EXAMINING A MODEL OF RATEE ACCOUNTABILITY WITHIN
MULTI-SOURCE FEEDBACK SYSTEMS

by

MARSHA LYNN BEWLEY

(Under the direction of Dr. Charles Lance)

ABSTRACT

Organizations are increasingly using multi-source feedback (MSF) assessments for leadership development and organizational change efforts. However, some studies indicate that MSF may not lead to desired outcomes including behavior change and improved performance. The current empirical study tested the theory of London, Smither and Adsit (1997) that accountability mechanisms built into MSF systems will increase the likelihood of achieving and sustaining desired outcomes. A Ratee Perceptions of Accountability to Use MSF scale was developed with scale development best practices and evaluated with path analyses that were used to test a model of ratee accountability within a MSF system. Two samples of managers from a financial services organization were used to develop and test the scale and model. Evidence was found in support of several predictors of ratee perceived accountability including need for achievement, self-efficacy to use MSF and organizational support for continuous learning. In addition, ratee perceived accountability predicted ratee intentions to use MSF and ratee development behaviors. However, evidence did not support the predicted outcome of ratee performance improvement. Implications for future research and practitioners are discussed.

INDEX WORDS: Accountability, Multi-source feedback, Multi-rater feedback, Upward feedback, Scale development, Path analysis, Need for achievement, Self-efficacy, Organizational continuous learning
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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>iv</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>vii</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>viii</td>
</tr>
<tr>
<td>CHAPTER</td>
<td></td>
</tr>
<tr>
<td>1 INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Multi-Source Feedback</td>
<td>3</td>
</tr>
<tr>
<td>Defining Accountability</td>
<td>8</td>
</tr>
<tr>
<td>Purpose of Study</td>
<td>28</td>
</tr>
<tr>
<td>2 METHOD</td>
<td>41</td>
</tr>
<tr>
<td>Participants</td>
<td>41</td>
</tr>
<tr>
<td>Procedure</td>
<td>43</td>
</tr>
<tr>
<td>Measures</td>
<td>45</td>
</tr>
<tr>
<td>Analyses for Evaluating the Ratee Accountability Scale</td>
<td>57</td>
</tr>
<tr>
<td>3 RESULTS</td>
<td>64</td>
</tr>
<tr>
<td>Ratee Accountability Model Comparison and Selection Summary</td>
<td>71</td>
</tr>
<tr>
<td>Tests for Predicted Direct Effects</td>
<td>72</td>
</tr>
<tr>
<td>Tests for Predicted Indirect Effects</td>
<td>76</td>
</tr>
<tr>
<td>Path Analysis Results Summary</td>
<td>81</td>
</tr>
<tr>
<td>4 DISCUSSION</td>
<td>84</td>
</tr>
<tr>
<td>Development of a Ratee Perceptions of Accountability to Use MSF Scale</td>
<td>85</td>
</tr>
</tbody>
</table>
LIST OF TABLES

1 Sample 1: Factor Loadings and Eigenvalue for Factor Analysis with Ratee Accountability Scale Data...........................................................................................47

2 Sample 2: Factor Loadings and Eigenvalue for Factor Analysis with Ratee Accountability Scale Data...........................................................................................49

3 Internal Consistencies (Chronbach’s Coefficients Alpha) of Each Measure in Current Study........................................................................................................50

4 James, Mulaik, and Brett’s (1982) Ten Conditions for Causal Inferences........59

5 Descriptive Statistics and Intercorrelations of Ratee Accountability Model Variables ..................................................................................................................65

6 Intercorrelations of the Standardized Residuals of Ratee Accountability Model Variables........................................................................................................66

7 Magnitude of Indirect Effects......................................................................................83
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Page</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A Model of Accountability Processes .........................................................20</td>
</tr>
<tr>
<td>2</td>
<td>Accountability in MSF System Model ..........................................................25</td>
</tr>
<tr>
<td>3</td>
<td>Current Study Initial Model of Ratee Accountability Within a MSF System ....30</td>
</tr>
<tr>
<td>4</td>
<td>Current Study Alternative Model of Ratee Accountability Within a MSF System ....40</td>
</tr>
<tr>
<td>5</td>
<td>Path Coefficients of Initial Model of Ratee Perceptions of Accountability Within a MSF System ..........................................................67</td>
</tr>
<tr>
<td>6</td>
<td>Omitted Parameter Path Coefficients of Initial Model of Ratee Perceptions of Accountability Within a MSF System ..........................................................69</td>
</tr>
</tbody>
</table>
CHAPTER 1
INTRODUCTION

With the widespread extension of traditional performance review and professional
development processes by organizations investing valuable resources in multi-source
feedback, the need to ensure that multi-source feedback leads to performance
improvement is increasing in importance. The current study considers this important
issue by testing several arguments made by London, Smither and Adsit (1997) regarding
how to enhance the ratee accountability within a multi-source feedback process so as to
increase desired process outcomes.

Multi-source feedback (MSF) is also referred to as 360-degree feedback and upward
feedback in various organizations and the research literature. In addition to receiving
performance ratings from one’s manager, recipients of MSF may receive performance
ratings from subordinates, peers, other senior leaders, internal or external customers and
vendors depending on who represents the “full circle” of people with whom the ratee
regularly works (Collins, 2000). The ratee usually provides self-ratings on a standardized
survey that are combined with survey ratings from others to create a quantitative and
qualitative summary of performance feedback. Typically the ratee is then expected to
make appropriate behavior changes based on the feedback to improve personal
effectiveness (Wise, 1997). Some estimate that at least ten to fifteen percent of
organizations use some form of MSF for development or administrative purposes
(Yammarino & Atwater, 1997). Others estimate that all Fortune 500 companies are
either using or considering the use of MSF (London & Smither, 1995). Furthermore,

With the widespread use of MSF and significant investment that companies are making in MSF, an important question emerges for both researchers and practitioners – Does MSF lead to behavior change and performance improvement throughout the organization? Successful implementation of MSF systems rests on the assumption that by providing managers with feedback on their effectiveness from multiple perspectives they will use the information to become more effective (London et al., 1997). However, experts note that feedback is simply information that may or may not lead to behavior change (Balcazar, Hopkins, & Suarez, 1985; Ilgen, Fisher, & Taylor, 1979; Kluger & DeNisi, 1996; Latham & Locke, 1991). In fact, a meta-analysis reviewing the effects of feedback interventions on performance provided evidence that in general feedback leads to performance improvement, yet one third of the effects reviewed in the study indicated that feedback negatively impacted performance (Kluger & DeNisi, 1996).

In response to the evidence that MSF may not lead to performance improvement, London et al. (1997) propose that ratee accountability for using feedback can positively influence ratee usage of feedback for goal setting and performance improvement. While initial evidence has demonstrated support for the ratee accountability portion of London et al.’s theoretical framework (Walker & Smither, 1999; Leonard & Williams, 2001), much remains to be learned regarding the measurement of ratee accountability and the predictors and outcomes of ratee accountability within MSF systems.

The purpose of this study, therefore, is to build on theoretical and empirical research of factors influencing MSF outcomes. Specifically, hypotheses from the ratee
accountability portion of the London et al. (1997) theoretical framework and findings from empirically-tested feedback models (e.g., McDonald & Kavanagh’s, 1998; Leonard & Williams, 2001) are examined in this study. A scale that measures ratee perceptions of accountability to use MSF for behavior change and performance improvement was developed and tested with two manager samples in an organizational setting and predictors and outcomes of ratee accountability within MSF systems were examined. Few have attempted to study ratee perceptions of accountability and test related predictors of MSF outcomes. Findings of this study not only contribute to a broader understanding of MSF systems for researchers, but also benefit practitioners by testing the impact of individual differences and interventions intended to increase the organization’s return on investment in MSF.

This chapter begins by presenting an overview of the relevant MSF literature. Then the theoretical and empirical literature surrounding accountability is explored and the application of accountability to MSF systems is highlighted with special focus on discussing London et al.’s (1997) framework of accountability within MSF systems. Initial empirical evidence in support of London et al.’s framework is next examined. Finally, a more extensive study to test a model of ratee accountability within MSF systems is presented.

**Multi-Source Feedback**

Numerous trends in corporate America have led to the increasing popularity of MSF as a useful management tool. Decentralization and flatter organizations have made it more difficult for the boss to shape behavior (Timmreck & Bracken, 1997). Managerial jobs are becoming increasingly complex which limits the value of the manager as the sole
source of performance feedback (London & Smither, 1999). In addition, a “war for
talent” has forced organizations to more quickly identify their talent and accelerate the
development of talent (Chambers, 1998). Also due to the talent war and investment in
talent development, organizations are seeking ways to retain their talent. In response to
this retention effort, the Gallop Organization conducted research with over 80,000
managers in over 400 organizations and found significant evidence that employees leave
leaders and not organizations (Buckingham & Coffman, 1999). Thus, the movement to
use MSF for identifying, developing, and often rewarding effective leaders has built
momentum. While MSF is usually used for developmental purposes, more organizations
are looking to MSF systems for help with making administrative decisions such as
performance reviews, compensation, high potential identification and promotion
(Timmreck, 1995). Timmreck and Bracken (1997) report that organizations are also
using MSF for such purposes as transitioning to a coaching or feedback climate,
communicating desired behaviors, and supporting teamwork.

Ilgen et al. (1979, p. 349) emphasize that “feedback about the effectiveness of an
individual’s behavior has long been recognized as essential for learning and for
motivation in performance-oriented organizations.” Multi-source feedback programs
simply extend this premise by acknowledging that no one person or perspective can offer
feedback that fully reviews an individual’s effectiveness (Lawler, 1967; Hoffman, Elder,
Stierwalt, Kihm, & Hakel, 1998). MSF enables ratees to obtain feedback from additional
sources that have the best opportunities to observe certain behaviors (e.g., subordinates
rating leadership behaviors, peers rating teamwork across the company) (London &
Smither, 1995). According to London and Smither (1995), organizations that use MSF
programs assume that (a) MSF helps ratees gain additional insight about how they are viewed by others in relation to goal accomplishment and self-competence, and (b) MSF helps ratees identify areas for development and performance improvement (Tornow, 1993). In addition, other often anticipated benefits from MSF include: the reduction of individual appraisal biases based on prejudicial beliefs or limited interaction (Albright & Levy, 1995), creation of a safe forum for subordinates to provide managers with honest feedback about undesirable work behaviors, and an increase in informal performance feedback throughout the organization (Hoffman et al., 1998).

Organizations that include self ratings in MSF programs typically focus ratee attention on similarities and discrepancies between self and other ratings. Thus, much of the study surrounding MSF has focused on topics such as self-rating accuracy (Yammarino & Atwater, 1997), self-other rating discrepancies (Nilsen & Campbell, 1993), participant reactions to feedback (Williams & Lueke, 1998), and comparison of feedback sources (Bettenhausen & Fedor, 1997; Hoffman et al., 1998). In addition, the practical issues of how to design, deliver and apply MSF have often been addressed for organizational practitioners (Bracken, 1996; London & Beatty, 1993; Van Velsor & Leslie, 1991; Van Velsor, Leslie, & Fleenor, 1997). While these “how to” discussions are valuable for organizations interested in using MSF, less attention has focused on addressing the critical question of whether MSF leads ratees to improve their performance.

An early effort to study the impact of upward feedback was made by Hegarty (1974) who conducted a longitudinal study and found that supervisors improved performance after receiving upward feedback according to subsequent subordinate ratings. Later, Van Velsor, Ruderman, and Phillips (1991) reported “preliminary findings” with a small
sample of managers that indicated that some managers improved performance (based on subordinate ratings) after receiving low evaluations from subordinates. Hazucha, Hezlett, and Schneider (1993) reported skill increases and higher self-coworker agreement after a two-year follow-up to MSF. However, Walker and Smither (1999) point out that the Hazucha et al. (1993) findings were based on only 48 managers of the original 198 managers due to a significant decrease in the follow-up response rate. Additional evidence supporting the upward feedback—performance relationship (based on improved subordinate ratings over time) was found by Bernardin, Hagan, Ross, and Kane (1995) and Atwater, Roush and Fischthal (1995). Furthermore, Atwater et al. (1995) found that student leaders in their U. S. Naval Academy sample, who initially received student follower ratings that were greatly below self-ratings, improved the most.

Upward feedback given to 238 managers of a large international organization at two points in time (6 months apart) was examined by Smither, London, Vasilopoulos, Reilly, Millsap, and Salvemini (1995). Their findings revealed that managers who initially were rated moderate or low by subordinates improved their performance according to subordinate ratings, and their findings ruled out regression to the mean as the only cause of the improvement (Smither et al., 1995). In a follow-up study with the same sample of managers 2.5 years later, Reilly, Smither, and Vasilopoulos (1996) examined a third administration of upward feedback for 171 of the original 238 managers and then examined a fourth administration of upward feedback for 92 of the managers. Results from the Reilly et al. (1996) study indicated that the managers with initial low feedback ratings sustained their performance improvements found by Smither et al. (1995) over the 2.5 years.
Another longitudinal study examined the impact of upward feedback on a sample of supervisors at a state police agency (Atwater, Waldman, Atwater, & Cartier, 1998). Atwater et al. used random assignment to study the performance of two groups of supervisors of which only one group received upward feedback at Time 1, while the other group did not. A significant improvement in performance over time was found for the supervisors who received upward feedback at Time 1, yet there was not a significant improvement in performance over time found for the supervisors who did not receive feedback at Time 1. In addition, within the group of supervisors who received feedback at Time 1, Atwater et al. found a positive relationship between the supervisors’ acceptance of the feedback and improvement over time.

Finally, Walker and Smither (1999) extended prior longitudinal research to review five years of upward feedback in relation to performance with a sample of 252 managers from a financial services company. Not only were Walker and Smither interested in examining whether performance improvement after upward feedback could be sustained for five years, but also whether what the ratee did with the feedback had any impact on performance improvement. Specifically, Walker and Smither examined the extent to which holding follow-up feedback discussion meetings with subordinate raters was related to performance improvements following the upward feedback. First, their results indicated that managers who initially received low or moderate upward feedback significantly improved their scores over five years of annual upward feedback administrations. In addition, Walker and Smither demonstrated that the performance improvement was beyond what could be expected due to regression to the mean. Furthermore, their results revealed that: (a) the performance of managers who met with
subordinate raters to discuss their feedback improved more than other managers and (b) that in years that managers held these follow-up sessions with their subordinate raters, they improved more than in years when they did not debrief their feedback with their raters (Walker & Smither, 1999).

The significance of Walker and Smither’s (1999) study was that it was the first attempt to examine the impact of what ratees do with their feedback in relation to performance. Based on the longitudinal studies described above, there is evidence that upward feedback produces performance improvement, especially for ratees with initially poor or moderate feedback. However, Kluger and DeNisi (1996) found with their comprehensive meta-analysis that one third of the effects of feedback intervention studies they reviewed produced negative effects on performance. London, Smither and Adsit (1997) make an argument that ratees’ accountability for using feedback can positively influence goal setting and performance improvement. Walker and Smither’s (1999) findings provide initial evidence to support London et al.?s (1997) ratee accountability theory.

Defining Accountability

“Social control rests on a society’s ability to hold people responsible for their conduct and to sanction violations of important prescriptions,” (Schlenker, Britt, Pennington, Murphy, & Doherty, 1994 p. 632). According to Frink and Klimoski (1998), social control becomes even more complex and critical in organizations that exist to be productive and require predictable and conforming behaviors. Thus, formal social control in organizations often takes the form of reporting relationships, performance evaluations, disciplinary procedures, reward systems and training programs to name just
The complexity of organizations also leads to less formal forms of social control including corporate culture, work team norms, corporate values, and loyalty to work relationships (i.e., with customers, coworkers) (Frink & Klimoski, 1998). In addition, Schlenker and Weigold (1989) propose the idea of “self-accountability” that points to the control one exerts over one’s own behavior due to ethics and personal values. Others note that “accountability arises from self-control and social control,” (Dose & Klimoski, 1995; London et al., 1997, p. 167).

Despite the frequent reference to and application of the term “accountability” in society and in organizations, the research literature has given little attention to the concept until recently. Frink and Klimoski (1998) identified fewer than fifty references related to accountability in the academic literature in management and psychology, and they report that the references found were from only five research teams. The following discussion presents an overview of the accountability literature including (a) conceptual models of accountability; (b) accountability in decision making; (c) accountability in performance evaluation; and (d) accountability in MSF.

Conceptual Models of Accountability

The related concept of responsibility was introduced by Greek philosophers such as Plato, Aristotle and Zeno in writings of justice, duty, and punishment (Schlenker et al., 1994). From early Greek writings to current times, responsibility has been discussed in terms of two main components: (a) causality and (b) answerability (Davis, 1973; McKeon, 1957; Schlenker et al., 1994). In presenting a triangle model of responsibility, Schlenker et al. (1994) use a legal or moral perspective to discuss both causality and answerability components. They describe the causality component of responsibility as
“Who did it and why?” while the answerability component is described as “Who is deserving of positive or negative treatment because of the event?” (p. 633). It is the latter component or liability for sanctions based on rules that the authors define as accountability. Specifically, accountability is defined as “being answerable to audiences for performing up to certain prescribed standards, thereby fulfilling obligations, duties, expectations and other charges,” (Schlenker et al., 1994, p. 634). The authors further argue that accountability is the mechanism by which society exerts control on individuals’ behavior by prescribing behavior, making judgments based on individual behavior and then rewarding or disciplining based on the judgment.

Schlenker et al. (1994) proposed a responsibility triangle that is composed of the linkages between three critical components: (a) prescription for behavior (prescription-event link); b) an actor that is identified with the prescription (prescription-identity link); and (c) the actor is connected to the event and seems to have some form of control over the event (identity-event link). The responsibility triangle becomes the “accountability pyramid” when there is some form of an audience in a position to look down on the three critical components and linkages and to make a judgment and sanction in reference to the actor’s behavior (Schlenker et al., 1994, p. 635). Thus, the authors argue that responsibility is a function of the combined strength of the linkages between the three critical components as perceived by the audience. High responsibility gives purpose and direction to an actor’s behavior and leads the actor to receiving rewards or punishment following her behavior (Schlenker et al., 1994).

A lab study conducted with a sample of undergraduate students and an experimental design to test the accountability pyramid resulted in strong support for the model
(Schlenker et al., 1994). Participants were presented with various actor and event vignettes in which strength of the links was manipulated (i.e., one weak link and two strong links; three strong links; three weak links). After reviewing the vignettes, participants were asked to make responsibility judgments based on the vignettes. Results indicated that judgments were made in positive relationship to the strength of the linkages such that the actor was seen as least responsible when all three links were weak and most responsible when all three links were strong. In addition, the participants perceived the actors to be more determined in direct relationship to the additive strength of the linkages.

Similar to Schlenker et al., (1994), Cummings and Anton (1990) described responsibility as a related concept subsumed within accountability (Frink & Klimoski, 1998). They defined responsibility as, “the personal causal influence on an event,” (Cummings and Anton, 1990, p. 262). They further propose that accepted responsibility or “felt responsibility” leads to accountability when three conditions hold true: (a) the actor has a capacity for rational behavior; (b) there is a condition of foreseeability; and (c) there is a deviation from expectations. The last deviation condition distinguishes the Cummings and Anton (1990) theory from other accountability theories (Frink & Klimoski, 1998).

Frink and Klimoski (1998) extend earlier theoretical work by defining accountability as “the perceived need to justify or defend a decision or action to some audience(s) which has the potential reward and sanction power, and where such rewards and sanctions are perceived as contingent on accountability conditions,” (p. 9). Their definition builds on the definitions noted above, but also emphasizes the possibility of social context, multiple
audiences and the subjectivity of rewards as important factors. Frink and Klimoski use role theory (Katz & Kahn, 1978) to create a more integrated framework for discussing accountability in an organizational context. Role theory emerged as a way to describe how organizations as social systems coordinate work to predict and control behavior (Frink & Klimoski, 1998; Katz & Kahn, 1978). Frink and Klimoski argue that accountability has also emerged as an avenue for predicting behavior and thus, maintain that role theory is useful for building a more complete theory of accountability. They posit that accountability then becomes a situation of role taking and role making and that the combined linkages that Schlenker et al. (1994) presented in their responsibility triangle and accountability pyramid translate to role expectations under social control (Frink and Klimoski, 1998).

