MULTISOURCE RATINGS OF MANAGERIAL COMPETENCIES AND THEIR PREDICTIVE VALUE FOR MANAGERIAL AND ORGANIZATIONAL EFFECTIVENESS

JUDITH H. SEMEIJN, BEATRICE I. J. M. VAN DER HEIJDEN, AND ANNE VAN DER LEE

This study examined the predictive value of multisource ratings of managerial competencies for managerial and organizational effectiveness. Data from 155 subordinates, 59 peers, and 28 supervisors were gathered in order to provide insight into their perceptions on managerial competencies for their managers. With regard to the outcome variable (i.e., effectiveness), both individual-level (subordinates', peers', and supervisors' ratings of managers) and organizational-level (Balanced Scorecard) measures were used. As expected, subordinates, peers, and supervisors have distinct perspectives on the managerial competencies that are relevant for effectiveness. Moreover, the specific managerial competencies differ in terms of their predictive validity respectively for managerial and organizational effectiveness. The outcomes of our study suggest that a multisource and multimethod approach is valuable in assessing both managerial competencies and managerial and organizational effectiveness. Several implications for human resource management practices are discussed. © 2014 Wiley Periodicals, Inc.

Keywords: multisource ratings, 360-degree feedback, managerial competencies, managerial effectiveness, organizational effectiveness

Correspondence to: Judith H. Semeijn, Faculty of Management, Science & Technology, Open Universiteit in the Netherlands, P.O. Box 2960, 6401 DL Heerlen, the Netherlands, Phone: +31 45 576 2569/2587, Fax: +31 45 5762103, E-mail: Judith.semeijn@ou.nl.

Human Resource Management, September–October 2014, Vol. 53, No. 5. Pp. 773–794

© 2014 Wiley Periodicals, Inc.
Published online in Wiley Online Library (wileyonlinelibrary.com).

DOI:10.1002/hrm.21592

Introduction and Problem Statement

In any working organization, managerial competencies are essential to managerial effectiveness (Heinsman, 2008), a core outcome measure for managerial performance (Spencer, 2003). A significantly positive relationship between competencies and effectiveness (or performance) was found in previous studies (e.g., Posner & Kouzes, 1988; Smither, London, & Reilly, 2005). However, Spencer (2003) stated that there is a strong need for better quantitative measurement tools, grounded in science, in order to more reliably assess competencies. Moreover, Hollenbeck, McCall, and Silzer (2006) argued that there is a need for a more comprehensive model of effectiveness that incorporates more tangible results, such as organizational effectiveness, in addition to outcomes at the level of the managers themselves, such as perceived managerial effectiveness.

In this article, we focus on the predictive validity of two types of managerial competencies for both managerial and organizational effectiveness. Over the past years, the use of multisource ratings has proliferated in the United States. However, scarce research is available that demonstrates its usefulness in other countries (see Atwater, Waldman, Ostroff, Robie, & Johnson [2005] for an important exception in this regard), as well as its importance and meaning across countries (Eckert, Ekelund, Gentry, & Dawson, 2010). Managerial competencies can be assessed by means of multisource approaches, provided by sources such as subordinates, peers, supervisors, and customers. These can be used to obtain unique and valuable information that adds incremental validity to the assessment of individual performance (Borman, 1997). Multisource feedback, also called 360-degree feedback, has undergone both widespread application and close academic scrutiny (Atwater, Waldman, & Brett, 2002; Borman, 1997; Hensel, Meijers, Van der Leeden, & Kessels, 2010; Levy & Williams, 2004; Toegel & Conger, 2003; Waldman, Atwater, & Antonioni, 1998). Numerous studies suggested that rating incongruence is inherent to multisource feedback (e.g., Hassan & Rohrbaugh, 2009; Heinsman, 2008; Hooijberg & Choi, 2000), and should be integrated into performance appraisal practices in order to better understand possible discrepancies in perceptions (Borman, 1997; Hassan & Rohrbaugh, 2009; Hooijberg & Choi, 2000; Salam, Cox, & Sims, 1997; Tornow, 1993; Van der Heijden & Nijhof, 2004).

