996) and the Vroom-Yetton Model (Vroom & Jago, 1988) prescribe participation only under

certain circumstances, for example when leaders have to rely on subordinates' knowledge or decision acceptance. However, these conditions may often be given in change-oriented situations in the service context, because service representatives are usually engaged in more direct customer encounters than supervisors, hence gaining first-hand knowledge of customer opinions that may inform employee suggestions for change. Therefore, the initiation and implementation of service innovations (Nord & Tucker, 1987) may be particularly dependent upon employees' contributions, which may be more significant when supervisors are participative.

Due to the conceptual overlap between innovative behavior and both voice and initiative (Fay et al., 1998), previous findings on positive relationships between participative leadership and innovation suggest that participation may also predict these two proactivity criteria. Management scholars have long suggested that participation facilitates innovation (Peters & Waterman, 1982). In the longitudinal *Minnesota Studies*, participative leadership predicted organization-level innovation, particularly in the stage when idea adoption decisions were made and employees' voice and initiative may be particularly relevant (Manz, Barstein, Hostager, & Shapiro, 1989). In more recent field studies conducted in a variety of industries, participative leadership was positively associated with innovation at the individual and group levels of analysis (King & Anderson, 2002).

With respect to voice behavior, subordinates may obviously be more likely to speak up with suggestions and opinions if invited to do so. Janssen and colleagues (1998) found higher levels of voice behavior if supervisors were responsive to ideas. Considering initiative, previous longitudinal research has shown that personal initiative is

positively predicted by employee perceptions of control (Frese, 1996, 1997), which may be enhanced by participative leadership (Ganster & Fusilier, 1989). Not only the previous reasoning relating participation to initiative, but also a few previous findings from the customer service domain suggest that participative leadership may also facilitate proactive service performance. Using a measure of employee involvement that included items pertaining to participative leadership, Liao and Chuang (2004) revealed positive relationships between unit-level involvement and unit-level aggregates of employee-rated service performance as well as customer-rated service quality. In an interview study with financial service employees, Schneider and associates (1992) found that panelists with a positive passion for service tended to also mention managerial behaviors reflecting high participation (e.g., “manager keeps his door open”, “manager is very responsive to our questions and concerns”, p. 712). In conclusion, participative leadership may facilitate all of the three forms of proactive behavior included in this study.

Hypothesis 4: Participative leadership will be positively associated with voice behavior, personal initiative, and proactive service performance.

Active-corrective transactional leadership and proactive behavior

In contrast to participative leadership, corrective supervision may be detrimental to subordinate proactivity. Active-corrective transactional leadership, also referred to as active management-by-exception, is exhibited by supervisors who closely monitor subordinates to detect errors and deviations from standards and immediately take corrective action by criticizing and punishing subordinates (Howell & Avolio, 1993).

Specifically, “the leader specifies the standards of compliance, as well as what constitutes ineffective performance, and may punish followers for being out of compliance with these standards” (Bass, Avolio, Jung, & Berson, 2003, p. 208).

Encountering this controlling type of supervision, subordinates may focus on meeting standards and avoiding errors rather than engaging in self-started activities. Bass (1985) even proposed that constant reprimand can lead to serious reductions in follower effort. Empirically, Howell and Avolio (1993) identified active-corrective transactional leadership as a negative determinant of unit effectiveness in a financial services organization undergoing organizational change. Previous research has revealed that controlling supervision negatively predicts creativity (George & Zhou, 2001; Zhou, 2003), including the number of improvement suggestions submitted by subordinates (Oldham & Cummings, 1996), a variable that may overlap with voice behavior.

According to Amabile’s (1996) comprehensive theory of creativity, controlling extrinsic motivation, including close monitoring and expected critical evaluation, is detrimental to intrinsic motivation and creativity. Similarly, cognitive evaluation theory (Deci & Ryan, 1985) suggests that any external event perceived as controlling elicits an external perceived locus of causality and reduces intrinsic motivation. Considering previous research that revealed positive associations between intrinsic motivation and individual innovation (Bunce & West, 1995), one may argue that controlling transactional leadership diminishes voluntary change-oriented behavior by reducing intrinsic motivation.

Furthermore, active-corrective transactional leadership aiming at error prevention and the enforcement of strict standards may stifle proactivity, because subordinates of

controlling supervisors may avoid errors at any cost. As Frese and Fay (2001) have argued, personal initiative may sometimes involves anti-authoritarian elements and the risk of making mistakes when trying out new approaches. To avoid criticism and punishment, customer service representatives may not go beyond prescribed behaviors, because offering or fulfilling unusual services may be considered an inappropriate deviation from standards and potentially lead to errors that may be reprimanded. Consequently, active-corrective transactional leadership may be negatively associated with proactive behavior.

Hypothesis 5: Active-corrective transactional leadership will be negatively associated with subordinates' voice behavior, personal initiative, and proactive service performance.

Transformational leadership and proactive behavior

Transformational leadership (Bass, 1990; Bass et al., 2003) includes supervisory behaviors such as inspirational motivation (articulating visions, displaying enthusiasm, and promoting positive expectations), individualized consideration (demonstrating understanding of subordinates' individual development needs and coaching them to maximize full potential), and intellectual stimulation (encouraging followers to question traditional assumptions and motivate them to adopt new approaches). An analysis of associations between intellectual stimulation and subordinate proactivity is particularly interesting, because this leadership variable is relatively unexplored, although it “comes

closest to our prototypical abstractions of ‘true leadership’” (Lowe, Kroeck, & Sivasubramaniam, 1996, p. 416) and may obviously facilitate change (House, 1995).

Positive relationships between transformational leadership and productivity have been revealed in laboratory experiments (Kirkpatrick and Locke, 1996), field experiments (Barling, Weber, & Kelloway, 1996), and longitudinal field survey studies (Howell & Avolio, 1993). Meta-analytic research has identified positive relationships between transformational leadership and unit-level productivity (Lowe et al., 1996) as well as individual employees’ OCB (Podsakoff et al., 2000). A service-related study revealed that the transformational leadership exhibited by head nurses positively predicted ratings of nursing quality (Prekert & Ehnfors, 1997).

Furthermore, a few studies examined relationships of transformational leadership with creativity and innovation (Jung, Chow, & Wu, 2003; Mumford, Scott, Gaddis, & Stange, 2002). In a brainstorming study (Jung, 2001), for example, transformational leadership positively predicted fluency (number of unduplicated ideas) and flexibility (number of different types of ideas). Sosik, Kahai and Avolio (1998) argued that intellectual stimulation “is likely to promote creativity by encouraging followers to think ‘out of the box’ and by enhancing generative and exploratory thinking” (p. 7). Together, these studies suggest that transformational leadership enhances task performance and potentially also proactive behavior.

One of the central propositions within the transformational leadership paradigm is the augmentation hypothesis, which implies that subordinates will exert extra effort above and beyond prescribed requirements if their leaders are transformational (Bass, 1990). However, empirical tests of this assumption have been largely confined to studies

demonstrating a positive impact of transformational leadership on subordinates' self-rated extra effort (Bass & Avolio, 1995; Dvir, Eden, Avolio, & Shamir, 2002). Dvir and coauthors (2002) found transformational leadership to be related with two other outcomes that relevant to proactivity, subordinates' critical-independent approach and their self-efficacy, which is an already identified predictor of initiative (Speier & Frese, 1997).

Recently, Frese and Fay (2001) suggested a variation of this hypothesis by proposing that the performance effects of transformational leadership may be due primarily to an increase in subordinates' initiative. Particularly the confidence and enthusiasm displayed by leaders high in inspirational motivation and the personalized developmental feedback provided by leaders high in individualized consideration may cultivate proactive behaviors such as personal initiative and proactive service performance that require high levels of persistence in overcoming barriers. It may also be argued that visionary leaders facilitate a form a belief-driven sensemaking referred to as "sensemaking as expecting" (Weick, 1995), which may engender a long-term orientation among subordinates.

On the other hand, transformational leadership in itself may not necessarily enhance voice, because subordinates may hesitate to interfere with the optimistic climate created by transformational supervisors. Subordinates of such leaders may tend to embrace the supervisor's visions and approaches (Mumford et al., 2002) rather than developing their own deviating opinions and suggestions for change. Indirect empirical support for this notion comes from a study by Basu and Green (1997), who found transformational leadership to be negatively related to innovative behavior and concluded that transformational leadership may sometimes intimidate subordinates. As will be

argued in the subsequent sections, transformational leadership may facilitate voice only in combination with high participation or low levels of corrective leadership. Together, the above rationale suggests that transformational leadership may facilitate initiative, proactive service performance, and task performance.

Hypothesis 6: Transformational leadership will positively relate to subordinates' personal initiative, proactive service performance, and task performance.

Chapter Four

Leadership Variables as Moderators

In addition to direct independent relationships between leadership and proactive subordinate behavior, this research also examines interactions between the leadership variables. This approach is motivated by previous studies on specific configurations of different leadership behaviors. For example, Fleishman and Harris (1962) found that initiating structure was considerably more strongly and positively related to subordinates' grievance rates when consideration was moderate than when consideration was high. An important implication of this research was that supervisors may be able to compensate for high structure by increasing consideration. Since these interaction studies based on the Ohio State approach, one of the first behavioral models of leadership, were conducted in the 1960s, most leadership studies have analyzed isolated leadership variables rather than combinations of different supervisory factors (Yukl, 2002). Because proactive subordinate behavior is voluntary and challenging, it may be best facilitated when supervisors exhibit a combination of leadership behaviors that is particularly conducive to proactivity. Figure 3 illustrates the two interaction hypotheses developed in the following paragraphs.

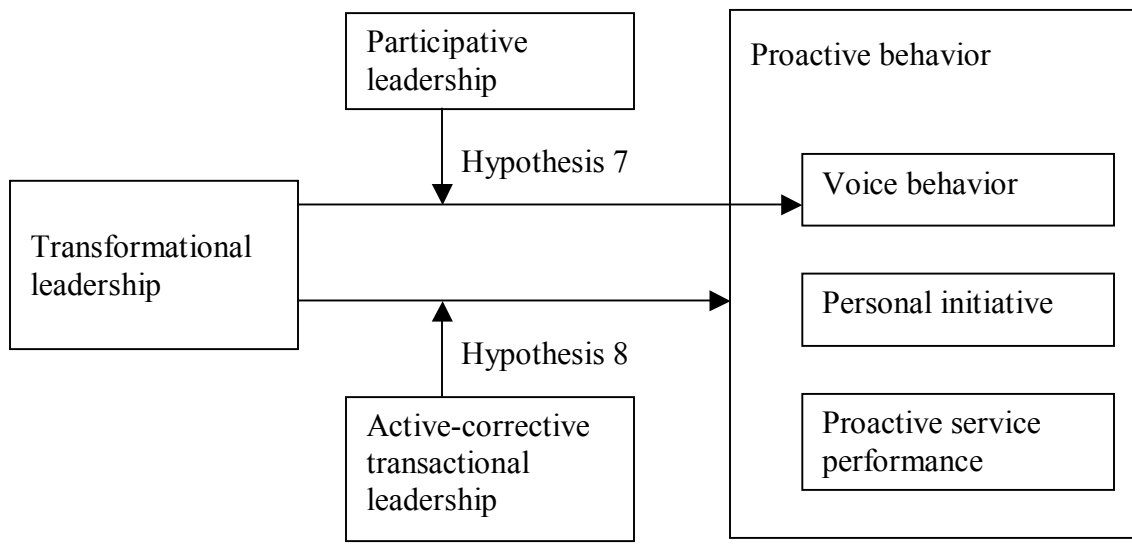


Figure 3. Overview of hypotheses 7 and 8 specifying interactions between the leadership variables.

Participative leadership as a moderator

Although Bass and Avolio (1993) argued that all aspects of transactional and transformational leadership can be performed in a participative or authoritarian way, little research has examined the impact of these different leadership combinations. To recite an example provided by Bass and Avolio, supervisors exhibiting participative intellectual stimulation may ask, “Can we try to look at our assumptions without being too critical of each other” (p. 66), whereas their authoritarian counterparts may say, “You must reexamine the assumption. Revisit this problem and question your assumption” (p. 66). According to Bass (1995), it is through intellectual stimulation of subordinates that the

status quo is questioned and that new methods of accomplishing the organization's mission are explored. However, one may argue that subordinates will actively contribute to the questioning of the status quo and the development of new work procedures only if their supervisors combine intellectual stimulation with participation. Without participation, subordinates may not exhibit voice but rather adopt the supervisor's opinions and ideas. In general, participative transformational leadership may more strongly and positively predict voice behavior than the authoritarian version.

To substantiate the proposition that transformational leadership may positively predict subordinates' voice behavior only in combination with participation, several relevant propositions included in contingency models of leadership such as the Vroom-Yetton-Model (Vroom & Jago, 1988) and the newest version of Path-Goal-Theory (House, 1996) may be considered. Among the various decision approaches included in the Vroom-Yetton-Model, only participative approaches are recommended if a problem is unstructured and possesses quality requirements, if the leader lacks information, and if acceptance by subordinates is important. Similarly, propositions 18 and 19 of Path-Goal-Theory (House, 1996) indicate that participation is beneficial when decisions require acceptance and group members have relevant expertise.

In situations involving change, problems usually possess quality requirements and are not overly structured, and employees' information sharing and decision acceptance are critical (King & Anderson, 2002). According to Path-Goal-Theory (House, 1996), participation will lead to higher quality outcomes if mutual interests among work unit members exist. Participative but not authoritarian transformational leaders may establish

such mutual interests by considering subordinates' opinions and ideas and by integrating their individual goals into shared group goals (House & Shamir, 1993).

Basu and Green (1995), who found a negative relationship between transformational leadership and subordinates' innovative behavior, argued that transformational supervisors may sometimes intimidate followers. Similarly, Mumford and colleagues (2002) argued that employees who focus on a transformational leader's vision instead of pursuing their own ideas may be restricted in their autonomy. If a visionary leader is highly authoritarian, subordinates may refrain from developing and articulating their own critical opinions or suggestions, but rather follow the manager's guidelines.

However, this effect may not occur if the supervisor exhibits the participative type of transformational leadership, involving subordinates in the development and realization of visions and new approaches. As House (1995) argued, "visions need not be formulated exclusively by the leader. The leader may instead be a catalyst and facilitator of follower contributions to the formulation of the vision" (p. 417). Based on this reasoning, I expect participative inspirational motivation, which includes the collaborative development of a vision, to be positively related to proactive subordinate behavior. Similarly, participative intellectual stimulation and participative individualized consideration imply that supervisors ask for subordinates' opinions about new work approaches and employee development initiatives, respectively. In conclusion, voice behavior may be highest if both transformational leadership and participation are high.

On the other hand, I do not expect this interaction effect for the other two proactivity criteria, which do not necessarily entail change-oriented communication.

Because subordinates may exhibit initiative and proactive service performance on their own without being involved in the supervisor's decision making, transformational leadership may not necessarily need to be supplemented by participation to facilitate these two outcomes. Hence, the effects of transformational and participative leadership on initiative and proactive service performance may be independent rather than interactive. However, subordinates may be less likely to voice critical opinions and suggestions for change when their supervisors are transformational without also being participative.

Hypothesis 7: Participative leadership will moderate the relationships between transformational leadership and subordinates' voice behavior such that transformational leadership will be more strongly and positively related to voice when participative leadership is high.

Active-corrective transactional leadership as a moderator

Participation may strengthen the link between transformational leadership and voice, whereas active-corrective transactional leadership may weaken the associations between transformational leadership and all three proactivity criteria. This proposition can be explained by integrating the transformational leadership paradigm with the action sequence model incorporated in German action theory (Frese & Sabini, 1985; Hacker, 1985). The action sequence, which reflects courses of active employee behavior from goal development to performance feedback, encompasses the phases goal development, prognosis of future events, plan development, decision to follow a specific plan, action

execution, and the processing of performance feedback (Frese & Zapf, 1994). A feedback loop from the last to the first phase suggests that the feedback obtained towards the end of earlier courses of action will influence subsequent goal revisions and expectations of future outcomes. Transformational leadership may most strongly affect the first two phases, because its visionary, inspirational, stimulating, and developmental components may cause employees to adopt innovative approaches, long-term oriented goals, and optimistic future outlooks.

On the contrary, active-corrective transactional leadership may affect the final phase in the action sequence, because it entails critical surveillance and negative performance feedback (Howell & Avolio, 1993). Hence, active-corrective transactional leadership may modify the impact of transformational leadership on subordinate action (rather than vice versa), because the effect of feedback on action occurs after the development of goals and plans, which may be influenced by transformational leadership. Due to the feedback loop, employees may respond to negative feedback by modifying their goals, for example by adopting less challenging approaches bearing little risk for rejection and failure and by limiting the content of their work-related goals to prescribed activities rather than broadening them to include self-set objectives. The combination of transformational and corrective leadership is inconsistent insofar as employees are first encouraged to adopt challenging goals and develop new approaches, but are then criticized for errors and deviations from standard procedures.

According to cognitive evaluation theory (Deci & Ryan, 1985, 1987), being controlled by external events fosters an external perceived locus of causality, thus undermining intrinsic motivation, which may be critical to self-started proactive

behavior. Previous research has demonstrated that intrinsic motivation positively predicts individual-level creativity, work role innovation, and different aspects of personal initiative (Amabile, 1996; Rank & Spector, 2003; West, 1987). Active-corrective transactional leadership may be considered a prolonged controlling external event.

This is the case because Deci and Ryan (1987) explicitly mentioned surveillance and critical evaluation as indicators of a controlling environment negatively affecting perceived autonomy, intrinsic motivation as well as various other variables that may be conducive to proactive behavior, including interest, creativity, cognitive flexibility, and persistence of behavior change. Deci and Ryan (1987) summarized findings for creativity, a criterion potentially related to proactivity, as follows: "Events that are typically controlling appear to affect creativity negatively, whereas events that are more autonomy supportive seem to promote creativity" (p. 1027). In conclusion, active-corrective supervision may undermine the beneficial effects of transformational leadership on subordinates' proactive behavior.

Hypothesis 8: Active-corrective transactional leadership will moderate the relationships of transformational leadership with subordinates' voice behavior, personal initiative, and proactive service performance such that transformational leadership will be more strongly and positively related to the three proactivity criteria if active-corrective transactional leadership is low.

Chapter Five

Subordinate Variables as Moderators

The relationships between certain leadership predictors and subordinate proactivity may not only be moderated by other supervisory variables, but also by subordinate characteristics. For several decades, leadership scholars have attempted to identify subordinate characteristics that modify the relationships between various supervisory behaviors and subordinate performance (Bass, 1990; Villa, Howell, Dorfman, & Daniel, 2003). For instance, researchers have investigated the potential moderating role of subordinates' need for leadership (Knickerboxer, 1948; De Vries, Roe, & Taillieu, 2002), maturity (Hersey & Blanchard, 1969), and other variables such as need for independence and indifference to organizational rewards (Kerr & Jermier, 1978). However, empirical studies examining these moderators frequently failed to support the proposed interaction effects or led to inconclusive results (De Vries et al., 2002; Villa et al., 2003). According to Podsakoff, MacKenzie, Ahearne, and Bommer (1995), identifying moderators of leadership effects is a task similar to searching for a needle in a haystack.

Nonetheless, the present research includes two subordinate characteristics that have rarely been examined as moderators, but may modify relationships between certain leadership variables and proactivity. First, this study includes the hesitation dimension of

the action-state orientation construct (Kuhl, 1992) as a relevant aspect of subordinates' self-regulatory capabilities. Action orientation may enhance the positive association of participative leadership with proactivity and buffer the negative effects of active-corrective transactional leadership on proactivity. Additionally, affective organizational commitment is incorporated as an attitudinal variable that may strengthen the relationships between specific leadership variables and subordinates' proactive behavior. Figure 4 illustrates the two interaction hypotheses developed in the subsequent sections.

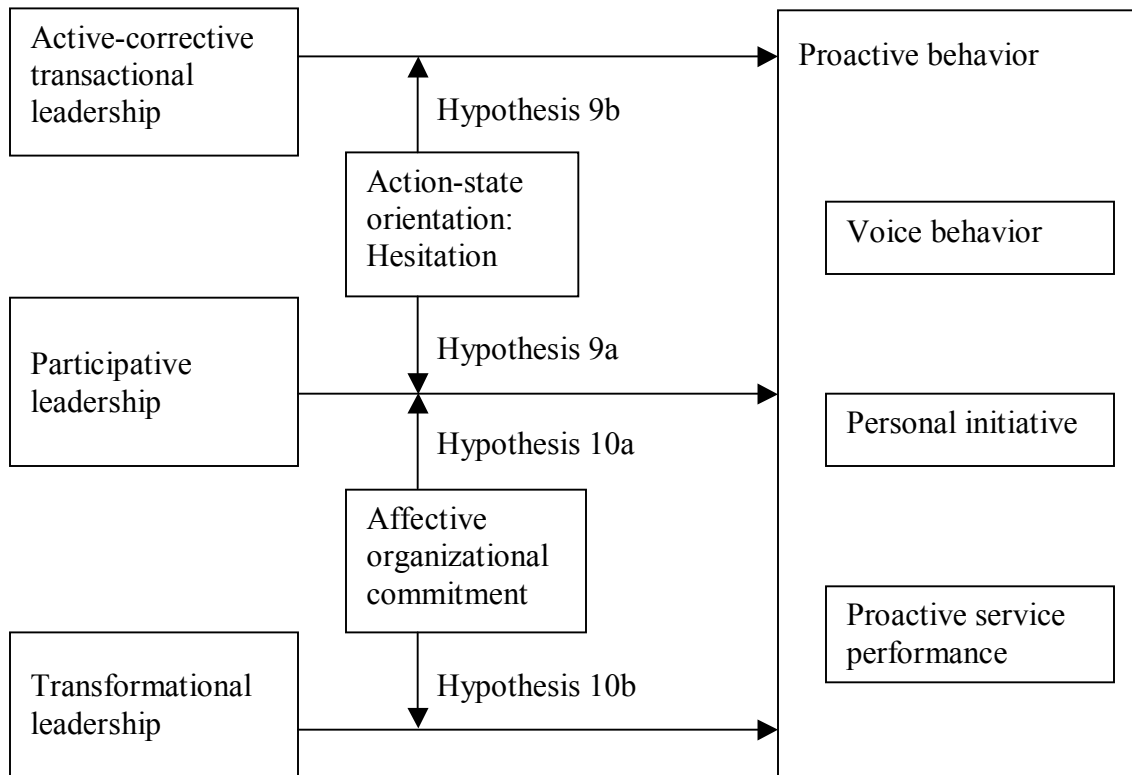


Figure 4. Overview of hypotheses 9-10 involving subordinate moderators of the relationships between the leadership predictors and the proactivity criteria.

Action versus state orientation (hesitation dimension) as a moderator

Action versus state orientation (ASO) is a volitional construct capturing individual differences in self-regulatory capabilities related to decision making, action planning, and goal striving (Diefendorff, Lord, Hepburn, Quickle, Hall, & Sanders, 1998; Kuhl & Beckmann, 1994). Based on his theory of action control, which he defined as the maintenance and enactment of intentions, Kuhl (1986) has developed the action-state orientation construct to capture individual variability in the consistency between cognition and action. According to the theory, state-oriented people experience difficulties in their command of several facets of action control, including attentional selectivity, emotion control, and the parsimony of information processing.

In general, action-oriented individuals efficiently translate intentions into goal-directed behaviors, whereas state-oriented individuals tend to focus on cognitive states that may interfere with decision-making, goal striving, and goal accomplishment (Farr, Hofmann, & Ringenbach, 1993; Kuhl & Beckmann, 1994). According to Lord and Levy (1994), the action-state orientation construct deserves greater attention in American organizational psychology, because “action control is critical to people’s work behavior” (p. 361). In this study, I focus on the ASO subdimension “hesitation”, which refers to behavioral difficulties in the initiation of desired courses of action (Farr et al., 1993; Kuhl, 1994a; Diefendorff, Hall, Lord, & Streat, 2000), because this dimension relates most strongly and positively to various types of work behavior, including personal initiative, task performance, and OCB (Diefendorff et al., 2000; Rank & Spector, 2003) and because the theoretical considerations explicated in the subsequent section most strongly suggest hesitation as a potential moderator.

Outlining potential avenues for future research on control constructs such as participation, Spector (1986) concluded: “What is called for is more complex studies that can test the limits of control as contributor to employee outcomes” (p. 1012). Employees’ state orientation may be one of these boundary conditions, because the beneficial effects of control on proactivity may depend upon employees’ self-regulatory capabilities to use given control effectively. In general, state-oriented employees may be more successful at work if they receive clear instructions that can be easily followed. As Kuhl (1992) argued, state-oriented individuals “work more efficiently in a structured environment than in one that involves much responsibility, initiative, and assertive handling of novel situations” (p. 123). Participative leadership is a contextual condition indicating that subordinates should consider new approaches and take on responsibility, particularly with respect to decision-making (Vroom & Jago, 1988). However, hesitant subordinates typically take a long time or even fail to commit themselves to a decision, as they often cannot stop thinking about alternatives (Farr et al., 1993; Kuhl, 1994).

Furthermore, employees high in hesitation may refrain from initiating change, because they may fear the demands resulting from such proactive endeavors. “Initiative will only be taken when an individual is ready to cope with the potential changes in the environment that his actions are likely to evoke” (Fay et al., 1998, p. 174). Farr and coauthors argued that action-oriented individuals may have more consistent intention-behavior links with novel and challenging tasks, because they respond more flexibly to situational factors suggesting disengagement from original strategies (p. 223). Hence, action-oriented subordinates may be more likely to respond to participation by voicing new ideas and showing self-started behavior.

To further substantiate the previous reasoning, I considered studies based on Kuhl's (1992) self-discrimination theory, the most frequently followed approach to action-state orientation in recent years. This theory implies that state-oriented individuals, particularly those high in hesitation (Kuhl, 2001), tend to falsely internalize others' demands rather than concentrating on their own goals. Several experimental studies (e.g., Baumann & Kuhl, 2003; Kazen, Baumann, & Kuhl, 2003; Kuhl & Kazen, 1994) demonstrated that state-oriented individuals tended to falsely consider goals as self-selected that were actually assigned by experimenters. Examining the effects of self-infiltration (i.e., state-oriented individuals' tendency to self-ascribe external goals) on actual behavior, Kuhl and Kazen (1994) demonstrated that "a higher tendency of self-infiltrations was associated with a lower tendency to actually enact self-chosen activities" (p. 1112).

This finding is further corroborated by the results from a recent field survey study by Norman, Sheeran and Orbell (2003) who concluded that state-oriented individuals high in hesitation "exhibit enhanced enactment of goals recommended by others" (p. 548) but not of those chosen by themselves. Therefore, state-oriented individuals may be less able to respond to participation with their own opinions, ideas, or self-started courses of action. Conversely, action-oriented individuals, who effectively discriminate between their own and others' goals (Baumann & Kuhl, 1993), are more likely to show self-started proactivity if given a chance to do so.

In addition, hesitation may also moderate the relationship between active-corrective transactional leadership and subordinate proactivity such that this type of supervision will be more strongly and negatively associated with proactive subordinate

behavior for hesitant subordinates. Most of the previous reasoning may apply not only to participation, but also to active-corrective transactional leadership, which is a highly controlling type of leadership that may stifle proactivity particularly strongly among state-oriented subordinates, at least if the supervisor treats proactivity as a deviation from standards that needs to be criticized. State-oriented subordinates of active-corrective transactional leaders may falsely internalize the supervisors' performance avoidance goals (VandeWalle, Cron, & Slocum, 2001), hence concentrating their efforts on avoiding errors rather than pursuing self-started activities.

Farr and coauthors (1993) provided an additional reason why corrective supervision may undermine proactivity among state-oriented subordinates: If state-oriented persons receive negative feedback, they may respond to it by becoming fixated on old and inefficient performance strategies rather than trying out new and potentially more effective approaches. Therefore, active-corrective transactional leadership may be more strongly and negatively associated with proactive behavior for state-oriented subordinates high in hesitation.

Hypothesis 9: Action-state orientation will moderate the relationships (a) between participative leadership and voice behavior, personal initiative, and proactive service performance such that participative leadership will be less strongly and positively associated with the proactivity criteria for state-oriented employees high in hesitation. Furthermore, action-state orientation will moderate the relationships (b) between active-corrective transactional leadership and voice behavior, personal initiative, and proactive service performance, such that active-corrective

transactional leadership will be more strongly and negatively associated with the proactivity criteria for state-oriented employees high in hesitation.

Affective organizational commitment as a moderator

An attitudinal individual-level variable that may moderate the relationships between some of the predictors and the proactivity criteria is affective organizational commitment, one's emotional attachment to the organization (Eisenberger, Fasolo, & Davis-LaMastro, 1990), manifesting itself in "identification with and involvement in the organization" (Allen & Meyer, 1990, p. 1). A recent meta-analysis (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002) demonstrated that affective commitment was more strongly and positively associated with job performance and organizational citizenship behavior than other types of commitment. As Van Dyne and colleagues (1995) argued, employees high in affective commitment may be more likely to respond to supportive contextual factors by engaging in promotive extra-role behavior, including voice. With respect to service performance, previous research has demonstrated that the gap between actual and optimal service was smaller when the employees had a strong desire to remain in the organization (Chenet, Tynan, & Money, 2000) and that affective organizational commitment positively predicted the performance of service managers (Meyer, Paunonen, Gellatly, Goffin, & Jackson, 1989). When encountering special challenges, only affectively committed individuals may demonstrate proactive service performance, because they are interested in the success of their organization (Meyer et al., 1993).