According to Frink and Klimoski (1998) the advantages of considering accountability in terms of role theory include using the “relationship” as the unit of analysis, since other accountability frameworks tend to focus on an event or a decision that must be made separate from a social context. Thus, they propose that different variables (e.g., duration, predictability, and quality) related to the work relationship between an actor and audience(s) will affect accountability outcomes. Another advantage is that role theory emphasizes individual differences between agents (role takers) and principles (role makers) which accountability studies tend to overlook. An exception to be discussed below is Frink and Ferris (1999) who studied accountability as a moderator of the conscientiousness-performance relationship. A third advantage that role theory brings to the study of accountability is to introduce the idea of multiple expectations due to multiple relationships. The role taker has to balance the expectations and consider them
in relation to self-expectations. Frink and Klimoski suggest that this not only has practical implications for the importance of aligning expectations through HR systems, but also holds implications for selecting individuals whose self-expectations fit organizational expectations. Finally, Frink and Klimoski note the role theory advantage of bridging several levels of analysis. Typically, accountability has been studied inadequately at the individual or work unit levels. They propose that role expectations are not only set at the individual and work unit levels, but also at the organizational level (i.e., organizational values and culture). Frink and Klimoski (1998) argue that various levels of analysis must be considered for an accountability framework to be systemic and thus, adequate.

**Accountability in Decision Making**

Research that has empirically examined accountability in relation to decision making has demonstrated that the experimentally manipulated condition of having to justify one’s decision to others affects how one thinks and what one thinks (Lerner & Tetlock, 1999; Tetlock, 1983, 1985). According to London et al. (1997), the obligations to make a decision and then to justify a decision operate as separate accountability forces. However, having to justify one’s decision creates a stronger accountability effect by causing people to think harder and more carefully about decisions (Ford & Weldon, 1981; London et al., 1997). Further evidence reveals that accountability is most likely to increase cognitive effort when a decision maker is made accountable to justifying her decision prior to making the decision and when she must justify the decision to an audience with unknown views (Lerner & Tetlock, 1999).
Tetlock’s (1983) empirical study in which participants reviewed criminal cases and assessed guilt of the defendant found evidence that in accountability conditions, participants’ free recall improved and primacy effects were reduced. However, Tetlock (1983) found that the quality of decisions may also be affected by conditions of accountability, such that the decision maker may lean toward the opinion of the audience to whom he will have to justify his decision. In a later study, Tetlock (1985) demonstrated that conditions of accountability eliminated over attribution effects or the fundamental attribution error often made by decision makers who are quick to draw conclusions about others based on their personalities and attitudes. In Lerner and Tetlock’s (1999) review of the accountability literature, they pose the question of whether accountability affects what and how people actually think (i.e., cognitive process) or only what they say they think (i.e., self presentation). The authors conclude from the literature that “neither the cognitive process nor the temporary self presentation interpretation holds all the time,” but instead findings are dependent on the moderators under study and the statistical analysis method used (Lerner & Tetlock, 1999, p. 266). Findings in support of the self presentation argument point to a coping strategy that decision makers in situations of accountability may use. The coping strategy involves seeking the obvious accepted or expedient position in order to be seen as competent and to make a good impression (Baumeister, 1982; London et al., 1997; Simonson & Nye, 1992).

**Accountability in Performance Evaluation**

Studies that have examined performance rater accountability have revealed that in cases of poor performance, when raters expect having to share feedback face-to-face as opposed to giving written or anonymous feedback, rating distortion increases in terms of
amount and direction (Fisher, 1979; Klimoski & Inks, 1990; Ilgen & Knowlton, 1980).
Other research has indicated that raters who believe they are accountable to justify their
ratings to others may provide more accurate ratings (Mero & Motowidlo, 1995).
Furthermore, research indicates that the intended purpose of the performance review
affects rater cognitive processes and behavior such that when raters perceive that their
ratings will have important consequences or personal implications, they are more
observant and careful in making their ratings (Murphy, Balzar, Kellam, & Armstrong,
1984; Mero & Motowidlo, 1995).
Performance appraisal research that includes a focus on accountability mainly has
examined accountability in reference to rater behavior and has widely ignored examining
the accountability of ratees to use performance review information to improve their
performance (London et al., 1997). However, a few researchers have empirically
examined the performance-accountability relationship. Frink and Ferris (1998)
conducted both a lab study with undergraduate students and a field study with
telemarketers to examine how manipulated conditions of accountability influence task
performance and goal uses. Results from both studies revealed that participants
approached tasks and set goals differently based on accountability conditions. According
to the researchers, under conditions of low accountability, participants set goals to direct
performance, while under conditions of high accountability, participants set goals for
impression-management purposes. Higher goals were set under conditions of high
accountability. Frink and Ferris (1998) used subgroup correlational analyses to test for
an interaction of accountability and goals on performance after performing a median split
on the felt accountability variable to create low and high felt accountability subgroups.
In the lab study they found that in a condition of high accountability, the goal-performance relationship was negative, yet the goal-performance correlation was positive in the no accountability condition. In addition, the authors found that the difference between the goal-performance correlations was significant. The telemarketer field study results demonstrated the same accountability and goal interaction effect with the calls per hour goal-performance relationship, but not with the revenue per hour goal-performance relationship (Frink & Ferris, 1998).

In a separate study, Frink and Ferris (1999) conducted another lab experiment with undergraduate students and with a similar cognitive math-verbal task and accountability manipulation. The authors found that when participants were told prior to the task that they would be meeting with a group leader to discuss the task after the final trial (i.e., condition of accountability), the participants who were more conscientious performed the task better than participants who were less conscientious. The same effect was not found in the non-accountable condition. Thus, the authors concluded that accountability moderated the conscientiousness-performance relationship (Frink & Ferris, 1999).

Finally, in another performance appraisal study, the researchers examined the influence of organizational and individual factors on employees’ perceptions about the accuracy of their performance feedback given by supervisors and on employee intentions to use feedback to improve performance (McDonald & Kavanagh, 1998). Although the authors did not consider accountability in their feedback model, the study design and results have relevance to the current study. The researchers tested a feedback model with a sample of 85 grocery store managers in an effort to address the lack of empirical study focusing on factors that influence employee motivation to use performance appraisal
feedback to improve job performance. Results from causal analyses used to evaluate the model found significant statistical support for several predicted relationships within the model. Strong support was found for the hypothesis that predicted the higher feedback discrepancy (i.e., between self and supervisor ratings), the more the employee perceives the feedback to be inaccurate. However, support was not found for the hypothesis that the greater the feedback discrepancy, the stronger the intention to use feedback to improve work performance. Additional evidence was found to support that perceived feedback accuracy was positively related to intentions to use feedback for performance improvement with a significant path coefficient ($B = .37, p < .05$). Furthermore, evidence was found in support of a positive relationship between feedback accuracy and employees’ perceived capacity to improve work performance (i.e., self efficacy) with a significant path coefficient ($B = .34, p < .05$). Also evidence was found in support of a positive relationship between capacity to improve and intention to use feedback to improve work performance with a significant path coefficient ($B = .49, p < .05$).

However, the researchers’ predictions of relationships between organizational variables and outcomes were not supported. The proposed significant positive relationship between organizational support for continuous learning and intentions to use feedback to improve performance was not supported, and the prediction of a significant negative relationship between organizational constraints and motivation to use feedback was also not supported. The researchers suggested that their mixed findings were perhaps due to the small sample size or to variables missing from their model (McDonald & Kavanagh, 1998). The current study builds on McDonald and Kavanagh’s findings by examining ratee perceptions of accountability as a variable in the feedback model, in addition to
studying several individual and supervisory support factors in relation to intentions to use multi-source feedback to improve work performance.

**Accountability in Multi-Source Feedback**

Similar to the research of accountability in performance appraisal, the research of accountability in MSF focuses mainly on raters and ignores ratees (London et al., 1997). This lack of research examining ratee accountability in MSF has serious implications since the practice of MSF is so popular and relatively expensive as an organizational intervention. London et al. (1997) point out that quite often management distributes MSF reports without support for ratees and assumes behavior change and performance improvement will be natural outcomes. However, based on Kluger and DeNisi’s (1996) meta-analysis, evidence indicates that one third of feedback intervention effects are performance detractions.

To address this gap in the research, London et al. (1997) build on earlier research regarding accountability and MSF to propose a framework of accountability in MSF and offer several hypotheses for researchers to test empirically. London et al. (1997) refer to goal-setting theory (Locke & Latham, 1990) and control theory (Carver & Scheier, 1982) to build their framework, since these theories maintain that goals and specific feedback are critical to performance improvement. The authors define accountability as “accepting and meeting one’s personal responsibilities, being and/or feeling obligated to someone else or oneself, or having to justify one’s actions to others about whom we care,” (London et al., 1997, p. 163). Whereas London et al.’s model of accountability in MSF and framework of accountability components relate to both raters and ratees, for purposes of this study the model and framework will be discussed in terms of ratees.
London et al. present a model of accountability as shown in Figure 1 that includes the following six components: (a) sources of accountability (e.g., supervisor, subordinates, self, organizational policies); (b) the objective (i.e., what the actor is being held accountable for); (c) internal or external accountability forces used by the sources to affect actor feelings of accountability (e.g., internal forces such as the desire to gain recognition or avoid embarrassment and external forces such as positive or negative financial outcomes); (d) accountability mechanisms (i.e., ways the sources activate the forces, that is, ways to hold someone—or oneself—accountable); (e) psychological processes and characteristics of the actor that determine what forces can be activated; and (f) the actor’s feelings of accountability and resulting behaviors (London et al., 1997, pp. 169-170).

The authors present the *sources of accountability* as the audience who imposes accountability on the actor, along with monitoring and enforcing accountability on the actor based on his reactions. The audience or sources may include one’s conscience if the source is self. According to London et al. (1997), the sources affect the actor’s perceptions of accountability and provide implicit or explicit consequences. The *objective* in London et al.’s model simply represents the content or focus of accountability. The authors suggest that MSF ratees can be held accountable for such responsibilities as reviewing their MSF results, discussing their results with a supervisor, basing development efforts on results and demonstrating behavior change and performance feedback on results.

According to London et al. (1997), the *accountability forces* presented in their model symbolize the power behind the imposed accountability. Depending on the source and
Figure 1

A Model of Accountability Processes

the actor, these forces may be internal (e.g., self-efficacy, morality, self-control) or external (e.g., financial rewards, supervisor control, or job security). The authors present an overview of potential accountability forces linked to sources that include achievement motivation from self, reward power from supervisors, affiliation with subordinates or peers, social comparison with peers, dependence on customers, and climate supportive of continuous improvement in terms of an organizational level source. According to the authors, accountability mechanisms are “the means by which the accountability forces are transformed into feelings of accountability,” (London et al., 1997, p. 171). Examples of potential mechanisms ratees may encounter are self ratings presented in comparison to other ratings, performance review and compensation links to MSF results, leadership reputation with subordinates, expertise sought by peers, repeat business by customers, and results incorporated into organizational decision making. Furthermore, the authors present interventions that may facilitate accountability which include: surveys repeated over time, group discussion of MSF results with subordinates, presentation of normative data that includes peer comparisons, discussion of results with supervisor, and organizational rewards for continuous improvement.

London et al. (1997) propose several characteristics and psychological processes that may make an actor more sensitive to accountability forces. For instance, the authors maintain that processes such as self efficacy (Bandura, 1982), perceptions of MSF process fairness (Greenburg, 1987), and impression management (Baumeister, 1982) may make an actor more sensitive to accountability forces. In addition, self-monitoring (Snyder, 1987), the need for approval (Mero & Motowidlo, 1995), and susceptibility to others’ wishes (Klimoski & Inks, 1990) are proposed as individual characteristics that
may lead to a greater sensitivity to accountability forces. The authors further maintain that the actor’s reactions to accountability forces and mechanisms may be positive (e.g., effort, persistence, conformity) or negative (e.g., opposition, depression, confrontation).

London et al.’s (1997) ratee accountability model rests on three assumptions of how the six components work together to lead to outcomes. The authors’ assumptions include: (a) “equifinality” or the idea that there is more than one way to achieve the accountability outcomes and that no one source is any more important than another, so all sources should be considered with interventions; (b) “mutual reinforcement” or the idea that various accountability forces and mechanisms work to reinforce each other and may be important simultaneously; and (c) “multiple outcomes” or the idea that the same source, force or mechanism may result in functional and dysfunctional outcomes (e.g., sharing MSF results with supervisor may lead to increased feelings of accountability and defensiveness) (London et al, 1997, p. 175).

Several hypotheses emerge from London et al.’s model of ratee accountability. The authors propose that “ratee accountability may be increased by requiring ratees to discuss feedback with coworkers (raters), prepare a development plan, and share the development plan with others,” (London et al., 1997, p. 177). In addition, the authors propose levels of accountability in relation to MSF administrative applications. A positive relationship is predicted between ratee accountability and administrative uses of feedback by the ratee’s manager in the form of performance appraisal decisions and decisions regarding the ratee’s compensation, promotion or other rewards. A positive relationship is also predicted between ratee accountability and facilitator-guided use of feedback (e.g., the ratee discusses MSF results with a facilitator, subordinates and boss; the ratee creates a
development plan based on the feedback and shares the plan with the boss; and the ratee has follow-up meetings with the facilitator to discuss approaches and best practices) (London et al., 1997). Finally, the authors maintain that behavior change and performance improvement will more likely be outcomes of MSF systems in organizations that establish sources and mechanisms of accountability that facilitate and reinforce accountability to self and others through interventions described above (London et al., 1997).

As noted earlier in this review, the first empirical study to offer initial evidence in support of London et al.’s (1997) model of ratee accountability was conducted by Walker and Smither (1999). Walker and Smither examined upward feedback ratings over five annual administrations of an upward feedback survey to 252 bank managers. In years 2, 3, 4, and 5 the survey asked subordinates whether the manager had conducted a feedback session with the subordinates to discuss the prior year feedback results. The feedback session item was rated on a five point Likert scale (i.e., 1 = “Strongly Agree” to 5 = “Strongly Disagree”), was treated as a continuous variable and was scored for each manager as the average subordinate rating. In the organization’s MSF program, feedback session training was provided to all ratees during year 1. Through hierarchical regression analyses, the researchers found that improvement in upward feedback ratings from the previous year was greater for managers who held feedback sessions with their subordinates to discuss the feedback from the prior year than for managers who did not hold feedback sessions (Walker & Smither, 1999). Furthermore the researchers found with repeated measures regression and hierarchical regression analyses that holding a feedback session was related to improvements in ratings regardless of the manager’s
initial score. The researchers concluded that meeting with subordinates to discuss upward feedback enhances a ratee’s likelihood of improving feedback scores over time (Walker & Smither, 1999). However, Walker and Smither note that they were unable to measure the extent of ratees’ perceptions of accountability to use their feedback for behavior change and performance improvement and whether holding feedback sessions increased ratees’ perceptions of accountability as proposed by London et al. (1997). The researchers suggest that future research should examine perceptions of accountability to different sources with a questionnaire (Walker & Smither, 1999).

In a more recent study, Leonard and Williams (2001) made the first attempt at empirically developing a scale to measure MSF ratee perceptions of accountability and to test several components of London et al.’s (1997) model of accountability within MSF systems (see Figure 2). The researchers developed an eight-item, two-factor perceptions of accountability scale to measure self-imposed accountability and accountability imposed by others. They administered a paper and pencil questionnaire with the accountability scale to 104 employees in a marketing research organization before the employees received their written MSF reports. Factor analyses supported their two-factor structure including factor one—accountability to self (4 items; $\alpha = 0.85$; e.g., “I feel responsible for using the feedback I receive from my organization’s MSF system.”) and factor two—accountability to relevant others in the organization (4 items; $\alpha = 0.74$; e.g., “My supervisor will notice if I make changes as a result of the feedback I receive.”) (Leonard & Williams, 2001, p. 7-8). The questionnaire also included measures of self-efficacy, need for achievement, perceptions of the work environment (i.e., organizational support for employee development), supervisor support for development, and situational
Figure 2
Accountability in MSF System Model

constraints. Two months following the distribution of MSF reports, the ratees were sent another paper and pencil self-report questionnaire measuring their development behaviors, while the ratees’ supervisors were sent a questionnaire asking them to report on the employees’ development behaviors. Development behaviors were assessed with four measures outlined by Noe, Wilk, Mullen, and Wanek (1997). The first three ratee self-report measures included: participation in development activities (e.g., “I discussed my feedback with my supervisor to gain further information about the MSF ratings.”); intentions to participate in future development activities (e.g., “I intend to seek out a mentor to guide me in developing my skills after receiving my MSF.”); and frequency of participation (e.g., “In the past two months, how often have you sought advice or mentoring from another peer.”). The supervisor report questionnaire assessed the fourth development behavior measure with an 11-item supervisor-report scale (e.g., “I believe that this employee has set clear goals for his/her development after receiving the MSF ratings.”).

With a series of mediated regression analyses using the approach recommended by Baron and Kenny (1986), Leonard and Williams (2001) found significant evidence in support of the London et al. (1997) ratee accountability framework. Perceptions of accountability were shown to either fully or partially mediate most of the predicted relationships between forces, mechanisms and development behaviors. Although the researchers found psychometric support for the two-factor perceptions of accountability measure and found slightly more significant findings related to the self-imposed accountability measure, they suggest that future research should “examine whether the two construct conceptualization of accountability is useful” (Leonard & Williams, 2001,
They also recommend that future research designs extend the length of time in measuring development behaviors after the ratees receive their MSF results (i.e., longer than two months after receiving MSF). Furthermore, this study used the same sample to develop and test the accountability scales and did not include actual performance criterion measures beyond self-report and supervisor report measures of participating in development activities. However, the study did provide initial evidence of the significant role accountability plays within MSF systems, along with providing practitioners insight regarding interventions to enhance the effectiveness of MSF outcomes. The current study builds on Leonard and Williams’ (2001) findings by addressing several of the limitations of their study to further test a ratee accountability scale within London et al.’s (1997) accountability framework.

Summary

To summarize, high-performing organizations will continue to seek ways to provide individuals with essential performance feedback that facilitates learning and motivation to improve performance. Multi-source feedback programs will likely continue to serve this need for organizations as they enable individuals to receive performance-related information from multiple perspectives that otherwise would be unavailable. The challenge remains for practitioners to maximize the effectiveness of MSF programs by incorporating interventions to enhance performance improvement based on the ratees’ MSF. No longer can decision makers assume that ratees will automatically take action with their MSF to improve their performance.

Empirical research examining factors that influence ratees to use performance feedback for performance improvement is somewhat lacking. However, theoretical work
has presented a strong argument that sources of accountability and mechanisms and interventions built into MSF programs will positively affect preferred MSF outcomes (e.g., performance improvement). Two studies have provided initial empirical evidence in support of this theory (e.g., Leonard & Williams, 2001; Walker & Smither, 1999). Other empirical research has demonstrated positive relationships between conditions of accountability and cognitive effort in decision-making (Lerner & Tetlock, 1999); conditions of accountability and quality of performance evaluations (Mero & Motowidlo, 1995; Murphy et al., 1984); and conditions of accountability and cognitive task performance outcomes (Frink & Ferris, 1998). However, additional research is needed to examine perceptions of accountability to use MSF for performance improvement in work settings rather than simply manipulating conditions of accountability in a lab with undergraduate students. The theoretical groundwork and initial empirical work exists to support further examination of the impact of individual factors, work group factors and organizational factors that are predicted to influence perceptions of accountability and MSF outcomes. Finally, there is significant practical merit in the direction of this study for organizations which seek performance improvement outcomes from expensive MSF programs.

**Purpose of Study**

The purpose of this study is to build on existing empirical and theoretical research of factors influencing MSF outcomes. By developing a scale that measures ratee perceptions of accountability to use feedback for performance improvement and by testing it in an organizational setting, this study extends prior accountability research that has mainly relied on experimental accountability manipulations in lab settings.
Development and testing of a ratee accountability scale with two different manager samples using a performance criterion addresses a gap in the MSF literature. Furthermore, this study examines critical individual, work group and organizational factors proposed to affect ratee perceptions of accountability and to influence MSF outcomes. Results of this study benefits practitioners by testing the impact of MSF program interventions on ratee perceptions of accountability and on MSF outcomes. Thus, both researchers and practitioners alike may find value in results of this study for guiding future MSF and accountability research and MSF program implementation.

Building on London et al.’s (1997) theoretical framework of ratee accountability; McDonald and Kavanagh’s (1998) empirically tested feedback model; and Leonard and Williams’ (2001) empirical accountability study, the current study discusses and tests the following ratee accountability model (see Figure 3). The main components of the current study’s model include: (a) internal ratee forces; (b) manager support; (c) organizational support for continuous learning; (d) ratee perceptions of accountability to use MSF for performance improvement; (e) ratee intentions to use MSF to improve work performance; (f) ratee development actions taken to use MSF; and (g) ratee performance improvement. These model components are discussed next.