> *The aim of this article is to shed light on the predictive value of multisource ratings (i.e., of subordinates, peers, and supervisors) on managerial competencies for both managerial and organizational effectiveness.*

Organizations often use multisource feedback to distinguish between effective and ineffective managers (e.g., Borman & Brush, 1993). This feedback is used by the ratee to make training and development plans, and by organizations to make decisions—for example, on pay or promotion (Borman, 1997; Conway, Lombardo, & Sanders, 2001; Hassan & Rohrbaugh, 2009; Toegel & Conger, 2003). So, a short-term goal of multisource feedback is enhanced *managerial effectiveness*, while a longer-term goal refers to improved *organizational effectiveness* (Furnham & Stringfield, 1998; Levy & Williams, 2004).

Although a direct association between managerial competencies and effectiveness was expected, there is limited empirical support for this association (O'Driscoll, Humphries, & Larsen, 1991; Posner & Kouzes, 1988; Smither et al., 2005). A few studies have reported how multisource feedback predicts effectiveness (Atkins & Wood, 2002). Furthermore, previous research used either individual-level ratings or organization-level measures as outcome variables. It should be noted that perceptions of raters may be biased and organizational outcomes may be incomplete (Bommer, Johnson, Rich, Podsakoff, & MacKenzie, 1995). Including both types of measures allows a more comprehensive insight in the relationship between managerial competencies and effectiveness.

The aim of this article is to shed light on the predictive value of multisource ratings (i.e., of subordinates, peers, and supervisors) on managerial competencies for both managerial and organizational effectiveness. By using individual multisource ratings for the predictor variables on the one hand and both individual and organizational outcome measures on the other hand, we add to the understanding of differences in rating perspectives, as well as possible biases and information gaps for the parties involved.

Theoretical Framework

Multisource Feedback and Rating Incongruence

The multisource approach is attractive because of its numerical scoring, which conveys the impression of objectivity and fairness (Toegel & Conger, 2003). Although multisource feedback was primarily meant for the purpose of managerial development, it also serves as a basis for administrative decisions (e.g., succession planning and promotions) (Hassan & Rohrbaugh, 2009; Toegel & Conger, 2003). When used for administrative decisions, the goal of multisource assessment is accuracy. However, in the light of personal development, its goal is obtaining an honest perspective, even if the specific contents vary among evaluators, or lead to contradictory views. For both goals the required information should be reliable and valid, reflecting comparability of psychometric properties of measurement scales (psychometric equivalence), and the use of a similar conceptual framework for evaluating performance (conceptual equivalence) (Cheung, 1999).

Generally speaking, even in case of sufficient measurement equivalence, raters do not reach consensus (Atkins & Wood, 2002; Borman, 1997; Harris & Schaubroeck, 1988; Tsui & Ohlott, 1988). Methodological omissions may be at play, such as the lack of using multisource validated methods and/or not comparing the ratings from multisource feedback with objective or independent measures of competencies or effectiveness (e.g., Atkins & Wood, 2002; De Hoogh et al., 2004; Heinsman, 2008; Luthans, Welsh, & Taylor, 1988; Mersman & Donaldson, 2000).

Rating incongruence may also be caused by differences in performance expectations, differences in performance observed, contextual factors, observer recall, or observer cognition (Atkins & Wood, 2002; Atwater & Yammarino, 1997; Bradley, 2004; Hooijberg & Choi, 2000; Spence & Keeping, 2010; Toegel & Conger, 2003; Warr & Bourne, 2000). These differences between observers may refer to meaningful subjective discrepancies. These can be explained in terms of, for example, implicit leadership theories (ILTs) that raters apply during rating (see, e.g., Judge, Bono, Ilies, & Gerhardt, 2002). Raters may have different perspectives on managerial behavior, or the leadership role (Offerman, Kennedy, & Wirtz, 1994).