Participative and transformational leadership may be more strongly and positively associated with the proactivity criteria for subordinates high in affective organizational

commitment, who are more interested in the success of their organization and tend to expend extra effort to ensure its effectiveness (Meyer et al., 1993). Due to their greater involvement in the organization (Allen & Meyer, 1991), they may be more likely to identify potential options for improvement, whereas their counterparts may simply not develop any suggestions for change. Therefore, affectively committed employees may respond to participative and transformational leadership by proposing suggestions for change or by implementing self-started courses of action.

As previously discussed, an important component of personal initiative and proactive service performance is a long-term orientation involving forward thinking and the proclivity to proactively develop solutions to anticipated future problems. Because of the substantial relationship between low affective organizational commitment and intention to quit (Jenkins, 1993; Vandenberghe, Bentein, & Stinglhamber, 2004) employees with little affective commitment may limit their efforts and adopt a short-term orientation, even if their supervisors are participative or inspirational.

Another reason to assume a moderator role of affective organizational commitment is that it is typically related to the experience of positive affect (Meyer et al., 1993), which facilitates several behavioral outcomes that may be relevant to proactivity, including enhanced cooperation and negotiation, creative problem-solving, cognitive flexibility, and persistence (Isen & Baron, 1991). Van Dyne and associates (1995) argued that voice is more likely to occur when employees' overall affective state is positive, even if they are dissatisfied with a specific aspect of the status quo. When encountering optimistic supervisors high in inspirational motivation or other contextual facilitators of proactivity, subordinates low in affective commitment may experience less

positive affect, thus being less likely to exhibit proactivity than those high in affective commitment.

Following suggestions by several authors (McNeely & Meglino, 1994; Moorman & Blakely, 1992; Williams & Anderson, 1991) to partition the OCB domain according to the intended beneficiaries into OCB-O (OCB directed towards the organization) and OCB-I (OCB directed towards individuals), recent studies found that affective organizational commitment related more strongly and positively to the OCB-O variables extra effort and loyal boosterism than to OCB-I (Becker & Kernan, 2003; Blakely, Andrews, & Fuller, 2003). On the basis of these findings, one may argue that employees high in affective commitment are more likely to exhibit proactive behavior in response to beneficial leadership, because they feel greater loyalty to their organization and generally tend to exhibit greater extra effort.

Several authors (Becker, 1992; Becker & Kernan, 2003; Chen, Tsui, & Farh, 2002; Vandenberghe et al., 2004) argued that it is important to distinguish between different foci of commitment (e.g., to the organization, supervisor, coworkers etc.). This study includes commitment to the organization rather than commitment to the supervisor, because the focus of the commitment variable should be tailored to the relevant outcome variables (Becker, 1992). Whereas commitment to the supervisor may be critical to performance requirements prescribed by the supervisor or for citizenship behaviors directed toward the supervisor (Vandenberghe et al., 2004), commitment to the organization may be more relevant to proactive organizational behavior, which may sometimes not be appreciated by supervisors (Seibert et al., 2001), but ultimately serve the organization.

As Frese and associates (1996) argued, “workers with high initiative contribute to long-range positive outcomes for organizations, but in the short term they may well be a nuisance to their bosses because they are constantly pushing new ideas” (p. 40). In this study, commitment is modeled as a moderator rather than a mediator, because leadership variables predict commitment to the supervisor more strongly than organizational commitment, which is more strongly determined by other antecedents (e.g., perceived organizational support; Meyer et al., 2002; Vandenberghe et al., 2004). Overall, the above reasoning suggests that affective organizational commitment may moderate the relationships between transformational as well as participative leadership and the proactivity criteria.

Hypothesis 10: Affective organizational commitment will moderate the relationships of (a) participative leadership and (b) transformational leadership with voice behavior, personal initiative, and proactive service performance such that these two leadership predictors will be more strongly and positively associated with the proactivity criteria for subordinates high in affective organizational commitment.

Chapter Six

Perceptual Variables As Mediators

The previously developed hypotheses concern direct relationships between the leadership variables and proactivity as well as interaction effects, but do not address the underlying psychological mechanisms that connect the supervisory behaviors to subordinates' proactivity. Therefore, the following sections are devoted to the development of mediation hypotheses. This approach follows the general call for more studies examining intermediate variables between leadership and subordinate outcomes: "To date, the literature has placed little emphasis on examining variables that intervene between leader behaviors and their effects on followers" (Kirkpatrick & Locke, 1996, p. 39).

Subordinates' perceptions of trust in leadership and autonomy are identified as two variables that may partially account for the links between leadership and proactivity. As evident in Crant's (2000) conclusion cited in the beginning of the introduction, perceptual variables may function as mediators between contextual factors and proactivity. Because perceived trust in leadership has emerged as a mediator of relationships between transformational leadership and performance outcomes such as OCB (Podsakoff et al., 1990; Pillai et al., 1999), it is of substantial interest whether this mediation effect also applies to proactive performance. Since control perceptions have

been shown to facilitate initiative (Frese et al., 1996, 1997; Fay & Frese, 2001), it is an intriguing question whether leadership behaviors may affect proactivity through their potential effects on employees' perceived autonomy. Figure 5 illustrates the mediation hypotheses.

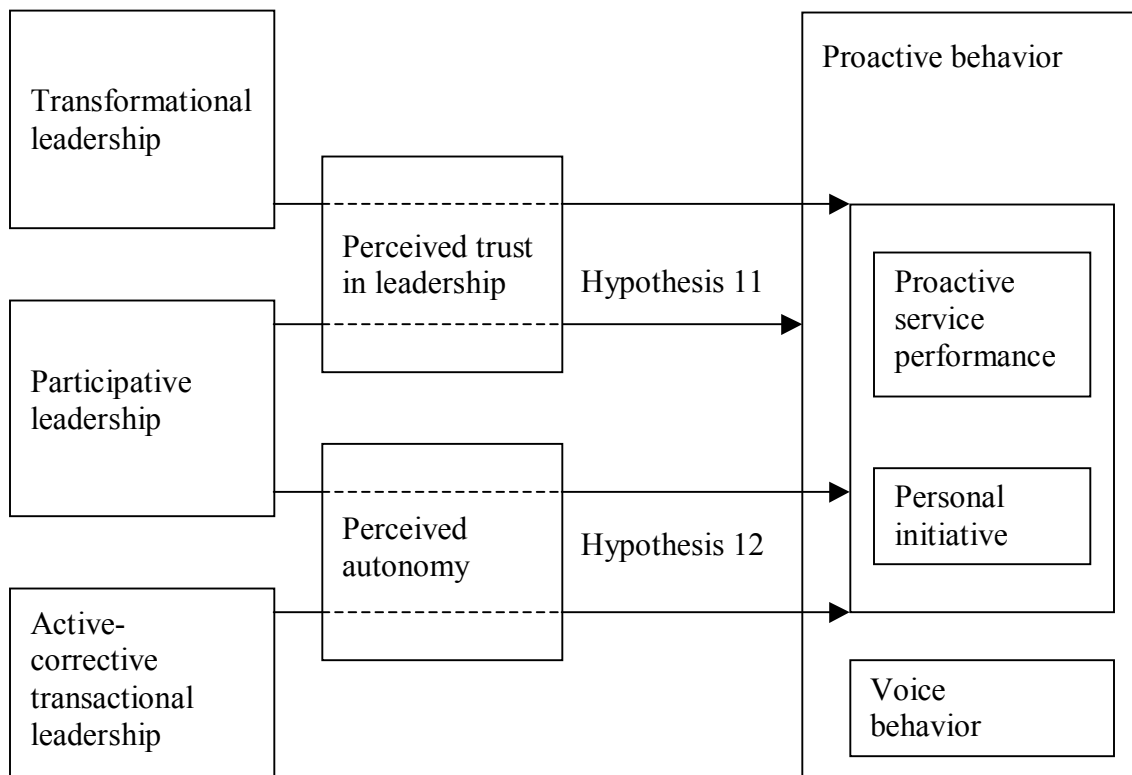


Figure 5. Overview of hypotheses 11-12 involving perceptual mediators of the relationships between the leadership predictors and the proactivity criteria.

Perceived trust in leadership as a mediator

Previous research has consistently identified trust in leadership as one of the premier mediators of relationships between leadership and various follower outcomes in different domains. In the political arena, for example, surveys collected before and after the 2000 presidential election revealed that perceived trust mediated the relationship between respondents' leadership perceptions of Al Gore and George W. Bush and their voting behavior (Pillai, Williams, Lowe, & Jung, 2003). One of the few projects tracking transformational leadership ratings over time, a four-wave longitudinal study conducted during President Clinton's second term (Pillai, Stites-Doe, & Brodowsky, 2004), revealed dynamic causal influences of transformational leadership perceptions on trust perceptions over time. When the Lewinsky scandal unfolded, declines in the respondents' transformational leadership ratings of Clinton were followed by substantial declines in their trust perceptions.

In the business domain, numerous scholars have argued that outstanding leaders enhance performance by gaining their followers' trust (Podsakoff et al., 1990). Entire volumes in the popular management literature are devoted to the impact of trust in top management on corporate success (Galford & Drapeau, 2002). A multidisciplinary review of trust research in the organization sciences has suggested that trust is typically defined as "a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another" (Rousseau, Sitkin, Burt, & Camerer, 1998, p. 395).

Two studies exploring trust as a mediator of relationships between transformational leadership and subordinates' organizational citizenship behavior

conceptualized trust in leadership as faith in and loyalty to the leader (Podsakoff et al., 1990; Pillai et al., 1990). In one of these studies, Podsakoff and associates (1990) identified perceived trust as a mediator of the links between individualized consideration as well as a second-order transformational core factor (which included vision articulation, role modeling, and the instillment of group goals) and four specific OCB dimensions (altruism, courtesy, conscientiousness, and sportsmanship). The fact that these researchers did not find a significant relationship between trust and civic virtue may not be interpreted as evidence precluding a link between trust and proactivity, because their operationalization of civic virtue was confined to relatively mundane activities such as reading memos and attending meetings.

Using different measures of leadership and perceived trust as well as composites of the leadership and citizenship scales, Pillai and colleagues (1999) found additional support for the role of trust as a mediator between transformational leadership and organizational citizenship behavior. In a recent laboratory study (Jung & Avolio, 2000), trust in the leader partially mediated the relationship between transformational leadership behaviors portrayed by confederates and a type of performance that may be particularly relevant to the voice behavior, namely the quantity and quality of ideas produced in a brainstorming task. In addition to these individual studies, a recent meta-analysis (Dirks & Ferrin, 2002) accumulated strong empirical evidence regarding relationships between trust in leadership and different leadership variables. Specifically, the mean weighted correlations were .72 with transformational leadership and .46 with participative decision making. The meta-analysis also revealed that trust in the direct leader was more strongly associated with job performance ($r = .17$) and the altruism component of OCB ($r = .22$)

than trust in organizational leadership ($r = .00$ and $.07$, respectively), hence suggesting that perceived trust in the direct superior may mediate the relationship between the direct supervisors' (rather than top managers') leadership behavior and the performance of their direct reports.

Employees' trust in the direct supervisor may be even more critical to proactive behaviors such as initiative, voice, and proactive service performance than to the job performance or OCB factors included in the meta-analysis, because employees may take a certain risk of being reprimanded if they take charge without being asked to do so or if they challenge the status quo even if others disagree (Frese & Fay, 2001; Seibert et al., 2001). Several scholars emphasized not only the vulnerability component of trust (Rousseau et al., 1999), but also argued that trust may be an important determinant of risk-taking behavior (Mayer, Davis, & Schoorman, 1995; Pillai et al., 1999). In comparison with proactive behavior, which may involve anti-authoritarian and risk-prone elements (Frese & Fay, 2001), the potential vulnerability associated with the adequate fulfillment of task requirements or citizenship components such as courtesy or sportsmanship appears to be moderate. In the present study, trust is expected to mediate the relationships between participative leadership and all three proactivity criteria and between transformational leadership and two proactivity criteria (personal initiative as well as proactive service performance). Consistent with hypothesis 5, which specified relationships between transformational leadership and these two criteria but not voice, a mediation effect for voice is not expected, because a direct relationship between the predictor and the criterion constitutes a prerequisite for mediation (Baron & Kenny, 1986; James & Brett, 1984).

With respect to transformational leadership, it should be noted that previous research has shown the intellectual stimulation factor to be either unrelated or even negatively related to subordinates' trust perceptions (Gillespie, 2004; Podsakoff et al., 1990). As Podsakoff and colleagues argued, the destabilizing nature of intellectual stimulation might induce role ambiguity and other stressors among subordinates, thus reducing their perceptions of supervisor consistency and dependability. However, it should be noted that the significant negative path (-.17) between intellectual stimulation and trust in the study by Podsakoff et al. appeared in a structural equation analysis, whereas the zero-order correlation was +.67. This finding is probably due to a complex suppressor effect, because several paths from the other transformational leadership factors to trust and additional outcomes were calculated simultaneously. It is possible that the unique variance that intellectual stimulation shared with trust reflected mainly non-constructive and irritating facets of intellectual stimulation. Due to these considerations, the high positive relationships between the other two transformational leadership factors and trust (Podsakoff et al., 1990; Pillai et al., 1999) and the .72 meta-analytic mean correlation between overall transformational leadership scores and trust (Dirks & Ferrin, 2002), it is expected that the transformational leadership composite will relate to personal initiative and proactive service performance via its positive association with subordinates' trust perceptions.

Finally, one may argue that active-corrective transactional leadership aiming at error prevention and risk avoidance may reduce subordinates' trust perceptions, because the propensity to take risks has been identified as one important component of trust (Mayer et al., 1995). Moreover, subordinates of overly critical supervisors may be less

willing to accept vulnerability (Rousseau et al., 1998), because they may have negative expectations regarding the behavior of their supervisor due to previous criticisms or reprimands. On the other hand, Gillespie (2004) found a nonsignificant $-.03$ correlation between active-corrective transactional leadership and trust in her study of R&D teams, arguing that this form of leadership may be unrelated to trust in contexts where adherence to rules or rigorous thinking is expected and necessary for success. Due to these issues, no explicit mediation hypothesis for active-corrective transactional leadership is suggested.

Hypothesis 11. Perceived trust in leadership will mediate the relationships between (a) participative leadership and voice behavior, personal initiative as well as proactive service performance, and between (b) transformational leadership and personal initiative as well as proactive service performance.

Perceived autonomy as a mediator

In addition to perceived trust in leadership, perceived autonomy may also mediate some of the relationships between the leadership predictors and the proactivity criteria. Previous research has already identified overall control perceptions as a predictor of personal initiative (Frese et al., 1996, 1997; Speier & Frese, 1997; Frese & Fay, 2001) and creativity (Amabile, 1988; Amabile et al., 1996). However, little research has examined perceived control as a mediator between leadership and subordinate outcomes, although “many management techniques plausibly involve control as a central mediating variable” (Ganster & Fusilier, 1989, p. 235-236). To accomplish this goal and to provide

a more highly differentiated analysis of the relevance of employee control, the present study partitions perceived control into its two major components (Spector, 1986), participation and task autonomy.

Sargent and Terry (1998) demonstrated that task control (control over how and when job tasks are undertaken) was only moderately correlated with decision control (degree of involvement in work or organizational decisions) and suggested that future research should separately examine the role of these two control variables in predicting performance. In this study, participation is included as a predictor and moderator (see hypotheses 3 and 6), whereas task autonomy is incorporated as a mediator (hypothesis 12). Task autonomy is different from participation, because employees who have control over immediate task processes are not necessarily involved in decision-making processes related to wider aspects of the workplace and vice versa (Ganster & Fusilier, 1989).

Task autonomy is defined as “the degree to which the job provides substantial freedom, independence, and discretion to the individual in scheduling the work and in determining the procedures to be used in carrying it out” (Hackman & Oldham, 1976, p. 246). In comparison with objective autonomy, perceived autonomy reflects the extent to which individual employees feel that they “can structure and control how and when they do their particular job tasks” (Spector, 1986, p. 1006). House (1995) explicitly argued that today’s leaders need to foster subordinates’ independence, because formal organizations of the twenty-first century need members who exercise initiative as well as autonomous judgment.

Cognitive evaluation theory (Deci & Ryan, 1985, 1987) may serve as a framework for developing mediation effects involving autonomy, because this theory

explicates antecedents and consequences of individuals' evaluations of external events as autonomy-supportive and autonomy-reducing. Participation may be considered an important ingredient of an autonomy-supportive work environment (Deci & Ryan, 1987). "Autonomy-supportive events are defined as those that encourage the process of choice" (p. 1026-1027). Participative leadership may be one way that supervisors may enhance perceived employee control, because "employees who are more involved in making decisions believe that they have more control over processes and outcomes in the workplace" (Ganster & Fusilier, 1989, p. 243). Considering the various forms of participation differentiated by Locke and Schweiger (1979), participative leadership as a direct form of individual participation (compared to, for example, indirect representation through employee representatives) may be particularly conducive to perceptions of subordinate influence. Empirically, a field experiment (Jackson, 1983) demonstrated that an intervention enhancing participation in decision-making explained increases in employees' perceived influence six and nine months later.

Whereas the positive effects of participative leadership may be partially explained by an enhancement of autonomy perceptions, the negative effects of active-corrective transactional leadership may be partially due to a reduction in perceived autonomy, because this type of supervision is indicative of a controlling work environment involving surveillance and critical evaluation (Deci & Ryan, 1987). Applying the learned helplessness paradigm to organizational settings, Martinko and Gardner (1982) argued that certain supervision practices may lead to low productivity and passivity by reducing employees' control perceptions. Active-corrective transactional supervisors may reduce subordinates' perceived autonomy, because they tend to provide and enforce standards

regarding the order or timeline in which specific tasks are to be completed. Participants in experimental conditions involving close monitoring (Farh & Scott, 1983) had considerably lower perceived task autonomy scores on the Job Diagnostic Survey autonomy scale than those in high autonomy conditions (Ganster & Fusilier, 1989).

While the previous reasoning explains why participative and active-corrective transactional leadership may be linked to perceived autonomy, the development of the mediation hypotheses also requires a rationale for the association between the mediator and the criteria. One of the directions for future research provided in a review of control research (Ganster & Fusilier, 1989) is to examine whether employees may use their control to alter work demands. An analysis of the relationship between employee control and proactivity reflects this idea, because proactivity may lead to changes in one's work tasks and environments (Crant, 2000; Frese et al., 1996). As Fay and coauthors (1998) argued, "control at work is assumed to support initiative as it has an impact on employee's motivation to redefine their tasks in a broader way (thus, including extra-role goals), and on their sense of responsibility for their job. Furthermore, control at work makes it easier to leave the routine tracks of one's work" (p. 173).

Among the five core job dimensions included in Job Characteristics Theory (Hackman and Oldham, 1976), task autonomy may be most critical to proactivity, as it is the only characteristic in the theory expected to directly enhance one's experienced responsibility for work outcomes, a psychological state that may explain why employees exhibit self-started and persistent forms of work behavior. This idea may also be derived from the finding that individuals with greater personal control are less able to avoid internal attributions for negative outcomes (Rodin, Rennert, & Solomon, 1980). Similar

to participation as a predictor, meta-analytic research (Fried, 1991; Spector, 1986) identified only moderate correlations of about .20 between autonomy and job performance. Despite these results and despite experimental null findings (e.g., Farh & Scott, 1983) regarding the relationship between autonomy and performance on relatively simple tasks, task autonomy may be critical to proactive behaviors, because it has stronger positive effects when tasks are meaningful (Hackman & Oldham, 1976) and desirable (Ganster & Fusilier, 1989), which likely applies to self-chosen activities. Adelman (1986) found that employees in jobs with high levels of control had higher scores in self-confidence, a variable that may be important for the overcoming barriers facet of initiative (Frese & Fay, 2001).

Previous studies of service-specific occupations also suggest that task autonomy facilitates the initiative exhibited by customer service representatives. In a study in the airline industry (Chenet et al., 2000), the gap between actual and optimal service was smaller when perceived employee control was high. Moreover, experimental research (Sparks, Bradley, & Callon, 1997) using videotaped scenarios revealed that observers provided higher service quality ratings when service providers had greater autonomy. Previous findings on positive relationships between control and innovation implementation (Amabile, 1988; King, 1990), particularly individuals' work role innovation (West, 1987), also suggest that autonomy may facilitate types of proactivity that require the persistent implementation of self-started courses of action, such as personal initiative and proactive service performance.

However, the idea that task autonomy facilitates persistent types of proactivity, because individuals will perceive greater individual responsibility for obtained outcomes

also suggests that task autonomy may be less relevant to voice behavior. Voice may be indicative of job involvement, a variable that is considerably more strongly associated with participation than with autonomy (Spector, 1986). Employees high in voice propose changes in the ways the work group carries out its tasks without necessarily implementing such changes in their individual work roles. It is even conceivable that employees sometimes decide to speak up, because they do not have sufficient autonomy to change work procedures themselves, but rather have to convince supervisors and coworkers to do so. Overall, it is expected that task autonomy will mediate the relationships of participative as well as active-corrective transactional leadership with personal initiative and proactive service performance.

Hypothesis 12. Perceived autonomy will mediate the positive relationships between (a) participative leadership and personal initiative as well as proactive service performance such that this leadership predictor will be associated with these two proactivity criteria via enhanced autonomy perceptions. Perceived autonomy will also mediate the negative relationships between (b) active-corrective transactional leadership and personal initiative as well as proactive service performance such that this leadership predictor will be associated with these two proactivity criteria via reduced autonomy perceptions.

Chapter Seven

Additional Predictors of Proactive Behavior

In addition to the identification of moderators and mediators, a theoretically and practically important question is whether the leadership variables explain incremental variance in the proactivity criteria after relevant individual and contextual predictors have been accounted for. To test this assumption, I will assess the incremental validity of the leadership predictors over and above three individual variables (trait personal initiative, affective organizational commitment, and work-related self-efficacy) and two task-related characteristics (task autonomy and job complexity).

A second purpose of this analysis is to provide additional construct validity evidence for the proactive service performance concept, because all of the included individual and task predictors are expected to be positively associated with this proactivity variable. The analysis will include one personality, one attitudinal, and one motivational construct as well as two task characteristics whose effects on proactivity have been previously demonstrated or are strongly suggested by the literature. In the following paragraphs, I will briefly justify the inclusion of each variable. Because two of the variables (affective organizational commitment and task autonomy) have been described before, their discussion will be particularly concise.

Affective organizational commitment may not only moderate the relationships between leadership and proactivity, as previously discussed, but also directly predict all three proactivity criteria. As Van Dyne and colleagues (1995) argued, individuals high in affective commitment may tend to engage in promotive extra-role behavior. Employees high in affective organizational commitment may be more likely to be proactive because of their greater identification with and involvement in the organization (Allen & Meyer, 1990), their enhanced overall service performance (Chenet et al., 1990; Meyer et al., 1989), and their greater likelihood to perceive positive affect (Meyer et al., 1993) and its associated benefits (e.g. intrinsic motivation, creative problem-solving, cognitive flexibility, willingness to take risks; Isen & Baron, 1990). Because task autonomy is also included as a mediator, it has already been discussed in detail why this specific task characteristic should be positively associated with personal initiative and proactive service performance. However, the inclusion of three additional predictors needs to be justified.

Trait personal initiative

Clearly, proactivity may be predicted by employees' proclivity to engage in proactive behavior. In addition to their work on initiative as work behavior, Frese et al. (1996, 1997) developed a self-report measure assessing trait personal initiative, one's propensity to engage in self-started, long-term oriented and persistent behavior. In previous studies, trait personal initiative positively predicted various desirable outcomes, including performance, OCB, job-search success, individual and group-level innovation, and active feedback-seeking in training sessions (Allen, Fecteau, & Fecteau, 2001; Borman et al., 2001; Fay & Frese, 2001; Rank et al., 2004). The trait personal initiative

concept is similar to the proactive personality construct (Bateman & Crant, 1993), which captures the proclivity to effect change in one's environment. Frese and Fay (2001) compared the proactive personality scale with their trait personal initiative scale and found a disattenuated correlation of .96, hence suggesting that these two measures are basically interchangeable (Crant, 2004). However, the items in the trait initiative scale (e.g., "Whenever there is a chance to get actively involved, I take it") are more applicable to a range of employees than those of the proactive personality scale (e.g., "I feel driven to make a difference in my community, and maybe the world"). Borman and colleagues (2001) explicitly mentioned personal initiative as "an important personal characteristic to consider in future research" (p. 64).

Work-related self-efficacy

Self-efficacy, an individual's subjective estimate of his or her capacity to perform (Bandura, 1997), may function as a motivational predictor of proactivity. According to Kanfer's (1992) integrative framework of motivation constructs, self-efficacy represents a proximal motivational variable that may directly predict performance. Morrison and Phelps (1999) demonstrated that generalized self-efficacy beliefs were positively associated with employees' discretionary efforts to initiate workplace change.

Longitudinal research (Frese et al., 1996, 1997; Speier & Frese, 1997) identified work-related self-efficacy as a predictor of personal initiative. Because self-efficacy beliefs are partially derived from one's previous performance history (Bandura, 1997) and because highly efficacious individuals tend to positively assess their ability to overcome the potential risks associated with new courses of action (Morrison & Phelps, 1999), they may be more likely to exhibit proactive organizational behavior.

Task complexity

In an effort to assess the incremental validity of leadership variables beyond individual and task predictors, it would be insufficient to include only the narrow task autonomy variable. Therefore, I also consider the broader job characteristic task complexity, which reflects the overall degree of challenge in one's job (Hackman & Oldham, 1976). As Ganster and Fusilier (1989) noted, it is important to separately assess the effects of control and complexity, although these influences may be somewhat difficult to disentangle due to strong intercorrelations. However, because of the previous success of initiative and creativity researchers (Amabile, 1996; Frese et al., 1996, 1997) in identifying additive effects of these variables, it is warranted to include both. As German action theorists (Frese & Zapf, 1994) argued, control represents decision possibilities, whereas complexity reflects decision necessities.

Kohn and Schooler (1983) have shown that the complexity of one's work increases one's active orientation and instills a higher degree of intellectual flexibility. According to Frese and associates (1996), complexity leads to the development of skills and knowledge, which may in turn facilitate the development of suggestions for change, stimulate forward thinking, and help overcome barriers. In longitudinal studies (Frese et al., 1996; Speier & Frese, 1997), not only control, but also complexity significantly and positively predicted personal initiative. It may also be argued that employees simply do not have the opportunity to exhibit proactivity if they encounter only simple routine tasks. With respect to the customer service domain, complex service demands frequently create a necessity for customized or personalized service solutions (Liao & Chuang, 2004), thus enabling service representatives to take initiative when tailoring their sometimes

improvised offers and responses to customers' individual needs. Hence, complexity should function as positive predictor of all three proactivity criteria.

Incremental validity of the leadership predictors

The purpose of the incremental validity analysis is to examine whether the leadership variables explain incremental variance in the proactivity criteria after the previously described individual and task predictors have been accounted for. It should be noted that the incremental validity analysis will be more exploratory in nature than the tests of the previously developed hypotheses. However, it is important to know whether leadership explains incremental variance in proactivity over and above a set of variables that may already be determined to a great extent in most organizational contexts before leadership influences become operative.

Furthermore, it is of particular interest which specific leadership variables explain additional variability in which specific proactivity criteria. It has been argued before that one of the task variables, perceived task autonomy, may be partially influenced by leadership, and a similar case may be made for perceived task complexity. However, the present study includes not only job incumbents' subjective estimates of these variables, but also supervisor ratings of their subordinates' task characteristics, hence allowing for an analysis from both perspectives.

Overall, the present dissertation involves a comprehensive effort to examine three leadership predictors of three proactivity criteria, including not only tests of hypotheses specifying direct relationships, interactions between the leadership variables, individual moderators, and perceptual mediators, but also an analysis of the incremental validity of the three leadership variables in predicting proactive behavior beyond a relevant set of

subordinate and task variables. Although the broad set of leadership, subordinate, and task variables included in this project would have allowed for the analysis of several additional hypotheses (e.g., trait personal initiative as a moderator, self-efficacy as a moderator and mediator, task complexity as a mediator), priority was given to the careful development of a manageable set of twelve hypotheses suggested by the literature review. Figure 6 provides an illustration of all of the twelve hypotheses developed in the previous sections.