**Internal Ratee Forces**

According to London et al.’s accountability model (1997) internal forces serve as antecedents to ratee accountability feelings and behaviors within MSF systems (see Figure 1). London et al. (1997) discuss various individual difference factors as playing the proposed internal force role in the accountability model. The current study tests individual factors discussed by London et al. and others within an accountability model.
Figure 3

Current Study Model of Ratee Accountability Within a MSF System
that includes predictions of direct effects between several internal forces and a ratee’s intention to use MSF for performance improvement and indirect effects through ratee perceptions of accountability.

**Conscientiousness.** Frink and Ferris (1999) describe conscientiousness with terms such as dependability, persistence, and responsibility which all reflect how people allocate effort among decisions and tasks (McCrae & Costa, 1987). Researchers studying the conscientiousness-performance relationship have consistently found evidence supporting this positive relationship (Barrick & Mount, 1993; Barrick, Mount, & Strauss, 1993; Frink & Ferris, 1999). However, Frink and Ferris (1999) found in an experimental study that under conditions of no external accountability, the conscientiousness and performance relationship was not significant. In the same study, participants in a condition of external accountability who reported high levels of conscientiousness performed a cognitive task at higher levels than less conscientious participants in the same accountability condition (Frink & Ferris, 1999).

**Need for Achievement.** According to Steers and Spencer (1977, p. 473), the need for achievement represents “an experienced need to accomplish something important or to compete with a standard of excellence” (McClelland, Atkinson, Clark, & Lowell, 1953). Research has demonstrated that individuals high in need for achievement typically prefer situations where they receive clear feedback on task performance (Atkinson, 1958; Steers & Spencer, 1977), while individuals low in achievement motivation often prefer situations in which responsibility is shared with others (Steers, 1975). London et al. (1997) predict with their ratee accountability model that need for achievement serves as an internal accountability force or reason of why a ratee may feel
more accountable to use MSF for performance improvement. Furthermore, initial empirical evidence supports the mediator role of ratee perceptions of accountability between the need for achievement and ratee development behavior relationship (Leonard & Williams, 2001).

**Self-Efficacy to Use MSF.** Studies examining predictions of Bandura’s (1982) social learning theory have demonstrated that an individual’s motivation to improve work performance is directly related to the individual’s belief in his/her capability or self-efficacy to make performance improvements (McDonald & Kavanagh, 1998; Wood & Bandura, 1988). Locke and Latham (1990) found that employees give up when they do not believe that they have the ability to achieve a goal. McDonald and Kavanagh (1998) found strong empirical evidence indicating that a manager’s belief in her capability to (a) improve work performance areas identified in a performance appraisal process as needing improvement and to (b) further strengthen areas identified as strengths was directly related to the manager’s intention to use the feedback to improve work performance. London et al. (1997) propose that self-efficacy serves as another internal accountability force or reason of why a ratee may feel more accountable to use MSF for performance improvement. In addition, initial evidence supports the mediating role of ratee perceptions of accountability between the self-efficacy and ratee development behavior relationship (Leonard & Williams, 2001).

**Perceived Feedback Accuracy.** Locke and Latham (1990) point out that feedback perceived to be inaccurate will be dismissed or discounted. Individuals perceive that feedback is accurate to the extent that it is seen as consistent with how they perform their job (Ilgen et al., 1979). According to Murphy, Cleveland, & Mohler (2001), ratees who
perceive their feedback to be biased, unfair or inaccurate are less likely to expend energy in changing their behavior. Research results have supported a strong empirical relationship between perceptions of feedback accuracy and intentions to use feedback to improve performance (McDonald & Kavanagh, 1998). Leading experts in MSF maintain that perceptions of fairness of the MSF system and perceived accuracy of the MSF will affect a ratee’s reaction to the feedback and perceived accountability to use the feedback for behavior change and performance improvement (Greenburg, 1987; London et al., 1997; Murphy et al., 2001).

**Perceived Feedback Value.** There has been relatively little empirical research conducted to study what leads ratees to perceive MSF as useful or valuable as opposed to traditional top-down performance feedback (Murphy et al., 2001). Cleveland and Murphy (1992) suggest that the aggregated and anonymous ratings provided by MSF may allow raters to make more accurate ratings which may in turn enhance the ratee’s perception of the feedback value (Murphy et al., 2001). Other researchers have studied individual difference variables that may lead to greater acceptance and perceived value of MSF. McFarland and Miller (1994) propose that ratees who focus attention on the positive components of feedback are more likely to value the feedback and think that it can be used to enhance their performance (Murphy et al., 2001). Self-monitoring, feedback-seeking, and self-image variables have also been proposed as variables that may influence feedback interpretation (London & Smither, 1995). In addition, empirical findings indicate that the belief in the salience of feedback will positively influence an individual’s belief in ability to improve performance (McDonald & Kavanagh, 1998). Empirical research is needed to examine factors that influence a ratee’s acceptance and
perceived value of MSF (Murphy et al., 2001). There is no research to the author’s knowledge that has examined a predictive relationship between a ratee’s perception of MSF as valuable and useful and the ratee’s intention to use the feedback for behavior change. However, MSF experts maintain that individuals who believe MSF is biased and/or meaningless will be unlikely to exert much effort to change behavior based on ratings (Murphy et al., 2001). Therefore, it holds that individuals who believe their MSF is meaningful will be more likely to feel accountable to use their feedback to improve their work performance and will be more likely to intend to use their MSF to improve their work performance.

Organizational Commitment. Mowday, Steers, and Porter (1979, p. 226) characterize organizational commitment by “three related factors: (1) a strong belief in and acceptance of the organization’s goals and values; (2) a willingness to exert considerable effort on behalf of the organization; and (3) a strong desire to maintain membership in the organization.” Organizational commitment has been shown to be a somewhat stable predictor of employee turnover (Mowday et al., 1979; Porter & Steers, 1973; Steers, 1977); employee absenteeism (Steers & Rhodes, 1978) and a mild predictor of employee performance (Crampon, Mowday, Smith, & Porter, 1978; Meyer, Paunonen, Gellatly, Goffin, & Jackson, 1989; Mowday, Porter, & Dubin, 1974). Based on the theory underlying organizational commitment, it follows that employees with greater affective commitment to the organization’s goals and values would be willing to exert additional effort within MSF systems to help the organization achieve desired outcomes. Although London et al. (1997, p.169) make no specific reference to organizational commitment as an internal force, they do note that the “goal of meeting an obligation”
may be an internal force that could facilitate perceptions of accountability. Thus, based on Mowday et al.’s (1979) definition, the goals of the organizationally committed individual are very likely aligned with the organization’s goals, including goals set for the MSF program. The organizational committed individual may feel more accountable to use MSF for performance improvement.

Ratee Perceptions of Accountability to Use MSF

Frink and Klimoski (1998) note that a critical missing variable in most experimental studies that use manipulated accountability conditions is the content of accountability—or for what the actor is being held accountable (i.e., London et al.’s (1997) “objective”). Typically experimental research participants are considered either accountable or not accountable based on the experimental condition of the participant group. However, this simplistic approach ignores the complexity of organizational settings and overlooks issues necessary to understand in order to predict behavior. In London et al.’s (1997) discussion of an accountability framework within MSF systems, they propose that increasing ratee accountability will increase the likelihood that feedback will be used to improve performance. Furthermore, Walker and London (1999) recommend future researchers develop a questionnaire that measures the extent of accountability ratees feel in relation to different sources. To the author’s knowledge, only two studies have attempted to measure perceptions of accountability (e.g., Frink & Ferris, 1998; Leonard & Williams, 2001). Frink and Ferris (1998) administered a 3-item lab study manipulation check scale to measure telemarketer “felt accountability” to an evaluator, team, and team leader for task performance (e.g., “I feel I am accountable for my work to those who evaluate me.”). Leonard and Williams (2001) developed and tested an eight-
item, two-factor “ratee perceptions of accountability” scale with a sample of Marketing Research employees that was discussed earlier.

In the current study, ratee accountability is defined as the extent to which a ratee feels obligated or responsible to others and/or himself for using his feedback to improve his work performance; and believes that he will have to justify his actions taken or lack of action taken to use his feedback to others who have potential reward and sanction power (Frink & Klimoski, 1998; Klimoski & Inks, 1990; London et al., 1997; Tetlock, 1983).

Hypothesis 1: Ratee internal forces (e.g., conscientiousness, need for achievement, perceived feedback accuracy; perceived feedback value; and organizational commitment) will have both a direct effect on ratee intentions to use MSF for performance improvement and an indirect effect on ratee intentions to use MSF for performance improvement through ratee perceptions of accountability to use feedback for performance improvement.

External Forces/Mechanisms

Manager Support to Use MSF. Supportive actions taken by the ratee’s manager are also predicted to influence ratee perceptions of accountability. Ratee accountability will be high when managers support performance improvement based on MSF and incorporate measures into the ratee’s performance appraisal and compensation (London et al., 1997; Timmreck & Bracken, 1997). In addition, it is proposed that role modeling interventions that facilitate self-accountability by the ratee’s manager (e.g., sharing his/her own feedback and action plans with the ratee and other subordinates) will increase ratee perceptions of accountability (London et al., 1997; Peiperl, 2001). Furthermore, ratees’ managers who facilitate employee development by supporting ratee
implementation of development action plans will increase ratee perceptions of accountability to use MSF for performance improvement (Oldham, & Cummings, 1996).

Hypothesis 2: Manager support to use MSF will have a direct effect upon ratee perceptions of accountability to use MSF to improve performance.

Hypothesis 3: Ratee perceptions of accountability to use MSF to improve performance will mediate the relationship between manager support to use MSF and ratee intentions to use MSF for performance improvement.

Organizational Support for Continuous Learning. Empirical evidence indicates that employee efforts to improve work performance can be positively influenced by organizational support for continuous learning (Hazucha et al., 1993; Kavanagh, Lance, Gould, McDonald, & Black, 1996; Tracey, Tannenbaum, & Kavanagh, 1995). London et al. (1997) predict with their ratee accountability framework that an organizational climate that supports development and continuous improvement serves as an accountability force which encourages ratees to be more accountable for applying their MSF. Although McDonald and Kavanagh (1998) did not find support for their hypothesis that organizational support for continuous improvement will be strongly related to intentions to use performance appraisal feedback, they note that they may have left a variable out of their feedback model.

Hypothesis 4: Organizational support for continuous learning will have a direct effect upon ratee perceptions of accountability to use MSF to improve performance.

Hypothesis 5: Ratee perceptions of accountability to use MSF to improve performance will mediate the relationship between organizational support for continuous learning and ratee intentions to use MSF for improving work performance.
**Ratee Development Actions Taken to Use MSF**

London et al. (1997) discuss development actions that ratees can take with their MSF in terms of creating a development action plan with goals based on their MSF, working with a facilitator or coach to review and learn from their MSF, and conducting a follow-up discussion regarding their MSF with their raters. Walker and Smither (1999) demonstrated initial evidence that ratees who conduct follow-up feedback sessions with subordinates to discuss their upward feedback ratings improved their feedback scores in the subsequent year more than managers who did not conduct feedback sessions. Leonard and Williams (2001) defined ratee development actions in their study based on Noe, Wilk, Mullen, and Wanek’s (1997) definition and operationalization of development. According to Leonard and Williams (2001, p.6), Noe et al. (1997) defined development as “growing in the skills, behaviors, and abilities that are necessary for long-term personal effectiveness” and they operationalized development in the four categories of assessment, job experience, formal courses/programs and relationships. Leonard and Williams (2001) found initial evidence supporting direct effects of ratee perceptions of accountability upon ratee development behaviors. However, they did not test whether ratee development behaviors will have direct effects upon ratee performance improvement.

*Hypothesis 6: Ratee intentions to use MSF to improve performance will have a direct effect upon ratee development actions taken to use MSF.*

*Hypothesis 7: Ratee development actions taken to use MSF will have a direct effect upon ratee performance improvement.*
An Alternative Model

While existing empirical evidence cited above supports the current study’s positioning of ratee development actions within the Model of Ratee Accountability as shown in Figure 3, others have proposed that ratee development actions may appear earlier in the model. Ratee participation in MSF follow-up intervention activities is predicted to increase ratee perceptions of accountability to apply MSF for improvement in work performance (London et al., 1997; Walker & Smither, 1999). Specifically, London et al. (1997) predict that ratee accountability levels will be high when ratees work with a facilitator to discuss MSF results, create a development action plan based on the MSF and conduct a discussion with raters regarding results and plans for action. Therefore, the current study also tested this alternative order in addition to the model presented in Figure 3. As shown in Figure 4, the only change in the alternative model is that ratee development actions is positioned in the beginning of the model before ratee perceptions of accountability and aligned with internal ratee forces, manager support to use MSF and organizational support for continuous learning. The alternative model enabled the testing of direct effects of ratee development actions upon ratee perceptions of accountability to use MSF to improve performance and direct effects of ratee intentions to use MSF to improve performance upon ratee performance improvement. Exploratory analyses were conducted to test this alternative model after examining the initial model.
Figure 4

Current Study Alternative Model of Ratee Perceptions of Accountability Within a MSF System
CHAPTER 2

METHOD

The data used for the current study were obtained from a national diversified financial services company, headquartered in the southeast. The data specifically include survey responses from a manager population used to develop the ratee perceptions of accountability scale and from a second manager population used to test the ratee accountability model. In addition, the managers’ results from two different annual MSF survey administrations were used and supplemented by demographic data from the company’s human resource information system (HRIS).

Participants

Sample One

The first manager population targeted to develop the ratee accountability scale consisted of 127 senior leaders who participated in the organization’s first 360-degree feedback assessment (i.e., Time 1 MSF) as ratees. Although new to this MSF process, many of the participants had participated in external 360-degree feedback assessments before and all had participated in the organization’s upward feedback assessment process for multiple years.

A total of 87 (69%) targeted senior leaders responded to the accountability questionnaire described below. Four of the 87 participants did not provide identifier information that enabled the researcher to match demographic information and MSF results. Of the 83 participants with demographic information, 55 (63%) were male and 28 (32%) were female. Seventy-eight (90%) were Caucasian, while five (6%) were
African American. The senior leaders had on average, 16.7 years of experience within the organization with a range of 2 to 38 years and were on average 47 years of age with a range from 30 to 64. The functions represented by the sample of senior leaders included retail and commercial sales; finance and risk management; human resources; bank operations; and marketing and research areas. Comparison analyses were conducted to test for any significant differences between the total population and survey respondents. Specifically, differences between age, gender, organizational tenure, race, and salary grade were examined with t-tests, none of which were statistically significant. Evidently then, there was no evidence of response bias.

Sample Two

The second manager population targeted to test the ratee accountability model consisted of 493 entry to middle level leaders with three or more direct reports who participated in the organization’s annual upward feedback assessment (i.e., Time 1 MSF) as ratees. The majority of these managers had participated in the upward feedback process before. First-time participants are required to participate in an upward feedback training session which is also offered to experienced participants as refresher training.

A total of 206 (42%) targeted leaders responded to the accountability questionnaire described below. However, due to missing data, two surveys were discarded for a total of 204 (41%) respondents. One hundred thirty-two (65%) of the participants were female and 72 (35%) were male. One hundred seventy-seven (87%) of the participants were Caucasian; 26 (13%) were African American; and one (.5%) was Asian Pacific. The leaders had on average, 13.8 years of experience with the organization with a range of 1 to 42 years and were on average 45 years of age with a range of 25 to 69 years.
Functions similar to sample one were represented by sample two. Comparison analyses were conducted to test for any significant differences between the total population and survey respondents. Specifically, differences between manager age, gender, organizational tenure, race, and salary grade were examined with t-tests. Evidence of significant differences in race between the total population and respondent sample were found. Thus, the race variable was controlled for in regression analyses discussed below (see “Analyses for Evaluating the Ratee Accountability Scale”).

Procedure

The first phase of the study included administering an electronic questionnaire to the first population of managers approximately six months following the Time 1 distribution of their 360-degree feedback results. The questionnaire included the ratee accountability scale items and all other measures described below except for the performance improvement measure (see Appendix A for a copy of the questionnaire). Communication regarding the questionnaire and a hyperlink to the questionnaire found on the company’s intranet were sent by email via the Executive Vice President of Human Resources. While the responses were not anonymous due to a need to link respondent questionnaire data to human resources information system (HRIS) data, communication emphasized the importance of the respondents’ participation to corporate strategic efforts and guaranteed the confidentiality of all information provided by the respondents. Participants were assured that only summary information would be presented to the organization. To further encourage participation, approximately two weeks following distribution of the initial questionnaire communication and electronic link, the researcher distributed email reminders and postcards to participants who had yet to complete the questionnaire. In
addition, the researcher administered several paper questionnaires for participants with limited intranet access.

The second phase of the current study included collecting the Time 1 total MSF scores from the second sample of managers. The annual upward feedback survey is administered electronically via the organization’s intranet (see Appendix B for a copy of the survey). All managers and supervisors who do not participate in the annual 360-degree feedback program and who have at least 3 employees reporting to him/her receive feedback with the survey process. Communication regarding the process including: electronic survey completion tips, rating tips, and messages regarding the survey purpose is provided before the process with the organization’s newsletter, intranet, email, and posters. Representatives from the organization’s human resources department provide survey administration support which includes answering employee questions and administering some paper surveys to groups with limited intranet access. The same representatives distributed five page individualized feedback summary reports to the ratee managers that include the individual’s data and present comparisons to the individual’s historical data and comparisons to norms within larger groups in the organization. The HR representatives are trained to understand the reports and to provide training for new manager participants and refresher training for past participants. The training includes information for understanding their reports, tips for setting development goals and taking action with their feedback to improve their performance and an overview of development resources available to them within and outside the company. Similar information is summarized as a reference for all manager ratees on the organization’s intranet. Communication from the organization’s executive leadership which is reinforced by the
human resources representatives emphasizes that manager ratees are expected to use their MSF as a development tool to improve their performance.

The third phase of the study included administering the electronic ratee accountability questionnaire described above and modified based on scale development analyses to the second population of managers approximately six months following the distribution of their Time 1 upward feedback results (see Appendix C for a copy of the questionnaire). The same electronic communication and intranet questionnaire administration procedure described above was used with the second manager population. Again, the researcher administered several paper questionnaires to participants at their request due to limited intranet access.

The fourth and final phase of data collection included collecting the Time 2 MSF results for the second manager sample approximately six months following the second ratee accountability questionnaire administration and 12 months following Time 1 MSF results distribution.

Measures

Development of a Ratee Accountability Scale

Consistent with scale development best practices described by Hinkin (1995), several steps were taken to develop a scale that measures ratee perceptions of accountability to use MSF for improving work performance. Scale items were rationally constructed based on the theoretical framework of MSF ratee accountability (London et al., 1997) and theoretical accountability models (Frink & Klimoski, 1998; Schlenker et al., 1994). In addition, HR professionals with graduate training in either industrial and organizational psychology (N=6); human resource management (N=3); or business administration (N=1)
were asked to pretest the scale. The subject matter experts (SMEs) were asked to review the twelve ratee accountability items created by the researcher for readability and redundancy. Furthermore the SMEs were asked to sort the ratee accountability items randomly intermixed with other study scale items into scale categories in order to test the content validity of the ratee accountability scale (MacKenzie, Podsakoff, & Fetter, 1991). See Appendix D for a copy of the SME sorting tool. Ratee accountability scale items were retained after the SME sorting exercise if at least 80% of the SMEs sorted the items into the ratee accountability category and approved the readability and lack of redundancy of the items. Based on the SME review, two items were deleted due to redundancy and two items were deleted due to sorting disagreement which left a total of eight ratee accountability items for the scale that was administered to the first sample of senior managers. The scale was measured using a seven-point Likert-type response scale (“1 = Strongly Disagree” to “7 = Strongly Agree”). An example item is “I am accountable to the company for using my feedback to enhance my job performance.” See Appendix E for complete questionnaire items by scale.