In the 1950s, scholars at Ohio State University defined two distinct behavioral roles of leaders as a framework to categorize the array of leadership styles that could be adopted (Fleishman, 1957; Halpin & Winer, 1957; Hemphill & Coons, 1957; Stogdill, 1950). As Tabernero, Chambel, Curral, and Arana (2009, p. 1394) put it, *initiating structure* or *task-oriented leadership* expresses the degree to which a leader defines the roles of their followers, focuses on goal achievement, and establishes well-defined patterns of communication. *Consideration* or *relationship-oriented* leadership, on the other hand, expresses the degree to which a leader shows concern and respect for their followers, looks out for their welfare, and expresses appreciation and support (Bass, 1990a, 1990b).

Blake and Mouton (1982) who distinguished, in a similar vein, between leadership behavior focusing on task achievement and leadership behavior aimed at the establishment of relationships with their group members, stressed the need for future researchers to continue to explore the effect of different leadership styles in terms of valuable outcomes. Our objective to explain both managerial and organizational effectiveness is in line with this need and compares differences in perceived value of leadership behavior in terms of managerial *competencies*, across different types of raters.

Depending on the rating group, different aspects of leadership or managerial behavior are valued to a higher extent. For instance, in their factor-analytic study, Offerman and colleagues (1994) found eight dimensions or distinct factors of ILTs (sensitivity, dedication, tyranny, charisma, attractiveness, masculinity, intelligence, and strength). Keller (1999) related these dimensions to individual differences, and argued that especially four of the eight dimensions are relevant in explaining the ILTs from a social learning or psycho-analytic perspective (i.e., sensitivity, dedication, tyranny, and charisma).

Conway and colleagues (2001) explained the content of ILTs by another perspective, using the socio-analytic theory by Hogan and Shelton (1998). From this perspective, two basic motives of behavior may underlie or co-create ILTs: the motive to get along versus the motive to get ahead. In this sense, we conclude that managerial behavior can be perceived as more oriented toward pursuing either good relationships ("get along," associated with sensitivity competence), or good results ("get ahead," associated with dedication competence). Thus, one would not expect, or even desire, a high agreement *across* rater groups, but respect, and use these different perspectives. The expectation, or purpose, should be to obtain high agreement *within* rater groups. Indeed, in previous research, inter-rater agreement (across sources) is found to be low to moderate, while intra-rater agreement (within sources) is significantly higher (Borman, 1997; Heinsman, 2008; Van der Heijde & Van der Heijden, 2006; Van der Heijden, 2000).

Managerial behavior can be perceived as more oriented toward pursuing either good relationships ("get along," associated with sensitivity competence), or good results ("get ahead," associated with dedication competence).

Although rater incongruence on managerial competencies and effectiveness can be valuable for its own good (see, for instance, Atwater and Brett [2005] on the effect in terms of enhanced future development activities and changes in leadership behavior), measurement unspecificity in ratings, as well as disconnection with more objective, organizational outcome measures, should be avoided (Atwater, Ostroff, Yammarino, & Fleenor, 1998). To comply with the need for a better understanding of rater incongruence and its implications, we will further discuss the relevance of multisource perspectives on managerial competencies and effectiveness, and their interrelatedness with organizational effectiveness.

The Relationship Between Managerial Competencies and Managerial and Organizational Effectiveness

Management literature on multisource feedback identified different dimensions of managerial performance that are linked to effectiveness (Fraser & Zhu, 2008; O'Driscoll et al., 1991; Posner & Kouzes, 1988; Smither et al., 2005). However, previous studies have not yet provided clear insight into the relationship between separate or specific managerial *competencies* and managerial or organizational effectiveness. Hagan, Konopaske, Bernardin, and Tyler (2006) validated a six-competency, 360-degree assessment to assessment-center criteria but did not relate them to managerial or organizational effectiveness outcomes. And to the best of our knowledge, only the study by Heinsman (2008) dealt with the importance of specific (i.e., relevant *separate*) managerial competencies for predicting managerial effectiveness.

Other studies have focused on *organizational outcomes*, with measures such as organizations' net profit margin (Conway et al., 2001; Koene, Vogelaar, & Soeters, 2002; Waldman, Ramirez, House, & Puranam, 2001), business-unit sales (e.g., Barling, Weber, & Kelloway, 1996; De Hoogh et al., 2004), and the percentage of business unit performance goals that were met (J. M. Howell & Avolio, 1993). However, while reducing common-source and common-method bias, such organizational measures can be viewed as being overly narrow (Bommer et al., 1995). Organizational measures are also dependent on environmental constraints and reflect forces outside the control of the manager (Atkins & Wood, 2002; Heneman, 1986).