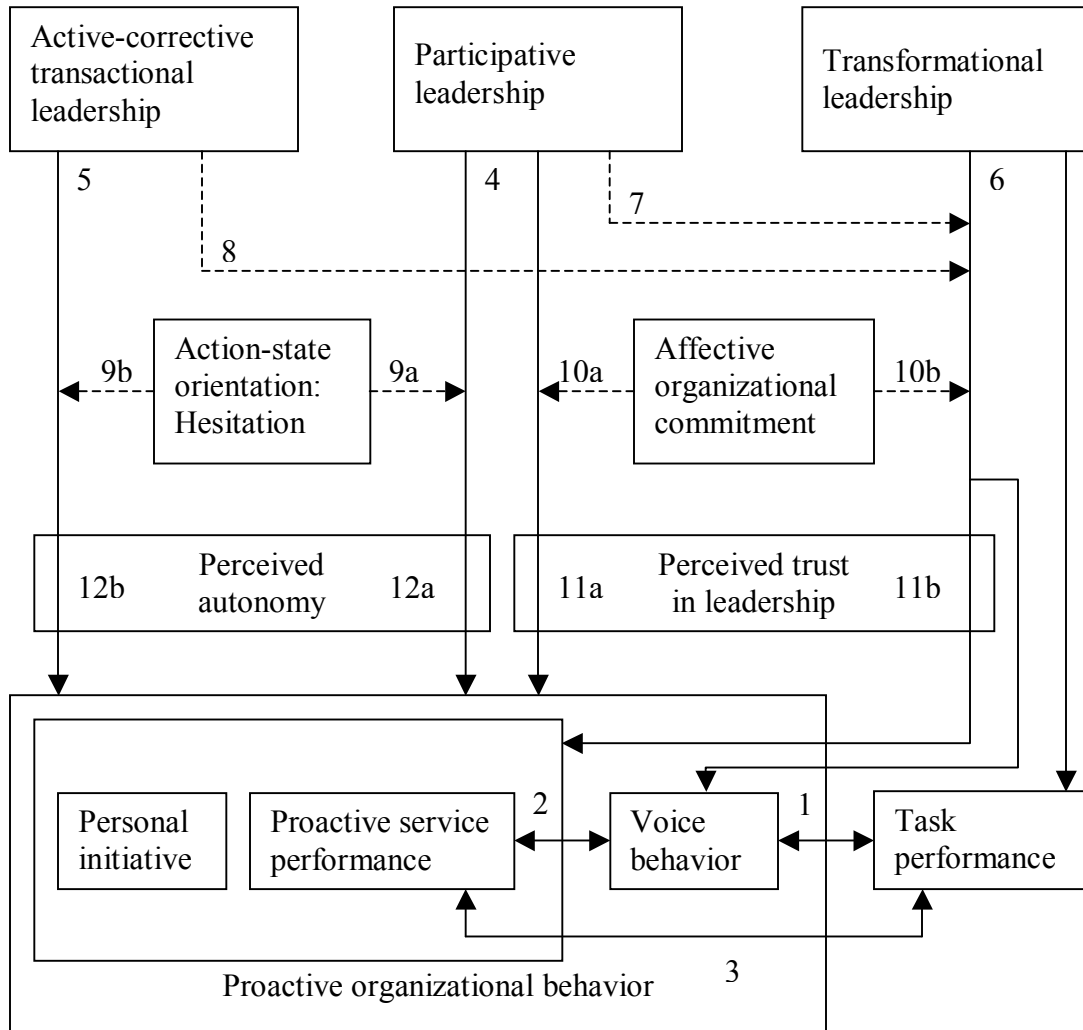


Figure 6. Overview of the 12 hypotheses (numbers indicate the hypotheses).

Hypotheses 1-3 reflect the expected distinguishability of voice behavior, proactive service performance, and task performance. Hypotheses 4-6 represent direct relationships between the leadership predictors and the criteria. Hypotheses 7 and 8 anticipate interactions between the leadership variables. Hypotheses 9 and 10 explicate interaction effects involving individual moderators. Finally, hypotheses 11 and 12 specify mediation effects involving perceptual variables. Dashed lines indicate moderation hypotheses.

Chapter Eight

Sample, Procedure, and Organizational Context

This study was conducted in one of North America's largest financial services organizations. In this section, I describe the sample and data collection procedure. To provide an impression of the organizational context of the present research, I subsequently describe the organization's motivation behind participation in the study as well as the organization's internal research activities that preceded the conduct of this study.

Sample and Procedure

The participating financial services organization is one of the five largest within North America and one of the ten largest in the world. I collected field survey data from employees and their direct supervisors. The participants worked in three different lines of business (branches, mortgage, and credit card services) and were employed in 10 geographically dispersed US states, including New York, Ohio, Florida, Texas, and California. To evenly represent the lines of business and locations in the overall sample, I adopted a stratified sampling technique, selecting a total of 345 employees who received the survey through the company's internal mail system. In a deliberate effort to ensure independence of the data, I ensured that most of the employees had a different supervisor, such that each participating supervisor provided performance ratings for only

one subordinate, and that her or his leadership behaviors were rated by only one subordinate. In a cover letter signed by myself and a high-level human-resource executive, the participants were assured confidential treatment of the data. Specifically, they were informed that their supervisors would not see their responses and that only aggregated line-of-business specific and company-wide data would be reported to top management and in research publications.

Three hundred and fourteen of the 345 employees who had received the survey (91% response rate) returned their completed survey to the company's employee development headquarters. Immediately after each subordinate questionnaire was received, a supervisor survey was sent to the respective subordinate's manager. Supervisors who did not respond within five business days received up to three reminders by electronic mail and telephone. Of the 314 supervisor surveys sent to the managers, 237 completed questionnaires were returned (75% response rate). With the exception of eight supervisors who rated two subordinates, all managers participated with only one subordinate. To assure independence, the second survey submitted by these eight supervisors was not further considered (i.e., only the subordinate who was rated first by each of these eight supervisors was considered in the analysis), which reduces the number of actually used surveys completed by supervisors from 237 to 229 and the number of actually used surveys completed by subordinates from 314 to 306. The final sample consists of 306 subordinates and 229 supervisors. In total, complete sets of matched supervisor-subordinate surveys were received for 229 independent manager-associate dyads. Of the 306 participating subordinates, 174 were female, and 132 were male. The subordinates' average organizational tenure was 5.91 years ($SD = 5.78$). On average,

they worked 38.89 hours per week ($SD = 5.48$). Of the 229 participating supervisors, 112 were male, and 117 were female. The organization did not allow the collection of additional demographic information.

The overall sample is composed of two subsamples that received two different, albeit largely overlapping, sets of questionnaires. In combination, the majority of the surveys (186 of the 229 supervisor surveys, and 224 of the 306 completed subordinate surveys, for a total of 186 supervisor-subordinate sets) included the entire set of measures assessing all variables considered in this dissertation. However, because of the organization's wish to administer a few other measures (not included in this dissertation) to a small subset of the sample, while not including more than approximately 60 items in each survey, I had to eliminate a few of the scales from this subset.

Therefore, 43 of the supervisor surveys, and 82 of the subordinate surveys did not include a few of the measures relevant to this study. All of the 229 supervisor surveys included scales assessing the subordinate's voice behavior, personal initiative, task performance, and task autonomy. A subset of 186 supervisor surveys also included scales assessing the subordinate's proactive service performance and task complexity. All of the 306 subordinate surveys included scales assessing the supervisor's transactional, transformational, and participative leadership as well as the subordinate's action orientation (hesitation subscale), perceived autonomy, and perceived complexity. A subset of 224 returned subordinate surveys also included scales assessing the subordinate's affective organizational commitment, perceived trust in leadership, trait personal initiative, and work-related self-efficacy.

The organizational context

The participating financial services organization employed several thousand customer service associates across the US as well as in other countries. Three years before the initiation of the present study, top management had launched a corporate culture change towards greater customer centricity and had rolled out a new nationwide customer service training program for all of its service employees. Top management put an increasing emphasis upon outstanding customer service, particularly the initiative taken by service employees to enhance customer satisfaction. In the months before the present research was begun, the organization had implemented the first wave of a comprehensive measurement initiative intended to identify and quantify all antecedents of customer satisfaction by aligning metrics and integrating data from employee development, marketing, and quality assurance departments on corporate and line-of-business-specific levels.

Specifically, a team of internal marketing and development professionals as well as external consultants and the author of this dissertation reviewed and integrated internal findings regarding the most relevant predictors of desirable customer outcomes. For example, studies conducted in the marketing department demonstrated that two of the main determinants of customer satisfaction were consumer perceptions of service employees' flexibility and their proactive development of personalized solutions. Training evaluation studies conducted in the employee development department revealed that participants in the nationwide customer service training program wished to have greater management support to enhance their customer service delivery. Additionally, focus groups conducted with service employees and managers in all of the three

participating lines of business and most of the participating US states revealed that a portion of the company's managers still emphasized quantity of performance (e.g., number of customer calls answered per hour). The findings of these and other internal studies suggested that employee proactivity may be crucial for achieving desirable customer outcomes, and that the management behaviors related to subordinate proactivity may be particularly relevant. A few weeks before data collection for the present study began, the organization decided to redesign and implement a nationwide leadership development program, involving the presentation and practicing of management behaviors that may improve customer service performance. Hence, human resource management was interested in professionally conducted studies about the measurement of service initiative and the relationships between managerial behaviors and service employees' proactive behavior.

Chapter Nine

Measures

The research design utilized in this dissertation is that of a cross-sectional field survey study using different rating sources to avoid potential same-source bias. All predictor variables were assessed with previously established scales via subordinate ratings. The four criterion variables personal initiative, voice behavior, proactive service performance, and task performance were measured via supervisor ratings of subordinates' work behavior. Because the measure of proactive service performance had to be newly designed, the development and psychometric properties of this scale are explained in greater detail in the next section before the other measures are described.

Proactive service performance. Proactive service performance was measured with the newly developed Proactive Service Performance Scale (PROSPER). The seven items (see Table 1) were developed internally in the organization by a team of industrial-organizational psychologists and human resource managers. A set of qualitative and quantitative pilot studies was conducted to identify relevant service behaviors and to assess the internal consistency of the seven-item scale in a first sample independent of the main dataset collected for this dissertation.

Table 1. *Items included in the Proactive Service Performance (PROSPER) scale and their means, standard deviations, and item-total correlations.*

<i>Proactive service performance (PROSPER) items</i>	<i>M</i>	<i>SD</i>	<i>r_{it}</i>
1. My staff member proactively shares information with customers to meet their financial needs.	4.78	1.45	.72
2. My staff member anticipates issues or needs customers might have and proactively develops solutions.	4.93	1.60	.82
3. My staff member uses own judgment and understanding of risk to determine when to make exceptions or improvise solutions.	4.70	2.14	.59
4. My staff member takes ownership by following through with the customer interaction and ensures a smooth transition to other service representatives.	4.53	1.71	.75
5. My staff member actively creates partnerships with other service representatives to better serve customers.	5.22	1.63	.74
6. My staff member takes initiative to communicate client requirements to other service areas and collaborates in implementing solutions.	4.96	1.50	.80
7. My staff member proactively checks with customers to verify that customer expectations have been met or exceeded.	4.82	1.48	.77

Note. $N = 186$. r_{it} = corrected item-total correlation.

Scale development. The qualitative pilot research involved a consideration of transcripts from several focus group sessions with service representatives and managers, several interviews with human resource executives, and a content analysis of more than 800 critical incidents reported by employees in a nationwide customer service training program. In these training sessions, each employee reported one successful example of service performance that led to high customer satisfaction and one poor example of service performance that resulted in customer dissatisfaction. To condense the critical incident information, a two-step grounded theory technique combining open and axial coding methods was used (Charmaz, 2003; Strauss & Corbin, 1990). The open coding stage involved the creation of approximately 25 labels capturing the key behaviors included in the critical incident reports. In the subsequent axial coding stage, similar behavioral labels were combined into broader behavioral categories reflected in the PROSPER items (i.e., proactively sharing information, anticipating customer needs, proactively developing solutions, making exceptions and taking appropriate risks, following through and ensuring smooth transitions to coworkers, communicating customer needs and creating partnerships with other service areas, proactively soliciting customer feedback and verifying customer satisfaction).

Consistent with the insights gained from the inductive grounded-theory approach (Strauss & Corbin, 1990), the items reflect the proactive service behaviors mentioned most often in the critical incidents, interviews, and focus group sessions as those discretionary service activities that best enhance customer satisfaction. Furthermore, the items are also consistent with the deductive derivation of the proactive service concept as outlined in the introduction. In concordance with the studies on service quality by

Schneider and associates (1992, 1998), for example, the PROSPER items reflect individual-level proactive behaviors (e.g., taking initiative to communicate client needs to other service areas, proactively verifying customer satisfaction) contributing to the higher-level factors (e.g. cooperation across functional units, solicitation of customer feedback) that predicted service quality perceptions in these studies.

Scale properties. To assess the internal consistency of the PROSPER scale in a first quantitative study, the seven items were included in a training evaluation survey completed by managers of participants in customer service training programs. In this nationwide sample of 256 customer service representatives, Cronbach's alpha reliability of the PROSPER scale was .88. In the main study involving the previously described sample, Cronbach's alpha of the PROSPER scale was .91, which was slightly higher than in the pilot study (.88) and as high as the internal consistencies of the previously established task performance and voice behavior scales.

To further assess the psychometric properties of the PROSPER scale, I conducted an item analysis and computed inter-item correlation coefficients. The intercorrelations between the seven items ranged from .45 (between items 3 and 6) to .78 (between items 5 and 6) and were all significant at $p < .01$. As can be seen in Table 1, the means obtained on the seven-item response scale ranged from 4.53 (item 4) to 5.22 (item 5), the standard deviations from 1.60 (item 2) to 2.14 (item 3), and the corrected item-total correlations from .59 (item 5) to .82 (item 2). The confirmatory factor analysis will be reported in the beginning of the results section, because it is one of the means to test Hypotheses 1-3.

Other criterion measures

The three other criteria were measured with previously developed scales (see Table 2). Like proactive service performance, these criteria were also assessed via supervisor ratings of subordinates' work behavior. Meta-analytic research (Viswesvaran, Ones, & Schmidt, 1996) has demonstrated that supervisory ratings have higher interrater and intrarater reliabilities than peer ratings, considering both overall performance ratings and two dimensions particularly relevant to proactive behavior and service performance, namely effort and interpersonal competence. Furthermore, service researchers (Borucki & Burke, 1999) have explicitly recommended the use of supervisor ratings. In one of the few service-related studies involving supervisor ratings (Hogan et al., 1984), service employees' dispositional service orientation (a personality variable composed of elements of sociability, likeability, adjustment, and willingness to follow rules) positively and significantly predicted supervisory ratings of several service performance components, including insurance agents' communication and relational skills or nursing aides' patient services and their support of other nursing personnel. With respect to voice behavior, Van Dyne and LePine (1998) demonstrated that supervisor ratings of voice strongly and positively correlated with peer and self-ratings. Overall, these previous findings suggest that supervisor ratings are an appropriate source to assess the criterion variables.

Table 2. *Overview of all measures included in this study, including source of each measure, the number of items, and the internal consistencies in the present study.*

<i>Variable</i>	<i>Source of measure</i>	<i>Items</i>	<i>α</i>
<i>Criteria (Supervisor ratings)</i>			
Proactive service performance	Newly developed	7	.91
Voice behavior	Van Dyne & LePine (1998)	6	.91
Personal initiative	Frese et al. (1996)	7	.95
Task performance	Williams & Anderson (1991)	7	.91
<i>Predictors (Subordinate ratings)</i>			
Participative leadership	Vroom (1959)	4	.84
Active-corrective transactional leadership	Bass & Avolio (1995)	4	.72
Transformational leadership	Bass & Avolio (1995)	12	.94
Action-state orientation (Hesitation)	Diefendorff et al. (2000)	8	.72
Affective organizational commitment	Meyer et al. (1989)	8	.86
Trait personal initiative	Frese et al. (1996)	7	.86
Work-related self-efficacy	Spreitzer (1995)	3	.70
Trust in leadership	Podsakoff et al. (1990)	6	.89
Task autonomy	Hackman & Oldham (1975)	3	.83
Task complexity	Frese et al. (1996)	4	.70

Voice behavior. Voice behavior ($\alpha = .91$) was measured with the 6-item scale by Van Dyne and LePine (1998), which itself was based on a modification of the Van Dyne et al. (1994) Advocacy Participation Scale. Items were prefaced with “my staff member”. Two sample items are, “my staff member speaks up in this group with ideas for new projects or changes in procedures“, and “my staff member communicates his/her opinion about work issues to others in this group even if his/her opinion is different and others in the group disagree with him/her“.

Personal initiative. Personal initiative ($\alpha = .95$) was measured with a supervisor version of the 7-item self-report and peer-rating inventory developed by Frese and associates (1996). Frese and colleagues (1996, 1997) demonstrated moderate convergence of self- and spouse-ratings and between both of these types of ratings and interview-based initiative ratings. In the supervisor rating version used in the present study, I added the words “my staff member” and “at work” to each item. Two sample items are, “whenever there is a chance to get actively involved at work, my staff member takes it”, and, “my staff member actively attacks problems at work”.

Task performance. Each supervisor also rated the prescribed task performance exhibited by his/her subordinate. Prescribed task performance was assessed with the seven-item in-role behavior scale by Williams and Anderson (1991). Cronbach’s alpha was .91. A sample item is, “my staff member meets formal performance requirements of the job”. Two of the seven items are negatively worded (e.g., “my staff member neglects aspects of the job he/she is obligated to perform“). An introductory statement to rate the subordinate’s prescribed customer service behavior was included to provide additional

clarification that the scale was intended to be used for ratings of the fulfillment of explicitly required service behaviors.

Predictor measures

All of the predictor variables were measured with previously established scales. The three leadership predictors were assessed via subordinate ratings of the manager's supervisory behaviors. The individual, perceptual, and task variables were measured via subordinate self-report. Additionally, the two task characteristics autonomy and complexity were also assessed via supervisor report of the respective subordinate's task autonomy and complexity.

Participative leadership. Participative leadership ($\alpha = .84$) was measured with a four-item scale by Vroom (1959), presented with a seven-point scale ranging from "not at all" to "very much". A sample item is, "Does your immediate superior ask your opinion when a problem comes up which involves your work?".

Active-corrective transactional leadership. Active-corrective transactional leadership was measured with the 4-item scale "Active Management-by-Exception" from the Multifactor Leadership Questionnaire Form 5X (Bass & Avolio, 1995). The scale consists of four items presented with a 5-point scale ranging from 0 (not at all) to 4 (frequently, if not always). However, one of the four items ("my supervisor directs my attention toward failures to meet standards") yielded a low item-total-correlation (.27). Furthermore, this item correlated more strongly with the transformational leadership items (r s ranging from .27 - .43) than with the other three active-corrective transactional leadership items (r s ranging from .18 - .26). Therefore, this item was eliminated, which led to an increase in Cronbach's alpha from .69 to .74. It is likely that this item was

positively correlated with the transformational items, because it may capture more constructive and necessary facets of corrective leadership than those reflected in the other active-corrective transactional items (e.g., “my supervisor concentrates his/her full attention on mistakes, complaints and failures”).

Transformational leadership. Transformational leadership was measured with the three four-item scales inspirational motivation (e.g., “my supervisor talks enthusiastically about what needs to be accomplished”), intellectual stimulation (e.g., “my supervisor gets me to look at problems from many different angles”), and individualized consideration (e.g., “my supervisor spends time teaching and coaching me”) from the Multifactor Leadership Questionnaire (MLQ) Form 5X (Bass & Avolio, 1995). Each scale consists of four items presented with a 5-point scale ranging from 0 (not at all) to 4 (frequently, if not always). Cronbach’s alpha of the composite twelve-item transformational leadership measure was .94.

Action-state orientation (hesitation dimension). The hesitation dimension of action-state orientation was measured with the eight-item hesitation subscale of the revised Action Control Scale (ACS-90) (Diefendorff et al., 2000), an English version of the German HAKEMP scale (Kuhl, 1994b). The name of the original ACS-90 subscale is “Decision-related action orientation versus hesitation” (Kuhl, 1994b). Based on the results of a confirmatory factor analysis, Diefendorff and coauthors eliminated 4 of the 12 items originally included in the ACS-90 (Kuhl, 1994b) and slightly improved the wording of a few items. In the present study, Cronbach’s alpha of the revised 8-item version was .72, which is similar to the .74 internal consistency value obtained by Diefendorff et al. (2000). The items of the ACS-90 are presented in a forced-choice

format, requiring respondents to select one of two specific behavioral response alternatives. A sample item is, “When I am getting ready to tackle a difficult problem, (a) I usually don’t have a problem getting started on it, (b) I have trouble sorting things out in my head so that I can get down to working on the problem”. For each action-oriented response (e.g., alternative (a) in the sample item), participants received a score of 1, whereas each state-oriented response was equivalent to a score of 0.

Affective organizational commitment. Affective organizational commitment ($\alpha = .86$) was measured with the eight-item self-report scale by Meyer and associates (1989; for items, see McGee & Ford, 1987). A sample item is, “I really feel as if this organization’s problems are my own”. The items were presented with a seven-point response scale ranging from “strongly disagree” to “strongly agree”.

Trait personal initiative. Trait personal initiative was measured with the seven-item self-report inventory by Frese et al. (1996). The internal consistency reliability was .86. A sample item is, “I take initiative even when others do not”. The items were presented with a seven-point answer scale ranging from “strongly disagree” to “strongly agree”.

Work-related self-efficacy. Work-related self-efficacy was measured with Spreitzer’s (1995) three-item work-related self-efficacy (perceived competence) self-report scale ($\alpha = .70$). A sample item is, “I feel self-assured about my capabilities to perform my work activities”. The items were presented with a seven-point answer scale ranging from “strongly disagree” to “strongly agree”.

Trust in leadership. Perceived trust in the direct leader was assessed via subordinate self-report with the six-item scale by Podsakoff and associates (1990). Two

of the six items were derived from the Interpersonal Trust at Work scale developed by Cook and Wall (1980). Cronbach's alpha in the present study was .85. Although the items are relatively heterogeneous, because they pertain to different aspects of trust in the supervisor (e.g., faith, allegiance, loyalty), a confirmatory factor analysis demonstrated its unidimensional nature (Podsakoff et al., 1990). A sample item of the perceived trust scale is, "I have complete faith in the integrity of my supervisor".

Task autonomy. Task autonomy was assessed via subordinate self-report and via supervisor ratings of the subordinates' task autonomy. The variable was measured with three items from the Job Diagnostic Survey (Hackman & Oldham, 1975). The task autonomy items were presented with a seven-point answer scale ranging from "strongly disagree" to "strongly agree". A sample item is, "My job gives me considerable opportunity for independence and freedom in how I do my work". Cronbach's alpha for the subordinate self-report version (i.e., perceived task autonomy) was .83. For the supervisor reports of subordinate autonomy ($\alpha = .66$), the items were adapted (i.e., "My staff member's job gives her/him considerable opportunity for independence and freedom in how she/he does her/his job"). The correlation between the incumbent's autonomy rating and the supervisor's rating of the incumbent's autonomy was .39 ($p < .05$).

Task complexity. Task complexity was assessed both via subordinate self-report and via supervisor ratings of the subordinates' task complexity. This variable was measured with the four-item complexity scale used by Frese et al. (1996). A sample item is, "Do you have to make complicated decisions in your work?". Cronbach's alpha for the subordinate self-report version was .70. Responses were given on a seven-point scale ranging from "not at all" to "very much". For the supervisor reports of subordinate

complexity ($\alpha = .66$), the items were adapted (i.e., "My staff member has to make complicated decisions in her/his work"). The correlation between the incumbent's complexity rating and the supervisor's rating of the incumbent's complexity was .31 ($p < .05$).

Although self-reports of job conditions such as autonomy and complexity do at least partially reflect the objective environment, they are also affected by additional factors, including attitudes, moods, cognitions, and dispositions (Spector, 1992). Using the Idaszak and Drasgow (1987) modification of the Job Diagnostic Survey, Spector and Fox (2003) found a nonsignificant .15 correlation between incumbent ratings of their own autonomy and supervisor ratings of these incumbents' autonomy. Although the correlations between the supervisor and subordinate assessments of autonomy (.31) and complexity (.39) were significant and somewhat higher in the present study, it should be considered that these measures captured perceived rather than actual autonomy and complexity. Because the mediation analyses explicitly involve perceptual variables, the incumbent self-reports of autonomy will be used in this analysis.

Chapter Ten

Data Analytic Strategies

To test the hypotheses and to address additional conceptual and methodological concerns, the present research uses confirmatory factor analysis, correlation analysis, multiple hierarchical regression analysis, moderated hierarchical regression analysis, mediated regression analysis, and structural equation modeling.

Confirmatory factor analysis

Hypotheses 1-3, together predicting that voice behavior, proactive service performance, and task performance are distinct performance dimensions, will be assessed via confirmatory factor analysis (CFA) (Bentler, 1992; Byrne, 1998; MacCallum, 1995; Hu & Bentler, 1998) using LISREL 8 (Jöreskog & Sörbom, 1993). A three-factor expected measurement model (voice behavior, proactive service performance, task performance) of the scales' items will be specified and compared with a one-factor overall performance model and a two-factor model (task performance versus one common proactivity factor consisting of the voice behavior and proactive service performance items). The personal initiative items will not be included in this analysis, because initiative conceptually overlaps with the two other proactivity criteria (particularly with proactive service performance) and may also be substantially associated with task performance (Frese & Fay, 2001). First, I will assess whether the

standardized factor loadings associated with the hypothesized three-factor solution are significant ($p < .05$) and correspond to the hypothesized underlying constructs (i.e., the respective latent performance factors). To examine whether the three performance variables are distinguishable from each other, I will test the three hierarchically nested models specified above. To assess model fit, I will consider the χ^2 -statistic as well as several incremental fit indices (Hu & Bentler, 1998), including the Root Mean Squared Error of Approximation (RMSEA) and its associated 90% confidence interval, the Goodness of Fit Index (GFI), the Comparative Fit Index (CFI), the Normed Fit Index (NFI), and the Non-normed Fit Index (NNFI) associated with each of the three models.

A χ^2 -square difference test (Byrne, 1998) will be conducted to examine whether the hypothesized three-factor model provides a fit superior to that of the one-factor and the two-factor model. With respect to RMSEA, values of less than .08 indicate good fit, values between .08 and .10 mediocre fit, and values greater than .10 poor fit (Byrne, 1998; MacCallum & Austin, 2000). The upper-bound value of the 90% RMSEA confidence interval for the hypothesized three-factor model should be lower than .10 (Byrne, 1998). Additionally, it will be examined whether the other incremental indices of fit (particularly CFI, NNFI, and NFI) for the three-factor model supersede the .90 borderline values typically specified in the literature (Bentler, 1990, 1992; Byrne, 1998). The Comparative Fit Index may be considered especially meaningful, as it takes sample size into account (Bentler, 1990). Further empirical support for Hypotheses 1-3 may be gained by considering whether some of the predictor variables differentially predict the criteria. This assessment may be made by considering the regression weights identified in the multiple hierarchical regression analyses described below.

In addition to the CFA of the criterion measures, I will conduct a CFA of the leadership scales, because the factor structure of the Multifactor Leadership Questionnaire, which includes the items used to assess transformational and active-corrective transactional leadership, is controversial (e.g., Avolio, Bass, & Jung, 1999; Tejeda, Scandura, & Pillai, 2001), and little previous research assessed whether participative leadership is distinct from transformational and active-corrective transactional leadership. Because meta-analytic research (Lowe et al., 1996) has identified very low correlations between the transformational and corrective transactional scales of the MLQ, it is unlikely that the items representing these two types of leadership will load on the same factor. However, it may be conceivable that the participation items load together with the transformational and/or active-corrective transactional items. Therefore, the fit of the anticipated three-factor leadership model will be compared to a one-factor overall leadership model, two two-factor models (corrective vs. participative-transformational and transformational vs. corrective-participative), and a five-factor model (participative leadership, active-corrective transactional leadership, and the three transformational subscales).

Correlations and multiple hierarchical regression analysis

Hypotheses 4-6, specifying expected independent relationships of the specific leadership variables with the performance criteria, will be tested by analyzing bivariate zero-order correlation coefficients as well as regression coefficients computed in multiple hierarchical regression analyses (Pedhazur, 1997). Although significant correlations in the expected direction may be considered sufficient support for the direct relationship hypotheses, particularly strong support for the relevance of the leadership predictors may

be inferred if they succeed in explaining additional variability in the criteria after relevant control, individual, and task variables have been accounted for. For this purpose, and to provide additional construct validity evidence for the proactive service performance variable, I will conduct four hierarchical multiple regressions (one for each criterion) involving two control variables (organizational tenure and number of hours worked per week) in block one, the three individual predictors (trait personal initiative, affective organizational commitment, and work-related self-efficacy) in block two, the task variables (autonomy and complexity) in block three, and the three leadership variables (participative, active-corrective, and transformational leadership) in block four.

The hierarchical regression analyses will follow a theory-driven “enter” procedure rather than an exploratory stepwise predictor selection procedure (Cohen & Cohen, 1983; Pedhazur, 1997). The two control variables will be included, because previous research has revealed differences in proactivity based on these two factors, hence suggesting the necessity to partial out their effects (e.g. Stamper & Van Dyne, 2001; Fay & Frese, 2002). It may also be argued that leadership effects on discretionary proactive behavior can be expected only for subordinates with a certain tenure and a certain number of weekly work hours.