After administering the ratee accountability scale to the first sample of senior managers, the factor structure of the ratee accountability scale was examined by conducting an exploratory factor analysis with maximum likelihood extraction and direct oblimin rotation using SPSS (Release 10.0 for Windows; SPSS, 1999). A one-factor solution emerged from the analysis which accounted for 72% of the explained variance. See Table 1 for the eigenvalue and factor loadings based on exploratory factor analysis with ratee perceptions of accountability data from the first sample of managers. When examining the factor structure of the accountability scale with data from the second
Table 1

Sample One: Factor Loadings and Eigenvalue for Factor Analysis With Ratee Accountability Scale Data

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q5: I will have to demonstrate to my manager how I have used my feedback to enhance my job performance.</td>
<td>0.782</td>
</tr>
<tr>
<td>Q7: I am responsible for using my feedback for improving my job performance.</td>
<td>0.858</td>
</tr>
<tr>
<td>Q8: I am accountable to the company for using my feedback to enhance my job performance.</td>
<td>0.890</td>
</tr>
<tr>
<td>Q10: I feel obligated to my raters to apply my feedback to the way I Perform my job in order to increase my effectiveness.</td>
<td>0.829</td>
</tr>
<tr>
<td>Q12: I will have to justify to my raters how I have applied my feedback to improve my job performance.</td>
<td>0.740</td>
</tr>
<tr>
<td>Q13: I accept the responsibility to my raters to use my feedback for performance improvement.</td>
<td>0.829</td>
</tr>
<tr>
<td>Q15: I feel personally responsible for using my feedback to improve my job performance.</td>
<td>0.853</td>
</tr>
<tr>
<td>Q16: I am accountable to my manager for using my feedback to get greater results with my team.</td>
<td>0.821</td>
</tr>
</tbody>
</table>

Eigenvalue: 5.783

Notes. Extraction Method: Maximum Likelihood, SPSS 10.0 for Windows
Rotation Method: Direct Oblimin, Only one factor was extracted so solution could not be rotated.
sample of managers, the same maximum likelihood extraction was used and a one-factor solution was specified. The decision to retain the one-factor solution was based on the following criteria: (a) theoretical interpretability of the factor (Kim & Mueller, 1978); (b) retain factors with eigen values greater than one (Kaiser, 1960; Nunnally, 1978); and (c) retain factors accounting for at least 35% of explained variance (Hinkin, 1995; Zwick & Velicer, 1986). Cattell’s (1966) scree test was also used with SPSS for making the factor retention decision. With the second sample of managers, the one-factor solution accounted for 60% of the explained variance. See Table 2 for the eigenvalue and factor loadings based on factor analysis with ratee perceptions of accountability data from the second sample of managers.

Further analyses were conducted to examine the reliability and structure of the scale, including internal consistency and item analyses. Specifically, Cronbach’s (1951) coefficient alpha was used as a conservative, lower-bound estimate of scale reliability or internal consistency (Mallard & Lance, 1998). According to Nunnally’s (1978) recommendation, the coefficients alpha obtained with both manager samples (Sample One: \( \alpha = .94 \); Sample Two: \( \alpha = .90 \)) were sufficient and demonstrated internal consistency reliability. See Table 3 for a summary of internal consistency estimates or Cronbach’s coefficients alpha obtained for all measures used in the current study. In addition, item-total scale relationships were examined to decide if any items were internally inconsistent with the other scale items and thus, needed discarding (Crocker & Algina, 1986). Items were discarded if (a) the scale alpha coefficient increased with the item’s removal, (b) the corrected item-total scale correlation was either negative or near
Table 2
Sample Two: Factor Loadings and Eigenvalue for Factor Analysis with Ratee Accountability Scale Data

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q5: I will have to demonstrate to my manager how I have used my feedback to enhance my job performance.</td>
<td>0.510</td>
</tr>
<tr>
<td>Q7: I am responsible for using my feedback for improving my job performance.</td>
<td>0.677</td>
</tr>
<tr>
<td>Q8: I am accountable to the company for using my feedback to enhance my job performance.</td>
<td>0.729</td>
</tr>
<tr>
<td>Q10: I feel obligated to my raters to apply my feedback to the way I Perform my job in order to increase my effectiveness.</td>
<td>0.809</td>
</tr>
<tr>
<td>Q12: I will have to justify to my raters how I have applied my feedback to improve my job performance.</td>
<td>0.708</td>
</tr>
<tr>
<td>Q13: I accept the responsibility to my raters to use my feedback for performance improvement.</td>
<td>0.823</td>
</tr>
<tr>
<td>Q15: I feel personally responsible for using my feedback to improve my job performance.</td>
<td>0.889</td>
</tr>
<tr>
<td>Q16: I am accountable to my manager for using my feedback to get greater results with my team.</td>
<td>0.668</td>
</tr>
</tbody>
</table>

Eigenvalue: 4.797

Notes. Extraction Method: Maximum Likelihood, One Factor Specified, SPSS 10.0 for Windows. Rotation Method: Only one factor was extracted so solution could not be rotated.
Table 3

Internal Consistencies (Cronbach’s Coefficients Alpha) of Each Measure in Current Study

<table>
<thead>
<tr>
<th>Measure</th>
<th>Number of Items</th>
<th>Sample 1 Coefficient Alpha*</th>
<th>Sample 2 Coefficient Alpha**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratee Accountability</td>
<td>8</td>
<td>0.94</td>
<td>0.90</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>5</td>
<td>0.90</td>
<td>0.80</td>
</tr>
<tr>
<td>Need for Achievement</td>
<td>5</td>
<td>0.84</td>
<td>0.72</td>
</tr>
<tr>
<td>Self-Efficacy to use MSF</td>
<td>3</td>
<td>0.90</td>
<td>0.78</td>
</tr>
<tr>
<td>Perceived Feedback Accuracy</td>
<td>3</td>
<td>N/A***</td>
<td>0.93</td>
</tr>
<tr>
<td>Perceived Feedback Value</td>
<td>3</td>
<td>N/A***</td>
<td>0.84</td>
</tr>
<tr>
<td>Organizational Commitment</td>
<td>5</td>
<td>N/A***</td>
<td>0.84</td>
</tr>
<tr>
<td>Manager Support</td>
<td>3</td>
<td>0.85</td>
<td>0.85</td>
</tr>
<tr>
<td>Organizational Support</td>
<td>6</td>
<td>0.92</td>
<td>0.88</td>
</tr>
<tr>
<td>Ratee Intentions to Use MSF</td>
<td>1</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Ratee Development Actions</td>
<td>6</td>
<td>0.82</td>
<td>0.75</td>
</tr>
</tbody>
</table>

Notes. *Sample 1 N = 87. **Sample 2 N = 204. ***Since the scale was modified or added after the survey administration to the first sample of managers, no coefficient alpha is available.
zero, or (c) the scale variance increased with the removal of the item (Mallard & Lance, 1998). Factor loadings of the items were also examined to ensure acceptable loadings (i.e., > .40) for making the item retention decision (Hinkin, 1995). Based on the outlined criteria all eight items were retained in the ratee perceptions of accountability scale.

The final scale development analyses conducted with the second sample of managers enabled testing the criterion and construct validity of the ratee accountability scale within a broader nomological network of relationships including other constructs and related measures (Cronbach & Meehl, 1955; Mallard & Lance, 1998). These analyses are described below under “Analyses for Evaluating the Ratee Accountability Scale.”

**Internal Ratee Forces**

**Conscientiousness.** A six-item self-report measure modified from the NEO Personality Inventory was used (Frink & Ferris, 1999; McCrae & Costa, 1987). The NEO Personality Inventory measure of conscientiousness consists of fourteen items and has demonstrated a coefficient alpha of .84 (McCrae & Costa, 1987). Coefficients alpha obtained in the current study for the six-item scale were .90 and .80 for the first and second manager samples respectively. An example item is “I pay attention to details.” Responses were measured using a seven-point response scale (“1 = Never” to “7 = Always”). Scores for the scale were calculated by taking an arithmetic mean of the six item ratings.

**Need for Achievement.** A five-item self-report measure modified from the Manifest Needs Questionnaire (MNQ) (Steers & Braunstein, 1976) was used. The MNQ measure of achievement motivation consists of five items and has demonstrated a coefficient alpha internal reliability estimate of .66 and acceptable test-retest reliability levels (i.e., .72)
Coefficients alpha obtained in the current study were .84 and .72 for the first and second manager samples respectively. An example item is “I do my best work when my job assignments are fairly difficult.” Responses were measured using a seven-point response scale “1 = Never” to “7 = Always.” Scores for the scale were calculated by taking an arithmetic mean of the five item ratings.

**Self Efficacy to Use Feedback.** A three-item self-report measure modified from the three-item “capacity to improve work performance” scale used by McDonald and Kavanagh (1998) was used. McDonald and Kavanagh (1998) reported a coefficient alpha of .76 for their capacity measure. Coefficients alpha obtained in the current study were .90 and .78 for the first and second manager samples respectively. An example item is “I have the skills required to enhance my effectiveness on the job based on my feedback.” Responses were measured using a seven-point Likert-type response scale “1 = Strongly Disagree” to “7 = Strongly Agree.” Scores for the scale were calculated by taking an arithmetic mean of the three item ratings.

**Perceived Feedback Accuracy.** A three-item self-report measure modified from McDonald and Kavanagh (1998) and Stone and Stone (1984) was used to measure the extent that ratees perceived their feedback to be accurate. Stone and Stone (1985) found coefficients alpha of .94 and .96 with their (1994) 10-item feedback accuracy measure. Since the scale was modified after the first manager sample administration, a coefficient alpha was only obtained from the second manager sample (α = .93). An example item is “My feedback was consistent with how I performed on the job.” Responses were measured using a seven-point Likert-type response scale (“1 = Strongly Disagree” to “7 =
Strongly Agree”). Scores for the scale were calculated by taking an arithmetic mean of the three item ratings.

**Perceived Feedback Value.** A three-item self-report measure was created to measure the extent that ratees perceived their feedback to be valuable. Items were modified from a five-item measure of performance appraisal system satisfaction (Waldman, 1997) and were created to be aligned with other employee value items used in the research sponsoring organization’s annual employee value questionnaire. Waldman (1997) found a coefficient alpha of .81 with his five-item measure. Since the scale was modified after the first manager sample administration, a coefficient alpha was only obtained from the second manager sample ($\alpha = .84$). An example item is “My feedback adds value to my personal development at FTN.” Responses were measured using a seven-point Likert-type response scale (“1 = Strongly Disagree” to “7 = Strongly Agree”). Scores for the scale were calculated by taking an arithmetic mean of the three item ratings.

**Organizational Commitment.** A five-item self-report measure modified from Porter, Steers, Mowday, and Boulian’s (1974) Organizational Commitment Questionnaire (OCQ) was used to measure ratee organizational commitment. The items used in the current study targeted affective commitment. Since the scale was only administered to the second sample of managers, only one coefficient alpha was obtained ($\alpha = .84$). An example item from the scale used is “I am proud to tell others that I am a part of this organization.” Responses were measured using a seven-point Likert-type response scale (“1 = Strongly Disagree” to “7 = Strongly Agree”). Scores for the scale were calculated by taking an arithmetic mean of the five item ratings.
External Forces/Mechanisms

Manager Support to Use Feedback. The theoretical framework of London et al. (1997) was used to rationally develop the Manager Support three-item scale. In developing this scale, the same SME group described above took the same steps to review the readability and content validity of this scale as were taken in reviewing the ratee accountability scale described above. The researcher also used the same criteria to decide which items to retain. Based on the SME review and sorting, all three of the original items were retained. Additional analyses were conducted to test the reliability of the scale as described above under the Ratee Accountability measure. Coefficients alpha obtained were .85 and .85 for the first and second manager samples respectively. An example item is “My manager discussed his/her [MSF] feedback with me in a feedback session.” Responses were measured using a two-point scale (“0 = Disagree” and “1 = Agree”). Scores for the scale were obtained by summing the three item ratings.

Organizational Support for Continuous Learning. A six-item measure of organizational support for continuous learning modified from Tracey, Tannenbaum and Kavanagh (1995) and McDonald and Kavanagh (1998) was used. McDonald and Kavanagh (1998) reported a coefficient alpha of .73. In the current study, coefficients alpha obtained were .92 and .88 for the first and second manager samples respectively. An example item is “Leaders in this company give recognition and credit to those who apply new knowledge and skills to their work.” Responses were measured using a seven-point Likert-type response scale (“1 = Strongly Disagree” to “7 = Strongly Agree”). Scores for the scale were calculated by taking an arithmetic mean of the six item ratings.
Ratee Intentions to Use Feedback to Improve Work Performance

A one-item measure modified from McDonald and Kavanagh (1998) was used to measure ratee intentions to use MSF to improve work performance. The item used in the current study is “The likelihood that I will use my [MSF] feedback to improve my job performance over the next 3 months.” Responses were measured using a five-point scale (1 = 0-20%; 2 = 21-40%; 3 = 41-60%; 4 = 61-80%; 5 = 81-100%).

Ratee Development Actions Taken to Use Feedback

The theoretical framework of London et al. (1997) and interventions recommended to participants in MSF training by the research sponsoring organization were used to rationally develop this six-item scale. The same SME group noted above took all of the steps described above to review the readability and content validity of the items. The researcher used the same criteria noted above to decide which items to retain. All of the original six items were retained following the SME review and sorting. Additional analyses were conducted to test the reliability of the scale as described above under the Ratee Accountability and Manager Support measures. Coefficients alpha obtained were .82 and .75 for the first and second manager samples respectively. An example item is “I discussed my [MSF] feedback report with my manager.” Responses were measured with a two-point scale (“0 = Disagree” and “1 = Agree”). Scores for the scale were obtained by summing the six item ratings.

Ratee Performance Improvement

This measure was calculated using Time 1 and Time 2 overall MSF scores of the second manager sample. The upward feedback instrument was designed based on interviews and focus groups with high performing leaders conducted to elicit behaviors
critical to effective leadership within the research sponsoring organization. A research
team reviewed data from the interviews and focus groups to identify common themes and
generate 35 behaviorally-based MSF survey items. A small sample of managers from the
focus group and interview population and executive leaders was asked to review the
survey items for readability and content validity before the items were administered to
the entire manager population. Based on their review all 35 items were retained with
only a few changes in wording to enhance readability. Example items include: “[My
leader] Motivates me to do my best” and “[My leader] Promotes teamwork within my
work unit.” Ratings were obtained with a five-point response scale (i.e., “1 = Ineffective”
to “5 = Extraordinarily Effective”). See Appendix B for a sample Time 2 upward
feedback survey. Although the 35 items were rationally clustered into twelve leadership
dimensions, exploratory factor analyses using maximum likelihood extraction and direct
oblimin rotation yielded a one-factor solution. The one factor solution was retained
based on a decision rule of eigenvalues greater than one, item loadings .40 or higher on
the one component, and a scree plot examination. The internal consistency estimate or
Cronbach’s coefficient alpha was .99 and all 35 items were retained using the decision
rule of item deletion if (a) the scale alpha coefficient increased with the item’s removal,
(b) the corrected item-total scale correlation was either negative or near zero, or (c) the
scale variance increased with the removal of the item (Mallard & Lance, 1998). The
single factor component is interpreted as an overall leadership measure with a total score
composite calculated from aggregating item ratings across raters and items. The number
of subordinate raters for each manager ranges from 3 to 23. Although a few additional
items were added to the Time 2 survey administration based on executive input, the Time
2 overall score for the current study was calculated using the same core 35 items discussed above. The final measure used in the current study and referenced as “Ratee Performance Improvement” was calculated by subtracting the Time 1 overall feedback score from the Time 2 overall feedback score with the second sample of managers. Due to attrition and some reorganization, the sample size of managers with both Time 1 and Time 2 feedback scores and thus, a Ratee Performance Improvement score is 170.

Analyses for Evaluating the Ratee Accountability Scale

Preliminary Analyses

Because the researcher suspected that MSF was being used for different purposes (i.e., administrative decision-making or development) by different groups within the research sponsoring organization, the ratee accountability survey included two items that inquired if administrative decisions would be based on the ratee’s MSF. Specifically, the two items were: “Improvement in my scores on the next Leadership Survey [MSF assessment] is a component of my personal review and compensation” and “My implementation of an action plan based on my LS feedback [MSF] is a component of my personal review and compensation.” A two-point response scale was used with “0 = Disagree” and “1 = Agree.” If the ratee agreed with one or both of these items, then the ratee was coded as using MSF for administrative purposes. Otherwise, the ratee was coded as using the MSF for development purposes. Preliminary t-tests analyses were conducted to test whether there were significant differences in the twelve model variables between the administrative purpose group (N = 120) and the development purpose group (N = 83). Significant differences were found in three of the twelve model variables at the p < .001 level and significant differences were found in three of the model variables
at the p < .01 level. Thus, the researcher decided to control for the MSF purpose variable in path analyses described below along with controlling for the race variable discussed above under “Participants: Sample 2.” To control for both confounds, the researcher conducted a series of twelve separate ordinary least squares regressions by regressing each of the twelve model variables (see Figures 3 and 4) on both MSF purpose and race. With each regression the standardized residual of the model variable was saved to replace the model variable for path analyses.

Path Analyses

Path analysis was then used to test the ratee accountability scale in a nomological network of related constructs and predicted relationships. According to Billings and Wroten (1978), the path analysis technique enables the researcher to use ordinary least squares regression to test proposed causal relationships among a set of variables. However, as emphasized by James and Brett (1984), when taking a confirmatory analytic approach, it is critical for the data and specified model to meet the assumptions for confirmatory analysis described by James, Mulaik, and Brett (1982). James et al. (1982) outline ten conditions that must be met for researchers to proceed with confirmatory analyses and draw causal inferences from non-experimental data as shown in Table 4. Failure to meet one or more of the ten conditions for causal inferences indicates that a specification error has been made and requires that the researcher transition analyses and inferences into exploratory mode (James et al., 1982; James & Brett, 1984). Although James and Brett (1984) emphasize that specification errors only become evident after sufficient knowledge is accumulated regarding the conditions, it is proposed for the
Table 4
James, Mulaik, and Brett’s (1982) Ten Conditions for Causal Inferences

<table>
<thead>
<tr>
<th>Conditions for Causal Inference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A formal statement of theory in terms of a structural model</td>
</tr>
<tr>
<td>2. The theoretical rationale for causal analyses (i.e., an explanation for each arrow in the model)</td>
</tr>
<tr>
<td>3. The specification of causal order</td>
</tr>
<tr>
<td>4. The specification of causal direction</td>
</tr>
<tr>
<td>5. A model that is self-contained (i.e., all relevant causes are included)</td>
</tr>
<tr>
<td>6. The specification of model boundaries in reference to the populations and settings for generalization</td>
</tr>
<tr>
<td>7. Stability of the model over time</td>
</tr>
<tr>
<td>8. Operationalization of the model variables</td>
</tr>
<tr>
<td>9. Empirical confirmation of the predicted relationships in the model</td>
</tr>
<tr>
<td>10. Empirical evidence of the predicted “no relations” in the model (i.e., evidence that omitted relations are non-significant)</td>
</tr>
</tbody>
</table>
current study that the first eight conditions contained in Table 4 have been met and are outlined above in the literature review and description of measures. Path analyses enabled the researcher to test conditions (9) and (10) as specified in Table 4. Specifically, path analyses were required to test the models for empirical evidence that confirms the predicted relationships (H1-H7) and non-significant omitted relationships in the ratee accountability model.

To test Hypotheses 1-7, a series of ordinary least squares regression analyses was conducted. Endogenous (dependent) variables were regressed on the exogenous (independent) variables as specified in the proposed ratee accountability model shown in Figure 3 and alternative model shown in Figure 4 to obtain path coefficients or standardized beta weights (Billings & Wroten, 1978). Significant path coefficients for the proposed direct effect relationships demonstrate support of the hypotheses and support for the condition 9 tests recommended by James et al. (1982).

The proposed recursive model of ratee accountability to use MSF for performance improvement also includes several hypothesized indirect effects or partially mediated relationships (i.e., H1) and fully mediated relationships (i.e., H3 and H5). James and Brett (1984) describe the mediated relationship as one in which the mediator variable transmits complete or partial influence from an antecedent to a consequence. Mediators explain how or why effects occur and often explain how external physical events take on internal psychological significance (Barron & Kenny, 1986). Indirect effects or mediated relationships are usually tested by conducting James et al.’s (1982) omitted parameters test (i.e., condition 10 test). To provide evidence of the full proposed ratee accountability model, proposed relationships and omitted relationships within the model must be tested
for significance (James et al., 1982). Given that the predicted relationships are
significant, if the omitted relationships are non-significant, then the proposed model is
fully supported. If the predicted model relationships are not shown as significant, then
the researcher proceeds with the omitted parameter tests in exploratory mode.