The distinction between subjective and objective measures can be considered somewhat arbitrary but refers to a relevant difference, to be combined in empirical research. Meta analyses by Bommer and colleagues (1995) and Conway and colleagues (2001) revealed mean correlations between .25 and .39 for subjective (ratings) and objective outcomes (such as production, profit, or number of demerits). The different types of outcomes can therefore not be used interchangeably, especially when measured at different levels (e.g., individual versus organizational level).

Studies that *combine* individual-level multisource ratings and organizational-level outcome measures on managerial effectiveness are scarce. Two single studies found low correlations between the two types of measures (Hazucha, Hezlett, & Schneider, 1993; Merchant, Stringer, & Theivananthampillai, 2010). Following the argument that effectiveness is interpreted to be a multifaceted construct that is composed of distinct components (Campbell, McHenry, & Wise, 1990), a combination of subjective (multisource feedback) and more objective (organizational) outcomes seems warranted.

Subjective and objective effectiveness measures are shown to yield different information and might reflect a different perspective of managerial effectiveness (e.g., Conway et al., 2001). Therefore, we include both types of outcome measures in the current study and relate them to managerial competencies as perceived by different rater groups. In the next section, our hypotheses are presented.

Multisource Perspectives on Managerial Competencies Predicting Managerial and Organizational Effectiveness

Earlier studies indicate that intra-rater agreement on managerial competencies is higher compared to inter-rater agreement (e.g., Heinsman, 2008). We assume ILTs to play a role in the sense that *within* groups, ideas and notions on what competencies managers should have are more equal than *between* groups. Due to hierarchical distance, we expect the supervisors' perceptions of managerial competencies to be more different from the subordinates' perceptions, than from the peers' perceptions.

Hypothesis 1a: Intra-rater agreement on managerial competencies will be higher than inter-rater agreement.

Hypothesis 1b: Disagreement on managerial competencies' ratings between groups will be largest between supervisors and subordinates.

Thus, distinct rater groups have different perspectives (and possibly biases) in observing the manager's behaviors (Bradley, 2004). Subordinates seem to value a full and a rather *balanced* spectrum of competencies of their managers, ranging from being involved to being disciplined (Heinsman, 2008; O'Driscoll et al., 1991). From an ILT perspective, this balanced view of subordinates seems plausible, since this rater group experiences the added value of a leader engaging in both foci (relationships- versus results-oriented) on a daily basis. Likewise, Bradley (2004) found that subordinates perceive a good relationship with their manager as *equally important* as good results for effectiveness. In terms of the importance of relationships- versus results-oriented competencies for managers, we therefore expect that:

Hypothesis 2a: Among subordinates, relationships-oriented and results-oriented competencies will both be perceived as equally important for managerial effectiveness, more equally important than among peers and supervisors.

Following the argument that effectiveness is interpreted to be a multifaceted construct that is composed of distinct components, a combination of subjective (multisource feedback) and more objective (organizational) outcomes seems warranted.

In line with the meta-analysis of Conway and colleagues (2001), in which subordinates' ratings were linked to organizational effectiveness outcomes, we assume that among subordinates the relationships-oriented competencies are more important for organizational effectiveness than among peers and supervisors:

Hypothesis 2b: Among subordinates, the relationships-oriented competencies will be more important for organizational effectiveness than among peers and supervisors.

Heinsman (2008) demonstrated that *peers* more highly value managers who easily interact and initiate and maintain relationships, while also being disciplined and tenacious. Among peers, this combination is considered positive for managerial effectiveness. It may also be considered positive in the light of better-performing teams of subordinates who work for these peers, leading to organizational effectiveness, serving the peers' goals (Heinsman, 2008). Thus, for peers, both relationships- and results-oriented competencies are likely part of their ILT. In line with the findings among peers on perceived managerial effectiveness (Bradley, 2004) and organizational effectiveness (Conway et al., 2001), we expect that, for peers, relationships- and results-oriented competencies will both be significantly important for effectiveness.