Moderated regression analysis

Hypotheses 7-10, explicating interaction effects between the leadership variables and between the leadership factors and the two individual moderators action-state orientation and affective organizational commitment, will be tested with moderated hierarchical regression analyses (Aiken & West, 1991; Cohen & Cohen, 1983). The two control variables (organizational tenure and hours worked per week) will be entered into

the first block of the regression equation. The predictor variable and the moderator variable will be entered into the second block. Finally, the interaction term (i.e., the product of the centered values of the predictor and the moderator; Aiken & West, 1991) will be entered into the third block. If this product term is significant ($p < .05$), support for the respective moderation effect will be inferred. The effect size (R-squared change) associated with the interaction term will be reported and interpreted. However, due to the considerable problems associated with the detection of interaction effects using field samples (McClelland & Judd, 1993; Zedeck, 1971), however, several authors have argued that even a 1-2% increase in explained variance may be considered meaningful (Evans, 1985; Champoux & Peters, 1987).

If an interaction term is significant ($p < .05$), I will create a graph illustrating the nature of the interaction effect. Based on the instructions provided by Aiken and West (1991), which are typically implemented in articles in top journals featuring interaction effects (e.g., George & Zhou, 2001; Oldham & Cummings, 1996), two predictor-criterion regression lines will be plotted on the basis of moderator scores one standard deviation above the mean and one standard deviation below the mean. The slopes of these regression lines will be interpreted to describe how exactly the moderator variable modifies the relationship between the predictor and the criterion.

Mediated regression analysis

Hypotheses 11-12, modelling two perceptual variables as mediators between some of the leadership predictors and the criteria, will be analyzed using the method specified by Baron and Kenny (1986) as well as James and Brett (1983). A series of regressions will be conducted to test (1) whether the predictor is significantly related to the criterion,

(2) whether the predictor is significantly associated with the mediator, (3) whether the mediator is significantly related to the criterion, and (4) whether the initially significant relationship between predictor and criterion becomes nonsignificant or diminishes substantially when controlling for the mediator. If the predictor-criterion relationship remains significant but the magnitude of the determination coefficient is considerably reduced after partialling out the mediator, support for partial mediation will be inferred (James & Brett, 1983).

Structural equation modelling

To supplement the mediated regression analyses, a unified test of the mediation hypotheses will be performed using structural equation modeling (SEM). The advantages of SEM are that parameters can be estimated simultaneously, overall model fit indices can be obtained, and paths can be introduced or eliminated (Byrne, 1998; MacCallum & Austin, 2000). Due to the strong overlap of personal initiative with the other two proactivity criteria, it is advisable to conduct separate SEM analyses involving either only personal initiative, one, or both of the specific proactivity variables (i.e., proactive service performance and/or voice behavior). Because only one mediation effect involving only one predictor and one mediator was hypothesized for voice behavior, an SEM model with the purpose of a unified test does not appear useful for this criterion. Therefore, I will conduct two separate SEM analyses for personal initiative and proactive service performance.

The structural equation models will include the three leadership variables as exogenous variables and the two mediator variables (trust and autonomy) as well as the proactivity criterion (personal initiative or proactive service performance) as endogenous

variables. In all analyses, item parcels consisting of 2-3 items will be created for all scales composed of more than three items (Byrne, 1998). Hence, the individual items will serve as indicators (i.e., observed variables) for active-corrective transactional leadership and perceived autonomy (three-item scales), while between two and three item parcels will function as indicators for the other variables. With respect to transformational leadership, the three item parcels will consist of the items measuring inspirational motivation, intellectual stimulation, and individualized consideration.

Similar to published studies on related topics (e.g., Moorman, Blakely, & Niehoff, 1998), a saturated model involving both direct and indirect paths (i.e., a partially mediated model) will be compared to a more parsimonious model (i.e., a fully mediated model) including only indirect paths via the mediators. Model fit will be assessed using the χ^2 -statistic, RMSEA, and several other fit indices including the GFI, CFI, NNFI, and NFI (Hu & Bentler, 1998; MacCallum et al., 1996). Support for mediation will be inferred if model fit is adequate and both the γ -parameters linking the leadership variables to the mediators and the β -parameters linking the mediators to the criterion yield significant t-test statistics. If the fit indices for the parsimonious model are adequate and those of the saturated model are not superior, preference will be given to the parsimonious model. This procedure reveals whether a fully or partially mediated model is adequate. If the standardized weights linking one of the mediators to the criterion and/or the leadership variables are not significant, I will proceed by assessing the fit of a model including only the remaining mediator. The latter procedure will reveal whether it is more appropriate to include one or both mediators. If modifications are made, it will be noted that the nature of the modified analyses was not fully confirmatory and the

supported model should be replicated in future research so that more definitive conclusions can be drawn.

Chapter Eleven

Results of the Confirmatory Factor Analyses

The twelve hypotheses developed in the introduction section addressed the distinguishability of the three constructs voice behavior, proactive service performance, and task performance (Hypotheses 1-3), direct relationships between the three leadership variables and the four performance criteria (Hypotheses 4-6), interaction effects involving the leadership variables and the two individual moderators action-state orientation and affective organizational commitment (Hypotheses 7-10) and mediation effects involving the two perceptual variables trust in leadership and perceived task autonomy (Hypotheses 11-12). This section features the results of the confirmatory factor analyses of the performance scales (relevant to Hypotheses 1-3) as well as the leadership scales.

Performance scales

Hypotheses 1-3, together predicting that voice behavior, proactive service performance, and task performance are factorially distinct dimensions of individual performance, were assessed via confirmatory factor analysis (CFA) (Bentler, 1992; Byrne, 1998; MacCallum, 1995; Hu & Bentler, 1998) using LISREL 8 (Jöreskog & Sörbom, 1993). The three-factor hypothesized measurement model (proactive service performance versus voice behavior versus task performance) of the scales' items was

compared with a unidimensional overall performance model (one undifferentiated performance factor) and a two-factor model (task performance versus one common proactivity factor composed of the voice behavior and proactive service performance items), as explained in greater detail in chapter 10. As can be seen in Table 3, the standardized factor loadings associated with the hypothesized differentiated three-factor solution were all significant ($p < .01$) and corresponded to the hypothesized underlying constructs (i.e., the respective latent performance factors proactive service performance, voice behavior, and task performance). The loadings of the observed variables (i.e., the individual items which served as indicators in this measurement model) ranged from .60 to .87 for proactive service performance, from .74 to .87 for voice behavior, and from .63 to .94 for task performance.

Table 4 displays the χ^2 -statistic as well as the Root Mean Squared Error of Approximation (RMSEA) and its associated 90% confidence interval, the Goodness-of-Fit Index (GFI), the Comparative Fit Index (CFI), the Normed Fit Index (NFI), and the Non-Normed Fit Index (NNFI) associated with each of the three models. Because two of the seven task performance items (items TP6 and TP7 in Table 2) were negatively worded, I allowed their associated error variances to be intercorrelated by freeing up the respective theta-delta parameter (Byrne, 1998). The χ^2 -square difference test indicated that the three-factor model provided a fit superior to that of the one-factor model ($\Delta\chi^2 = 2093.51, p < .01$) and the two-factor model ($\Delta\chi^2 = 918.77, p < .01$). RMSEA for the three-factor model was .068, and the upper-bound value of its 90% confidence interval was .080, which indicates acceptable model fit (Byrne, 1998; MacCallum et al., 1996),

whereas the RMSEA values for the one-factor model (.27) and the two-factor model (.21) were unacceptable.

As can be seen in Table 4, the hypothesized three-factor model yielded additional fit indices clearly superior to the indices associated with the alternative models. Specifically, the Comparative Fit Index (.94) and the Non-Normed Fit Index (.93) associated with the three-factor model superseded the .90 borderline values typically specified in the literature (Bentler, 1990; Hu & Bentler, 1998). It should be noted that a few of the other fit indices associated with the three-factor model (GFI = .86; NFI = .89) only reached values in the borderline region of acceptability (see Table 4). However, considering the clearly superior fit of the hypothesized three-factor performance model and the fact that the CFI and the NNFI are frequently discussed as two particularly meaningful indices in the literature (Bentler, 1990; Byrne, 1998; Hu & Bentler, 1998), it may be concluded that the results are consistent with the hypothesized three-factor structure, hence supporting Hypothesis 1, 2, and 3. Further empirical support for the first three hypotheses may be derived from the identification of distinct relationships between the predictors and the criteria. This type of evidence will be presented in the end of chapter 12.

Table 3. *Standardized factor loadings of the performance items resulting from confirmatory factor analysis of the hypothesized differentiated three-factor measurement model.*

Item	Proactive service performance (PS)	Voice behavior (VB)	Prescribed task performance (TP)
PS1	.76		
PS2	.84		
PS3	.60		
PS4	.77		
PS5	.79		
PS6	.87		
PS7	.81		
VB1		.74	
VB2		.87	
VB3		.81	
VB4		.84	
VB5		.85	
VB6		.87	

Table 3 (Continued). *Standardized factor loadings of the performance items resulting from confirmatory factor analysis of the hypothesized differentiated three-factor measurement model.*

Item	Proactive service performance (PS)	Voice behavior (VB)	Prescribed task performance (TP)
TP1			.87
TP2			.90
TP3			.92
TP4			.94
TP5			.63
TP6			.65
TP7			.63

Note. $N = 186$. All factor loadings are fully standardized lambda loadings derived from a confirmatory factor analysis using LISREL 8.30 and are significant at $p < .01$.

Table 4. *Results of confirmatory factor analysis comparing the hypothesized differentiated three-factor performance model to a one-factor and a two-factor model.*

Model	χ^2 (df)	RMSEA (90% CI)	GFI	CFI	NFI	NNFI
1. One-factor model (Overall performance)	2402.29 (169)	.27 (.26 - .28)	.44	.57	.54	.52
2. Two-factor model (Prescribed task performance vs. overall proactive behavior)	1483.52 (168)	.21 (.20 - .22)	.55	.76	.72	.73
3. Three-factor model (Proactive service performance vs. voice behavior vs. prescribed task performance)	308.78 (166)	.068 (.056 - .080)	.86	.94	.89	.93

Note. $N = 186$. RMSEA = Root Mean Squared Error of Approximation. CI = Confidence interval. GFI = Goodness of Fit Index. CFI = Confirmatory Fit Index. NFI = Normed Fit Index. NNFI = Non-Normed Fit Index.

Leadership scales

The CFA of the leadership scales was conducted due to the controversial factor structure of the Multifactor Leadership Questionnaire and the lack of research assessing whether participative leadership is distinct from transformational and active-corrective transactional leadership. The latter variable is referred to as corrective leadership in all tables in the results section. As explained in detail in chapter 10, the hypothesized three-factor model (participative versus corrective versus transformational leadership) was compared to a one-factor model and two two-factor models (participative-transformational versus corrective leadership and participative-corrective versus transformational leadership). Table 5 displays the standardized factor loadings associated with the three-factor solution, which were all significant ($p < .01$) and corresponded to the hypothesized underlying constructs (i.e., the latent factors participative, active-corrective transactional, and transformational leadership). The item loadings ranged from .54 to .91 for participative leadership, from .59 to .85 for active-corrective transactional leadership, and from .72 to .82 for transformational leadership.

As can be seen in Table 6, the RMSEA value of the expected three-factor model (.078) was slightly below the .08 cutoff value. The model with the lowest χ^2 -value and the best fit indices was the anticipated three-factor model (e.g., CFI = .92; NNFI = .91; RMSEA = .078). The fit indices of the three alternative models were clearly below acceptable borderline values. Therefore, it is justified to consider the three leadership variables separately in the subsequent analyses.

Table 5. *Standardized factor loadings of the leadership items resulting from confirmatory factor analysis of the hypothesized differentiated three-factor measurement model.*

Item	Participative leadership (PL)	Active-corrective transactional leadership (AC)	Transformational leadership (TL)
PL1	.54		
PL2	.64		
PL3	.91		
PL4	.90		
AC1		.59	
AC2		.85	
AC3		.71	
TL1			.73
TL2			.79
TL3			.77
TL4			.81
TL5			.69

Table 5 (Continued). *Standardized factor loadings of the leadership items resulting from confirmatory factor analysis of the hypothesized three-factor differentiated measurement model.*

Item	Participative leadership (PL)	Active-corrective transactional leadership (AC)	Transformational leadership (TL)
TL6			.80
TL7			.72
TL8			.79
TL9			.72
TL10			.77
TL11			.81
TL12			.82

Note. $N = 229$. All factor loadings are fully standardized lambda loadings derived from a confirmatory factor analysis using LISREL 8.30 and are significant at $p < .01$.

Table 6. *Results of confirmatory factor analysis comparing the hypothesized differentiated three-factor leadership model to a one-factor and two two-factor models.*

Model	χ^2 (df)	RMSEA (90% CI)	GFI	CFI	NFI	NNFI
1. One-factor model (Overall leadership)	1190.77 (152)	.15 (.14 - .16)	.71	.74	.71	.71
2. Two-factor model (Participative-transformational vs. corrective leadership)	914.76 (151)	.13 (.12 - .14)	.76	.80	.77	.78
3. Two-factor model (Participative-corrective vs. transformational leadership)	731.59 (151)	.11 (.10 - .12)	.80	.85	.82	.83
4. Three-factor model (Participative vs. transformational vs. corrective leadership)	450.39 (149)	.078 (.069 - .087)	.87	.92	.88	.91

Note. $N = 229$. RMSEA = Root Mean Squared Error of Approximation. CI = Confidence interval. GFI = Goodness of Fit Index. CFI = Confirmatory Fit Index. NFI = Normed Fit Index. NNFI = Non-normed Fit Index.

Chapter Twelve

Results of the Correlational and Multiple Hierarchical Regression Analyses

Hypotheses 4-6, specifying independent relationships of the three leadership variables with the performance criteria, were tested by analyzing bivariate zero-order correlation coefficients as well as regression coefficients computed in multiple hierarchical regression analyses (Pedhazur, 1997). To analyze the relative importance of the leadership predictors as well as their incremental validity, I entered them into the fourth block of each hierarchical regression, after having accounted for the two control variables tenure and hours worked per week, the three subordinate variables trait personal initiative, affective organizational commitment and work-related self-efficacy, and the two task characteristics complexity and autonomy. Regarding the latter two variables, the subordinate rather than the supervisor ratings were used in the regression analyses to avoid shared same-source variance with the criterion measures. Because all of the latter variables were accounted for before the leadership predictors were entered and because the three leadership variables competed as predictors in the final block of the equation, this analysis was considered an especially conservative test of the hypotheses.

The means, standard deviations, and intercorrelations of all study variables are displayed in Table 7. The regression tables (8 and 9) feature the determination

coefficients (R^2 s) and respective F -test values for each block of variables as well as the standardized regression weights (β s) and associated t -test values for each single predictor. As the emphasis of these analyses is on the incremental validity of each block and its specific variables, the statistics displayed in the tables are taken from each separate step, not from the final equation. The correlation coefficients were generally computed using the largest N available for each pair of variables (e.g., $N = 229$ for the correlation between transformational leadership and voice behavior and $N = 186$ for the correlation between affective organizational commitment and proactive service performance). Because regression analyses can be based only on data from complete sets of corresponding predictor-criterion data points, I enhanced the possibility for correspondence between the correlational and regression results by basing the subordinate-reported portion of the correlation table on data from only those subordinates whose supervisors also responded. However, the sample basis for the correlation coefficients derived from the larger dataset ($N = 229$) still differs from the one in the regressions ($N = 186$), because the regression analyses involve several predictor variables assessed only in the subset (i.e., trait personal initiative, affective organizational commitment, self-efficacy, and job complexity).

As can be seen in Table 7, the four criterion variables were significantly correlated with each other ($p < .01$), with the coefficients ranging from .35 to .68. Personal initiative was particularly highly correlated with the other criterion measures (.53 - .68), which is not surprising considering its conceptual overlap with the other criteria, as noted in the introduction. The intercorrelations of the other three criterion variables were in the medium range (.35 to .49), reflecting a shared variance proportion of about 10-25% between these variables. In the subsequent sections, the hypothesis-

relevant results of the correlational and the regression analyses are reported together for each leadership variable. Afterwards, the results of the incremental validity analysis for each criterion are described in greater detail not only with respect to the leadership variables, but also with regard to the other predictors introduced in chapter 7.

Participative leadership as a predictor

Hypothesis 4 predicted that participative leadership would be positively associated with the three proactivity criteria. As can be seen in Table 7, participative leadership was positively and significantly correlated with voice behavior ($r = .18; p < .05$), personal initiative ($r = .21; p < .01$), and proactive service performance ($r = .43; p < .01$). Hence, all three correlation coefficients are consistent with Hypothesis 1. As can be seen in Tables 8 and 9, the only criterion significantly predicted by participative leadership in the hierarchical regression analysis was proactive service performance ($\beta = .29; p < .01$). The regression coefficients relating participative leadership to voice behavior ($\beta = .13$) and personal initiative ($\beta = .07$) were both nonsignificant. In conclusion, particularly strong empirical evidence for participative leadership as a predictor was revealed for the criterion variable proactive service performance.

Active-corrective transactional leadership as a predictor

Hypothesis 5 predicted that active-corrective transactional leadership would be negatively associated with the three proactivity criteria. In support of this hypothesis, active-corrective transactional leadership was negatively and significantly correlated with voice behavior ($r = -.24; p < .01$), personal initiative ($r = -.19; p < .01$), and proactive service performance ($r = -.16; p < .05$). Furthermore, active-corrective transactional leadership emerged as a significant negative predictor of voice behavior ($\beta = -.23; p <$

.01) and personal initiative ($\beta = -.27; p < .01$), but not proactive service performance ($\beta = .09$) in the regressions. Overall, it may be concluded that particularly consistent empirical support of Hypothesis 5 was obtained with regard to the two proactivity criteria voice behavior and personal initiative.

Transformational leadership as a predictor

Hypothesis 6 predicted that transformational leadership would be positively and significantly associated with subordinates' personal initiative, proactive service performance, and task performance. Neither a positive nor a negative relationship with voice behavior was expected. Transformational leadership was positively and significantly correlated with personal initiative ($r = .15; p < .05$), proactive service performance ($r = .32; p < .01$), and task performance ($r = .16; p < .05$), as expected. Moreover, it was not significantly correlated with voice behavior ($r = .06$). These correlations are consistent with Hypothesis 6. In the multiple hierarchical regression analyses, transformational leadership significantly and positively predicted personal initiative ($\beta = .30; p < .01$) and task performance ($\beta = .28; p < .05$). Consequently, one may conclude that especially consistent support for Hypothesis 6 was found for personal initiative and task performance.

Table 7. Means, standard deviations, intercorrelations, and alphas.

Variable	<i>M</i>	<i>SD</i>	1	2	3	4
1. Voice behavior	5.13	1.29	<i>.91</i>			
2. Personal initiative	5.30	1.34	.68**	<i>.95</i>		
3. Proactive service performance	4.85	1.34	.49**	.58**	<i>.91</i>	
4. Task performance	5.91	.99	.35**	.53**	.41**	<i>.91</i>
5. Participative leadership	4.30	1.44	.18*	.21**	.43**	.18*
6. Corrective leadership	2.15	1.09	-.24**	-.19**	-.16*	-.02
7. Transformational leadership	2.80	.88	.06	.15*	.32**	.16*
8. Action-state orientation	1.82	.22	-.01	-.02	.02	.03
9. Trait personal initiative	5.76	.87	.21**	.17*	.29**	.18*
10. Affective commitment	5.04	1.19	.25**	.25**	.34**	.21**
11. Self-efficacy	6.29	.76	-.06	-.09	-.04	.02
12. Trust in leadership	5.68	1.38	.16*	.26**	.32**	.32**
13. Task autonomy	5.36	1.33	.07	.18*	.30**	.07
14. Task complexity	4.26	1.20	.15	.11	.34**	.11
15. Organizational tenure	5.97	5.71	.22**	.12	.30**	-.06
16. Work hours per week	39.33	5.09	.14*	.07	.06	.05

Note. ** $p < .01$. * $p < .05$. † $p < .10$. (two-tailed tests). *N* ranges from 186 to 229.

Coefficient alphas are listed in italics across the diagonal.

Table 7 (Continued). *Means, standard deviations, intercorrelations, and alphas.*

Variable	5	6	7	8	9	10
1. Voice behavior						
2. Personal initiative						
3. Proactive service performance						
4. Task performance						
5. Participative leadership	<i>.84</i>					
6. Corrective leadership	-.11	<i>.74</i>				
7. Transformational leadership	.60**	.09	<i>.94</i>			
8. Action-state orientation	.09	-.01	.10	<i>.72</i>		
9. Trait personal initiative	.29**	-.09	.36**	.37**	<i>.86</i>	
10. Affective commitment	.29**	-.10	.50**	.18*	.48**	<i>.86</i>
11. Self-efficacy	.04	-.01	.03	.21**	.26**	.07
12. Trust in leadership	.53**	-.08	.72**	-.01	.31**	.50**
13. Task autonomy	.52**	-.21**	.42**	.12*	.49**	.40**
14. Task complexity	.51**	-.03	.33**	.04	.30**	.37**
15. Organizational tenure	-.05	-.13	-.10	.06	.06	.06
16. Hours worked per week	.07	.01	-.14	.06	.18*	.14

Note. ** $p < .01$. * $p < .05$. † $p < .10$. (two-tailed tests). N ranges from 186 to 229.

Coefficient alphas are listed in italics across the diagonal.

Table 7 (Continued). Means, standard deviations, intercorrelations, and alphas.

Variable	11	12	13	14	15	16
1. Voice behavior						
2. Personal initiative						
3. Proactive service performance						
4. Task performance						
5. Participative leadership						
6. Corrective leadership						
7. Transformational leadership						
8. Action-state orientation						
9. Trait personal initiative						
10. Affective commitment						
11. Self-efficacy	<i>.70</i>					
12. Trust in leadership	-.01	<i>.89</i>				
13. Task autonomy	.06	.42**	<i>.83</i>			
14. Task complexity	.00	.41**	.34**	<i>.70</i>		
15. Organizational tenure	.05	-.07	.07	.12		
16. Hours worked per week	-.06	.03	.05	.06	.04	

Note. ** $p < .01$. * $p < .05$. † $p < .10$. (two-tailed tests). N ranges from 186 to 229.

Coefficient alphas are listed in italics across the diagonal.

Incremental validity analysis

In the previous paragraphs, it was already noted whether the leadership variables emerged as significant predictors in the fourth block of the multiple hierarchical regression analyses. In this section, the results are described from an incremental validity perspective and with regard to the additional predictors (see chapter 7).

Predictors of voice behavior. Considering voice behavior (see Table 8), the two control variables together predicted five percent of the criterion variance. Organizational tenure ($\beta = .30$; $p < .01$) positively and significantly predicted this criterion. Although the three individual predictors together explained a significant seven percent increment in the criterion variance, none of these variables yielded a significant regression weight. It is noteworthy that the regression coefficient for affective organizational commitment ($\beta = .16$) approached the significance criterion ($p = .089$). The two task variables (subordinate ratings) explained a nonsignificant one percent increment of the criterion variance, with none of these two variables yielding significant regression coefficients.

Finally, the block of leadership variables significantly incremented the variance prediction by another seven percent. The standardized regression coefficient ($\beta = -.23$) for active-corrective transactional leadership was significant ($p < .01$) and in the negative direction anticipated by Hypothesis 5. Hence, it may be concluded that the leadership variables together had incremental validity in predicting voice behavior, and this outcome was due primarily to active-corrective transactional leadership. In total, the set of subordinate-reported predictor variables accounted for twenty four percent (adjusted 18%) of the variance in supervisor ratings of voice behavior.

Predictors of personal initiative. Regarding personal initiative (see Table 8), the two control variables together predicted four percent ($p = .061$) of the criterion variance, with none of these two variables yielding a significant regression coefficient. Among the three individual variables, affective organizational commitment ($\beta = .25; p < .01$) significantly and positively predicted personal initiative. Unexpectedly, self-efficacy was negatively and significantly associated ($\beta = -.18; p < .05$) with personal initiative in the regression, although the correlation (see Table 7) was nonsignificant ($r = .09$). This pattern of results indicates that the regression weight may be due to a suppressor effect. It is also noteworthy that the subordinate self-rating of trait personal initiative was unrelated to supervisor-rated personal initiative in the regression, although the correlation was significant ($r = .17, p < .05$). The entire block of individual variables explained an additional eleven percent of the criterion variance. The two task variables explained a nonsignificant one percent increment of the criterion variance, with none of these two variables yielding significant regression coefficients.

Finally, the block of leadership variables significantly incremented the variance prediction by twelve percent. Both active-corrective transactional leadership ($\beta = -.27; p < .01$) and transformational leadership ($\beta = .30; p < .01$) significantly predicted personal initiative. Therefore, the block of leadership variables had incremental validity in predicting personal initiative, with this outcome being due mainly to transformational and active-corrective transactional leadership. In total, the set of subordinate-reported predictor variables accounted for twenty eight percent (adjusted 22%) of the variance in supervisor ratings of subordinate personal initiative.

Predictors of proactive service performance. With respect to proactive service performance (see Table 9), the two control variables together predicted five percent of the criterion variance. Organizational tenure ($\beta = .22$; $p < .05$) positively and significantly predicted this criterion variable. Among the three individual variables, affective organizational commitment ($\beta = .24$; $p < .01$) significantly and positively predicted proactive service performance. The regression coefficient for trait personal initiative ($\beta = .16$) approached the significance criterion ($p = .091$). Together, the individual variables explained an additional twelve of the criterion variance. The two task variables (subordinate ratings) together explained an additional four percent of the variance ($p = .050$). Specifically, proactive service performance was significantly and positively associated with task complexity ($\beta = .21$; $p < .05$), but not task autonomy.

Finally, the block of leadership variables significantly incremented the variance prediction by nine percent. The regression coefficient ($\beta = .29$) for participative leadership was significant ($p < .01$). Hence, the set of leadership variables had incremental validity in predicting proactive service performance, and this outcome was due primarily to participative leadership. In total, the set of subordinate-reported predictor variables accounted for thirty percent (adjusted 24%) of the variance in supervisor ratings of subordinate proactive service performance.

Predictors of task performance. With regard to task performance (see Table 9), the two control variables together predicted only two percent of the variance, and none of these two variables yielding a significant regression coefficient. Affective organizational commitment ($\beta = .24$; $p < .05$) significantly and positively predicted task performance.

Together, the individual variables explained a significant seven percent increment in the criterion variance. The two task variables did not explain additional percentage points in the criterion variance. Finally, the leadership block significantly incremented the variance prediction by another seven percent. The standardized regression coefficient ($\beta = .28$) for transformational leadership was significant ($p < .05$). Consequently, it may be concluded that the leadership variables together had incremental validity in predicting task performance, and this outcome was due primarily to transformational leadership. In total, the set of subordinate-reported predictor variables accounted for sixteen percent (adjusted 8%) of the variance in supervisor ratings of task performance.

Differential relationships

As noted in the section on data analytic strategies, to further assess Hypotheses 1-3, differential relationships between the predictors and the criteria were considered primarily by examining the regression weights. The personal initiative results are not considered in this section. Affective organizational commitment significantly and positively predicted all criteria except for voice behavior in the regressions, although it should be noted that it yielded significant correlation coefficients with all criteria. Task complexity significantly predicted only proactive service performance in the regression, a finding which is reflected in the significant correlation coefficient. Regarding the leadership predictors, participative leadership yielded a significant positive regression weight only for proactive service performance, although it was positively and significantly correlated with all criteria. Active-corrective transactional leadership, which was negatively and significantly correlated with the proactivity criteria but not task performance, also emerged as a negative and significant predictor of voice behavior in

the regression analysis. Finally, transformational leadership, which was positively and significantly correlated with all criteria except for voice behavior, emerged as a significant positive predictor of task performance and personal initiative in the regression analyses.

The previously described analyses suggest that several of the variables (most notably task complexity and the three leadership variables) were differentially associated with some of the criteria. Overall, none of the ten variables included in the regression analyses significantly predicted all criteria. In addition to the confirmatory factor analysis, these analyses may further corroborate the conclusion that proactive service performance, voice behavior, and task performance are distinct performance dimensions. However, the pattern of findings does not allow for very clear conclusions, because the correlational and regression results differ with respect to several variables. The fact that the entire predictor set, which was selected due to its potential to relate to proactive behavior, explained higher variance proportions in the proactivity criteria (ranging from 24% to 30%) than task performance (16%) suggests that the predictors were more relevant to proactive behavior.

Table 8. *Multiple hierarchical regression analyses of voice behavior and personal initiative on the control, individual, task, and leadership variables.*

Hierarchical block	Voice behavior				Personal initiative			
	<i>R</i> ²	ΔF	β	<i>t</i>	<i>R</i> ²	ΔF	β	<i>t</i>
Block 1: Controls	.09	6.66**			.04	2.86 [†]		
Organizational								
Tenure			.30	3.49**			.21	2.39
Hours per week			.07	.84			-.02	-.18
Block 1: Individual	.16	3.33*			.15	5.03**		
Trait initiative			.15	1.57			.11	1.12
Affective								
Commitment			.16	1.71 [†]			.25	2.59*
Self-efficacy			-.13	.14			-.18	-2.06*
Block 3: Task	.17	.31			.16	.95		
Task complexity			.06	.70			.00	.05
Task autonomy			-.05	-.51			.14	1.34
Block 3: Leadership	.24	3.99*			.28	6.29**		
Participative			.13	1.26			.07	.66
Corrective			-.23	-2.79**			-.27	-3.25**
Transformational			.14	1.31			.30	2.83**

Note. ***p* < .01. **p* < .05. [†]*p* < .10. *N* = 186.