Evidence supporting proposed mediated relationships in the current study is
demonstrated with the following examples. A fully mediated relationship by mediator
variable \( m \) between predictor or exogenous variable \( x \) and criterion or endogenous
variable \( y \) is demonstrated by (a) a significant path coefficient from \( x \) to \( m \), (b) a
significant path coefficient between \( m \) to \( y \), and (c) a non-significant direct path
coefficient between \( x \) to \( y \). When a predicted fully mediated relationship is tested, the
first two path coefficients noted by (a) and (b) above are obtained with condition 9 tests
of predicted relationships, while the third path coefficient noted by (c) above is obtained
with a condition 10 test of omitted relationships. Furthermore, a partially mediated
relationship by mediator variable \( m \) between exogenous variable \( x \) and endogenous
variable \( y \) is demonstrated by (a) a significant path coefficient from \( x \) to \( m \), (b) a
significant path coefficient between \( m \) to \( y \), and (c) a significant direct path coefficient
between \( x \) to \( y \). When a proposed partially mediated relationship is tested, all three path
coefficients noted by (a) to (c) above are obtained with condition 9 tests of predicted
relationships.

In the current study, an alternative approach to the James et al. (1982) omitted
parameters test was conducted. Since multicollinearity is often encountered at the stage
when an endogenous variable is regressed on many correlated exogenous variables,
sources of lack of fit may be obscured (Lance, 1986). The researcher anticipated
multicollinearity among the current study model variables and thus chose to follow Lance’s (1986) recommendation to use a disturbance term regression test procedure as opposed to the omitted parameters test in order to minimize the likelihood of encountering multicollinearity challenges. The disturbance term regression test requires the researcher to save the residual terms of the endogenous variables when conducting analyses to test predicted model relationships. The endogenous variables’ residual terms are then regressed on the exogenous variables that are predicted “no relations” (Lance, 1986). In the current study, if all of the path coefficients emerging from the disturbance term regression tests are non-significant, additional evidence in support of the proposed ratee accountability model is demonstrated. However, if any of the emerging path coefficients are significant, then the proposed ratee accountability model is not further supported.

The researcher anticipated the possibility that neither the proposed ratee accountability model nor the alternative model would be supported in its entirety since this is the first empirical study testing the models. Therefore, at the time that evidence was found to not support the model, the researcher planned to shift into exploratory mode to further study and develop the ratee accountability model. It should be noted that a model emerging from an exploratory process needs to be tested and confirmed with additional samples.

Finally, results from path analyses used to examine both the initial model and alternative model were compared in order to specify the better model for additional consideration and future research. Not only was amount of support for predicted and omitted relationships in each model compared, but also goodness of fit indices were
calculated and compared for both models in order for the researcher to select the better model for further discussion and future research (Pedhazur, 1982).
CHAPTER 3

RESULTS

Table 5 contains descriptive statistics (i.e., means and standard deviations) and intercorrelations among study variables with the internal consistencies or Cronbach’s coefficients alpha along the diagonal. Unfortunately, most of the model variable intercorrelations with the ratee performance improvement variable were negative which caused the researcher to anticipate negative path coefficients in later path analyses with the ratee performance improvement variable.

Table 6 contains intercorrelations among the standardized residuals of the twelve model variables saved after regressing each of the model variables on both MSF purpose and race for controlling the potential confounds. The saved standardized residuals were used in place of the original variables in path analyses to test the models presented in Figures 3 and 4.

Results from path analyses and model comparisons are presented in the following order. First, steps to compare the initial proposed model and alternative model and results are summarized, and the better model is selected for presenting specific path analysis results. Second, specific results from conducting path analyses for condition 9 tests or tests of predicted direct effects within the selected model are presented as shown in Figure 5. Next specific findings from path analyses conducted to test omitted relationships or predicted indirect effects (i.e., condition 10 tests) in the selected model are presented and shown in Figure 6. Finally, overall results of evidence supporting predicted direct and indirect effects in the selected model are summarized.
Table 5
Descriptive Statistics and Intercorrelations of Ratee Accountability Model Variables

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Notes. *p < .05, **p < .01; Cronbach’s coefficients alpha are on the diagonal except for measures 10, 12 and 13 which are one-item measures. MSF Purpose is coded as “1 = administrative purpose” and “2 = developmental purpose.”
Table 6

Intercorrelations of the Standardized Residuals of Ratee Accountability Model Variables

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Notes. *p < .05, **p < .01; Standardized residuals were saved from regressing each model variable on MSF purpose and race to control for their potential confounding influence in later path analyses.
Figure 5
Path Coefficients of Initial Model of Ratee Perceptions of Accountability Within a MSF System

Notes. Path weights represent standardized regression coefficients of predicted relationships (Condition 9 tests). * = p < .05; ** = p < .01. Significant path weights support predicted direct effect relationships.
Internal Ratee Forces

Conscientiousness

Need for Achievement

Self-Efficacy to Use MSF

Perceived Feedback Accuracy

Perceived Feedback Value

Organizational Commitment

Ratee Perceptions of Accountability to Use MSF

Ratee Intentions to Use MSF to Improve Performance

Ratee Development Actions to Use MSF

Ratee Performance Improvement

External Forces/Mechanisms

Manager Support to Use MSF

Organizational Support for Continuous Learning

-06

.04

.15*

.11

.30**

.10

.21**

-0.15*

.14

.29*

.02

.05

.38**

.14*

-0.15*

.07

.20*
Figure 6
Omitted Parameter Path Coefficients of Initial Model of Ratee Perceptions of Accountability Within a MSF System

Notes. Path weights represent standardized regression coefficients for omitted parameter tests (i.e., Condition 10 tests). * = p < .05; ** = p < .01. Non-significant path weights support model hypotheses of indirect effects.
Internal Ratee Forces

Conscientiousness
Need for Achievement
Self-Efficacy to Use MSF
Perceived Feedback Accuracy
Perceived Feedback Value
Organizational Commitment

External Forces/Mechanisms
Manager Support to Use MSF
Organizational Support for Continuous Learning

Ratee Perceptions of Accountability to Use MSF
Ratee Intentions to Use MSF to Improve Performance
Ratee Development Actions to Use MSF
Ratee Performance Improvement

Correlations:

Conscientiousness: .12
Need for Achievement: .10
Self-Efficacy to Use MSF: -.04
Perceived Feedback Accuracy: .05
Perceived Feedback Value: .21
Organizational Commitment: -.09
Manager Support to Use MSF: .09
Organizational Support for Continuous Learning: -.04
Ratee Perceptions of Accountability: .19*
Ratee Intentions to Use MSF to Improve Performance: -.01
Ratee Development Actions to Use MSF: .49**
Ratee Performance Improvement: -.04

Organizational Commitment: -.29*
Ratee Intentions to Use MSF to Improve Performance: -.04
Ratee Development Actions to Use MSF: -.13
Ratee Performance Improvement: -.02
Ratee Accountability Model Comparison and Selection Summary

In addition to testing the initial proposed ratee accountability model, exploratory path analyses were conducted to test an alternative model that proposed a different position in the model for ratee development actions based on London et al.’s (1997) theoretical work. Neither the initial ratee accountability model proposed nor the alternative model proposed received unequivocal support from path analyses. However, the overall evidence seemed to be more damaging to the alternative model than to the initial ratee accountability model proposed. There was greater support for predicted relationships and omitted relationships in the initial model as shown in Figure 5 and Figure 6 respectively than was found for the alternative model (see Appendixes F and G for alternative model path analysis results). Specifically, the main difference in the models – the proposed role of ratee development actions – was not supported in the alternative model.

In addition, goodness-of-fit indices were calculated and compared for each model using formulas recommended by Pedhazur (1982). In Pedhazur’s (1982) approach to testing overidentified path models for significance, a significant $\chi^2$ (with degrees of freedom equaling the number of overidentified restrictions in the model) at a prescribed level of alpha leads to rejection of the null hypothesis and indicates that the model does not fit the data (see Pedhazur, 1982, p. 617-628 for index formulas and numerical examples). A comparison of the goodness-of-fit index of the initial ratee accountability model ($\chi^2 (21) = 36.49, p > .01$) and the goodness-of-fit index of the alternative model ($\chi^2 (13) = 100.22, p < .001$) further demonstrated that the initial ratee accountability model better fit the data.
In summary, though both models lacked full support and resulted in similar path analysis findings due to the similarities of the models, the proposed role of ratee development actions to use MSF is better supported in the initial model and as a whole, the initial model appears to better fit the data. As supported by Leonard and Williams’ (2001) empirical findings, evidence in the current study more fully supports the placement of ratee development actions after ratee perceptions of accountability rather than before it as suggested by London et al. (1997). Since the initial model was selected as the better model for further review and discussion, specific path analysis results presented below represent findings obtained from testing the initial ratee perceptions of accountability to use MSF model as shown in Figures 5 and 6.

Tests for Predicted Direct Effects

A series of ordinary least squares (OLS) regressions was conducted to test the predicted relationships as shown in Figure 5. Each endogenous variable in the model was regressed on all of its predictor or exogenous variables simultaneously to calculate path coefficients or standardized beta weights which are shown in Figure 5 (Billings and Wroten, 1978). Path coefficients in Figure 5 are listed in order of variable relations moving from variables left to right in the model. For example, there are two path coefficients beside the variable “conscientiousness.” The first path coefficient represents the non-significant relationship between conscientiousness and ratee perceptions of accountability to use MSF and the second path coefficient demonstrates the non-significant relationship between conscientiousness and ratee intentions to use MSF to improve performance. Significant path coefficients support the direct effect relationships
proposed by the initial model and provide evidence in support of James et al.’s (1982) condition 9 test.

Hypothesis 1 predicted several direct effects between ratee internal forces and ratee intentions to use MSF to improve performance and direct effects of ratee internal forces upon ratee perceptions of accountability to use MSF to improve performance.

**Internal Ratee Forces**

**Conscientiousness.** Contrary to expectation, the path coefficient between conscientiousness and ratee perceptions of accountability to use MSF was also surprisingly negative, and non-significant ($\beta = -.06, p > .05$). Furthermore, the path coefficient between conscientiousness and ratee intentions to use MSF was non-significant ($\beta = .04, p > .05$). Therefore, the evidence did not support direct effects from conscientiousness upon ratee intentions to use MSF to improve performance or upon ratee perceptions of accountability which did not support hypothesis 1.

**Need for Achievement.** There was partial support for the predicted role of need for achievement in the proposed model. While the path coefficient between need for achievement and ratee perceptions of accountability was significant ($\beta = .15, p < .05$), the path coefficient between need for achievement and ratee intentions to use MSF to improve performance was non-significant ($\beta = .11, p > .05$). Thus, only direct effects from need for achievement upon ratee perceptions of accountability were found which partially supported hypothesis 1.

**Self-Efficacy to Use MSF.** There was also only partial support for the predicted role of self-efficacy to use MSF in the proposed model. While the path coefficient between self-efficacy to use MSF and ratee perceptions of accountability was significant ($\beta = .30,$
p < .01), the path coefficient between self-efficacy to use MSF and ratee intentions to use MSF to improve performance was non-significant ($\beta = .10, p > .05$). Thus, only direct effects from self-efficacy to use MSF upon ratee perceptions of accountability were found which partially supported hypothesis 1.

**Perceived Feedback Accuracy.** Mixed support was found for the predicted role of perceived feedback accuracy in the proposed model. The path coefficient between perceived feedback accuracy and ratee perceptions of accountability was significant ($\beta = .21, p < .01$) as predicted. However, the path coefficient between perceived feedback accuracy and ratee intentions to use MSF was unexpectedly negative and significant ($\beta = -.15, p < .05$). Thus, only the predicted direct effects from perceived feedback accuracy upon ratee perceptions of accountability to use MSF were found in support of hypothesis 1.

**Perceived Feedback Value.** A non-significant path coefficient between perceived feedback value and ratee perceptions of accountability ($\beta = .14, p > .05$) indicated lack of support for the predicted direct effects. However, a significant path coefficient between perceived feedback value and ratee intentions to use MSF to improve performance demonstrated evidence of predicted direct effects ($\beta = .29, p < .05$).

**Organizational Commitment.** Evidence was not found supporting the predicted role of organizational commitment in the proposed model. Non-significant path coefficients were found between organizational commitment and ratee perceptions of accountability ($\beta = .02, p > .05$) and between organizational commitment and ratee intentions to use MSF for performance improvement ($\beta = .05, p > .05$). Thus, the evidence did not support the predicted direct effects from organizational commitment proposed in hypothesis 1.
External Forces/Mechanisms

Manager Support to Use MSF. Evidence was not found in support of hypothesis 2 that predicted direct effects from manager support to use MSF upon ratee perceptions of accountability to use MSF. Surprisingly, the path coefficient between the two variables ($\beta = .07, p > .05$) was non-significant.

Organizational Support for Continuous Learning. Full support was found for hypothesis 4 that predicted the direct effects from organizational support for continuous learning upon ratee perceptions of accountability to use MSF. A significant path coefficient between the two variables was found ($\beta = .20, p < .05$) as predicted.

Ratee Perceptions of Accountability to Use MSF to Improve Performance

Evidence supporting direct effects of ratee perceptions of accountability upon ratee intentions to use MSF to improve performance was found with a significant path coefficient ($\beta = .38, p < .01$). This evidence is partial support for the proposed mediator role of ratee perceptions of accountability, given additional significant path coefficients for predicted relationships between internal ratee forces and ratee intentions to use MSF to improve performance discussed earlier. Indirect effects are further discussed below.

Ratee Intentions to use MSF to Improve Performance

Hypothesis 6 predicted that ratee intentions to use MSF to improve performance would have a direct effect upon ratee development actions taken to use MSF. A significant path coefficient supported hypothesis 6 ($\beta = .14, p < .05$).

Ratee Development Actions to Use MSF

Lastly, hypothesis 7 predicted that ratee development actions taken to use MSF would have a direct effect upon ratee performance improvement. Despite the significant path
coefficient found between ratee development actions and ratee performance improvement, the negative sign indicated an unexpected relationship that was counter to the prediction of hypothesis 7 ($\beta = -.15, p < .05$). See “Discussion” for further review of the unexpected negative relationships found in the model.

Tests for Predicted Indirect Effects

An additional series of OLS regressions was conducted in exploratory mode to test the omitted parameters (i.e., condition 10 test) and predicted indirect effects. To obtain the results shown in Figure 6, specifically disturbance term regression tests (Lance, 1986) were conducted by regressing the saved standardized residual of each endogenous variable simultaneously on its predictor or exogenous variables and the preceding, omitted parameter variables. For example, the standardized residual of ratee intentions to use MSF was regressed simultaneously on the six internal ratee variables and ratee perceptions of accountability (i.e., predictor variables) and on the two external force variables (i.e., omitted parameters). Again, path coefficients shown in Figure 6 are listed in order of omitted variable relations moving from left to right in the model. The first path coefficients beside the external force variables in Figure 6 represent the omitted parameter relationships between the external force variables and ratee intentions to use MSF and the first path coefficients beside internal ratee forces represent the omitted parameter relationships between the internal ratee force variables and ratee development actions. Non-significant path coefficients in Figure 6 further support the proposed model shown in Figure 5, including evidence for the proposed mediated relationships or indirect effects.
As noted under “Analyses” above, evidence of predicted mediated relationships is demonstrated as follows. A fully mediated relationship by mediator variable \( m \) between predictor or exogenous variable \( x \) and endogenous variable \( y \) is demonstrated by (a) a significant path coefficient from \( x \) to \( m \), (b) a significant path coefficient between \( m \) to \( y \), and (c) a non-significant direct path coefficient between \( x \) to \( y \). A partially mediated relationship by mediator variable \( m \) between exogenous variable \( x \) and endogenous variable \( y \) is demonstrated by (a) a significant path coefficient from \( x \) to \( m \), (b) a significant path coefficient between \( m \) to \( y \), and (c) a significant direct path coefficient between \( x \) to \( y \).

In addition to direct effects predicted in hypothesis 1, indirect effects were also predicted from the six internal ratee variables upon ratee intentions to use MSF through a partial mediator—ratee perceptions of accountability.

**Internal Ratee Forces**

**Conscientiousness.** As noted under tests for direct effects and shown in Figure 5, the path coefficients from conscientiousness to ratee perceived accountability and ratee intentions to use MSF were non-significant. Thus, there were neither direct nor indirect effects from conscientiousness to ratee intentions to use MSF, despite the significant path coefficient between the proposed mediator ratee perceived accountability and ratee intentions to use MSF. Further exploratory disturbance term regressions conducted as condition 10 tests of omitted parameters also obtained non-significant path coefficients between conscientiousness and ratee development actions (\( \hat{\beta} = .12, p > .05 \)) and between conscientiousness and ratee performance improvement (\( \hat{\beta} = .10, p > .05 \)) which supported the parameters being omitted from the model.
**Need for Achievement.** As noted above, direct effects were found between need for achievement and ratee perceived accountability ($\beta = .15$, $p < .05$) and between ratee perceived accountability and ratee intentions to use MSF ($\beta = .38$, $p < .01$). However, the path coefficient between need for achievement and ratee intentions to use MSF was non-significant ($\beta = .11$, $p > .05$), indicating that ratee perceived accountability fully mediated the relationship instead of partially mediating the relationship as predicted. Further exploratory disturbance term regressions or condition 10 tests of omitted parameters resulted in non-significant path coefficients between need for achievement and ratee development actions ($\beta = -.04$, $p > .05$) and between need for achievement and ratee performance improvement ($\beta = .01$, $p > .05$) as predicted.

**Self-Efficacy to Use MSF.** Direct effects were found between self-efficacy and ratee perceived accountability ($\beta = .30$, $p < .01$) and between ratee perceived accountability and ratee intentions to use MSF ($\beta = .38$, $p < .01$). However, the path coefficient between self-efficacy and ratee intentions to use MSF was non-significant ($\beta = .10$, $p > .05$), indicating that ratee perceived accountability fully mediated the relationship instead of partially mediating the relationship as predicted. Further exploratory disturbance term regressions or condition 10 tests of omitted parameters resulted in non-significant path coefficients between self-efficacy to use MSF and ratee development actions ($\beta = .05$, $p > .05$) and between self-efficacy to use MSF and ratee performance improvement ($\beta = .21$, $p > .05$) as predicted.

**Perceived Feedback Accuracy.** There was limited support for the proposed role of perceived feedback accuracy in the model. As noted above, there were direct effects upon ratee perceived accountability ($\beta = .21$, $p < .01$) as predicted, but the direct effects
found from perceived feedback accuracy upon ratee intentions to use MSF were surprisingly negative ($\beta = -0.15, p < 0.05$). Findings supported the partial mediated relationship through ratee perceived accountability, but the negative direct effects were counter to predictions. In addition, exploratory disturbance term regressions were conducted to test omitted relationships. A non-significant path coefficient was found from perceived feedback accuracy to ratee development actions ($\beta = 0.10, p > 0.05$) as predicted, while a significant, negative relationship between perceived feedback accuracy and ratee performance improvement ($\beta = -0.29, p < 0.05$) was found which did not support the parameter being omitted from the model.

**Perceived Feedback Value.** No support for the proposed mediated relationship or indirect effects from perceived feedback value through ratee perceived accountability was found. First, the path coefficient between the predictor, perceived feedback value, and the proposed mediator, ratee perceived feedback, was non-significant ($\beta = 0.14, p > 0.05$) as shown in Figure 5. However, direct effects from perceived feedback value upon ratee intentions to use MSF in Figure 5 were found ($\beta = 0.29, p < 0.05$). Exploratory disturbance term regressions conducted as condition 10 tests for omitted relationships between perceived feedback value and ratee development actions ($\beta = 0.09, p > 0.05$) and between perceived feedback value and ratee performance improvement ($\beta = -0.04, p > 0.05$) did obtain non-significant path coefficients as predicted and shown in Figure 6.

**Organizational Commitment.** There was no evidence supporting either direct effects or indirect effects from organizational commitment upon ratee intentions to use MSF as predicted. Both path coefficients from organizational commitment to ratee perceived accountability ($\beta = 0.02, p > 0.05$) and ratee intentions to use MSF ($\beta = 0.05, p > 0.05$) were
non-significant as shown in Figure 5. Exploratory disturbance term regressions conducted to test omitted relationships found non-significant path coefficients shown in Figure 6 between organizational commitment and ratee development actions ($\beta = .10, p > .05$) and between organizational commitment and ratee performance improvement ($\beta = .06, p > .05$) as predicted.

**External Forces/Mechanisms**

**Manager Support to Use MSF.** Evidence was not found to support hypothesis 3 that predicted indirect effects from manager support to ratee intentions to use MSF through complete mediation by ratee perceived accountability. As noted above, there were no direct effects found from manager support on either ratee perceived accountability or on ratee intentions to use MSF. However, exploratory disturbance term regressions resulted in a significant path coefficient shown in Figure 6 between manager support to use MSF and ratee development actions ($\beta = .49, p < .01$) which indicated unpredicted direct effects. Other exploratory disturbance term regressions resulted in non-significant path coefficients to ratee intentions to use MSF ($\beta = -.01, p > .05$) and to ratee performance improvement ($\beta = -.04, p > .05$) which supported the omitting of the parameters.

**Organizational Support for Continuous Learning.** Full support was found for hypothesis 5 that predicted indirect effects from organizational support for continuous learning upon ratee intentions to use MSF through complete mediation by ratee perceived accountability. First, there were direct effects shown in Figure 5 from organizational support for continuous learning to ratee perceived accountability ($\beta = .20, p < .05$). Second, there were direct effects from perceived accountability to ratee intentions to use MSF ($\beta = .38, p < .01$). Finally, as shown in Figure 6 there were no direct effects from
organizational support for continuous learning upon ratee intentions to use MSF ($\beta = -0.13, p > .05$) as predicted. Other exploratory disturbance term regressions resulted in non-significant path coefficients to ratee development actions ($\beta = -0.09, p > .05$) and to ratee performance improvement ($\beta = -0.04, p > .05$) which supported the omitting of the parameters.

**Ratee Perceptions of Accountability to Use MSF to Improve Performance**

Through exploratory disturbance term regression, an unpredicted, significant path coefficient between ratee perceptions of accountability and ratee development actions ($\beta = 0.19, p < .05$) was found as shown in Figure 6. Given the direct effects of ratee perceived accountability upon ratee intentions to use MSF and the direct effects of ratee intentions to use MSF upon ratee development actions shown in Figure 5, the unpredicted direct effects from ratee perceived accountability upon ratee development actions shown in Figure 6 indicated a partially mediated relationship between the two variables through ratee intentions to use MSF. Another exploratory disturbance term regression resulted in a non-significant path coefficient between ratee perceptions of accountability and ratee performance improvement ($\beta = 0.03, p > .05$) as predicted and shown in Figure 6.

**Ratee Intentions to Use MSF to Improve Performance**

An exploratory disturbance term regression resulted in a non-significant path coefficient between ratee intentions to use MSF and ratee performance improvement ($\beta = -0.02, p > .05$) as predicted and shown in Figure 6.

**Path Analysis Results Summary**

A comparison between initial model and alternative model path coefficients (i.e., total support/lack of support for each model) and a comparison of goodness-of-fit indices
resulted in the researcher selecting the initial ratee perceptions of accountability model as the better model for additional review and discussion. However, similar to the alternative model, the initial model did not receive unequivocal support.

There was partial support for hypothesis one in that (a) ratee perceived accountability completely mediated the relationship between need for achievement and ratee intentions to use MSF; (b) ratee perceived accountability completed mediated the relationship between self-efficacy to use MSF and ratee intentions to use MSF; (c) ratee perceived accountability partially mediated the relationship between perceived feedback accuracy and ratee intentions to use MSF, yet the indirect effect relationship was unexpectedly negative; and (d) perceived feedback value demonstrated only direct effects on ratee intentions to use MSF.

Both hypotheses two and three that focused on the proposed manager support to use MSF role were fully unsupported. There were neither direct nor indirect effects from manager support to use MSF upon ratee intentions to use MSF. However, an unexpected finding from exploratory disturbance term regression tests (i.e., omitted parameter tests) was the direct effects from manager support to use MSF upon ratee development actions to use MSF.

Both hypotheses four and five that predicted the role of organizational support for a continuous learning culture were fully supported. As predicted, ratee perceived accountability completely mediated the relationship between organizational support for continuous learning and ratee intentions to use MSF to improve performance. In addition, hypothesis six that predicted direct effects from ratee intentions to use MSF upon ratee development actions to use MSF was supported. An unexpected finding was
that there were also direct effects upon ratee development actions from ratee perceived accountability which, given the support for hypothesis six, indicated that ratee intentions to use MSF partially mediated the relationship. Finally, there was lack of support for hypothesis seven that predicted direct effects from ratee development actions to use MSF upon ratee performance improvement. Given the numerous indirect effects found with the path analysis, the magnitude of the indirect effects was calculated by multiplying all the direct path coefficients making up each indirect path as shown in Table 7 (Billings & Wroten, 1978).

Table 7

Magnitude of Indirect Effects

<table>
<thead>
<tr>
<th>Relevant Hypothesis</th>
<th>Exogeneous Variable of Indirect Effect</th>
<th>Upon Endogenous Variable</th>
<th>Magnitude of Indirect Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesis 1</td>
<td>Need for Achievement</td>
<td>Ratee Intentions to use</td>
<td>.15 * .38 = .06</td>
</tr>
<tr>
<td></td>
<td>Self-Efficacy to Use MSF</td>
<td>Ratee Intentions to use</td>
<td>.30 * .38 = .11</td>
</tr>
<tr>
<td></td>
<td>Perceived Feedback Accuracy</td>
<td>Ratee Intentions to use</td>
<td>.21 * .38 = .08</td>
</tr>
<tr>
<td>Hypothesis 5</td>
<td>Organizational Support for Continuous Learning</td>
<td>Ratee Intentions to use</td>
<td>.20 * .38 = .08</td>
</tr>
</tbody>
</table>

Notes. Magnitude of indirect effects was calculated by multiplying all direct path coefficients that comprised the indirect effect path (Billings & Wroten, 1978).
CHAPTER 4
DISCUSSION

The success of most multi-source feedback programs rests on the assumption that ratees will apply their feedback to change their behavior and improve their performance. Meta-analysis indicates that behavior change and performance improvement based on MSF is not a safe assumption (Kluger & DeNisi, 1996). Experts propose that forces, mechanisms and interventions built into MSF systems to increase ratee accountability to use MSF will increase the likelihood that desired outcomes are achieved (London et al., 1997). The primary purpose of this study was to test several of these propositions by developing a scale that measures ratee perceptions of accountability and by evaluating it with two different models of related constructs. To date, this is the first study to use path analysis to examine antecedents and outcomes of ratee perceptions of accountability to use MSF for performance improvement with a separate sample of managers from the scale development sample. This study found psychometric support for the ratee perceptions of accountability scale and found partial support for the proposed ratee accountability to use MSF models. Although it was not fully supported, stronger evidence was found in support of the initial ratee accountability model proposed than was found for the alternative model.

This study’s findings and conclusions will be discussed in the following sequence. First, findings from the development of a scale measuring ratee perceptions of accountability to use MSF will be revisited. Second, findings from evaluating the ratee perceptions of accountability scale within a MSF system will be discussed in regards to
supported predictions, non-supported predictions, unpredicted findings and related research. Third, several factors related to organizational context will be considered for interpreting unexpected findings that emerged from examination of the models. Fourth, the study’s implications for scientists and practitioners will be outlined. Finally, strengths and limitations of the current study will be noted before drawing summary conclusions.

Development of a Ratee Perceptions of Accountability to Use MSF Scale

The current study’s contribution of a scale measuring ratee perceptions of accountability to use MSF addresses a significant gap in the research literatures addressing both accountability and MSF systems. Typical accountability studies have included an experimental manipulation of an accountability condition instead of measuring perceptions of accountability. Earlier attempts to measure perceptions of accountability include a three-item lab study manipulation check to measure “felt accountability” for task performance to a research evaluator (Frink & Ferris, 1998) and an eight-item, two-factor self-report scale measuring “ratee perceptions of accountability” to use MSF (Leonard & Williams, 2001). However, the current study found support with two different samples of managers for an eight item, one-factor ratee perceptions of accountability to use MSF scale.

A deductive approach was taken to rationally create the eight-item scale based on the accountability and MSF literatures. The items were subjected to SME review for readability, redundancy and content validity checks. Exploratory factor analysis yielded a one-factor solution that was supported by acceptable factor loadings, eigenvalue and
scree plot review. Reliability analyses provided further support with an acceptable
coefficient alpha or internal consistency and an item-total correlations review.

While the Leonard and Williams’ (2001) two-factor scale differentiated between
accountability to self and accountability to relevant others, the current study’s eight items
which include references to different accountability sources (i.e., self, company, manager,
raters) all loaded on the same factor. Similar findings with both samples in the current
study support the stability of the ratee accountability scale factor structure which is a
primary goal of factor analysis (Hinkins, 1995). Perhaps future accountability research
could build on the current study scale development findings to test perceptions of
accountability in relation to other objectives of interest including: (a) decision-making;
(b) other forms of performance appraisal (for raters and ratees); (c) goal-setting; and (d)
other areas of cognitive task performance.

Evaluation of the Ratee Perceptions of Accountability Scale to Use MSF Scale

Evidence of Nomological Validity

Despite a lack of full support for either model tested, path analysis results from testing
the selected model demonstrated support for multiple predicted relationships between
ratee perceptions of accountability and other model variables (i.e., need for achievement,
self-efficacy to use MSF, perceived feedback accuracy, organizational support for
continuous learning, and ratee intent to use MSF). In addition, evidence was found that
supported several of the proposed mediator roles of ratee perceptions of accountability.
Ratee perceptions of accountability partially mediated the relationship between perceived
feedback accuracy and ratee intentions to use MSF and completely mediated the
relationship between organizational support for continuous learning and ratee intentions.
to use MSF. The latter mediator role is important to note because with LISREL analysis testing of their feedback model, McDonald and Kavanagh (1998) did not find support for the predicted relationship between organizational support for continuous learning and intention to use feedback to improve work performance. They cite omitted variables as one possible explanation for their non-significant findings (McDonald & Kavanagh, 1998). Similar to predictions of London et al. (1997) and findings of Leonard and Williams (2001) who took the Baron and Kenny (1986) approach with mediated regressions to test their model, ratee perceptions of accountability was found to fully mediate relationships between need for achievement and ratee intentions to use MSF and between self-efficacy and ratee intentions to use MSF. Finally, direct and indirect effects were found from ratee perceived accountability upon ratee development actions through a partial mediator, ratee intentions to use MSF. This evidence not only is similar to the direct effects from ratee accountability upon rate development behaviors that Leonard and Williams (2001) found, but it also provides supportive evidence of the role of ratee perceived accountability in predicting a desirable MSF outcome. This evidence of significant relationships among the newly developed scale and other variables within a nomological network of relationships provides initial evidence of the construct validity of the ratee perceptions of accountability scale (Chronbach & Meehl, 1955).

Non-Supported Predictions and Unpredicted Findings

As was previously noted, unequivocal evidence in support of either of the proposed models was not found. Thus, the researcher continued path analyses in exploratory mode to test the models’ predicted and omitted relationships and then compared results and goodness-of-fit indices for both models to identify the better model for future
consideration and research. Based on the non-significant results surrounding the ratee
development actions variable (i.e., the main difference in the two models) in the
alternative model and its significant goodness-of-fit index, indicating the model did not
fit the data, the researcher selected the initial ratee accountability model, which had a
non-significant goodness-of-fit index, as the better model for additional exploration.

However, several of the non-supported predictions deserve further discussion.
Despite consistent evidence in the literature supporting the positive relationship between
conscientiousness and performance (Barrick & Mount, 1993; Barrick et al., 1993; Frink
& Ferris, 1999), conscientiousness was not found in the current study to play the
predicted role in a MSF system. Furthermore, the predicted role of organizational
commitment was not supported in the model. Organizational commitment has been
shown to be only a weak predictor of performance (Crampon et al., 1978; Meyer et al.,
1979; Mowday et al., 1974) and surprisingly was not shown as a predictor of ratee
perceptions of accountability or of ratee intentions to use MSF to improve performance
as was hypothesized in the current study. In addition, perceived feedback value was not
shown to be a predictor of ratee perceptions of accountability, but it was shown to have a
direct effect upon ratee intentions to use MSF to improve performance as predicted.
While there has been very little empirical research studying perceived feedback value,
MSF implementation experts maintain that individuals who believe feedback is biased
and/or meaningless will be less likely to exert much effort in changing behavior to
improve performance based on MSF (Murphy et al., 2001). The current study
demonstrated empirical evidence of their argument and in doing so, demonstrated counter
to predictions that ratee perceptions of accountability do not play a mediator role in the
relationship. Finally, it should be noted that all three of the variables discussed in this section (i.e., conscientiousness, organizational commitment, and perceived feedback value) received little to no attention from London et al. (1997) and others as having a significant role in a ratee perceptions of accountability to use MSF model. Thus, these variables had the least theoretical support for their proposed role in the current study model.

Perhaps the most surprising prediction that was not supported was the non-significant relationship between manager support to use MSF and ratee perceptions of accountability to use MSF. However, manager support to use MSF did demonstrate direct effects upon ratee development actions to use MSF which was not predicted in the current study model, but has been supported by other studies (Hazucha et al., 1993; Noe & Wilk, 1993). London et al. (1997) propose that a supportive supervisor can play a critical role in increasing ratee accountability and performance improvement by discussing the ratee’s feedback with the ratee and by exerting financial and non-financial incentives. The current study’s finding is also counter to Leonard and Williams’ (2001) evidence that ratee perceptions of accountability mediates the relationship between supervisory support for continuous learning and ratee participation in development activities. One explanation for the non-supported prediction may be that MSF purpose was controlled for in the current study analyses which included any supportive efforts the manager may be taking to incorporate MSF-related goals in the ratee’s performance review and compensation. Another explanation may be related to the difference in items comprising the manager support factor as opposed to items used by Leonard and Williams (2001). The manager support factor in the current study includes several I items that refer to
manager role-modeling desired MSF outcome behaviors (i.e., indirect support behaviors) as opposed to referring to more direct manager support behaviors that were used by Leonard and Williams (2001). While the current study did not support the predicted relationship involving ratee perceived accountability, practitioners can still gain insight for MSF implementation efforts with the evidence that manager support does directly influence ratee development actions taken to use MSF.

Another surprising finding was the unpredicted significant, negative path relationship between perceived feedback accuracy and ratee intentions to use MSF to improve performance. Given the significant, positive zero-order correlation ($r = .32, p < .01$) between the two variables and the other significant, positive zero-order correlations among the other predictors and the ratee intentions to use MSF criterion shown in Table 5, a suppression explanation is appropriate (Darlington, 1968; Smith, Ager, & Williams, 1992). This finding was counter-intuitive due to the significant, positive path coefficient found between perceived feedback accuracy and ratee perceptions of accountability to use MSF. In addition, the finding was contrary to empirical evidence from McDonald and Kavanagh (1998) who found a strong positive relationship between perceptions of feedback accuracy and intentions to use feedback to improve performance with LISREL analysis. Thus, the best explanation for this unexpected finding in the current study is that perceived feedback accuracy acted as a suppressor in the multiple regression equation to predict ratee intentions to use MSF.

The most disappointing finding for the researcher was the lack of support for the predicted role of the criterion—ratee performance improvement—in the model. As shown in Tables 5 and 6 and in Figures 5 and 6, ratee performance improvement
displayed negative relationships with most of the model variables and in some cases
demonstrated unexpected, significant, negative relationships (i.e., with perceived
feedback accuracy and ratee development actions). These results are difficult to interpret
because they are counter-intuitive and inconsistent with existing research. The surprising
results can perhaps best be explained by the quality of the ratee performance
improvement measure. First, difference-score measures have received criticism due to
methodological and substantive problems they often suffer (Edwards & Perry, 1993;
Edwards, 1994). However, when a post-hoc alternative approach was taken to utilize the
Time 1 MSF and Time 2 MSF scores for a criterion measure with potential confounds
removed, quite similar results were found as when the performance improvement
difference score was used.¹ Second, a paired sample t-test conducted to compare Time 1
MSF (M = 3.73) and Time 2 MSF (M = 3.76) demonstrated that the means of the
measures were not significantly different (t = -.074 (169), p > .05) which indicated as a
total sample on average, there was lack of performance improvement between T1 and T2.
In addition, restriction of range or lack of variance of Time 1 MSF (SD = .62) and Time 2
MSF (SD = .66) and of the performance improvement measure (SD = .53) was examined
and thought to limit the quality of the criterion measure. Due to the smaller differences
on the criterion performance measure, it was more difficult for the predictor variables to
identify the differences as measured by the criterion (Gatewood & Feild, 1994). Thus,
the researcher’s attempt to include a performance criterion based on the two MSF
measures in the current study model intended to measure ratee accountability impact on
desired MSF outcomes was not successful. Unfortunately, other performance criterion
measures that were consistent across the manager sample were not available for the
current study. However, this challenge should not discourage future researchers from seeking to include performance criterion measures or other criterion measures in testing MSF models. In fact, researchers should be encouraged to find high quality criterion measures for testing MSF models since this direction of research is seriously lacking and needed for MSF validation and return on investment type studies. In the next section, several factors which may have negatively influenced the performance improvement measure are presented.

Organizational Context

Several critical factors related to the organizational context of the current study which may have influenced study measures and findings are worth noting. During the data collection time period, the research sponsoring organization was in the midst of a few corporate and division-specific change initiatives. The organization underwent (a) a significant culture change effort which included a communication campaign and leadership training; (b) an extensive effort to improve efficiency ratios which resulted in a few layoffs and reorganization in several areas; (d) reorganization of the executive leadership team due to retirement and other attrition; and (e) significant shifts in business strategy in several areas that changed performance measures, division/department structure and direction. There was also a negative fluctuation in stock price which has demonstrated a significant relationship with critical employee satisfaction measures that are tracked within the organization. However, it should be noted that when the last study measures (i.e., Time 2 MSF) were obtained, employee satisfaction measures were also obtained and reflected a significant increase in overall employee satisfaction and organization commitment from the prior year.
Nevertheless, a major theme in the qualitative data collected from the second sample of managers with the ratee accountability questionnaire administered after Time 1 MSF was distributed (see Appendix C) pointed to the challenges faced by the company during the feedback time period and potential spillover effects with MSF ratings. Almost 20 percent of the ratee comments focused on department reorganizations and tough decisions made by ratees who felt that they were in turn penalized by disgruntled subordinate raters. Comments in this category also noted that upon receiving their feedback, many ratees’ teams looked somewhat different due to reorganization or attrition, so Time 2 MSF may have come from a different group of raters than the group who provided Time 1 MSF. Not only could this scenario detract from a leader’s motivation to act on feedback given by raters with whom he/she no longer works, but it also could influence the leader’s ability to improve MSF scores with a new group of raters in Time 2.

Although the researcher was unable to disentangle any specific influence of these organizational context factors, the issues described should be considered when reviewing and interpreting unexpected findings in the current study. The range restriction of the performance improvement measure may have been due to distortion of ratings or inflation of ratings given by raters facing uncertainty brought by significant organizational change described above. Targeted rater communication and rater training that focuses on (a) making accurate ratings/avoiding rater errors; (b) understanding MSF purpose and (c) understanding rating confidentiality and rater anonymity of the process may increase criterion range. The researcher also recommends that future studies in this area include multiple performance or other criterion measures as available and
appropriate to better examine relationships between ratee perceptions of accountability to use MSF and desired MSF outcomes. Although change seems to be a constant in the business environment with the pace and extent of change increasing, practitioners involved in MSF implementation should consider organizational context issues for making recommendations on MSF process timing, communication, and training efforts.

Implications for Scientists and Practitioners

Research Implications

Implications emerging from the current study present future research opportunities for scientists with interest in studying accountability and/or MSF systems and practical insights for practitioners who implement MSF systems. As previously noted, accountability researchers could reference the newly developed and tested scale in this study for exploratory studies measuring perceptions of accountability with other objectives (i.e., decision-making, performance rating, goal setting, or other cognitive tasks). Furthermore there may be interest in revising the response options of the scale to measure extent of perceived accountability as proposed by Walker and Smither (1999). For MSF researchers, the newly developed and tested ratee accountability scale should be tested with a sample from a different organization in order to further test the stability of its structure and its reliability and nomological validity. Similar studies conducted across organizations would offer opportunities to test several of London et al.’s (1997) hypotheses of whether ratee accountability and performance improvement will be greater in (a) organizations that make significant investments in resources to support ratees’ use of MSF; (b) organizations that encourage teambuilding and peer development; and (c) organizations which hold raters accountable to clarify feedback and support ratee
development based on MSF as opposed to in organizations where these things are not done.