Table 9. Multiple hierarchical regression analyses of proactive service performance and task performance on the control, individual, task, and leadership variables.

Hierarchical block Variables	Proactive service performance				Task performance			
	R^2	ΔF	β	t	R^2	ΔF	β	t
Block 1: Controls	.05	3.26*			.02	1.21		
Organizational tenure			.22	2.50*			.11	1.19
Hours per week			.04	.43			-.10	-1.06
Block 1: Individual	.17	5.61**			.09	2.89*		
Trait personal initiative			.16	1.71 [†]			.05	.50
Affective commitment			.24	2.61**			.24	2.38*
Self-efficacy			-.14	-1.62			-.08	-.83
Block 3: Task	.21	3.08 [†]			.09	.04		
Task complexity			.21	2.31*			.03	.27
Task autonomy			.05	.49			.01	.05
Block 3: Leadership	.30	5.12**			.16	3.12*		
Participative			.29	2.87**			.10	.87
Corrective			-.09	-1.11			-.07	-.77
Transformational			.13	1.23			.28	2.38*
Total adjusted R^2	.24				.08			

Note. * $p < .05$. ** $p < .01$. [†] $p < .10$. $N = 186$ (Proactive service performance). $N = 229$ (Task performance).

Chapter Thirteen

Results of the Moderated Hierarchical Regression Analyses

Hypotheses 7-10, explicating interaction effects between the leadership variables and between the leadership factors and the two subordinate moderators action-state orientation and affective organizational commitment, were tested with moderated hierarchical regression analyses (Aiken & West, 1991; Cohen & Cohen, 1983). The cross-product of the mean centered values of the moderator and the respective leadership factor was entered into the third block of each analysis, after accounting for organizational tenure and hours worked per week in block one and for the two main effects in block two. If an interaction term was significant ($p < .05$), I created a graph illuminating the nature of the interaction effect, as described in detail in chapter 10.

Participative leadership as a moderator

Hypothesis 7 predicted that participative leadership would moderate the relationship between transformational leadership and subordinates' voice behavior such that transformational leadership would be more strongly and positively related to voice when participative leadership is high. Table 10 includes the regression weight and determination coefficient increase associated with the interaction term. The interaction explained a significant amount of variance in voice behavior ($\Delta R^2 = .03$; $\beta = .20$; $p < .05$) beyond that accounted for by the two control variables and the two main effects.

Table 10. *Moderated hierarchical regression analysis of voice behavior on transformational leadership and participative leadership.*

Hierarchical step	Voice behavior			
	R^2	ΔF	β	t
Block 1: Controls	.07	6.71**		
Organizational tenure			.23**	3.08**
Work hours per week			.14 [†]	1.87 [†]
Block 2: Main effects	.10	2.51 [†]		
Transformational leadership			-.01	-.15
Participative leadership			.17 [†]	1.85 [†]
Block 3: Interaction	.13	5.29*		
Transformational X Participative			.20*	2.30*
Total adjusted R^2	.10			

Note. ** $p < .01$. * $p < .05$. [†] $p < .10$. $N = 229$.

Figure 7 reveals the nature of the interaction between transformational and participative leadership. As hypothesized, transformational leadership was positively associated with voice only when participative leadership was high. Voice behavior was highest when both transformational and participative leadership were high. Therefore, Hypothesis 7 was fully supported. This pattern of results even somewhat exceeded the

prediction, because transformational leadership was not positively associated with voice behavior at all when participation was low (i.e., the slope of the line was even negative).

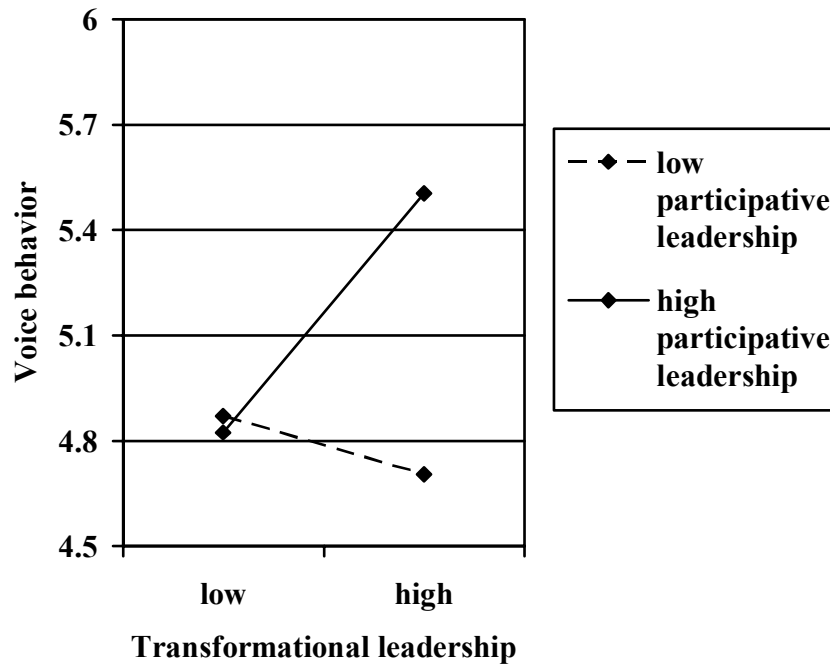


Figure 7. Interaction effect of supervisors' transformational leadership and participative leadership on subordinates' voice behavior

Active-corrective transactional leadership as a moderator

Hypothesis 8 predicted that active-corrective transactional leadership would moderate the relationships of transformational leadership with subordinates' voice

behavior, personal initiative, and proactive service performance such that transformational leadership would be more strongly and positively related to the three proactivity criteria if active-corrective transactional leadership is low. Table 11 shows the results for voice behavior and personal initiative. Table 12 displays the results for proactive service performance.

As can be seen in Table 11, the interaction term of transformational and active-corrective transactional leadership explained a significant amount of variance in voice behavior ($\Delta R^2 = .03$; $\beta = -.17$; $p < .05$) over and above that accounted for by the two control variables and the two main effects. As listed in Table 11, the interaction term also explained a significant amount of variance in personal initiative ($\Delta R^2 = .02$; $\beta = -.16$; $p < .05$) beyond that accounted for by the two control variables and the two main effects. However, the interaction term of transformational leadership and active-corrective transactional leadership did not explain a significant increment in the variance in subordinates' proactive service performance, as is evident in Table 12. With respect to the two significant interaction effects for voice behavior and personal initiative, two graphs (see Figures 8 and 9) were created to illustrate the nature of these two effects.

Table 11. *Moderated hierarchical regression analyses of voice behavior and personal initiative on transformational and active-corrective transactional leadership.*

Hierarchical block Variables	Voice behavior				Personal initiative			
	R^2	ΔF	β	t	R^2	ΔF	β	t
Block 1: Controls	.07	7.15**			.02	1.48		
Organizational tenure			.24**	3.25**			.11	1.44
Hours per week			.13 [†]	1.80 [†]			.07	.86
Block 2: Main effects	.11	3.66*			.07	4.64*		
Transformational Leadership			.09	1.25			.17	2.18*
Corrective leadership			-.18*	-2.53*			-.18	-2.35*
Block 3: Interaction	.14	5.49*			.09			
Transformational X Corrective			-.17*	-2.34*			-.16	-2.15*
Total adjusted R^2	.12				.07			

Note. ** $p < .01$. * $p < .05$. [†] $p < .10$. $N = 229$.

As illustrated in Figure 8, transformational leadership was positively associated with voice behavior only when active-corrective transactional leadership was low. Voice behavior was highest when high levels of transformational leadership were combined with low levels of active-corrective transactional leadership. Again, this pattern of findings even somewhat exceeded the prediction, because transformational leadership was not positively associated with voice behavior at all (i.e., having a negative slope) when active-corrective transactional leadership was high.

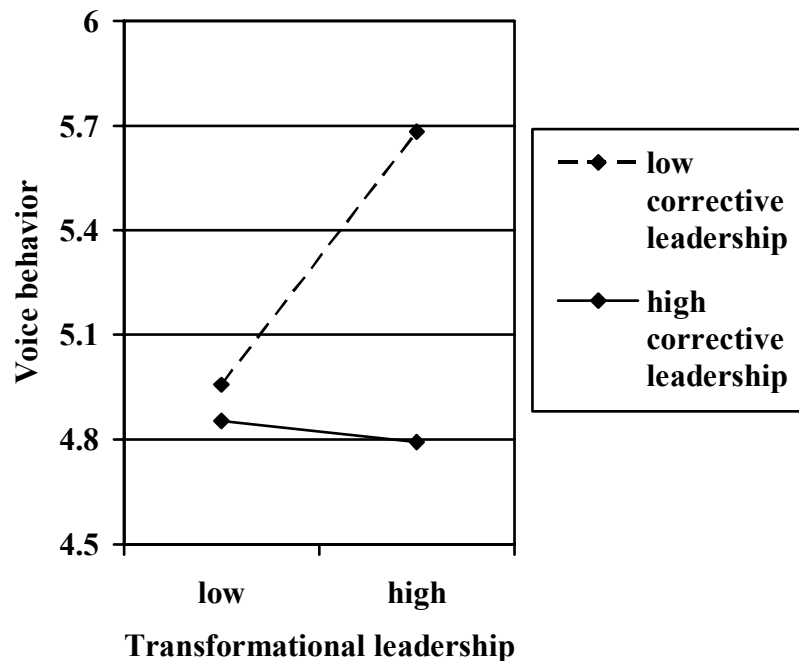


Figure 8. Interaction effect of supervisors' transformational leadership and active-corrective transactional leadership on subordinates' voice behavior

As illustrated in Figure 9, transformational leadership more strongly and positively related to personal initiative when active-corrective transactional leadership was low, as hypothesized. Personal initiative was highest when transformational leadership was high and active-corrective transactional leadership was low. In conclusion, Hypothesis 8 was fully supported with respect to voice behavior and personal initiative, but not supported with regard to proactive service performance.

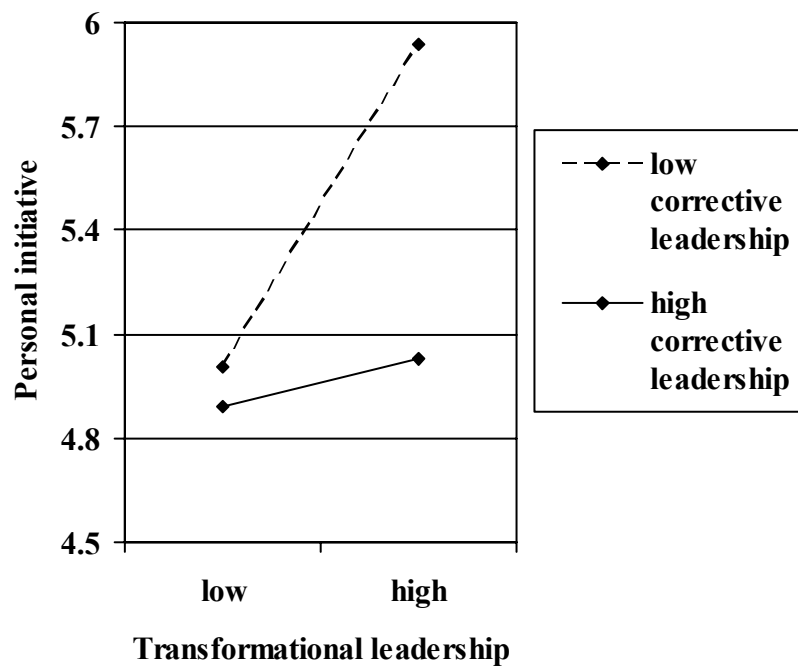


Figure 9. Interaction effect of supervisors' transformational leadership and active-corrective transactional leadership on subordinates' personal initiative

Table 12. *Moderated hierarchical regression analyses of proactive service performance on transformational and active-corrective transactional leadership.*

Hierarchical step Variables	Proactive service performance			
	R^2	ΔF	β	t
Block 1: Controls	.05	3.97*		
Organizational tenure			.22	2.76**
Work hours per week			.04	.47
Block 2: Main effects	.19	11.68**		
Transformational leadership			.36	4.70**
Corrective leadership			-.15	-1.99*
Block 3: Interaction	.19	.34		
Transformational Leadership X Corrective Leadership			-.05	-.58
Total adjusted R^2	.16			

Note. ** $p < .01$. * $p < .05$. † $p < .10$. $N = 186$.

Action-state orientation as a moderator

Hypothesis 9a predicted that subordinates' action-state orientation would moderate the relationships between participative leadership and voice behavior, personal initiative, and proactive service performance such that participative leadership would be less strongly and positively associated with the proactivity criteria for state-oriented employees high in hesitation. The results are listed in Table 13 for voice behavior and personal initiative and in Table 14 for proactive service performance. As can be seen in Table 13, the interaction term explained a significant amount of variance in voice behavior ($\Delta R^2 = .02$; $\beta = .15$; $p < .05$) over and above that accounted for by the two control variables and the two main effects.

Figure 10 reveals the nature of the interaction effect. As hypothesized, participative leadership was less strongly and positively associated with voice behavior for state-oriented subordinates high in hesitation. Voice behavior was highest when participative leadership was high and action orientation was also high (i.e., hesitation was low). Interestingly, given low participative leadership, voice was higher among state-oriented than among action-oriented subordinates. As can be seen in Tables 13 and 14, the interaction term failed to explain a significant increment in the variance in personal initiative and proactive service performance. Therefore, Hypothesis 9a was supported only with regard to voice behavior.

Table 13. *Moderated hierarchical regression analysis of voice behavior and personal initiative on participative leadership and subordinates' action orientation (hesitation dimension).*

Hierarchical block Variables	Voice behavior				Personal initiative			
	R^2	ΔF	β	t	R^2	ΔF	β	t
Block 1: Controls	.06	5.82**			.01	1.21		
Organizational tenure			.20**	3.08**			.07	.94
Hours per week			.14	1.87			.09	1.20
Block 2: Main effects	.09	2.99 [†]			.05	3.33*		
Participative leadership			.18*	2.41*			.19	2.54*
Action orientation			-.04	-.61			-.05	.51
Block 3: Interaction	.11	4.13*			.05	.21		
Participative leadership X Action orientation			.15*	2.03*			-.04	-.49
Total adjusted R^2	.09				.02			

Note. ** $p < .01$. * $p < .05$. [†] $p < .10$. $N = 229$.

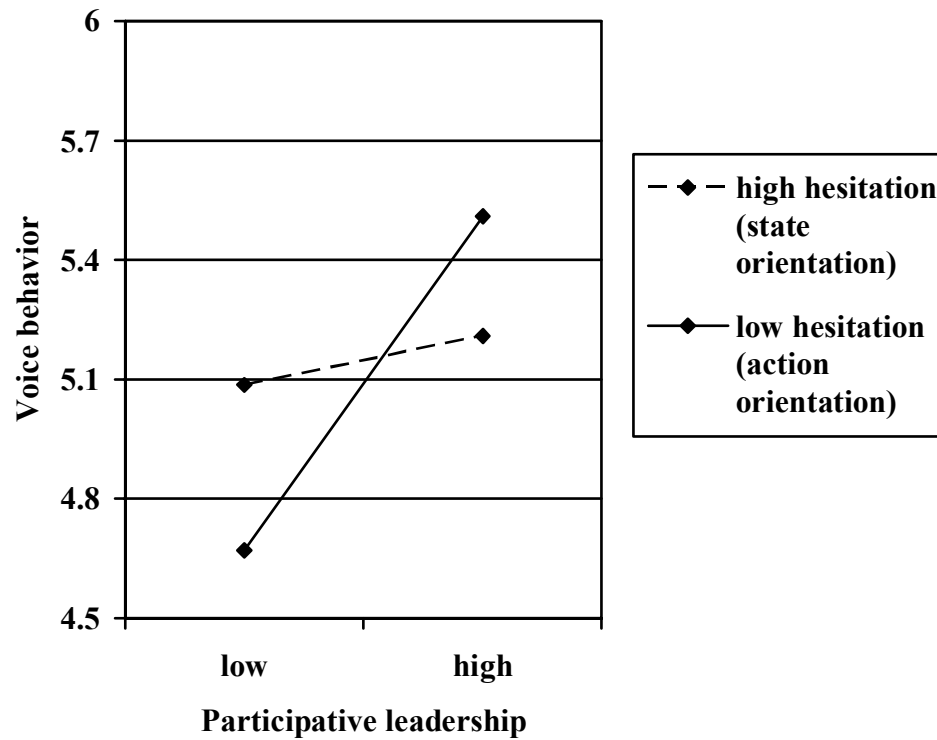


Figure 10. Interaction effect of participative leadership and subordinates' action-state orientation (hesitation dimension) on voice behavior

Hypothesis 9b predicted that action-state orientation would moderate the relationships between active-corrective transactional leadership and voice behavior, personal initiative, and proactive service performance such that active-corrective transactional leadership would be more strongly and negatively associated with the proactivity criteria for state-oriented employees high in hesitation. As can be seen in Tables 15 and 16, the interaction term did not explain a significant increment in the variance of any of the criterion variables, thus providing no support for Hypothesis 9b.

Table 14. *Moderated hierarchical regression analyses of proactive service performance on participative leadership and subordinates' action orientation (hesitation dimension).*

Hierarchical step Variables	Proactive service performance			
	R^2	ΔF	β	t
Block 1: Controls	.07	5.27**		
Organizational tenure			.26	3.19**
Work hours per week			.06	.70
Block 2: Main effects	.24	15.16**		
Participative Leadership			.41	5.50**
Action orientation			-.03	-.35
Block 3: Interaction	.24	.00		
Participative Leadership X Action orientation			-.01	-.06
Total adjusted R^2	.21			

Note. ** $p < .01$. * $p < .05$. † $p < .10$. $N = 186$.

Table 15. *Moderated hierarchical regression analysis of voice behavior and personal initiative on active-corrective transactional leadership and subordinates' action-state orientation (hesitation dimension).*

Hierarchical block Variables	Voice behavior				Personal initiative			
	R^2	ΔF	β	t	R^2	ΔF	β	t
Block 1: Controls	.08	7.51**			.02	1.60		
Organizational tenure			.24	3.34**			.10	1.35
Hours per week			.14	1.87			.09	1.11
Block 2: Main effects	.11	3.40*			.04	2.24		
Corrective leadership			-.19	-2.63**			-.16	-2.10*
Action orientation			.00	.04			-.01	-.18
Block 3: Interaction	.12	.26			.05	.34		
Corrective leadership X Action orientation			.04	.51			-.05	-.58
Total adjusted R^2	.09				.02			

Note. ** $p < .01$. * $p < .05$. † $p < .10$. $N = 229$.

Table 16. *Moderated hierarchical regression analysis of proactive service performance on corrective leadership and subordinates' action-state orientation (hesitation dimension).*

Hierarchical step Variables	Proactive service performance			
	R^2	ΔF	β	T
Block 1: Controls	.07	4.89**		
Organizational tenure			.25	3.07**
Work hours per week			.05	.55
Block 2: Main effects	.08	.83		
Corrective leadership			-.11	-1.28
Action orientation			.00	.00
Block 3: Interaction	.08	.10		
Corrective leadership X Action orientation			.03	.31
Total adjusted R^2	.04			

Note. ** $p < .01$. * $p < .05$. † $p < .10$. $N = 186$.

Affective organizational commitment as a moderator

Hypothesis 10 predicted that subordinates' affective organizational commitment would moderate the relationships of (a) participative leadership and (b) transformational leadership with subordinates' voice behavior, personal initiative, and proactive service performance such that these two leadership predictors would be more strongly and positively associated with the proactivity criteria for subordinates high in affective organizational commitment. With regard to Hypothesis 10a, Table 17 shows the moderated regression results for voice behavior and personal initiative. Table 18 shows the results for proactive service performance.

As can be seen in Table 17, the interaction term of participative leadership and subordinates' affective organizational commitment explained a significant amount of variance in voice behavior ($\Delta R^2 = .05$; $\beta = -.22$; $p < .01$) over and above that accounted for by the two control variables and the two main effects. The interaction term also explained a significant amount of variance in personal initiative ($\Delta R^2 = .08$; $\beta = -.30$; $p < .01$) over and above that accounted for by the two control variables and the two main effects. The effect size was even higher than that for voice behavior, as the increment in variance predicted by the product term equaled eight percent for initiative as compared to five percent for voice. Figures 11 and 12 illustrate the nature of these significant interaction effects.

Table 17. *Moderated hierarchical regression analyses of voice behavior and personal initiative on participative leadership and affective organizational commitment.*

Hierarchical block Variables	Voice behavior				Personal initiative			
	R^2	ΔF	β	t	R^2	ΔF	β	t
Block 1: Controls	.08	5.98**			.03	2.38+		
Organizational tenure			.26	3.21**			.18	2.17*
Hours per week			.10	1.18			.01	.13
Block 2: Main effects	.15	6.19**			.12	7.05**		
Participative leadership			.18	2.24*			.17	2.04*
Affective commitment			.17	2.03*			.21	2.49*
Block 3: Interaction	.20	8.23**			.20	14.25**		
Participative leadership X Affective commitment			-.22	-2.87**			-.30	-3.78**
Total adjusted R^2	.17				.17			

Note. ** $p < .01$. * $p < .05$. † $p < .10$. $N = 186$.

Figure 11 demonstrates that participative leadership was positively associated with voice behavior only for subordinates low in affective organizational commitment. When affective organizational commitment was high, participative leadership was unrelated to voice behavior. Because this pattern of findings does not correspond to the prediction, it cannot be considered supportive of Hypothesis 10a despite its significance and the substantial effect size. However, it should be noted that the fact that voice behavior was lowest when both participative leadership and affective organizational commitment were low does reflect the reasoning outlined in the introduction section.

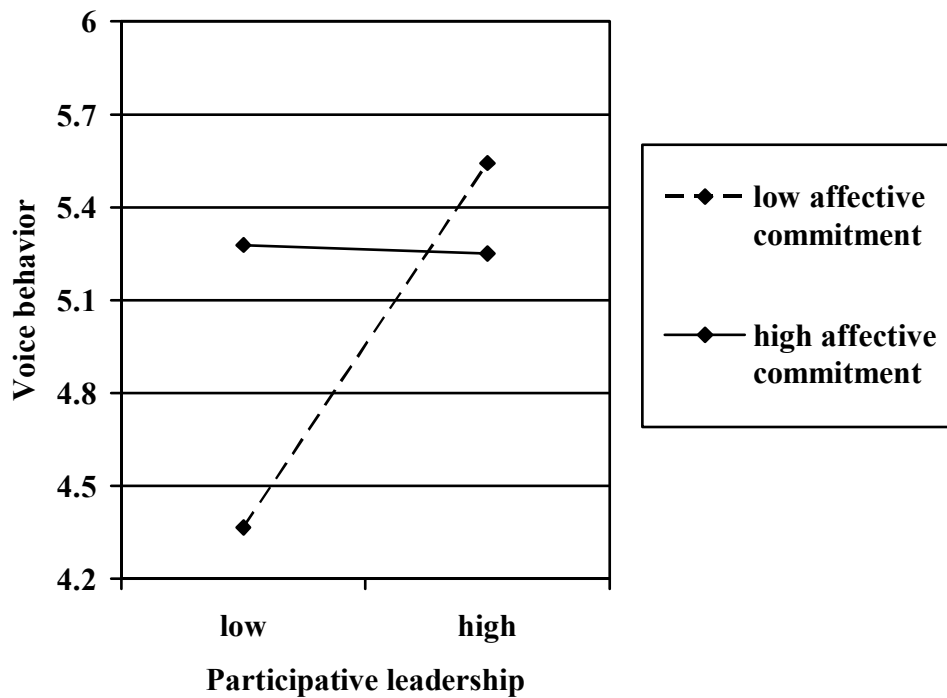


Figure 11. Interaction effect of supervisors' participative leadership and subordinates' affective organizational commitment on subordinates' voice behavior

As illustrated in Figure 12, the nature of this interaction effect was highly similar to the previously described effect for the voice criterion. Participative leadership was positively associated with personal initiative only for subordinates low in affective organizational commitment. The lowest level of personal initiative was exhibited when participative leadership and affective organizational commitment were low.

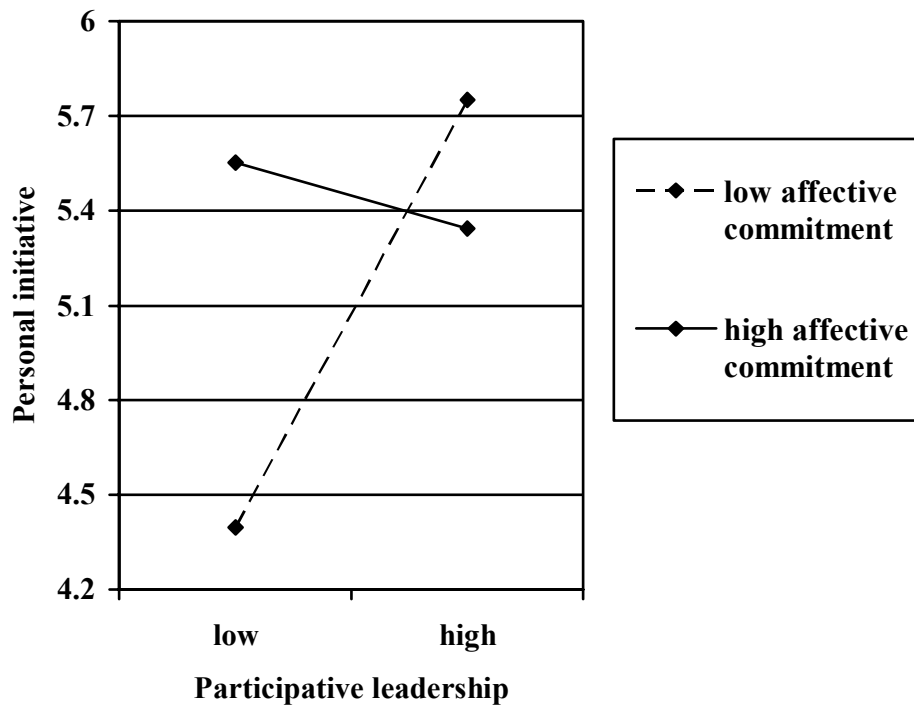


Figure 12. Interaction effect of supervisors' participative leadership and subordinates' affective organizational commitment on subordinates' personal initiative

As can be seen in Table 18, the interaction term also explained a significant amount of variance in proactive service performance ($\Delta R^2 = .02$; $\beta = -.16$; $p < .05$), although the effect size was smaller and the nature of this interaction effect was somewhat different than that for the other two proactivity criteria. As illustrated in Figure 13, participative leadership was more strongly and positively associated with proactive service performance for subordinates low in affective organizational commitment. The slope of the graph for subordinates high in affective commitment was less steep but still positive. Proactive service performance was lowest when participative leadership was low and subordinates were low in affective organizational commitment. Although the interaction between participative leadership and affective organizational commitment was the only one that was significant across all three proactivity criteria, it cannot be concluded that Hypothesis 10a was supported, because the findings were different from the predicted pattern. Contrary to expectations, participative leadership more positively predicted the criteria for subordinates low in affective commitment rather than those high in affective commitment.

Finally, as can be seen in Tables 19 and 20, affective organizational commitment did not significantly moderate any of the relationships of transformational leadership with voice behavior, personal initiative, and proactive service performance. The interaction term did not explain a significant increment in the variance of any of the three criterion variables over and above the proportion accounted for by the control variables and the main effects. Therefore, Hypothesis 10b was not supported.

Table 18. *Moderated hierarchical regression analyses of proactive service performance on participative leadership and affective organizational commitment.*

Hierarchical step Variables	Proactive service performance			
	R^2	ΔF	β	t
Block 1: Controls	.08	5.60**		
Organizational tenure			.27	3.25**
Work hours per week			.07	.43
Block 2: Main effects	.29	20.38**		
Participative leadership			.36	4.72**
Affective commitment			.22	2.93**
Block 3: Interaction	.31	.02*		
Participative leadership X Affective commitment			-.16	-2.10*
Total adjusted R^2	.29			

Note. ** $p < .01$. * $p < .05$. † $p < .10$. $N = 186$.