Since the models in this study were not fully supported, an important MSF research issue is whether other critical variables that were omitted from the model would help explain some of the current study’s findings. While several ratee attitudes were examined in this study, other research suggests ratee attitudes that deserve further study. Atwater, Waldman, Atwater, and Cartier (1999) conducted a field study that examined the attitudes of supervisors who received upward feedback. They found that leadership change measured by Time 1 and Time 2 feedback was predicted by organizational cynicism and the extent to which the supervisor reacted positively to the MSF and took steps to improve. It may hold that organizational cynicism is a critical issue related to ratee perceptions of accountability in organizations that have been unclear and inconsistent regarding MSF purpose and direction and that have conducted multiple cycles of MSF without reward for individual performance improvement or penalty for lack of improvement. London and Smither (1995) identified other individual difference variables (e.g., self-monitoring, self-image) that may influence ratee interpretation of MSF and their perceptions of accountability to use MSF, while ratees’ “propensity to concentrate on positive or negative aspects of feedback can affect his or her perceptions of the validity of the ratings received,” (Murphy et al., 2001, p.142). In fact, ratees who focus on the positive aspects of feedback may be more accepting of the feedback, value it more and be more willing to apply it to improve their performance (McFarland & Miller, 1994). Furthermore, Bracken and Timmreck (2001) suggest that intrinsic and extrinsic motives may influence a ratee’s accountability to take action on MSF and they argue that
MSF systems must seek to activate a combination of extrinsic and intrinsic motives in order to be sustainable. Finally, as previously mentioned, future ratee accountability model research should consider using multiple performance measures, more extensive repeated measures of performance, or other criterion measures (e.g., promotions, turnover, culture measures, objective performance measures, customer satisfaction, or employee satisfaction) (Waldman & Atwater, 2001).

**Practical Implications**

In addition to research implications for scientists, findings from this study reveal several important implications for practitioners who work with MSF systems. It is apparent from the current study that ratee perceptions of accountability to use MSF do play a significant role in MSF systems by directly influencing ratee intentions to use MSF to improve performance and ratee development actions taken to use MSF and by mediating several relationships between internal ratee forces and ratee intentions and between organizational support for continuous learning and ratee intentions. Thus, the MSF practitioner can take action in several areas to better understand ratee perceptions of accountability in his/her organization and increase it to influence desired MSF outcomes. First, the practitioner can use the ratee perceptions of accountability scale in early life cycles of MSF processes to communicate expectations of ratees and to assess baseline levels of ratee perceived accountability. In later life cycles of MSF programs the ratee accountability scale could be used to evaluate the effectiveness of organization-supported MSF development tools and interventions and their influence on levels of ratee perceived accountability and intentions to use MSF.
In addition, practitioners can focus on influencing the predictors of ratee accountability and ratee intentions, which include self-efficacy and organizational support for continuous learning. Communication and training initiatives that increase ratees’ self-efficacy or belief in their capability to use their MSF to improve their effectiveness should affect their perceptions of accountability and intentions to use their MSF. Success stories of individuals who applied their MSF for performance improvement and/or career progression may influence others to believe that they too can successfully apply their MSF. Finally, practitioners can take action to build organizational cultures that support continuous learning by (a) incorporating measures and rewards for developing oneself and supporting the development of others into performance management systems; (b) creating mentoring programs that encourage peer development; (c) involving managers in training programs to help them understand the newly acquired skills and knowledge of their subordinates so that they can encourage and recognize transfer of training; and (d) facilitating structured on-the-job learning opportunities or including developmental job assignments in succession plans.

The multiple significant differences found with model variables between the MSF for development purpose group and the MSF for administrative decisions purpose group hold interesting implications for practitioners as well. In fact, managers in the administrative MSF purpose group were more likely to report greater perceptions of accountability, manager support to use MSF, development actions taken to use MSF, self-efficacy to use MSF, intentions to use MSF to improve performance, and greater perceived feedback value. Thus, practitioners may want to consider these relationships in consulting with companies on MSF purpose direction in conjunction with desired outcomes.
Lastly, the disappointing results found with the performance improvement criterion or MSF results in the current study suggest practical implications. Earlier the restriction of range of the performance improvement measure was noted under “Organizational Context”. Strong rater training should improve the accuracy and variance of MSF results. Antonioni and Woehr (2001, p. 121) recommend that strong rater training must incorporate the following five components to enhance rater responsibility and rating accuracy: (a) Familiarizing raters with each of the performance dimensions; (b) Establishing standards pertaining to each of the dimensions to be rated; (c) Improving behavioral observation skills; (d) Preventing common rating errors; and (e) Writing descriptive, not evaluative, comments to support ratings. While the performance criterion measure did not demonstrate the predicted relationship in the current study, it is vital that practitioners continue to seek evidence of MSF influence on desired outcomes in order to justify further MSF investments.

Strengths, Limitations, and Summary Conclusions

**Study Strengths**

This study contributes to our understanding of MSF systems by using scale development best practices (Hinkin, 1995) and addressing prior research limitations and gaps in the literature to develop and evaluate a ratee perceptions of accountability to use MSF scale. The scale development and evaluation occurred with two different manager samples within a longitudinal study that took place in an organizational setting. Rigorous methods were used to create a rationally developed and empirically tested ratee accountability scale. The one-factor ratee perceptions of accountability scale was found to be stable across both manager samples. Path analysis was used to evaluate the ratee
accountability scale within two different ratee accountability models and the researcher attempted to include a performance improvement criterion measure unlike prior studies. Partial support for the selected model provided nomological validity evidence for the newly developed scale and provided practical insight for enhancing MSF system implementation.

Study Limitations

While there are several strengths of the current study, they should not be considered without discussing the study’s limitations. First, the sample size of the first manager sample used to develop the ratee perceptions of accountability scale was smaller than preferred. Hinkin (1995) recommends a sample of at least 150 for scale development. However, despite attrition and a low response rate, the second sample of managers was larger and supported findings obtained from the first sample of managers. In addition, both samples were taken from the same organization, so the study would be strengthened by testing the ratee perceptions of accountability scale with a third sample in a different organization.

Another concern regarding the second sample of managers was the response bias detected with the race variable for which preliminary analyses were used to control. A significant difference was found between the percentage of minority manager respondents in the second sample and the percentage of minority managers in the total population, such that significantly fewer minority managers responded to the accountability questionnaire. Cox (1993) notes that cultural communication differences may cause racial minority members to be distrustful of communications which come from majority groups, and as a result they may withhold information or alter viewpoints.
in response to the distrust. This effect could be further influenced by the organizational change and uncertainty issues outlined under “Organizational Context.” Even though all survey participants were equally assured of the importance of the questionnaire purpose and the confidentiality of their individual responses, the employee identification information requested on the questionnaire may have decreased minority manager responses.

Ideally, different samples should be studied from organizations that within consistently use MSF for the same purpose across MSF ratees, either only for development or for both development and administrative decision-making purposes. Although the researcher made efforts to control for the MSF purpose confound, it may still have operated as a study limitation. Researchers have noted that MSF purpose affects the actual ratings given (Ilgen, D. R., Barnes-Farrell, J. L., & McKellin, D. B., 1993; Wise, 1997). It would have been preferable for all MSF ratings to have been given for the same purpose in the current study to minimize rating distortion, yet clear instructions were provided to both raters and ratees and multiple raters were required (i.e., at least three) for a ratee to receive a summary report which should have decreased rating distortion (Antonioni, 1994; London, Wohlers, & Gallagher, 1990; Wise, 1997). In addition, it would be interesting to explore differences in accountability perceptions and predictors and outcomes of accountability perceptions in relation to MSF purpose across organizations with different MSF purposes, since some experts claim that lack of accountability in development-only MSF systems is a primary reason that organizational decision-makers are not pleased with MSF outcomes (Church & Bracken, 1997; London et al., 1997; London, 2001).
Another potential limitation of the study was the self-report nature of the majority of the study variables. Although the participants were assured their responses would be kept confidential and would be summarized with other responses for reporting purposes, there could have been response bias based on the social desirability of several of the study measures and due to the fact that participants were asked at the end of the accountability questionnaire to identify themselves by their employee identification number which enabled the researcher to match participant responses with MSF results and HRIS data. The study would be strengthened by obtaining additional measures of the model variables from other perspectives (e.g., supervisor observations of development actions as was obtained by Leonard & Williams, 2001).

The limitation of the ratee performance improvement measure has already been discussed above and the researcher recommended that future studies obtain multiple performance or other criterion measures that are aligned with desired MSF outcomes. Additional repeated measures of the MSF total scores may have also strengthened the current study. Other studies have shown performance improvement demonstrated by MSF measures collected with a time span of two years between measures (Hazucha et al., 1993) and with multiple measures over a five-year time span (Walker & Smither, 1999). Finally, it should be noted in a path analysis study in which models tested were not fully supported that specification errors could have occurred such as including variables that were not supported and did not belong in the model and by omitting important variables. Several variables noted under “Implications for Scientists and Practitioners” could be considered in future examination of ratee accountability models (e.g., organizational cynicism, extrinsic and intrinsic motives for using MSF).
Summary Conclusions

This study contributes to our understanding of ratee perceptions of accountability within MSF systems in the following critical ways. First, it extends prior theoretical and initial empirical study of ratee perceptions of accountability to use MSF by developing and testing a scale that measures ratee perceptions of accountability. Second, it demonstrates partial support for a model of ratee accountability within a MSF system. Third, it provides useful implications for future research regarding both perceptions of accountability and ratee perceived accountability within MSF systems that could lead to better understanding of MSF outcomes and predictors of MSF outcomes. Fourth, it provides practical implications for MSF practitioners who seek to enhance the desired outcomes of MSF systems.

Understandably, much of the MSF research to date has focused on the complexities of MSF instrument design and interpretation. However, more recent MSF review studies have shown compelling evidence that what happens after ratees receive their feedback warrants greater attention. Results of the current study further demonstrate that it is imperative for organizations using MSF to pay close attention to individual and organizational forces, mechanisms and interventions that will increase ratee perceptions of accountability to use MSF in order to achieve and sustain desired outcomes.
REFERENCES


An alternative approach was taken post-hoc to address potential confounds of the performance improvement difference score measure. First, Time 2 MSF was regressed on Time 1 MSF and the standardized-residual of Time 2 MSF was saved for next steps. This step enabled controlling for Time 1 MSF. Next, the standardized residual of Time 2 MSF was regressed on both Time 1 MSF and ratee development actions as a condition 9 test. Finally, the standardized residual of Time 2 MSF was regressed on Time 1 MSF, ratee development actions and all other model variables (i.e., internal ratee forces, external forces/mechanisms, ratee perceived accountability, and ratee intentions to use MSF to improve performance) as a condition 10 test of omitted parameters. Path coefficients were then compared to results from the original approach. The path coefficient from ratee development actions to Time 2 MSF while controlling for Time 1 MSF was still non-significant (\( \beta = .11, p > .05 \)) which did not support hypothesis 7. The only different result from using this alternative approach was that there was a positive, significant path coefficient between self-efficacy to use MSF and Time 2 MSF while controlling for Time 1 MSF (\( \beta = .26, p < .05 \)). Of course, this significant finding resulted from an exploratory omitted parameter test, so it did not support the model.
APPENDIX A

FOLLOW-UP TO THE 2000 360-DEGREE FEEDBACK PROCESS

OVERVIEW: The purpose of this questionnaire is to give you an opportunity to provide input on the value of your 360-Degree Feedback which you received in May. Your candid responses will help us ensure that your future involvement with 360-Degree Feedback will be maximized. YOUR RESPONSES ARE IMPORTANT AND WILL BE KEPT CONFIDENTIAL. All responses will be summarized into one total participant report. On average, completion of this survey has taken about 10 minutes. Thank you in advance for your time and input.

Please click the response that most closely matches your response to the following statements. You can change your responses at any time until you click “Finish” at the end.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Slightly Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Slightly Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. My 360 feedback ratings were consistent with how I performed on the job.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
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</tr>
<tr>
<td>2. My 360 feedback will help me improve my effectiveness on the job.</td>
<td>○</td>
<td>○</td>
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<td>○</td>
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</tr>
<tr>
<td>3. My 360 feedback adds value to my personal development at FTN.</td>
<td>○</td>
<td>○</td>
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<tr>
<td>4. I feel able to use my 360 feedback to improve my performance.</td>
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<td>○</td>
<td>○</td>
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<tr>
<td>5. I will have to demonstrate to my manager how I have used my 360 feedback to enhance my job performance.</td>
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<tr>
<td>6. I have the skills required to enhance my effectiveness on the job based on my 360 feedback.</td>
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<td>7. I am responsible for using my 360 feedback for improving my job performance.</td>
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<tr>
<td>8. I am accountable to the company for using my 360 feedback to enhance my job performance.</td>
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<td>Strongly Agree</td>
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<td>Neither Agree nor Disagree</td>
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<td>Strongly Disagree</td>
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<td>9. I have the ability to use my 360 feedback to get greater results in my job.</td>
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<td>10. I feel obligated to my raters to apply my 360 feedback to the way I perform my job in order to increase my effectiveness.</td>
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<td>11. I plan to use my 360 feedback to achieve enhanced results.</td>
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<td>12. I will have to justify to my raters how I have applied my 360 feedback to improve my job performance.</td>
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<tr>
<td>13. I accept the responsibility to my raters to use my 360 feedback for performance improvement.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
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<tr>
<td>14. I intend to use my 360 feedback to enhance my effectiveness as a leader.</td>
<td>o</td>
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<td>o</td>
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<tr>
<td>15. I feel personally responsible for using my 360 feedback to improve my job performance.</td>
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<td>16. I am accountable to my manager for using my 360 feedback to get greater results with my team.</td>
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<td>17. I plan on using my 360 feedback to improve my job performance.</td>
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<td>Question</td>
<td>Strongly Agree</td>
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<td>Neither Agree nor Disagree</td>
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<tr>
<td>18. Leaders in this company give recognition and credit to those who apply new knowledge and skills to their work.</td>
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<td>19. My colleagues tell each other about new information that can be used to increase job performance.</td>
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<tr>
<td>20. Job assignments in this company are challenges that can be used to promote personal development.</td>
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<td>21. My colleagues are willing to listen to new ideas.</td>
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<tr>
<td>22. Leaders in this company openly express their support of continuously finding ways to increase high performing results.</td>
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<tr>
<td>23. My colleagues encourage each other to use new knowledge and skills on the job.</td>
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<td>24. I set high standards for myself and for others.</td>
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<td>25. I do more than is expected of me.</td>
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<td>26. I do my best work when job assignments are difficult.</td>
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<td></td>
<td>Always</td>
<td>Almost Always</td>
<td>Usually</td>
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<td>Seldom</td>
<td>Almost Never</td>
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<td>27. I take calculated risks and stick my neck out to get ahead at work.</td>
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<td>28. I strive to work with others in the company for team high performance with contributes to my personal success.</td>
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<td>29. I try hard to improve on my past performance at work.</td>
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<td>30. I work hard to accomplish my goals.</td>
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<td>31. When I make a commitment, I can always be counted on to follow through.</td>
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<td>32. I do things according to a plan.</td>
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<td>33. I pay attention to details.</td>
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<td>34. I finish what I start.</td>
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<td>35. I carry out my plans.</td>
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<tr>
<th></th>
<th>Agree</th>
<th>Disagree</th>
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</thead>
<tbody>
<tr>
<td>36. I discussed my 360 feedback report with my Employee Services Relationship Manager or with another internal or external coach other than my manager.</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>37. I discussed my 360 feedback report with my manager.</td>
<td>○</td>
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</tr>
<tr>
<td>38. I held a feedback session with my team of direct reports to discuss my 360 feedback.</td>
<td>○</td>
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</tr>
<tr>
<td>39. I created an action plan with goals for performance improvement based on my 360 feedback.</td>
<td>○</td>
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</tr>
<tr>
<td>40. I shared my action plan with goals for performance improvement based on my 360 feedback with my manager.</td>
<td>○</td>
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</tr>
<tr>
<td>41. I shared my action plan with goals for performance improvement based on my 360 feedback with my team of direct reports.</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
42. My manager has supported the implementation of my action plan based on my 360 feedback.

 Agree  Disagree

43. My manager discussed his/her 360 feedback or Leadership Survey results with me in a feedback session.

 Agree  Disagree

44. My manager shared his/her action plan based on his/her 360 feedback or Leadership Survey results with me.

 Agree  Disagree

45. Improvement in my scores on the next 360 feedback survey / Leadership Survey is a component of my personal review and compensation.

 Agree  Disagree

46. My implementation of an action plan based on my 360 feedback is a component of my personal review and compensation.

 Agree  Disagree

47. What suggestions do you have for improving the value of your future 360 feedback to your development at FTN?

48. Please enter your 5-digit Employee ID number. This identification information will help us complete summary analyses that link questionnaire responses with your 360-degree feedback results. This information WILL NOT be reported at the individual level in any way to your manager or to others. Responses will only be reported in summary format at the corporate level.

Please enter your 5-digit employee ID number above before submitting your completed questionnaire.

THANK YOU for taking the time to complete this questionnaire. Your input is important and will prove helpful in our efforts to maximize the return on FTN’s investment in providing you with 360-Degree Feedback.
Please click “Finish” to submit your survey. Click only once or an error will occur.

FINISH
APPENDIX B

FIRST TENNESSEE/FIRST HORIZON

2001 ANNUAL

LEADERSHIP AND EMPLOYEE VALUE SURVEYS

Message from Ken Glass
President and Chief Operating Officer and Chair of 2001 Firstpower Council

“At First Tennessee and First Horizon, leadership is about enhancing our Firstpower culture, which stresses ownership and responsibility to do the very best we can do every day. We can all improve our organization by getting feedback from each employee through the 2001 Employee Value and Leadership Surveys. Your feedback is a critical part of our ability to improve individually and corporately. Please take the time to complete the surveys.”

GENERAL INSTRUCTIONS

This document contains two surveys. The first survey is the 2001 Annual LEADERSHIP SURVEY. The second survey is the annual EMPLOYEE VALUE SURVEY. The purpose of these two surveys is indicated in the OVERVIEW section of each survey.

Your individual responses on these surveys will be kept CONFIDENTIAL. That is, your responses will be grouped with all others in your work unit before being reported. Only those supervisors and managers having three or more surveys completed on them will receive LEADERSHIP SURVEY reports. The EMPLOYEE VALUE SURVEY will be reported at the divisional level and above only. This is done to further ensure your confidentiality.

If you have any questions while completing this survey, please contact your Employee Services Relationship Manager.

Please PRINT your leader’s full name below, followed by his/her Employee Number (ask your leader for his/her Employee Number if you do not know it).

Name: ___________________________________________ Employee Number: _________

(The supervisor or manager who completes your performance evaluation.)
Did you complete a 360º Feedback Assessment on your leader?
Select ONE:

[ ] Yes *(Please go directly to the EMPLOYEE VALUE SURVEY)*

[ ] No *(Please continue with the LEADERSHIP SURVEY)*

[ ] I do not recall *(Please continue with the LEADERSHIP SURVEY)*
2001 Leadership Survey

OVERVIEW: Your Leadership Survey participation gives you the opportunity to provide honest feedback to your leader, which will enable him/her to further develop his/her Firstpower leadership effectiveness. The items on this survey are based specifically on the Firstpower Success Factors which are high performing leadership behaviors within our Firstpower culture. Your responses will be kept CONFIDENTIAL and will be combined with others in a summary report. Only those supervisors and managers having three or more surveys completed on them will receive a summary report.

If you have not had the opportunity to observe a particular behavior, please use the “Too New to Rate” response.