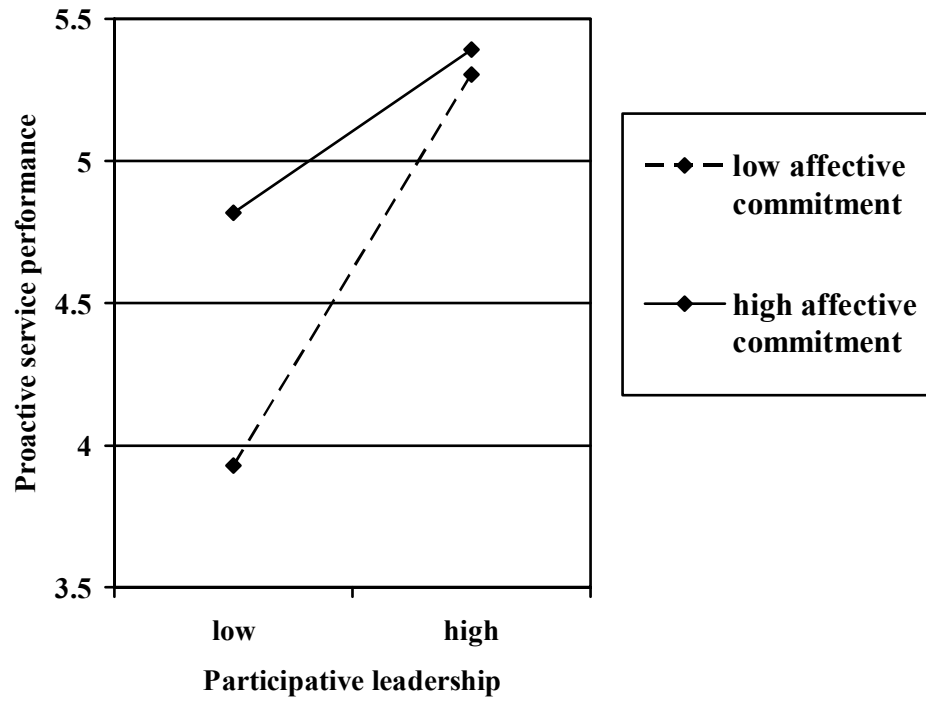


Figure 13. Interaction effect of supervisors' participative leadership and subordinates' affective organizational commitment on subordinates' proactive service performance.

Table 19. *Moderated hierarchical regression analyses of voice behavior and personal initiative on transformational leadership and subordinates' affective organizational commitment.*

Hierarchical block Variables	Voice behavior				Personal initiative			
	R^2	ΔF	β	t	R^2	ΔF	β	t
Block 1: Controls	.10	7.25**			.04	3.05 [†]		
Organizational tenure			.30	3.64			.21	2.45*
Hours worked per week			.07	.90			-.01	-.09
Block 2: Main effects	.14	3.12*			.14	7.45**		
Transformational leadership			.13	1.35			.27	2.88**
Affective commitment			.11	1.12			.07	.75
Block 3: Interaction	.14	.70			.15	1.86*		
Transformational leadership X Affective commitment			-.08	-.84			-.12	-1.36
Total adjusted R^2	.11				.12			

Note. ** $p < .01$. * $p < .05$. [†] $p < .10$. $N = 186$.

Table 20. *Moderated hierarchical regression analyses of proactive service performance on transformational leadership and subordinates' affective organizational commitment.*

Hierarchical step Variables	Proactive service performance			
	R^2	ΔF	β	t
Block 1: Controls	.06	4.42*		
Organizational tenure			.25	2.92**
Work hours per week			.04	.45
Block 2: Main effects	.20	11.63**		
Transformational leadership			.28	3.04**
Affective commitment			.16	1.72 [†]
Block 3: Interaction	.21	.23		
Transformational leadership X Affective commitment			-.04	-.48
Total adjusted R^2	.17			

Note. ** $p < .01$. * $p < .05$. [†] $p < .10$. $N = 186$.

Chapter Fourteen

Results of the Mediated Regression Analyses

Hypotheses 11 and 12, modelling the two subordinate variables perceived trust in leadership and perceived task autonomy as mediators between the leadership predictors and the criteria, were analyzed using the mediated regression methods specified by Baron and Kenny (1986) as well as James and Brett (1983). It was tested whether the predictor significantly related to the criterion as well as to the mediator, whether the mediator significantly related to the criterion, and whether the initially significant relationship between predictor and criterion became nonsignificant and diminished substantially when controlling for the mediator.

Trust in leadership as a mediator

Hypothesis 11 predicted that perceived trust in leadership would mediate the relationships between (a) participative leadership and voice behavior, personal initiative as well as proactive service performance, and between (b) transformational leadership and personal initiative as well as proactive service performance. The first step described above implies that a direct significant relationship between the predictor and the criterion is a prerequisite for a mediation effect. Considering the previously discussed correlations, this was the case for all of these associations. Second, as can be seen in Table 7, both participative ($r = .53; p < .01$) and transformational leadership ($r = .72; p <$

.01) were significantly and positively correlated with trust in leadership. Third, trust in leadership was significantly and positively correlated with voice behavior ($r = .16; p < .05$), personal initiative ($r = .26; p < .01$) and proactive service performance ($r = .32; p < .01$). Table 21 provides a summary of the mediated regression analyses for personal initiative and proactive service performance. Regarding voice behavior, the analysis was conducted only for participative leadership and is reported in the text.

Without including trust in leadership in the regression equation, the relationship between participative leadership and subordinates' voice behavior was positive and significant ($R^2 = .05; \beta = .23; p < .01$). Note that, for comparison purposes, this regression was conducted using the data from the subset ($N = 186$), because the mediator trust in leadership was assessed only in the subset. When trust in leadership was entered into the regression equation before participative leadership, the relationship between trust and voice behavior was positive and significant ($R^2 = .03; \beta = .17; p < .05$), and the relationship between participative leadership and voice behavior modestly diminished ($\Delta R^2 = .02; \beta = .18; p < .05$), but was still significant. Concerning the decrease in the determination coefficient from .05 to .02, one may conclude that trust partially mediated the relationship between participative leadership and voice behavior. With regard to personal initiative and proactive service performance, Table 21 includes a comparison of the determination coefficients and standardized regression weights for participative and transformational leadership without and with inclusion of the mediator trust in leadership.

Table 21. *Results of mediated regression analyses involving trust in leadership as a mediator.*

Variables	Personal initiative			Proactive service performance		
	R^2	ΔR^2	β	R^2	ΔR^2	β
Results for participative leadership						
Analysis without mediator						
Step 1: Participative leadership	.05**		.23**	.18**		.43**
Analysis with mediator						
Step 1: Trust in leadership	.08**		.28*	.11**		.33**
Step 2: Participative leadership		.00	.09		.09**	.35**
Results for transformational leadership						
Analysis without mediator						
Transformational leadership	.06**		.25**	.11**		.32**
Analysis with mediator						
Step 1: Trust in leadership	.07**		.26**	.11**		.34**
Step 2: Transformational leadership		.01	.12		.01	.17

Note. ** $p < .01$. * $p < .05$. † $p < .10$. $N = 186$.

Without including trust in leadership in the regression equation (again based on $N = 186$), the relationship between participative leadership and personal initiative was positive and significant ($R^2 = .05$; $\beta = .23$; $p < .01$). When trust was entered into the regression equation before participative leadership, the relationship between trust and personal initiative was positive and significant ($R^2 = .08$; $\beta = .28$; $p < .01$), and the relationship between participative leadership and personal initiative became nonsignificant and completely disappeared ($\Delta R^2 = .00$; $\beta = .09$; $p = .31$). In conclusion, the data suggest that trust in leadership fully mediated the relationships between participative leadership and personal initiative.

With regard to the role of trust in leadership in mediating the relationship between participative leadership and proactive service performance, the initially significant relationship between these two variables ($R^2 = .18$; $\beta = .43$; $p < .01$) was moderately reduced ($\Delta R^2 = .09$; $\beta = .35$; $p < .01$) when the mediator trust ($R^2 = .11$; $\beta = .33$; $p < .01$) was partialled out. Considering the fifty percent reduction in the determination coefficient, one may conclude that trust partially mediated the relationship between participative leadership and proactive service performance. Therefore, Hypothesis 11a received full support with respect to personal initiative and partial support with regard to proactive service performance as well as voice behavior.

Considering the role of trust in leadership in mediating the relationship between transformational leadership and personal initiative (see the bottom half of Table 21), the initially significant relationship between these two variables ($R^2 = .06$; $\beta = .25$; $p < .01$) became nonsignificant and virtually disappeared ($\Delta R^2 = .01$; $\beta = .12$; $p = .29$) when the mediator trust ($R^2 = .07$; $\beta = .26$; $p < .01$) was partialled out in the first step of the

regression equation. These results suggest that trust in leadership fully mediates the relationship between participative leadership and personal initiative.

Regarding the role of trust in leadership in mediating the relationship between participative leadership and proactive service performance, the initially significant relationship between these two variables ($R^2 = .10$; $\beta = .32$; $p < .01$) substantially diminished and became nonsignificant ($\Delta R^2 = .01$; $\beta = .17$; $p = .11$) when the mediator trust ($R^2 = .11$; $\beta = .34$; $p < .01$) was partialled out. These findings are consistent with the assumption that trust in leadership fully mediates the relationship between transformational leadership and proactive service performance. In conclusion, Hypothesis 11b received full support with respect to both personal initiative and proactive service performance.

Perceived autonomy as a mediator

Hypothesis 12 predicted that perceived autonomy would mediate (a) the positive relationships of participative leadership with personal initiative and proactive service performance as well as (b) the negative relationships of active-corrective transactional leadership with personal initiative and proactive service performance. With respect to the first step in testing for mediation effects, direct significant relationships between all of these predictors and criteria have been previously established (see Table 7). Second, participative leadership was significantly and positively correlated with perceived autonomy ($r = .52$; $p < .01$), whereas active-corrective transactional leadership was significantly and negatively correlated with perceived autonomy ($r = -.21$; $p < .01$). Third, perceived autonomy was significantly and positively correlated with personal initiative ($r = .18$; $p < .05$) and proactive service performance ($r = .30$; $p < .01$).

Table 22 includes a comparison of the determination coefficients and standardized regression weights for participative and active-corrective transactional leadership without and with inclusion of the mediator perceived autonomy. Note that the analysis for personal initiative is based on the subset ($N = 186$) so that the results for the mediator autonomy can be compared to those for trust in leadership. Without including perceived autonomy in the regression equation, the relationship between participative leadership and personal initiative was significant ($R^2 = .05$; $\beta = .23$; $p < .01$). When autonomy was entered into the regression equation before participative leadership, the relationship between autonomy and personal initiative was significant ($R^2 = .04$; $\beta = .22$; $p < .01$), and the relationship between participative leadership and personal initiative was still significant and diminished only modestly ($\Delta R^2 = .03$; $\beta = .20$; $p < .05$).

Regarding the role of perceived autonomy in mediating the relationship between participative leadership and proactive service performance, the initially significant relationship between these two variables ($R^2 = .18$; $\beta = .43$; $p < .01$) was only modestly reduced ($\Delta R^2 = .11$; $\beta = .36$; $p < .01$) when the mediator autonomy ($R^2 = .10$; $\beta = .32$; $p < .01$) was partialled out. In conclusion, there was little evidence that perceived autonomy mediated the relationships between participative leadership and both subordinate criteria. The reductions in the determination coefficients and the regression weights were very modest. Therefore, Hypothesis 12a received very limited support.

Considering the role of perceived autonomy in mediating the relationship between active-corrective transactional leadership and personal initiative, the initially significant relationship between these two variables ($R^2 = .09$; $\beta = -.30$; $p < .01$) was still significant and similarly strong ($\Delta R^2 = .08$; $\beta = -.28$; $p < .01$) when the mediator autonomy ($R^2 = .05$;

$\beta = .22; p < .01$) was partialled out. Regarding the role of perceived autonomy in mediating the relationship between active-corrective transactional leadership and proactive service performance, the initially significant relationship between these two variables ($R^2 = .03; \beta = -.16; p < .05$) became nonsignificant and was modestly reduced ($\Delta R^2 = .02; \beta = -.13; p = .09$) when the mediator autonomy ($R^2 = .10; \beta = .32; p < .01$) was partialled out. Although the relationship became nonsignificant, this result should be considered as not very supportive of a mediation effect due to the very modest reduction in the regression weight. In conclusion, Hypothesis 12b received no support with respect to personal initiative and partial support with regard to proactive service performance. Overall, the mediated regression analyses provided somewhat stronger support for the initiative-related hypotheses (full support for two and partial support for one of four hypothesized effects) than for the hypotheses concerning proactive service performance (full support for one and partial support for three of four hypothesized effects) and voice behavior (partial support for one hypothesized effect).

Table 22. *Results of mediated regression analyses involving perceived autonomy as a mediator.*

Variables	Personal initiative			Proactive service performance		
	R^2	ΔR^2	β	R^2	ΔR^2	β
Results for participative leadership						
Analysis without mediator						
Step 1: Participative leadership	.05**		.23**	.18**		.43**
Analysis with mediator						
Step 1: Perceived autonomy	.04**		.22**	.10**		.32**
Step 2: Participative leadership		.03*	.20*		.11**	.36**
Results for corrective leadership						
Analysis without mediator						
Corrective leadership	.09**		-.30**	.03*		-.16*
Analysis with mediator						
Step 1: Perceived autonomy	.05**		.22**	.09**		.30**
Step 2: Corrective leadership		.08**	-.28**		.02 [†]	-.13 [†]

Note. ** $p < .01$. * $p < .05$. [†] $p < .10$. $N = 186$.

Chapter Fifteen

Results of the Structural Equation Analyses

To complement the mediated regression analyses, I conducted structural equation modelling (SEM) (Byrne, 1998; MacCallum & Austin, 2000). The SEM procedures were described in detail in chapter ten. Two separate SEM analyses were conducted for personal initiative and proactive service performance. Two different models (i.e., saturated and fully mediated) were compared for each criterion variable (Moorman et al., 1998). Model fit was assessed using the χ^2 -statistic, RMSEA, and several other fit indices (Hu & Bentler, 1998), and by inspecting the γ -parameters as well as the β -parameters. If the fit of the initial models with both mediators (trust and autonomy), was not fully satisfactory and specific path coefficients related to one of the mediators were not significant, I proceeded by testing the saturated and fully mediated model using only the remaining mediator.

Structural equation model for personal initiative

The first structural equation model included the three leadership variables as exogenous variables and the two mediators (trust and autonomy) as well as personal initiative as endogenous variables. Mirroring the mediation hypotheses, the indirect effects included in the initial models operated via trust for transformational leadership, via autonomy for active-corrective transactional leadership, and via both trust and

autonomy for participative leadership. The fit indices of all models are listed in Table 23. The saturated model including both mediators yielded a χ^2 -value of 161.79, an RMSEA-value (.076) with a marginally acceptable magnitude, and reasonable other fit indices. However, the standardized paths from participative leadership to initiative ($\gamma = .02$), from active-corrective transactional leadership to autonomy ($\gamma = -.09$) and from autonomy to initiative ($\beta = .07$) were nonsignificant. The partially mediated model yielded a χ^2 -value of 172.22, which was not significantly different from the saturated model value, and fit indices comparable to those of the saturated model. Again, the standardized values linking active-corrective transactional leadership to autonomy ($\gamma = -.10$) and autonomy to initiative ($\beta = .15$) were nonsignificant.

These results indicated that the fully mediated model did not fit better than the parsimonious model and that autonomy may need to be eliminated from the model. Therefore, I proceeded with tests of models including only trust as a mediator (models 3-5 in Table 23). An issue regarding these models involving only trust as a mediator was whether it was appropriate to include active-corrective transactional leadership, because trust was not explicitly hypothesized to mediate associations of this leadership variable with proactivity due to the lack of empirical research linking this leadership factor to trust. However, as noted in chapter 6, theoretical issues (e.g., reduced willingness to accept vulnerability, reduced risk-taking propensity) suggest that corrective leadership may reduce trust. Hence, it was included in the subsequent model analyses.

Table 23. *Results of structural equation modeling involving personal initiative as the criterion*

Model	χ^2 (df)	RMSEA (90% CI)	GFI	CFI	NFI	NNFI
1. Fully mediated model including trust and autonomy	172.22 (81)	.078 (.062 - .094)	.89	.94	.90	.92
2. Partially mediated (saturated) model including trust and autonomy as mediators	161.79 (78)	.076 (.060-.093)	.90	.95	.91	.93
3. Fully mediated model including only trust as a mediator	84.70 (47)	.066 (.043-.088)	.93	.97	.94	.96
4. Partially mediated (saturated) model including only trust as a mediator	71.11 (44)	.058 (.031 - .082)	.94	.98	.95	.97
5. Modified model 3 with added path from corrective leadership to initiative	74.18 (46)	.058 (.032 - .081)	.94	.98	.95	.97

Note. $N = 186$. RMSEA = Root Mean Squared Error of Approximation. df = degrees of freedom. CI = Confidence interval. GFI = Goodness of Fit Index. CFI = Confirmatory Fit Index. NFI = Normed Fit Index. NNFI = Non-Normed Fit Index.

Both the saturated model ($\Delta\chi^2 = 90.68$) and the fully mediated model ($\Delta\chi^2 = 87.52$) had a fit superior to the corresponding models with both mediators. The fit of the saturated model was not superior to that of the fully mediated model. The standardized direct path from participative leadership to initiative in the saturated model was nonsignificant ($\gamma = .04$), whereas all paths inherent in the fully mediated model were significant. It was concluded that the fully mediated model was the most economic model receiving support. As can be seen in Table 3, all fit indices for this model were adequate (RMSEA = .066, GFI = .93, CFI = .97, NFI = .95, NNFI = .96).

The path diagram for the most parsimonious model (fully mediated with trust as the only mediator) is depicted in Figure 14. As illustrated in the Figure, the largest standardized path coefficient was the one linking transformational leadership to trust ($\gamma = .78$; $t = 10.29$), followed by the path from trust to initiative ($\beta = .33$; $t = 4.42$), the path from active-corrective transactional leadership to trust ($\gamma = -.22$; $t = -3.51$), and the path from participative leadership to trust ($\gamma = .18$; $t = 2.88$), which was still significant ($p < .05$). These findings suggest that trust mediated the relationships between all three leadership variables and initiative. Considering that the zero-order correlation ($r = -.08$) between active-corrective transactional leadership variable and trust was nonsignificant (see Table 3), the significant path between these variables suggests that a suppressor effect was operative, which will be discussed in the next chapter.

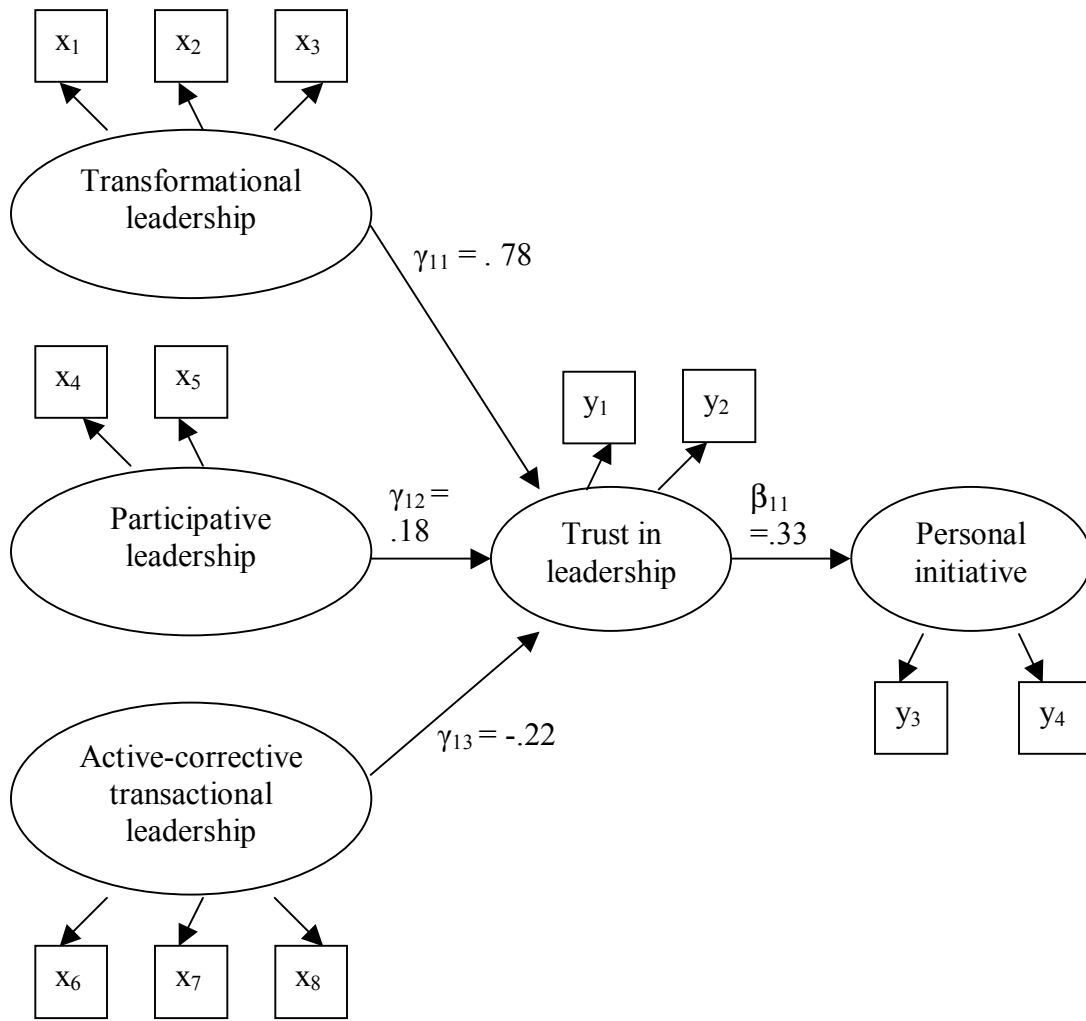


Figure 14. Measurement model and fully mediated structural model involving trust in leadership as a mediator between the leadership variables and personal initiative. All standardized path coefficients are significant ($p < .05$). In the measurement model, all standardized factor loadings were significant ($p < .01$) and ranged from .65 to .98.

Structural equation model for proactive service performance

The structural equation results for proactive service performance were similar to those for personal initiative. The fit of the saturated (i.e., partially mediated) model that included both mediators was not fully satisfactory ($\chi^2 = 172.64$, RMSEA = .081, GFI = .89, CFI = .94, NFI = .90, NNFI = .92) and yielded nonsignificant paths from participative and active-corrective transactional leadership to autonomy and from autonomy to proactive service performance. The fully mediated model yielded equally marginal fit indices and a nonsignificant path from active-corrective transactional leadership to autonomy. The fit of the two models including only trust as a mediator was significantly better. The most parsimonious model (i.e., the fully mediated model involving only trust as a mediator) yielded fit indices ($\chi^2 = 96.29$, RMSEA = .075, GFI = .92, CFI = .97, NFI = .94, NNFI = .95) similar to that of the saturated model.

Due to parsimony issues, preference was given to the fully mediated model depicted in Figure 15. All of the standardized path coefficients were significant (see Figure 15). In conclusion, the most parsimonious model (illustrated in Figures 14 and 15) had an adequate fit across the two criteria personal initiative and proactive service performance. However, it should also be noted that the fit of the respective saturated models (i.e., partially mediated models including direct paths from leadership to the criterion) was not worse than that of the fully mediated model. Overall, these findings lend further support to Hypotheses 11a and 11b and additionally suggest that trust may be modeled as a mediator between active-corrective transactional leadership and proactivity.

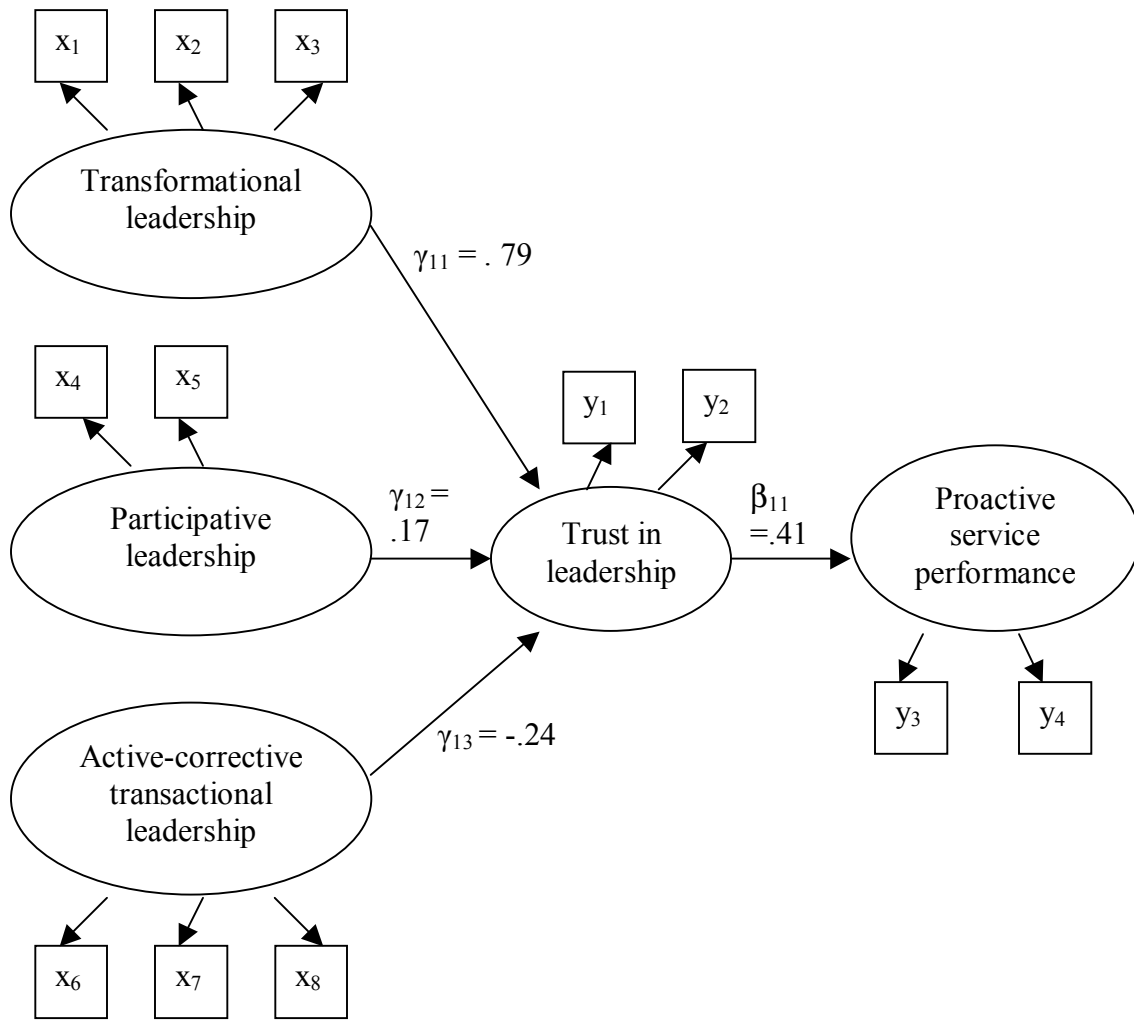


Figure 15. Measurement model and fully mediated structural model involving trust in leadership as a mediator between the leadership variables and proactive service performance. All standardized path coefficients are significant ($p < .05$). In the measurement model, all standardized factor loadings were significant ($p < .01$) and ranged from .67 to 1.01.

Chapter Sixteen

Discussion of the Findings

The major objective of this research was to investigate relationships of supervisory behaviors (transformational, participative, and active-corrective transactional leadership) with subordinates' proactive behavior (personal initiative, voice behavior, and proactive service performance) and to examine moderators and mediators of these associations. Furthermore, this investigation incorporated several individual and task variables as moderators, mediators, and additional predictors. Incremental validity analyses were conducted to examine whether the leadership predictors explained additional variance proportions in the criteria after accounting for other variables. A subgoal of this research was to introduce the proactive service performance concept and to establish evidence of the reliability and validity of the scale measuring this variable. Another subgoal was to examine whether voice behavior, proactive service performance, and prescribed task performance were distinguishable dimensions of subordinate performance. Tables 24, 25, and 26 provide an overview of the findings regarding the distinguishability and direct relationship hypotheses, the interaction hypotheses, and the mediation hypotheses, respectively. These findings are interpreted in the subsequent sections.

Table 24. *Overview of findings regarding the distinguishability and direct relationship hypotheses.*

Number	Hypothesis	Supported for		
		Voice behavior	Personal initiative	Proactive service performance
Distinguishability hypotheses				
1	Voice behavior distinct from prescribed task performance	Yes	N/A	N/A
2	Voice behavior distinct from proactive service performance	Yes	N/A	Yes
3	Proactive service performance distinct from prescribed task performance	N/A	N/A	Yes
Direct relationship hypotheses				
4	Participative leadership positively associated with all proactivity criteria	Yes	Yes	Yes
5	Corrective leadership negatively associated with all proactivity criteria	Yes	Yes	Yes
6	Transformational leadership positively related to personal initiative and proactive service performance	N/A	Yes	Yes

Findings on the distinguishability of the criteria

As Table 24 indicates, the three distinguishability hypotheses have received support. These hypotheses anticipated that voice behavior, proactive service performance, and prescribed task performance would be factorially distinct. The correlations between these three supervisor-rated variables (ranging from .35 to .49) were significant but not too high to preclude distinguishability. The confirmatory factor analysis demonstrated that the hypothesized differentiated three-factor performance model was associated with adequate model fit indices that were clearly superior to those of an undifferentiated one-factor overall performance model and those of a two-factor performance model (prescribed task performance versus a common proactivity factor composed of the voice behavior and proactive service performance items). This pattern of findings suggests not only that prescribed task performance is distinguishable from proactive behavior, but also that it is appropriate to distinguish the two different proactivity variables voice behavior and proactive service performance. Hence, this research addressed the “major need to begin thinking of performance in terms of its major components rather than as one overall ‘thing’” (Campbell et al., 1996, p. 277).