**Please rate your leader’s effectiveness in the following areas by placing a check in the appropriate box:**

<table>
<thead>
<tr>
<th></th>
<th>Extraordinarily Effective</th>
<th>Highly Effective</th>
<th>Effective</th>
<th>Somewhat Effective</th>
<th>Ineffective</th>
<th>Too New to Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Helping my work unit resolve differences and reach agreement.</td>
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<tr>
<td>2. Controlling unproductive emotional reactions when resolving conflicts with others.</td>
<td></td>
<td></td>
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<tr>
<td>3. Making others aware of my contributions.</td>
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<tr>
<td>4. Supporting my ability to embrace both work and family/personal responsibilities.</td>
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<tr>
<td>5. Helping me understand how my work is important to the success of the company.</td>
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<tr>
<td>6. Motivating me to do my best.</td>
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<tr>
<td>7. Empowering me to create value and build loyalty for my customers.</td>
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<tr>
<td>8. Distributing work in a way that takes full advantage of the unique skills of each team member.</td>
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<td></td>
<td>Extraordinarily Effective</td>
<td>Highly Effective</td>
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<td>Somewhat Effective</td>
<td>Ineffective</td>
<td>Too New to Rate</td>
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<tr>
<td>9.</td>
<td>Providing me with support and resources so I can successfully accomplish my responsibilities.</td>
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<td>10.</td>
<td>Exhibiting confidence in me to make decisions within my area of responsibility.</td>
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<td>11.</td>
<td>Actively promoting and demonstrating ethical business practices.</td>
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<td>12.</td>
<td>Helping me to understand what Firstpower is and means in my day-to-day activities.</td>
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<td>13.</td>
<td>Sharing current information about the organization, its strategy, and how my work unit contributes to it.</td>
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<tr>
<td>14.</td>
<td>Promoting teamwork within my work unit.</td>
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<tr>
<td>15.</td>
<td>Helping me understand how I contribute to creating customer value.</td>
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<tr>
<td>16.</td>
<td>Encouraging/supporting community involvement/volunteer activities.</td>
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<td>17.</td>
<td>Embracing differences in perspective, background, and behavioral style.</td>
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<tr>
<td>18.</td>
<td>Championing (e.g., educating, reinforcing, supporting) changes that are being implemented company-wide.</td>
<td></td>
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<tr>
<td>19.</td>
<td>Helping my work unit clearly understand how we can support the changes that are being made across the company and/or within my division.</td>
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<td>20.</td>
<td>Helping me understand the importance of tasks/projects when communicating what takes priority.</td>
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<td></td>
<td>Extraordinarily Effective</td>
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<td>Somewhat Effective</td>
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<tr>
<td>21.</td>
<td>Helping me understand how decisions made within my work unit impact other areas of the company.</td>
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<tr>
<td>22.</td>
<td>Listening and responding thoughtfully to my suggestions.</td>
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<tr>
<td>23.</td>
<td>Working with my work unit to continually identify opportunities to improve productivity and efficiency.</td>
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<td>24.</td>
<td>Encouraging innovative thinking to improve results.</td>
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<td>25.</td>
<td>Utilizing a positive, supportive, and tactful tone in all communications.</td>
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<td>Extraordinarily Effective</td>
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<td>Somewhat Effective</td>
<td>Ineffective</td>
<td>Too New to Rate</td>
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<tr>
<td>26.</td>
<td>Utilizing appropriate tools to help my work group stay informed (e.g., memos, instructions, e-mails, team meetings, videos).</td>
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<td>27.</td>
<td>Presents ideas in a way that actively involves others and gives them a stake in the outcome.</td>
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<td>28.</td>
<td>Ensuring new employees are integrated into my team (e.g., by providing job description and performance standards/goals, necessary supplies and equipment, celebrating their arrival).</td>
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<td>29.</td>
<td>Ensuring talented people who have the skills to contribute to my team’s success fill open positions.</td>
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<td>30.</td>
<td>Taking into consideration all relevant data, issues, and recommendations before making a final decision.</td>
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<tr>
<td></td>
<td>Extraordinarily Effective</td>
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<td>Effective</td>
<td>Somewhat Effective</td>
<td>Ineffective</td>
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<tr>
<td>31.</td>
<td>Communicating decisions in a timely manner.</td>
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<tr>
<td>32.</td>
<td>Frequently providing information about how I am performing my job.</td>
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<tr>
<td>33.</td>
<td>Working with me to ensure I understand the standards/goals on which my performance review will be based.</td>
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<td>34.</td>
<td>Coaching me to meet the challenges of my job.</td>
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<td>35.</td>
<td>Coaching me in planning and implementing activities that are targeted to build on my strengths and develop my weaker areas.</td>
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<td>37.</td>
<td>Helping me understand what high performance in my job looks like.</td>
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</table>

38. My leader has held a feedback session concerning last year’s Leadership Survey with my work unit.
   [ ] Yes       [ ] No       [ ] Too New to Rate

What is your leader doing exceptionally well that he/she should continue doing?____________________

__________________________________________

__________________________________________
What should your leader concentrate on to improve his/her Firstpower leadership effectiveness over the next year?
APPENDIX C

FOLLOW-UP TO THE 2000 REDESIGNED LEADERSHIP SURVEY

OVERVIEW: The purpose of this questionnaire is to give you an opportunity to provide input on the value of your participation in the redesigned 2000 Leadership Survey. Your candid responses will help us ensure that your future involvement with the Leadership Survey (LS) will be maximized. YOUR RESPONSES ARE IMPORTANT AND WILL BE KEPT CONFIDENTIAL. Your responses will be summarized into one total participant report.

On average, completion of this survey has taken about 10 minutes. Thank you in advance for your time and input.

Please click the response that most closely matches your response to the following statements. Until you submit your completed survey by clicking on “Finish” at the end of this survey, you can change your responses.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Slightly Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Slightly Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. My LS feedback ratings were consistent with how I performed on the job.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
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<tr>
<td>2. My LS feedback will help me improve my effectiveness on the job.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
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<tr>
<td>3. My LS feedback adds value to my personal development at FTN.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
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<tr>
<td>4. I feel able to use my LS feedback to improve my performance.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
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<tr>
<td>5. I will have to demonstrate to my manager how I have used my LS feedback to enhance my job performance.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
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<tr>
<td>6. I have the skills required to enhance my effectiveness on the job based on my LS feedback.</td>
<td>o</td>
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<tr>
<td>7. I am responsible for using my LS feedback for improving my job performance.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
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<tr>
<td></td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Slightly Agree</td>
<td>Neither Agree nor Disagree</td>
<td>Slightly Disagree</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
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<tr>
<td>8.</td>
<td>I am accountable to the company for using my LS feedback to enhance my job performance.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
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<tr>
<td>9.</td>
<td>I have the ability to use my LS feedback to get greater results in my job.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
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<tr>
<td>10.</td>
<td>I feel obligated to my raters to apply my LS feedback to the way I perform my job in order to increase my effectiveness.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
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<tr>
<td>11.</td>
<td>My LS feedback reflected my true performance.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
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<tr>
<td>12.</td>
<td>I will have to justify to my raters how I have applied my LS feedback to improve my job performance.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
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<tr>
<td>13.</td>
<td>I accept the responsibility to my raters to use my LS feedback for performance improvement.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
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<tr>
<td>14.</td>
<td>My LS feedback was an accurate evaluation of my leadership effectiveness.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
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<tr>
<td>15.</td>
<td>I feel personally responsible for using my hLS feedback to improve my job performance.</td>
<td>o</td>
<td>o</td>
<td>o</td>
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<td>16.</td>
<td>I am accountable to my manager for using my 360 feedback to get greater results with my team.</td>
<td>o</td>
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<tr>
<td>17.</td>
<td>My LS feedback will support my career growth with FTN.</td>
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</table>
18. The likelihood that I will use my LS feedback to improve my job performance over the next 3 months.

<table>
<thead>
<tr>
<th>Percentage</th>
<th>0 – 20%</th>
<th>21 – 40%</th>
<th>41 – 60%</th>
<th>61 – 80%</th>
<th>81 – 100%</th>
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19. To the extent that you will use your LS feedback to improve your performance, rank order the following options that support why you will use your LS feedback to improve your performance: [Please rank only those items that are important to you, with 1 being most important.]

<table>
<thead>
<tr>
<th>Option</th>
<th>Agree</th>
<th>Slightly Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Slightly Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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<tbody>
<tr>
<td>I take pleasure in improving my personal performance.</td>
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<tr>
<td>I take pleasure in contributing to enhanced organizational performance.</td>
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<td>It will make my job more challenging and interesting.</td>
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<td>It will make me feel better about my abilities.</td>
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<td>It will enhance my monetary rewards.</td>
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<td>It will enhance my career advancement opportunities.</td>
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<td>It will bring me recognition from my manager or others.</td>
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<td>It will help me build better relationships with my direct reports.</td>
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20. Leaders in this company give recognition and credit to those who apply new knowledge and skills to their work.

<table>
<thead>
<tr>
<th>Agreement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Slightly Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Slightly Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

21. My coworkers tell each other about new information that can be used to increase job performance.

<table>
<thead>
<tr>
<th>Agreement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Slightly Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Slightly Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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</table>

22. Job assignments in this company are challenges that can be used to promote personal development.

<table>
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<tr>
<th>Agreement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Slightly Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Slightly Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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<tr>
<td></td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Slightly Agree</td>
<td>Neither Agree nor Disagree</td>
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<tr>
<td>23. My coworkers are willing to listen to new ideas.</td>
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<td>24. Leaders in this company openly express their support of continuous learning.</td>
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<td>25. My coworkers encourage each other to use new knowledge and skills on the job.</td>
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<td>26. I am willing to put in a great deal of effort beyond that normally expected in order to help this organization succeed.</td>
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<td>27. I find that my values and the organization’s values are very similar.</td>
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<td>28. I am proud to tell others that I am a part of this organization.</td>
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<td>29. This organization inspires the very best in me in the way of job performance.</td>
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<td>30. I really care about the fate of this organization.</td>
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<thead>
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<th></th>
<th>Always</th>
<th>Almost Always</th>
<th>Usually</th>
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<th>Seldom</th>
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<th>Never</th>
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<tbody>
<tr>
<td>31. I set high standards for myself and for others.</td>
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<td>32. I do more than is expected of me.</td>
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<td>33. I do my best work when job assignments are difficult.</td>
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<td>34. I take calculated risks and stick my neck out to get ahead at work.</td>
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<td>35. I try hard to improve on my past performance at work.</td>
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<td>Almost</td>
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<td>36. When I make a commitment, I can always be counted on to follow through.</td>
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<td>37. I do things according to a plan.</td>
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<td>38. I pay attention to details.</td>
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<td>39. I finish what I start.</td>
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<td>40. I carry out my plans.</td>
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<th></th>
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<th>Agree</th>
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<td>41. I discussed my LS feedback report with my Employee Services Relationship Manager or with another internal or external coach other than my manager.</td>
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<td>43. I held a feedback session with my team of direct reports to discuss my LS feedback.</td>
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<td>44. I created an action plan with goals for performance improvement based on my LS feedback.</td>
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<td>45. I shared my action plan with goals for performance improvement based on my LS feedback with my manager.</td>
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<td>46. I shared my action plan with goals for performance improvement based on my LS feedback with my team of direct reports.</td>
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</table>
52. What suggestions do you have for improving the value of your future 360 feedback to your development at FTN?

53. Please enter your 5-digit Employee ID number. This identification information will help us complete summary analyses that link questionnaire responses with your 360-degree feedback results. This information WILL NOT be reported at the individual level in any way to your manager or to others. Responses will only be reported in summary format at the corporate level.

Please enter your 5-digit employee ID number above before submitting your completed questionnaire.

THANK YOU for taking the time to complete this survey. Your input is important and will prove helpful in our efforts to maximize the return on FTN’s investment in providing you with 360 Feedback.

Please click “Finish” to submit your survey. Click only once or an error will occur.
APPENDIX D

A SUBJECT MATTER EXPERT (SME) SURVEY ITEM SORTING EXERCISE

Dear Employee Services teammates:

The attached survey is part of the project to evaluate our 360-degree feedback and Leadership Survey feedback processes and is also a part of my dissertation research. Your subject matter expert assistance with this project is greatly appreciated! I have sought your input based on your education, training and experience. Your responses are very important for they will help me develop a perceptions of accountability to use feedback scale and a follow-up questionnaire for feedback program participants that will help us increase the likelihood of desired outcomes from our feedback programs (i.e., behavior change and performance improvement). Your input will be kept confidential; no one will see your responses but me.

Instructions: After reading each proposed survey item in the first column, please use your subject matter expert judgment to place an “X” in the column of the closest matching scale. In addition, your comments are encouraged about the readability and/or redundancy of the items. For example, if an item is awkwardly written, please note it by typing “awkward” by the item or by offering suggested rewording. Please keep in mind that the target population for these items is participating managers in both the 360-degree feedback and Leadership Survey processes.

After matching each survey item to a scale, please save your work and return it as an attachment to me by email: mbwelles@ftb.com or return your completed hard copy to me through interoffice mail at Employee Services, CT-6, IMZ 8467.

Estimated completion time is 15-20 minutes. If you have any questions or concerns, please give me a call at 901.523.5033.

Again, thank you for your time and expert input!

Sincerely,
Marsha B. Welles
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<tr>
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<th>Org.'s Support for Continuous Learning</th>
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<tr>
<td>1. My 360/LS feedback ratings were consistent with how I performed on the job.</td>
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<td>2. I work hard to accomplish my goals.</td>
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<td>3. Supervisors give recognition and credit to those who apply new knowledge and skills to their work.</td>
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<td>4. I feel an obligation to myself to use my 360/LS feedback to improve my effectiveness on the job.</td>
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<td>5. I do my best work when my job assignments are fairly difficult.</td>
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<td>6. I have the ability to use my 360/LS feedback to get greater results in my job.</td>
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<td>7. The 360/LS feedback that I received will help me improve my effectiveness on the job.</td>
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<td>8. I will have to demonstrate to my manager how I have used my 360/LS feedback enhance my job performance.</td>
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<td>9. I discussed my 360/LS feedback report with my manager.</td>
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<td>10. I accept the responsibility to my raters to use my 360/LS feedback for performance improvement.</td>
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<td>11. When I make a commitment, I can always be counted on to follow through.</td>
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<td>12. I intend to apply my 360/LS feedback in order to enhance my effectiveness as a leader.</td>
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<td>13. Job assignments are challenges that can be used to promote personal development.</td>
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<td>15. I will have to justify to my raters how I have applied my LS feedback to improve my job performance.</td>
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<td>16. It is my responsibility to create and implement a results-focused action plan based on my 360/LS feedback.</td>
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<td>17. I created an action plan with goals for performance improvement based on my 360/LS feedback.</td>
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<td>18. I think my 360/LS feedback adds great value to my development at FTN.</td>
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<td>19. I pay attention to details.</td>
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<td>20. I finish what I start.</td>
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<td>21. I feel able to use my 360/LS feedback to improve my performance.</td>
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<tr>
<td>22. I held a feedback session with my subordinates to discuss my 360/LS results.</td>
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<td>23. I am accountable to my manager for using my 360/LS feedback to get greater results with my team.</td>
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<td>24. I set high standards for myself and others.</td>
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<td>25. My manager discussed his/her 360/LS feedback with me.</td>
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<td>26. I feel obligated to my raters to apply my 360/LS feedback to the way I perform my job in order to increase my effectiveness.</td>
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<td>27. I plan on using my 360/LS feedback to improve my job performance.</td>
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<td>29. I try to perform better than my co-workers.</td>
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<td>31. Coworkers encourage each other to use new knowledge and skills on the job.</td>
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<td>32. I am responsible for using my 360/LS feedback for improving my job performance.</td>
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<td>33. I do more than is expected of me.</td>
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<td>34. My manager supported the implementation of my action plan based on my 360/LS feedback.</td>
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<td>36. I plan to use my 360/LS feedback to get better results with the next 360/LS process.</td>
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<td>37. I have the skills required to enhance my effectiveness on the job based on my 360/LS feedback.</td>
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<td>39. I take moderate risks and stick my neck out to get ahead at work.</td>
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<td>40. Supervisors openly express their support of continuous learning.</td>
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<td>43. I try very hard to improve on my past performance at work.</td>
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<td>Proposed Survey Item</td>
<td>Perceptions of Accountability to use feedback</td>
<td>Intentions to Use Feedback</td>
<td>Perceived Feedback Value/Accuracy</td>
<td>Conscientiousness</td>
<td>Manager Support to Use Feedback</td>
<td>Need for Achievement</td>
<td>Ratee Development Actions</td>
<td>Self-Efficacy to Use Feedback</td>
<td>Org.’s Support for Continuous Learning</td>
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<tr>
<td>44. I am accountable to the company for using my 360/LS feedback to enhance my job performance.</td>
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<tr>
<td>45. Coworkers tell each other about new information that can be used to increase job performance.</td>
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</tbody>
</table>

Thank you again for your subject matter expertise and time!
## APPENDIX E

RATEE ACCOUNTABILITY QUESTIONNAIRE ITEMS BY MEASURE

<table>
<thead>
<tr>
<th>Measure</th>
<th>Items</th>
</tr>
</thead>
</table>
| Ratee Perceptions of Accountability to use MSF | 1. I am responsible for using my feedback for improving my job performance.  
2. I feel obligated to my raters to apply my feedback to the way I perform my job in order to increase my effectiveness.  
3. I will have to justify to my raters how I have applied my feedback to improve my job performance.  
4. I accept the responsibility to my raters to use my feedback for performance improvement.  
5. I will have to demonstrate to my manager how I have used my feedback to enhance my job performance.  
6. I am accountable to my manager for using my feedback to get greater results with my team.  
7. I am accountable to the company for using my feedback to enhance my job performance.  
8. I feel personally responsible for using my feedback to improve my job performance. |
| Conscientiousness                    | 1. When I make a commitment, I can always be counted on to follow through.  
2. I do things according to a plan.  
3. I pay attention to details.  
4. I finish what I start.  
5. I carry out my plans.          |
| Need for Achievement                | 1. I do my best work when my job assignments are difficult.  
2. I set high standards for myself and for others.  
3. I do more than is expected of me.  
4. I try hard to improve upon my past performance at work.  
5. I take calculated risks and stick my neck out to get ahead at work. |
| Self-Efficacy to Use MSF            | 1. I feel able to use my feedback to improve my performance.                                                                         |
2. I have the skills required to enhance my effectiveness on the job based on my feedback.
3. I have the ability to use my feedback to get greater results in my job.

Perceived Feedback Accuracy
1. My feedback ratings were consistent with how I performed on the job.
3. My feedback was an accurate evaluation of my leadership effectiveness.

Perceived Feedback Value
1. My feedback adds value to my personal development at FTN.
2. My feedback will help me improve my effectiveness on the job.
3. My feedback will support my career growth within FTN.

Ratee Intentions to Use MSF
1. The likelihood that I will use my feedback to improve my job performance over the next 3 months.

Organizational Commitment
1. I am willing to put in a great deal of effort beyond that normally expected in order to help this organization succeed.
2. I find that my values and the organization’s values are very similar.
3. I am proud to tell others that I am a part of this organization.
4. This organization inspires the very best in me in the way of job performance.
5. I really care about the fate of this organization.

Manager Support to use MSF
1. My manager has supported the implementation of my action plan based on my feedback.
2. My manager discussed his/her feedback results with me in a feedback session.
3. My manager shared his/her action plan based on his/her feedback with me.

Organizational Support for Continuous Learning
1. Leaders in this company give recognition and credit to those who apply new knowledge and skills to their work.
2. My coworkers tell each other about new information that can be used to increase job performance.
3. Job assignments in this company are challenges that can be used to promote personal development.
4. My coworkers are willing to listen to new ideas.
5. Leaders in this company openly express their support of continuously finding
ways to increase high performing results.
6. My coworkers encourage each other to use new knowledge and skills on the job.

<table>
<thead>
<tr>
<th>Ratee Development</th>
<th>Actions to Use MSF</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>1. I discussed my feedback report with my Employee Services Relationship Manager or with another internal or external coach other than my manager.</td>
</tr>
<tr>
<td></td>
<td>2. I discussed my feedback report with my manager.</td>
</tr>
<tr>
<td></td>
<td>3. I held a feedback session with my team of direct reports to discuss my feedback.</td>
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<tr>
<td></td>
<td>4. I created an action plan with goals for performance improvement based on my feedback.</td>
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<tr>
<td></td>
<td>5. I shared my action plan with goals for performance improvement based on my feedback with my manager.</td>
</tr>
<tr>
<td></td>
<td>6. I shared my action plan with goals for performance improvement based on my feedback with my team of direct reports.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MSF Purpose</th>
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</thead>
<tbody>
<tr>
<td>1. Improvement in my scores on the next feedback survey is a component of my personal review and compensation</td>
</tr>
<tr>
<td>2. My implementation of an action plan based on my feedback is a component of my personal review and compensation.</td>
</tr>
</tbody>
</table>
APPENDIX F

PATH COEFFICIENTS OF ALTERNATIVE RATEE PERCEIVED ACCOUNTABILITY MODEL

Notes. Path weights represent standardized regression coefficients of predicted direct effects. * = p < .05; ** = p < .01. Significant coefficients support predicted direct effects.
APPENDIX G

OMITTED PARAMETER PATH COEFFICIENTS OF ALTERNATIVE RATEE ACCOUNTABILITY MODEL

Notes. Path Weights represent standardized regression coefficients. * = p < .05; ** = p < .01. Non-significant path weights support parameters being omitted and predicted indirect effects.
Internal Ratee Forces

- Conscientiousness
- Need for Achievement
- Self-Efficacy to Use MSF
- Perceived Feedback Accuracy
- Perceived Feedback Value
- Organizational Commitment

External Forces/Mechanisms

- Ratee Development Actions to Use MSF
- Manager Support to Use MSF
- Organizational Support for Continuous Learning

Ratee Perceptions of Accountability to Use MSF

Ratee Intentions to Use MSF to Improve Performance

Ratee Performance Improvement

Correlation Coefficients:

- .10
- -.01
- .21
- -.28*
- -.04
- -.06
- -.14
- -.14
- .05
- -.04
- .03
- .04