The results from the correlational and regression analyses further corroborate this conclusion. The multiple hierarchical regression analyses demonstrated that the set of subordinate-rated predictors, which was explicitly selected for its potential to predict proactive behavior, explained more variance in supervisor ratings of the proactivity criteria (between 24% and 30%) than in supervisor ratings of prescribed task performance (16%). Furthermore, several predictors appeared to be differentially related to these three criteria, although these patterns of associations differed somewhat across the two types of

analysis. The support of the distinguishability hypotheses is important, because one may doubt whether voice behavior and proactive service performance truly exceed the explicitly required range of behaviors, if proactivity ratings were not distinct from prescribed task performance ratings. By demonstrating that the two specific proactivity variables were distinguishable, this research also reflected the need to “employ research designs permitting the comparison of multiple proactive behavior constructs” (Crant, 2000, p. 458).

Overall, the analyses suggested that the newly introduced proactive service performance construct is different from prescribed task performance and from one of the most frequently studied other proactivity concepts, i.e., voice behavior (Van Dyne & LePine, 1998; LePine & Van Dyne, 1998, 2001). Construct validity evidence for proactive service performance has been gathered by demonstrating not only discriminant validity vis-à-vis these two other performance variables, but also by revealing relatively strong meaningful relationships in the .3 to .4 range with several predictor variables, most notably with affective organizational commitment, task complexity, and participative leadership. The high internal consistency of the PROSPER scale (.91 in the main study) as well as the factoranalytic results suggest that proactive service performance is a unitary construct, although the items in the scale tapped different aspects of self-started and long-term oriented service behavior (e.g., developing solutions to anticipated customer needs, soliciting customer feedback, creating partnerships with other service employees).

It was not expected that personal initiative would be distinct from the other performance variables, because this construct is so broad that voice behavior and

proactive service performance may be considered components of personal initiative. In this study, personal initiative was almost as strongly correlated to task performance (.53) as to the two specific proactivity variables (.58 and .68). Furthermore, the relationships of the predictors with personal initiative were not more similar to those with the specific proactivity variables than to those with task performance. For example, transformational leadership positively predicted both personal initiative and task performance in the multiple regression. This pattern of findings reflects the idea that personal initiative may be related to both task and contextual performance, as “one can be active and ‘reactive’ in both areas” (Fay & Frese, 2001, p. 173). The implications of these and related issues are further discussed in the section on conceptual implications in chapter 17.

Findings on direct relationships

The present study is one of the first that examined relationships between supervisors’ leadership behaviors and subordinates’ voice behavior, personal initiative, and proactive service performance. As Table 24 indicates, the three direct relationship hypotheses (4-6) received support with respect to all criteria (based on the correlation coefficients). All three proactivity criteria were correlated significantly and positively with participative leadership and significantly and negatively with active-corrective transactional leadership. These findings complement previous research identifying similar relationships between these leadership variables and subordinates’ creativity and innovation (George & Zhou, 2001; King & Anderson, 2002; Manz et al., 1989; Oldham & Cummings, 1996; Zhou, 2003). One expectation articulated in chapter three was that the association between participative leadership and proactive subordinate behavior may be stronger than the relatively low meta-analytic correlation identified for task or overall

job performance (Spector, 1986; Wagner, 1994), because participation is strongly associated with job involvement (Spector, 1986), enhances perceived influence (Ganster & Fusilier, 1989) and is prescribed by situational leadership theories (House, 1996; Vroom & Jago, 1988) when subordinates' knowledge, input, and decision acceptance is important. In this study, participative leadership was more strongly correlated with proactive service performance (.43) than with task performance (.18), but yielded similarly low correlations with personal initiative (.18) and voice behavior (.21). Possibly, participative supervisors in service settings enhance subordinate involvement primarily with regard to decisions and procedures related to service delivery enhancements, which may not affect personal initiative and voice behavior as much, because these forms of proactivity may also involve actions or suggestions not directly linked to customer service issues.

Active-corrective transactional leadership (Bass et al., 2003) yielded moderately low negative correlations with all three proactivity criteria and emerged as a significant negative predictor of personal initiative and voice behavior in the multiple regression analyses. These empirical findings are consistent with several theoretical suggestions. For example, Frese and Fay (2001) have emphasized that personal initiative may be low in error-avoidance environments, because it involves the risk of mistakes and failures when trying out new approaches. Seibert and colleagues (2001) have argued that managers may sometimes punish subordinates high in voice behavior whom they could perceive as being too critical. The present results regarding active-corrective transactional leadership shed new light on the inconsistent previous findings regarding relationships between this supervisory behavior and productivity (Lowe et al., 1996;

Howell & Avolio, 1993; Howell & Hall-Meranda, 2001). For example, one reason why active-corrective transactional leadership reduced unit productivity in the financial services organization undergoing change in the study by Howell and Avolio may be that subordinate proactivity could be particularly important for productivity in periods of change.

As hypothesized, transformational leadership was significantly and positively correlated with personal initiative, proactive service performance and task performance, but unrelated to voice behavior. Transformational leadership also significantly and positively predicted personal initiative in the multiple regression analysis. These results extend previous research revealing positive associations of transformational leadership with overall productivity, organizational citizenship behavior, creativity, and innovation (Jung, 2000; Jung et al., 2003; Lowe et al., 1996; Podsakoff et al., 2000). These findings are also consistent with the assumption that transformational leadership facilitates a wide range of desirable subordinate outcomes (Bass, 1998). Furthermore, the consistent pattern of findings for personal initiative across the correlational and regression analyses supports the theoretical proposition that personal initiative may be positively affected by transformational leadership (Frese & Fay, 2001). In contrast to previous studies (e.g., Dvir et al., 2001; Gillespie, 2004), which used subordinate self-ratings of general extra effort, the present research used supervisory ratings of more specific proactivity variables, hence allowing for somewhat more definitive conclusions regarding a positive relationship between transformational leadership and subordinate initiative.

The results of the multiple hierarchical regression analyses supported several of the assumptions regarding the relationships of the additional predictor variables (see chapter

7) with the proactivity criteria. Affective organizational commitment was significantly and positively correlated with all criteria and significantly predicted proactive service performance and personal initiative in the regression analyses. This finding complements previous studies revealing positive relationships of this attitudinal variable with forms of OCB directed toward the organization, such as loyal boosterism (Becker & Kernan, 2003; Blakely et al., 2003). Affective commitment likely relates to proactive behavior through its affective and behavioral consequences (e.g., via enhanced positive affect and its outcomes, including creative problem-solving, helping behavior, and persistence; Isen & Baron, 1991).

Due to the obvious importance of trait personal initiative, it was surprising that this predictor did not yield significant regression weights for any of the proactivity variables, although it was significantly correlated with all of them. The .48 intercorrelation between trait personal initiative and affective commitment may partially explain this pattern of findings. Crant (2000) urged researchers to examine the extent to which individual-difference proactivity constructs predict actually exhibited proactive behaviors. It is possible that researchers did not examine these associations as they may appear too obvious or trivial. However, the counterintuitive finding that trait personal initiative, which is highly similar to the proactive personality concept (Crant, 2004; Frese & Fay, 2001), did not significantly predict proactive behavior in the regressions demonstrates the need to further examine such relationships in the future. It is interesting that trait proactivity was less relevant than a more malleable variable like affective organizational commitment, which is strongly influenced by contextual factors such as

perceived organizational support (Eisenberger et al., 1990; Meyer et al., 2002; Vandenberghe et al., 2004).

Contrary to expectations, all of the criterion variables were uncorrelated with work-related self-efficacy. In the multiple regression, self-efficacy even emerged as a negative predictor of personal initiative. This is surprising, because work-related self-efficacy positively predicted initiative in interview studies (Frese et al., 1996; 1997), and generalized self-efficacy predicted the proactivity construct taking charge in a field survey study (Morrison & Phelps, 1999). The main reason for this result may be the range restriction operative in our sample, because the mean on the seven-point self-efficacy scale was 6.29. In addition to the potential social desirability bias, this may be explained by the fact that all of the employees had received extensive customer service training. The measure may have differentiated only between those with high versus extremely high levels of self-efficacy. On the other hand, there was enough variability to produce meaningful significant correlations with trait personal initiative and action orientation. Recent experimental research revealing intraindividual decreases in performance over time among individuals high in complacency (Vancouver, Thompson, Tischner, & Putkna, 2002) may partially explain why employees with very high self-efficacy did not obtain higher proactivity ratings than those who were somewhat lower in self-efficacy.

Considering the two task characteristics (complexity and autonomy) included in the multiple regressions, only the positive regression weight between job complexity and proactive service performance was significant. Job incumbents experiencing complexity may gain new skills as well as greater intellectual flexibility (Kohn & Schooler, 1983) and

encounter more opportunities to exhibit proactivity, as outlined in chapter nine. In contrast to proactive service performance, however, other proactive behaviors such as voice may also be shown if complexity is low, because communicated suggestions may aim at changes external to technical requirements. The fact that participation emerged as a stronger predictor than autonomy, which was significantly and positively correlated with personal initiative and proactive service performance but did not emerge as a significant predictor in the regressions, may be explained with the meta-analytic finding that participation is more strongly and positively associated with job involvement than autonomy (Spector, 1986). Intercorrelations between the different predictor variables may also explain why only a few of them emerged as significant predictors of each criterion in the multiple regression. However, it should be noted that several indices (i.e., tolerance and variance inflation factors; Myers & Well, 1995; Pedhazur, 1997) did not point to serious multicollinearity in the dataset.

Findings on interaction effects

As can be seen in Table 25, the empirical evidence regarding the hypothesized interaction effects was relatively mixed and better for the hypotheses involving leadership moderators (7-8) than for those involving subordinate moderators (9-10). Participative leadership moderated the relationship between transformational leadership and subordinates' voice behavior, such that transformational leadership positively predicted voice behavior only when combined with high levels of participation. The nature of the interaction effect even somewhat exceeded the prediction, which stated that transformational leadership would be more positively associated with this criterion if participation is high.

Table 25. *Overview of findings regarding the interaction hypotheses*

Number	Hypothesis	Supported for		
		Voice behavior	Personal initiative	Proactive service performance
Leadership variables as moderators				
7	Positive relationship between transformational leadership and voice if participation high	Yes	N/A	N/A
8	Stronger positive relationship between transformational leadership and all criteria if corrective leadership low	Yes	Yes	No
Subordinate variables as moderators				
9a	More positive relationship between participative leadership and all criteria for action-oriented subordinates	Yes	No	No
9b	More positive relationship between participative leadership and all criteria for action-oriented subordinates	No	No	No

Table 25 (Continued). *Overview of findings regarding the interaction hypotheses*

Number	Hypothesis	Voice behavior	Supported for Personal initiative	Proactive service performance
10a	More positive relationship between participative leadership and all proactivity criteria for subordinates high in affective organizational commitment	Effect different than expected	Effect different than expected	Effect different than expected
10b	More positive relationship between transformational leadership and all proactivity criteria for subordinates high in affective organizational commitment	No	No	No

In terms of the different types of moderator effects discussed by Podsakoff and coauthors (1995), lack of participation may be considered a neutralizer, because there was little relationship between transformational leadership and voice when participation was low. This finding is consistent with the proposition that participative rather than authoritarian forms of transformational leadership facilitate the development and expression of ideas and opinions. As suggested in chapter four, subordinates of nonparticipative transformational supervisors may uncritically endorse their leaders'

ideas rather than develop and voice own ideas, partially because they may feel restricted in their autonomy (Mumford et al., 2002). Additionally, such subordinates may be reluctant to interfere with the optimism and confidence created by inspirational motivation. The combination of transformational and participative leadership also reflects House's (1995) description of a successful leader who serves as a "catalyst and facilitator of follower contributions to the vision" (p. 417).

Active-corrective transactional leadership significantly moderated the relationships of transformational leadership with subordinates' voice behavior as well as personal initiative, but not proactive service performance. Transformational leadership positively predicted voice behavior and personal initiative when combined with low levels of corrective leadership. Hence, active-corrective transactional leadership may be considered a neutralizer (Podsakoff et al., 1995). Based on action theory (Frese & Zapf, 1994), it was argued that the visionary, inspirational, stimulating, and developmental aspects of transformational leadership may lead to an adoption of challenging, self-started, and long-term oriented goals and plans in the first two stages of the action sequence (i.e., the goal and plan development stages). However, this potential positive effect of transformational leadership on proactivity may be undermined by active-corrective transactional leadership, because the negative performance feedback typical for this supervisory behavior may negatively affect the last phase of the action sequence (i.e., the feedback stage), such that subordinates no longer pursue proactive behaviors in future action sequences. It may appear inconsistent and contradictory if transformational leaders, who typically display high levels of confidence and optimism (Bass & Avolio, 1993), simultaneously focus their attention on detecting and punishing errors and failures.

The fact that the two leadership moderators significantly modified three leadership-proactivity relationships (see Table 25) indicates the value of considering interactions between leadership variables, an endeavor that has been rarely pursued since Fleishman and Harris (1962) examined patterns of leadership behavior composed of the two Ohio State factors consideration and initiating structure. As is typical for interaction effects identified in field studies (McClelland & Judd, 1993), the effect sizes associated with the interaction terms were modest, ranging from two to three percent.

The only leadership-proactivity association that was significantly moderated by the hesitation dimension of subordinates' action-state orientation was the relationship between participative leadership and subordinates' voice behavior. Specifically, participative leadership more strongly and positively predicted voice behavior for subordinates low in hesitation, as expected. Spector (1986) described participation as one form of employee control and suggested the design of "more complex studies that can test the limits of control as a contributor to employee outcomes" (p. 1012). The nature of the interaction effect indicates that the impact of participation on employees' voice behavior is limited by the neutralizer subordinate hesitation.

This finding is consistent with the theories of action control and self-discrimination (Kuhl & Beckmann, 1994; Kuhl, 1992), which suggest that hesitant individuals experience difficulties in action initiation, particularly with regard to actions that reflect their own preferences rather than the demands imposed by others (Kazen et al., 2003; Kuhl, 2001; Norman et al., 2003). Highly hesitant employees may need relatively straightforward supervision and structure rather than environments in which "assertive handling of novel situations" (Kuhl, 1992, p. 123) is required. The hesitation

dimension of action-state orientation did not significantly moderate any of the relationships between active-corrective transactional leadership and proactivity, which is inconsistent with the proposition that state-oriented subordinates receiving negative feedback become focused on old performance strategies rather than pursuing new approaches and change-oriented behaviors (Farr et al., 1993).

The second subordinate moderator, affective organizational commitment, significantly moderated the relationships between participative leadership and all three proactivity criteria, but did not moderate any of the relationships involving transformational leadership. With respect to voice behavior and personal initiative, the effect sizes associated with the significant interaction terms for participation were substantial (5% and 8%, respectively). Inconsistent with hypothesis 10a, however, participative leadership more strongly and positively predicted proactivity for subordinates low rather than high in affective organizational commitment. In chapter five, it was argued that subordinates who are not affectively committed would not respond as positively to participation, because they usually show less involvement, less extra effort, and less interest in the success of their organization, experience less positive affect, and typically have a higher turnover intention than those high in affective organizational commitment (Becker & Kernan, 2003; Blakely et al., 2003; Jenkins, 1993; Meyer et al., 1993; Vandenberghe et al., 2004). Considering that affective organizational commitment was positively associated with all proactivity variables, one might conclude that it functioned as a leadership substitute (Kerr & Jermier, 1978; Podsakoff et al., 1995).

A ceiling effect may partially explain these findings, because highly committed employees may already exhibit such high levels of proactivity that there is little potential to further enhance it through participative leadership. Figures 11 and 12 reflect high baseline mean levels in voice and initiative among those high in affective commitment, even when participation was low. The fact that these individuals' mean level in proactive service performance was not as high may explain why the interaction effect for this criterion was weaker. Subordinates low in affective organizational commitment obviously had low baseline levels of proactivity, but exhibited proactive behavior when they were prompted by participative leadership. When supervisors explicitly demand subordinates' input, even those low in affective organizational commitment may respond, unless they do not care at all about their position. Future research is needed to replicate these unexpected effects in order to draw more definitive conclusions.

Findings on mediation effects

From a theoretical point of view, it is particularly interesting to understand the psychological mechanisms through which contextual predictors such as leadership variables affect subordinate proactivity (Crant, 2000). Both the mediated regression analyses (see chapter 14) and the structural equation analyses (see chapter 15) provided greater support for the hypotheses involving perceived trust in leadership as a mediator (11a and 11b) than for those involving perceived task autonomy as a mediator (12a and 12b).

Table 26. *Overview of findings regarding the mediation hypotheses*

Number	Hypothesis	Supported for		
		Voice behavior	Personal initiative	Proactive service performance
Trust in leadership as a mediator				
11a	Trust mediator between participative leadership and all proactivity criteria	Partially	Yes	Partially
11b	Trust mediator between transformational leadership and personal initiative as well as proactive service performance	N/A	Yes	Yes
Task autonomy as a mediator				
12a	Autonomy mediator between participative leadership and personal initiative as well as proactive service performance	N/A	Partially	Partially
12a	Autonomy mediator between corrective leadership and personal initiative as well as proactive service performance	N/A	No	Partially

Considering the regression results, there was support that trust in leadership fully mediated the relationships between transformational leadership and personal initiative as well as proactive service performance and between participative leadership and personal initiative. Moreover, evidence supported trust as partially mediating the relationships between transformational leadership and voice behavior and between participative leadership and proactive service performance. Because only one mediation effect was hypothesized for the voice behavior criterion, unified tests of the mediation hypotheses were conducted only for personal initiative and proactive service performance. For each of these two criteria, a parsimonious fully mediated structural model involving trust as the sole mediator yielded significant path coefficients as well as adequate model fit indices.

These findings complement previous research identifying trust as a mediator of the relationships between several transformational leadership behaviors and brainstorming performance (Jung & Avolio, 2000) as well as the OCB dimensions altruism, courtesy, conscientiousness, and sportsmanship (Podsakoff et al., 1990; Pillai et al., 1999). The associations of trust with transformational leadership ($r = .72$) as well as participative leadership ($r = .53$) were similar to those found in previous studies (Dirks & Ferrin, 2002; Gillespie, 2004).

As argued in chapter six, trust may pass over the effects of leadership behaviors to proactive behaviors, because it reflects a willingness to take risks and pursue novel approaches based upon positive expectations of the supervisor's intentions and behaviors (Dirks & Ferrin, 2002; Mayer et al., 1995; Rousseau et al., 1998). This reasoning also suggests that active-corrective transactional leadership may negatively affect proactivity

via reduced trust perceptions. Due to nonsignificant previous findings (e.g., Gillespie, 2004), however, no hypothesis for this leadership factor was explicated.

Interestingly, active-corrective transactional leadership had a nonsignificant $-.08$ zero-order correlation with trust, but yielded significant negative paths to trust in the structural equation models, which may be due to a complex suppressor effect. In these models, the unique variance that active-corrective transactional leadership shared with trust may reflect destructive criticism and negative punishment, whereas the more constructive aspects of corrective leadership (e.g., necessary feedback to avoid serious failure) may overlap with transformational leadership components such as individualized consideration, which encompasses coaching based on the individual weaknesses of subordinates. It is possible that the latter portion of the corrective leadership variance positively relates to transformational leadership, considering the $.09$ overall correlation between these variables. A common method factor (e.g., some subordinates' tendency to agree with most items) may also explain why active-corrective transactional leadership did not correlate more negatively with trust. As Gillespie (2004) suggested, employees may be hesitant to trust a critical leader whom "they perceive to be overly focused on the negatives" (p. 593). Due to the exploratory nature of the analyses, future research is needed to replicate the mediation effect for active-corrective transactional leadership.

Drawing on cognitive evaluation theory (Deci & Ryan, 1985, 1987), it was argued that participative leadership exerts positive effects on subordinate proactivity by enhancing perceived autonomy, whereas corrective leadership exerts negative effects on subordinate proactivity by reducing perceived autonomy. The mediated regressions provided limited support for the assumption that perceived autonomy partially mediated

the relationships of participative leadership with both personal initiative and proactive service performance and of active-corrective transactional leadership with proactive service performance. As noted in chapter 14, the size of these partial effects was very modest. When using structural equation modeling, the models involving autonomy as a second mediator in addition to trust yielded worse fit indices than the models involving only trust as a mediator. Furthermore, several of the paths pointing to or from autonomy were nonsignificant, thus suggesting the elimination of autonomy from the model.

The relatively weak support for these hypotheses is somewhat surprising, because several studies suggested not only a positive link between participation and perceived autonomy as well as a negative link between active-corrective transactional leadership and perceived autonomy (e.g., Farh & Scott, 1983; Jackson, 1983; Martinko & Gardner, 1982; Ganster & Fusilier, 1989), but also a positive link between perceived autonomy and proactive behavior (e.g., Adelman, 1986; Chenet et al., 2000; Frese et al., 1996, 1997; Sparks, 1997; West, 1987). One reason for these results may be that task autonomy typically refers only to freedom regarding the scheduling of the work tasks and the procedures used to carry them out (Hackman & Oldham, 1976), whereas a broader decision autonomy variable and measure may have better captured the type and degree of autonomy needed to engage in high levels of proactivity. On the other hand, despite the somewhat narrow conceptualization of task autonomy, its operationalization in the Job Diagnostic Survey (Hackman & Oldham, 1975) is relatively broad (e.g., “my job gives me a chance to use my personal initiative or judgment in carrying out my work”).

A theoretical explanation for these results comes from work on a proactivity construct similar to personal initiative, namely job crafting, which is defined as the self-

started physical and cognitive changes made by proactive employees in the task and relational boundaries of their work (Wrzesniewski & Dutton, 2001). In opposition to job design approaches (Hackman & Oldham, 1976), these authors argued “that employees take on the role of job crafters even in work that might be considered low in autonomy” (p. 194) by creating niches that allow initiative-taking. Another explanation may be that supervisors have a stronger influence on subordinates’ trust in leadership than on their task autonomy, which is determined by numerous factors outside of the leader’s control. In conclusion, this study provides less support for perceived autonomy than for perceived trust as a psychological mechanism explaining the relationships between the three leadership predictors and subordinates’ proactive behavior.

Strengths and limitations

The content-related contribution of this research is reflected in its comprehensiveness and well-balanced nature, because it did not only examine direct relationships between several leadership variables and several proactivity criteria, but also investigated mediators and moderators. Furthermore, the research hypotheses were based on relatively complex integrations of previous empirical findings as well as carefully selected implications of relevant leadership, motivation, and performance models (e.g., path-goal theory, cognitive evaluation theory, and action theory). It is particularly noteworthy that this study incorporated a broad but manageable set of individual, task, and leadership predictors of proactive service performance. Although Liao and Chuang (2004), for example, used a variety of predictors of unit-level service performance, they employed only personality measures as predictors of individual-level service performance. Similarly, several studies examining individual initiative or job

dedication from a citizenship performance perspective (e.g., Le Pine & Van Dyne, 2001; Moorman & Blakely, 1995; Van Scotter & Motowidlo, 1996) focused on personality predictors. This study complements this previous research by showing that the leadership factors explained incremental variance in all criteria after individual and task variables had been accounted for.

The present investigation also has several methodological strengths, including the quality of the sampling process, which resulted in a US-wide sample representing three important lines of business in the financial services sector (bank branches, credit card, and home finance services) as well as geographically dispersed locations. Second, I used different sources (subordinate and supervisor ratings) for the predictor and criterion assessments, whereas several previous studies used employee self-ratings of extra effort (e.g., Dvir et al., 2001; Gillespie, 2004) and service performance or quality (e.g., Liao & Chuang, 2004; Schneider et al., 1992). Third, the data are independent, because each manager rated the performance of only one subordinate, while each manager's leadership behaviors were rated by only one subordinate.

Fourth, the PROSPER scale development phase involved a combination of deductive theory-driven as well as inductive qualitative and quantitative approaches. Consequently, the PROSPER items reflect behaviors suggested most often as antecedents of desirable service outcomes not only in the pilot research, but also in the customer service literature (e.g., Parasuraman et al., 1998; Schneider et al., 1992, 1998). Fifth, considering levels-of-analysis issues (e.g. Klein & Kozlowski, 2000), all of the variables in our study were appropriately tailored to the individual level of analysis, because we collected individual subordinates' ratings of task characteristics and leadership behaviors

rather than the group-level climate variables typically employed in unit-level service studies (e.g., Schneider et al., 1998).

A potential limitation of this study may be the exclusive reliance upon supervisor ratings of subordinates' proactive service performance. However, the managers in the participating organization regularly monitored their subordinates' performance (e.g., by listening in to customer calls in credit card service centers without the subordinates' awareness). As noted in chapter nine, several researchers (e.g., Borucki & Burke, 1999; Hogan et al., 1984) have suggested or successfully used supervisor ratings of subordinates' behavior in service settings. Meta-analytic research (Viswesvaran et al., 1996) demonstrated that supervisory ratings had higher interrater and intrarater reliabilities than peer ratings, considering both overall performance ratings and the relevant dimensions effort and interpersonal competence. Furthermore, Van Scotter and Motowidlo (1996) showed that supervisor ratings of job dedication (a performance factor implying high initiative) had high internal consistency and interrater reliability. Nonetheless, future research assessing the convergence of supervisor with peer and customer ratings is desirable.

Due to the cross-sectional nature of the present research design, alternative explanations cannot be ruled out completely. Reverse or reciprocal causation may be possible, for example when supervisors exhibit less active-corrective leadership or more participative leadership to employees who effectively demonstrated proactive service performance, personal initiative or voice behavior in the past. Similarly, it is possible that employees are higher in affective organizational commitment or perceive greater job complexity as a result of having engaged in challenging proactive courses of action.

Clearly, supplemental longitudinal studies are desirable to draw more definitive conclusions. Besides, multi-level methodologies (Klein & Kozlowski, 2000) may be adopted to examine potential cross-level relationships between leadership and group-level as well as organization-wide proactivity.

Chapter Seventeen

Implications and Future Research Directions

The concluding chapter is devoted to a discussion of the practical, conceptual, and research implications of this investigation. With respect to all of these three types of implications, the value of this research depends on the degree to which it has addressed the five challenges highlighted in chapter one. These gaps were the lack of research on leadership predictors, moderators and mediators, comparisons of proactivity concepts with each other and with task performance, and investigations of proactive behavior relevant to innovation as well as customer service performance (Crant, 2000; House, 1995; Van Dyne et al., 2002). The previous discussion suggests that this study has successfully addressed each of these challenges at least to some extent. Specifically, it has revealed relevant leadership predictors as well as combinations of these predictors and identified two subordinate moderators and two mediators. It has also demonstrated that the innovation-related and service-specific proactivity variables were distinct from task performance and from each other. Therefore, this research contributes to the extant knowledge of the forms and correlates of proactive behavior. The purpose of this chapter is to discuss how this knowledge may be utilized for practical application, conceptual development, and empirical research.

Practical implications

As Dunnette (1990) has stated convincingly, advances in industrial/organizational psychology may come particularly from those who successfully integrate science and practice. According to this author, many academic scholars know that reality-based applied research may strongly contribute to the advancement of our discipline. Applied authors such as Wexley and Baldwin (1986) name a lack of theoretical foundation as one of the fundamental concerns in management development. Therefore, it seems critical from both the scientist's and the practitioner's perspective to bridge the gap between theory and application in leadership research. As explained in the section on the organizational context in chapter eight, one of the objectives of this study was to conduct scientific leadership research that is of practical value to the participating organization, particularly in regard to the design of its new leadership development program.

The findings of this research, in conjunction with a consideration of other studies, have been applied in a nationwide leadership development program. In these one-day training sessions, learning facilitators discuss the results of this and other internal studies as well as general leadership issues with the managers. Furthermore, the participating managers engage in role playing exercises, practicing the portrayal of specific leadership behaviors, including some of those included in the present study (e.g., participative leadership and specific transformational leadership behaviors such as intellectual stimulation). Additionally, the organization has designed a series of ten workshops for small groups of managers. Each of these workshops lasts between one and two hours, is delivered regionally in different company locations, and focuses on a specific leadership behavior and its implications for subordinate performance.

As several authors (e.g., Campbell, 2000; Crant, 2000; Frese 2000; Howard, 1995) have pointed out, employee proactivity has become increasingly important due to managerial process innovations such as lean, boundaryless, total quality, and business process reengineering approaches, which have decreased surveillance opportunities for managers while enhancing subordinates' responsibilities (Dess, Rasheed, McLaughlin, & Priem, 2000). Interestingly, these developments have somewhat blurred the hierarchical supervisor-subordinate boundary, because non-managerial employees are increasingly encouraged to adopt an informal leadership role. However, as proactive behaviors are supposed to be self-started, it may sound somewhat paradoxical to argue that leadership behaviors should be used to prompt these behaviors. Although subordinates' self-regulatory capabilities have been emphasized as particularly important facilitators of proactive behavior (Frese & Fay, 2001; Morrison & Phelps, 1998), it is interesting that neither action orientation nor self-efficacy were positively associated with any of the criteria examined in this study, which indicates that supervisors' leadership behaviors may be relevant to proactivity, although the effect sizes for voice and initiative were moderate. The fact that the effects for proactive service performance were considerably larger suggests that field research might have stronger practical implications for the participating organization if the performance measure is carefully designed to capture the entire conceptual criterion space as it exists in the specific business setting.

Because none of the observed interactions between leadership variables were found for prescribed task performance, it appears that proactive subordinate behavior is more difficult to manage than explicitly required behavior, as it may depend more strongly on relatively complex combinations of supervisory behaviors rather than simple

main effects. In particular, transformational leadership positively predicted two proactivity criteria (voice behavior and personal initiative) only when combined with low levels of active-corrective transactional leadership, a combination which is frequently difficult to achieve for supervisors in the day-to-day operations of a financial services organization. However, even if the implications of these findings are somewhat complex, they mirror the complexity of the naturalistic business environment, as managers typically exhibit a combination of multiple supervisory behaviors (e.g., managers are not only high, medium or low in transformational leadership, but also high, medium or low in other supervisory behaviors). This complexity is not captured in the majority of leadership studies, which frequently include only one leadership concept (Yukl, 2002).

Cross-validation and longitudinal studies are needed before definitive practical prescriptions are recommended, although the findings might suggest concrete measures, such as high levels of participation and low levels of corrective leadership, job design interventions enhancing task complexity, and efforts to increase affective organizational commitment. However, job analyses may be necessary to identify the positions that most strongly benefit from proactivity. Considering the increasing importance of the customer service sector in most economies (Van Dyne et al., 2002), efforts to enhance proactive service performance may be warranted once its consequences are identified.

Conceptual implications

The present investigation has important conceptual implications in light of recent theoretical controversies about the value of distinguishing proactivity and initiative from task performance (Coleman & Borman, 2000; Frese & Fay, 2001; Podsakoff et al., 2000; Van Scotter & Motowidlo, 1996; Van Dyne & LePine, 1998). For example, Podsakoff

and coauthors (2000) discussed individual initiative as one of seven OCB dimensions, but noted that this variable is particularly difficult to distinguish from in-role behavior or task performance. The previously discussed findings indicate that task performance was distinct from the two specific proactivity variables, but less clearly distinguishable from personal initiative. As Crant (2000) suggested, employees can engage in proactive activities with regard to fulfilling their basic job requirements as well as redefining their role in the organization. Similarly, although Speier and Frese (1997) initially described personal initiative as a form of contextual performance, Frese and Fay (2001) more recently argued that personal initiative may be a construct underlying both task and contextual performance, because both could be approached with initiative or passivity.

This viewpoint is reflected in the conclusion drawn by Van Scotter and Motowidlo (1996) regarding their attempt to distinguish job dedication from task performance. Their job dedication construct, defined as “self-disciplined and motivated acts such as working hard, taking initiative, and following rules” (p. 525), is similar to the personal initiative construct, with the difference that compliance is not a component of personal initiative. Except for a somewhat stronger positive relationship of job experience with task performance as opposed to job dedication, Van Scotter and Motowidlo failed to find differential predictors, hence concluding that their research did not support distinguishing job dedication from task performance. In the present regression analyses, both of the significant predictors of task performance (affective organizational commitment and transformational leadership) also emerged as significant predictors of personal initiative. The only clearly differential correlate and predictor of these two criteria was active-corrective transactional leadership, which was unrelated to

task performance, but negatively associated with personal initiative. Overall, these findings provide very limited evidence of the usefulness of distinguishing a broad proactivity variable such as personal initiative from task performance.

One of the major problems associated with the personal initiative construct (Frese & Fay, 2001) is that it may be considered an imprecise first degree construct. According to Calder (1977), first degree constructs are overly broad concepts lacking a sufficiently precise definition, whereas second-degree constructs are carefully defined concepts that can be differentiated from other concepts. Van Dyne and colleagues (1995) described the prosocial organizational behavior construct (Brief & Motowidlo, 1986), a concept that is about as broad as personal initiative, as a problematic first degree construct and suggested this as the reason for the declining interest in this concept. The definition of personal initiative as any form of goal-directed self-started, proactive, and persistent behavior is almost as broad as typical definitions of motivation (i.e., the processes underlying the initiation, intensity, and persistence of behavior, Mitchell, 1997). This issue is enhanced by the fact that Frese and associates discussed personal initiative as a performance, personality, and climate variable (Frese & Fay, 2001) and used a combination of behavioral and situational interview to assess initiative as a behavioral performance criterion (Frese et al., 1996, 1997), although such low-fidelity simulations tend to capture performance predictors (e.g., work experience, interpersonal skills) rather than performance itself (Motowidlo, Dunnette, & Carter, 1990).

The personal initiative concept may still be useful when researchers wish to capture proactivity in general terms without emphasizing conceptual distinctness. As this study demonstrates, the model of personal initiative proposed by Frese and Fay (2001)

may also be used as a framework for developing context-specific proactivity constructs. Overall, researchers wishing to distinguish proactivity from task performance and to identify unique proactivity predictors may be more successful when using a specific concept and measure. This reasoning is consistent with the arguments and findings by Van Dyne and LePine (1998; LePine & Van Dyne, 2001), who demonstrated that the more specific voice behavior construct was distinguishable from in-role behavior, explained incremental variance in overall performance ratings beyond in-role behavior, and exhibited different relationships with several predictors than task performance.

The most important conceptual issue that may need to be clarified in the future is whether the “conscientious initiative” factor included in the three-dimensional contextual or citizenship performance taxonomy by Borman et al. (2001) is truly distinguishable from task performance. Although Van Scotter and Motowidlo (1996) suggested to redefine task performance to include motivational elements of job dedication, the Borman et al. (2001) citizenship taxonomy, originally developed by Coleman and Borman (2000), includes a job/task citizenship factor, which was renamed “conscientious initiative” in subsequent publications (Borman et al., 2001; Borman, Buck, Hanson, Motowidlo, Stark, & Drasgow, 2001). This factor emerged mainly due to the inclusion of items from the job dedication scale by Van Scotter and Motowidlo and the functional participation scale by Van Dyne and colleagues (1994) and reflects the volunteering and extra effort dimensions in the Borman and Motowidlo (1993) model. As Coleman and Borman (2000) argued: “It might be argued that this dimension falls outside the domain intended in previous attempts to define the organizational citizenship construct. However, we believe that demonstrating citizenship toward one’s own job is a useful extension to the

notion of expressing citizenship toward other persons and the organization” (p. 41). Future research is clearly needed to further assess whether this factor is empirically distinguishable from task performance.

The present study provides somewhat mixed responses to these open questions, because both personal initiative and proactive service performance are variables reflecting conscientious initiative, and the latter variable could be more clearly distinguished from task performance than the former. However, the positive findings for proactive service performance may not necessarily support the distinction between task performance and conscientious initiative, because the proactive service performance measure entailed proactivity facets such as forward thinking and long-term orientation, which distinguish it from task performance and are not as strongly represented in the conscientious initiative factor (Borman et al., 2001). It should also be noted that the few studies that incorporated initiative as a citizenship variable revealed different patterns of results for initiative compared to other citizenship factors. For example, Moorman et al. (1998) found that perceived organizational support and procedural justice were unrelated to individual initiative, but positively and significantly associated with the three other citizenship factors included in their taxonomy (i.e., interpersonal helping, personal industry, and loyal boosterism). Hence, future research needs to simultaneously include measures of task performance, conscientious initiative, and other facets of citizenship performance (i.e., personal and organizational support) to further clarify the conceptual similarities and differences between these constructs.

Although the leadership constructs included in this research are well established, one additional conceptual implication of this research is that participative leadership is

distinct from the recently more frequently examined transformational and transactional leadership constructs. Bass and Avolio (1993) suggested such an independence by arguing that all of the transformational and transactional behaviors can be exhibited in a participative or autocratic way. The confirmatory factor analysis clearly identified participation as a separate leadership dimension. Furthermore, the interaction results demonstrated the value of considering these leadership factors simultaneously. Future research may reveal whether the conceptual distinction between participative and non-participative transformational and transactional leadership is relevant to criteria other than proactive organizational behavior.

Future research directions

The previous sections have already entailed several suggestions for future research, including the design of longitudinal and cross-validation studies, further tests of the moderating roles of participation and affective commitment and of the association between active-corrective transactional leadership and trust, and investigations examining the degree to which initiative can be distinguished from task performance. Besides, researchers may examine additional predictors, mediators and moderators. This study focused on the three behavioral transformational factors intellectual stimulation, inspirational motivation, and individualized consideration rather than attributed charisma. As subordinates may be restricted in their autonomy if they focus on a charismatic leader's vision (Mumford et al., 2002), certain forms of charisma may be detrimental to proactivity. Qualitative accounts of narcissistic or personalized forms of charisma feature examples of leaders forcing their organizations to implement their own ideas rather than encouraging others to develop alternative suggestions (Conger & Kanungo, 1998; Lubit,

2002). According to the self-concept based model of charisma, charismatic leadership may result in greater similarity between follower and leader self-concept (House & Shamir, 1993), which might restrict diversity in opinions and ideas, hence diminishing voice behavior and other forms of proactive behavior.

With respect to mediation effects, a unidimensional trust concept and measure reflecting a combination of cognition-based and affect-based elements was used in this study. According to McAllister (1995), cognition-based trust refers to positive judgments about the referent's character (e.g., honesty, reliability, integrity) that enhance one's willingness to accept vulnerability and to take risks, whereas affect-based trust reflects the quality of the relationship with the referent and results in the reciprocation of care and concern. Dirks and Ferrin (2002) encouraged researchers to assess these two dimensions separately and noted a particular need for studies examining affect-based trust. A logical extension of the present research would be to analyze relationships of the two trust factors with the leadership predictors as well as the proactivity criteria and to examine whether the mediation effects are mainly due to one of the subfactors. Other potential mediators are fairness perceptions (Pillai et al., 1999) and affective states (Van Dyne et al., 1995). In particular, positive affect such as joy or interest may mediate the relationships between participation as well as transformational leadership and proactivity, whereas negative affect such as anger or anxiety may mediate the relationship between active-corrective transactional leadership and proactivity.

Because the findings regarding subordinate variables as moderators were either not particularly strong or different than expected, future research may also consider other potential moderators. For example, it is conceivable that transformational leadership

more positively predicts proactivity for subordinates high in growth need strength (West, 1987), and that active-corrective transactional leadership more negatively predicts proactivity for subordinates high in rule independence (Bunce & West, 1995).

Researchers may also want to identify differential predictors of voice behavior and proactive service performance to further demonstrate the distinctness of these constructs. Although the personality trait agreeableness, for example, negatively predicted voice in a previous study (LePine & Van Dyne, 2001), it is unlikely that this is the case for proactive service performance, taking into account the positive relationship between agreeableness and overall service performance (Frei & McDaniel, 1997).

Particularly important are future studies examining the consequences of these two proactivity variables. Whereas several studies have demonstrated benefits of personal initiative, including entrepreneurial productivity, job-search success, and training transfer (Frese & Fay, 2001), the outcomes of voice behavior and proactive service performance are relatively unexplored. Although Van Dyne and colleagues (Van Dyne et al., 1995; LePine & Van Dyne, 1998, 2001) assert that voice behavior positively influences innovation, more research is needed to demonstrate this association. Seibert and colleagues (2001) even revealed negative influences of voice behavior on objective career outcomes such as promotions, when they partialled out ratings of innovative behavior (i.e., actual idea implementation). Employees who are high in voice without demonstrating innovative behavior may be perceived as those who complain, but do not take constructive action. To identify positive effects of voice behavior on career outcomes, successful change, and organizational productivity, it may be necessary to

differentiate the voice concept and measure such that they capture high-quality and tactful rather than less effective forms of idea communication and opinion articulation.

With respect to the consequences of proactive service performance, researchers may want to investigate whether relations with customers truly prosper when employees exhibit self-started and long-term oriented service behaviors. Potential desirable customer outcomes may include perceived service quality, customer satisfaction and retention, purchase decisions, and loyalty to the organization (Liao & Chuang, 2004; Parasuraman et al., 1988; Tsai, 2001). Due to its future orientation, service proactivity may particularly enhance customer's long-term satisfaction and loyalty. Possibly, effects of proactive service performance depend upon the type of service. For example, it may be more critical when customers are not fully aware of the benefits and risks associated with different choices than in settings such as shoe stores, where salespersons' displayed positive emotions predicted customer reactions including intentions to recommend the store (Tsai, 2001). Researchers may also want to investigate employee outcomes, including not only positive (e.g., career advancement), but also potential negative effects of prolonged service proactivity (e.g., burnout).

Finally, future studies may examine whether proactive service performance is associated with different outcomes than other "beyond core service" variables such as social regard (Butcher et al., 2003). Whereas social regard (i.e., displayed respect and deference) may influence the affective components of customer attitudes, proactive service performance may more strongly predict cognitive and behavioral facets of customer attitudes. Proactive service performance may be one of the paths to success in the service industry. Although research linking distal predictors such as employee

attitudes directly to customer outcomes (e.g., Schmit & Allscheid, 1995) is valuable, actually exhibited individual-level proactive service performance may have been one of the missing links in previous studies. If service employees exhibit proactivity, there may be a closer match between customers' expectations and their perceptions of actually performed service. Hopefully, the proactive service performance concept will aid researchers and practitioners in closing one of the gaps between expected and perceived service (Parasuraman et al., 1988; Zeithaml & Berry, 1985).

Conclusion

In his review of research on proactive behavior, Crant (2000) did not only urge organization scientists to analyze the interplay of contextual, individual, and perceptual variables relevant to proactive behavior and to examine moderators and mediators, but also offered six additional specific suggestions. These suggestions were as follows:

- 1) to create a comprehensive theory and model of the proactive behavior process;
- 2) use research designs that allow the analysis of both dispositional and situational effects on proactive behavior;
- 3) employ research designs permitting the comparison of multiple proactive behavior constructs;
- 4) study proactive behaviors in new contexts;
- 5) study managerial actions intended to elicit or minimize employee proactive behavior; and
- 6) examine the extent to which the four individual-difference proactive behavior constructs predict the extent to which employees exhibit the context-specific proactive behaviors (p. 458)

As can be concluded based on the previous sections, the present research partially advanced knowledge with respect to all of these issues. The greatest challenge that needs to be addressed in future research is the first suggestion offered by Crant. Although the set of hypotheses examined in this study can be synthesized into a model of the impact of leadership on proactive behavior, additional predictors, mediators and moderators may

have to be incorporated. Furthermore, a general model of the proactive behavior process beyond leadership influences would have to include numerous additional variables. Considering the meaningful relationships between various proactivity constructs and other variables identified in many previous studies as well as the present investigation, the creation of such an all-encompassing model appears to be a worthwhile endeavor, although it certainly requires high levels of self-started and long-term oriented behavior.

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Appendices

Appendix 1

Subordinate Questionnaire

Leadership Study Questionnaire for Subordinate

Dear participant: Please complete this questionnaire and return it promptly.

Please write down your Payroll-ID Number: _____

Payroll-ID Number needed to match your information with your supervisors' responses.

How long have you worked for this company? ___ years and ___ months

How many hours do you work per week? ___ hours

Your supervisor's name and interoffice address:

Supervisor information required so we can send a management questionnaire to your supervisor. Your supervisor will NOT see your completed questionnaire.

Your individual responses will NOT be shared with anyone. Only aggregated information will be included in research reports.

Thank you for your participation!

Appendix 1 (Continued)

Leadership Study Questionnaire for Subordinate (continued)

<p>Instructions for questions 1 to 20: For each item, please circle the number that indicates how often your direct supervisor shows the following behaviors.</p> <p>Your response options: 0 = Not at all 1 = Once in a while 2 = Sometimes 3 = Fairly often 4 = Frequently or always</p> <p><i>My direct supervisor...</i></p>	Not at all	Once in a while	Sometimes	Fairly often	Frequently or always
1. Talks enthusiastically about what needs to be accomplished	0	1	2	3	4
2. Gets me to look at problems from many different angles	0	1	2	3	4
3. Treats me as an individual rather than just as a member of a group	0	1	2	3	4
4. Makes clear what I can expect to receive when I achieve performance goals	0	1	2	3	4
5. Keeps track of my mistakes	0	1	2	3	4
6. Expresses confidence that we will achieve our goals	0	1	2	3	4
7. Suggests new ways of looking at how we do our jobs	0	1	2	3	4
8. Spends time teaching and coaching me	0	1	2	3	4
9. Expresses satisfaction when I meet expectations	0	1	2	3	4
10. Directs my attention toward failures to meet standards	0	1	2	3	4

Appendix 1 (Continued)

Leadership Study Questionnaire for Subordinate (continued)

<p>Questions 1 to 20 (continued): For each item, please circle the number that indicates how often your direct supervisor shows the following behaviors.</p> <p>Your response options: 0 = Not at all 1 = Once in a while 2 = Sometimes 3 = Fairly often 4 = Frequently or always</p> <p><i>My direct supervisor...</i></p>	Not at all	Once in a while	Sometimes	Fairly often	Frequently or always
11. Talks optimistically about the future	0	1	2	3	4
12. Re-examines critical assumptions to question whether they are appropriate	0	1	2	3	4
13. Treats each of us as individuals with different needs, abilities, and aspirations	0	1	2	3	4
14. Provides me with assistance in exchange for my efforts	0	1	2	3	4
15. Focuses attention on irregularities, mistakes, and deviations from standards	0	1	2	3	4
16. Articulates a compelling vision for the future	0	1	2	3	4
17. Seeks differing perspectives when solving problems	0	1	2	3	4
18. Helps me to develop my strengths	0	1	2	3	4
19. Makes sure that I receive appropriate rewards for achieving performance targets	0	1	2	3	4
20. Concentrates his/her full attention on mistakes, complaints and failures	0	1	2	3	4

Appendix 1 (Continued)

Leadership Study Questionnaire for Subordinate (continued)

<p>Instructions for questions 21 to 27: For each question, please circle the number that best applies, using these choices.</p> <p>Your response options: 1 = very much 2 = much 3 = rather much 4 = somewhat 5 = rather not 6 = almost not at all 7 = not at all</p>	Very much	Much	Rather much	Somewhat	Rather not	Almost not at all	Not at all
21. Do you receive tasks that are extraordinarily and particularly difficult?	1	2	3	4	5	6	7
22. Do you have to make complicated decisions in your work?	1	2	3	4	5	6	7
23. Can you use all your knowledge and skills in your work?	1	2	3	4	5	6	7
24. Can you learn new things in your work?	1	2	3	4	5	6	7
25. In general, how much say or influence do you have on what goes on in your department?	1	2	3	4	5	6	7
26. Do you feel you can influence the decisions of your immediate superior regarding things about which you are concerned?	1	2	3	4	5	6	7
27. If you have a suggestion for improving the job or changing the setup in some way, is it easy for you to get your ideas across to your immediate supervisor?	1	2	3	4	5	6	7
28. Does your immediate superior ask your opinion when a problem comes up which involves your work?	1	2	3	4	5	6	7

Appendix 1 (Continued)

Leadership Study Questionnaire for Subordinate (continued)

<p>Instructions for questions 29 to 55: For each item, please circle the number that expresses your agreement or disagreement best.</p> <p>Your response options: 1 = Strongly disagree 2 = Disagree moderately 3 = Disagree slightly 4 = Neither agree nor disagree 5 = Agree slightly 6 = Agree moderately 7 = Strongly agree</p>	Strongly disagree	Disagree moderately	Disagree slightly	Neither agree nor disagree	Agree slightly	Agree moderately	Strongly agree
29. I feel quite confident that my supervisor will always treat me fairly.	1	2	3	4	5	6	7
30. I have a divided sense of loyalty to my supervisor.	1	2	3	4	5	6	7
31. I have complete faith in the integrity of my supervisor.	1	2	3	4	5	6	7
32. My supervisor would never try to gain an advantage by deceiving workers.	1	2	3	4	5	6	7
33. I would support my supervisor in almost any emergency.	1	2	3	4	5	6	7
34. I feel a strong loyalty to my supervisor.	1	2	3	4	5	6	7
35. I do NOT feel a strong sense of belonging to this organization.	1	2	3	4	5	6	7
36. I do NOT feel “emotionally attached” to this organization.	1	2	3	4	5	6	7
37. This organization has a great deal of personal meaning to me.	1	2	3	4	5	6	7
38. I do NOT feel like “part of the family” at this organization.	1	2	3	4	5	6	7
39. I would be very happy to spend the rest of my career with this organization.	1	2	3	4	5	6	7
40. I enjoy discussing my organization with people outside it.	1	2	3	4	5	6	7
41. I really feel as if this organization’s problems are my own.	1	2	3	4	5	6	7

Appendix 1 (Continued)

Leadership Study Questionnaire for Subordinate (continued)

Instructions for questions 29 to 55 (continued): For each item, please circle the number that expresses your agreement or disagreement best. Your response options: 1 = Strongly disagree 2 = Disagree moderately 3 = Disagree slightly 4 = Neither agree nor disagree 5 = Agree slightly 6 = Agree moderately 7 = Strongly agree	Strongly disagree	Disagree moderately	Disagree slightly	Neither agree nor disagree	Agree slightly	Agree moderately	Strongly agree
42. I think I could easily become as attached to another organization as I am to this one.	1	2	3	4	5	6	7
43. My job gives me considerable opportunity for independence and freedom in how I do my work.	1	2	3	4	5	6	7
44. I decide on my own how I go about doing my work.	1	2	3	4	5	6	7
45. My job gives me a chance to use my personal initiative or judgment in carrying out my work.	1	2	3	4	5	6	7
46. I actively attack problems.	1	2	3	4	5	6	7
47. Whenever something goes wrong, I search for a solution immediately.	1	2	3	4	5	6	7
48. Whenever there is a chance to get actively involved, I take it.	1	2	3	4	5	6	7
49. I take initiative even when others don't.	1	2	3	4	5	6	7
50. I use opportunities quickly in order to attain my goals.	1	2	3	4	5	6	7
51. Usually, I do more than I'm asked to do.	1	2	3	4	5	6	7
52. I am particularly good at implementing ideas.	1	2	3	4	5	6	7
53. I am confident about my ability to do my job.	1	2	3	4	5	6	7
54. I am self-assured about my capabilities to perform my work activities.	1	2	3	4	5	6	7
55. I mastered the skills necessary for my job.	1	2	3	4	5	6	7

Appendix 1 (Continued)

Leadership Study Questionnaire for Subordinate (continued)

<p>Instructions for items 52-59: For each item, please circle the answer (either A or B) that is most true for you:</p>	
<p>56. When I know I must finish something soon: A. I have to push myself to get started B. I find it easy to get it done and over with</p>	<p>57. When I have a lot of important things to do and they must all be done soon: A. I often don't know where to begin B. I find it easy to make a plan and stick with it</p>
<p>58. When I don't have anything particular to do and I'm getting bored: A. I have trouble getting up enough energy to do anything at all B. I quickly find something to do</p>	<p>59. When I have to take care of something important which is also unpleasant: A. I do it and get it over with B. It can take a while before I can bring myself to do it</p>
<p>60. When I am getting ready to tackle a difficult problem: A. It feels like I am facing a big mountain that I don't think I can climb B. I look for a way that the problem can be approached in a suitable manner</p>	<p>61. When I am facing a big project that has to be done: A. I often spend too long thinking about where I should begin B. I don't have any problems getting started</p>
<p>62. When I have to solve a difficult problem: A. I usually don't have a problem getting started on it B. I have trouble sorting things out in my head so that I can get down to working on the problem</p>	<p>63. When I have an obligation to do something that is boring and uninteresting: A. I do it and get it over with B. It can take a while before I can bring myself to do it</p>

Thank you very much for completing this questionnaire and for returning it!

Appendix 2

Leadership Study Questionnaire for Supervisor

Dear supervisor: Please complete this questionnaire immediately and send it back.

Name of your staff member: _____

Payroll-ID Number of your staff member: ____ _

How long have you been this person's supervisor? ____ years and ____ months

Your staff member and your manager will NOT see your completed questionnaire. Your individual responses will NOT be shared with anyone. Only aggregated information will be included in research reports.

Thank you for your participation!

Appendix 2 (Continued)

Leadership Study Questionnaire for Supervisor (continued)

<p>Instructions for all questions: Using the choices below, please rate your staff member (see name above). For each item, please circle the number that expresses your agreement or disagreement best.</p> <p>Your response options: 1 = Strongly disagree 2 = Disagree moderately 3 = Disagree slightly 4 = Neither agree nor disagree 5 = Agree slightly 6 = Agree moderately 7 = Strongly agree</p> <p><i>Concerning his/her customer service performance, my staff member...</i></p>	Strongly disagree	Disagree moderately	Disagree slightly	Neither agree nor disagree	Agree slightly	Agree moderately	Strongly agree
1. adequately completes assigned tasks.	1	2	3	4	5	6	7
2. fulfills responsibilities specified in his/her job description.	1	2	3	4	5	6	7
3. performs tasks that are expected of him/her.	1	2	3	4	5	6	7
4. meets formal performance requirements of the job.	1	2	3	4	5	6	7
5. engages in activities that will directly affect his/her performance evaluation.	1	2	3	4	5	6	7
6. neglects aspects of the job he/she is obligated to perform.	1	2	3	4	5	6	7
7. fails to perform essential duties.	1	2	3	4	5	6	7

Appendix 2 (Continued)

Leadership Study Questionnaire for Supervisor (continued)

<p>Instructions for all questions:</p> <p>Using the choices on the right, please rate your staff member (see name above). For each item, please circle the number that expresses your agreement or disagreement best.</p> <p>Your response options: 1 = Strongly disagree 2 = Disagree moderately 3 = Disagree slightly 4 = Neither agree nor disagree 5 = Agree slightly 6 = Agree moderately 7 = Strongly agree</p> <p><i>My staff member...</i></p>	Strongly disagree	Disagree moderately	Disagree slightly	Neither agree nor disagree	Agree slightly	Agree moderately	Strongly agree
8. develops and makes recommendations concerning issues that affect this work group	1	2	3	4	5	6	7
9. speaks up and encourages others in this group to get involved in issues that affect the group	1	2	3	4	5	6	7
10. communicates his/her opinions about work issues to others in this group even if his/her opinion is different and others in the group disagree with him/her	1	2	3	4	5	6	7
11. keeps well informed about issues where his/her opinion might be useful to this work group	1	2	3	4	5	6	7
12. gets involved in issues that affect the quality of work life here in this group	1	2	3	4	5	6	7
13. speaks up in this group with ideas for new projects or changes in procedures	1	2	3	4	5	6	7
14. actively attacks problems at work.	1	2	3	4	5	6	7
15. takes initiative even when his/her coworkers don't.	1	2	3	4	5	6	7
16. uses opportunities at work quickly in order to attain goals.	1	2	3	4	5	6	7

Appendix 2 (Continued)

Leadership Study Questionnaire for Supervisor (continued)

<p>Instructions for questions 1-23:</p> <p>Using the choices on the right, please rate your staff member (see name above). For each item, please circle the number that expresses your agreement or disagreement best.</p> <p>Your response options: 1 = Strongly disagree 2 = Disagree moderately 3 = Disagree slightly 4 = Neither agree nor disagree 5 = Agree slightly 6 = Agree moderately 7 = Strongly agree</p> <p><i>My staff member...</i></p>	Strongly disagree	Disagree moderately	Disagree slightly	Neither agree nor disagree	Agree slightly	Agree moderately	Strongly agree
17. usually does more than he/she is asked to do at work.	1	2	3	4	5	6	7
18. is particularly good at implementing ideas at work.	1	2	3	4	5	6	7
19. Whenever something goes wrong at work, my staff member searches for a solution immediately.	1	2	3	4	5	6	7
20. Whenever there is a chance to get actively involved at work, my staff member takes it.	1	2	3	4	5	6	7
21. My staff member decides on his/her own how he/she goes about doing the work.	1	2	3	4	5	6	7
22. My staff member's job gives him/her considerable opportunity for independence and freedom in how she/he does the work.	1	2	3	4	5	6	7
23. My staff member's job gives him/her a chance to use personal initiative or judgment in carrying out the work.	1	2	3	4	5	6	7

Appendix 2 (Continued)

Leadership Study Questionnaire for Supervisor (continued)

<p>Instructions for questions 24 to 27: For each question, please circle the number that best applies, using these choices.</p> <p>Your response options: 1 = very much 2 = much 3 = rather much 4 = somewhat 5 = rather not 6 = almost not at all 7 = not at all</p>	Very much	Much	Rather much	Somewhat	Rather not	Almost not at all	Not at all
24. Does your staff member receive tasks that are extraordinarily and particularly difficult?	1	2	3	4	5	6	7
25. Does your staff member have to make complicated decisions in his/her work?	1	2	3	4	5	6	7
26. Can your staff members use all his/her knowledge and skills in his/her work?	1	2	3	4	5	6	7
27. Can your staff member learn new things in his/her work?	1	2	3	4	5	6	7

Thank you very much for completing this questionnaire and for returning it!

About the Author

Johannes Rank was born in Munich, Germany. In 1995, he began studying psychology and business administration at the University of Hamburg, Germany. In 1998, he received a Fulbright scholarship and moved to the University of South Florida, where he earned his Master's degree in 2000. Johannes received a graduate degree at the University of Hamburg in 2001 and worked as a research associate at the University of Giessen in 2002. He returned to the University of South Florida with a scholarship from the German Academic Exchange Service in 2003, taking doctoral coursework in industrial/organizational psychology, management, and communication. He completed a doctoral internship, gave several conference presentations, and taught classes on motivation, creativity, leadership, and cross-cultural organizational behavior. Johannes has accepted a position as lecturer in organizational behavior and human resource management in the School of Management at the University of Surrey in the United Kingdom.