> *We expect that, for peers, relationships- and results-oriented competencies will both be significantly important for effectiveness.*

Hypothesis 3a: Among peers, relationships-oriented and results-oriented competencies will both be significantly important for perceived managerial effectiveness.

Hypothesis 3b: Among peers, relationships-oriented and results-oriented competencies will both be significantly important for organizational effectiveness.

Evidence suggests that relationships-oriented behavior is more important to *peers* than to *supervisors* (Conway et al., 2001). Peers observe more interactions between managers and subordinates than the manager's supervisor. We therefore expect that among peers, the competencies that are relationships-oriented will be more important predictors of effectiveness than among supervisors.

Hypothesis 3c: Among peers, relationships-oriented competencies will be more important for managerial effectiveness than among supervisors.

Hypothesis 3d: Among peers, relationships-oriented competencies will be more important for organizational effectiveness than among supervisors.

Supervisors expect their reporting managers to produce good results, to contribute to the unit, and to approve behaviors that motivate others (Conway et al., 2001). This may reflect an ILT in which both relationships- and results-oriented competencies play a role. This is in line with the findings of Heinsman (2008) indicating that supervisors especially value managers who are involved with their coworkers, but also appreciate, although to a lesser extent, discipline and tenacity. Bradley's (2004) results showed, however, that, among supervisors, good results are slightly more important for effectiveness than good relationships. In the meta-analysis by Bommer and colleagues (1995), no distinction could be made in the importance of the two types of independent variables (that is, relationships-oriented predictors and results-oriented predictors). In spite of these mixed results, we assume that, of all rater groups, the supervisors' perspective will be most aligned with the organizational goals and focuses more on results than on relationships. After all, supervisors are directly instructed by the top management. We therefore expect that:

Hypothesis 4a: Among supervisors, results-oriented competencies will be more important for managerial effectiveness than relationships-oriented competencies.

Hypothesis 4b: Among supervisors, results-oriented competencies will be more important for organizational effectiveness than relationships-oriented competencies.

Methodology

Procedure and Sampling

Our study was conducted within a Dutch organization in the business services sector, which employs approximately 450 people. It supports industrial customers, governments and stakeholders, and individual clients in the field of business (confidential). For its activities (including research and development, consultancy, monitoring, and providing service), it combines expertise from different disciplines. The organization has nine business units and 40 departments, each headed by their own manager. The smallest business unit consisted of two departments; the largest business unit consisted of nine departments. The mean number of subordinates per manager was 10, with the span of control ranging from 1 to 33. Respondents from all business units and all 40 departments were invited to participate. They were informed about the background of the study and were asked to fill in an electronic questionnaire through the company's Intranet.

To protect the independence of the data points, we strove for a valid reflection of the distribution of the respondents, for all rater groups, across departments, age groups, gender, and educational level. For 39 managers, ratings were obtained from at least one subordinate. For 34 managers, at least one peer provided ratings. For 28 managers, data were gathered from their specific supervisors.

The final data set contained information on all 40 managers, and comprised a total of 242 filled-out surveys. A total of 155 (64.0 percent) surveys were completed by subordinates, 59 (24.4 percent) by peers, and 28 (11.6 percent) by supervisors. Of the 242 surveys, 151 (62.4 percent) were completed by male raters and 91 (37.6 percent) by female raters. The average tenure was 12.1 years for subordinates, 9.7 years for peers, and 8.5 years for supervisors. The response rates, as well as the subdivision of rater groups and their demographics, appeared representative for the overall organizational population.

Measures

Following Heinsman (2008), six *managerial competencies* (compassion, judgment, sociability, analytic ability, perseverance, and action orientation) were assessed to measure relationships- and results-oriented competencies on two three-item scales. The relationships-oriented competencies scale (sociability, compassion, and judgment) showed a Cronbach's alpha of .75. The items were: "The person that I assess shows concern for the well-being of others and is perceptive ("compassion"')," "The person that I assess integrates information in order to make a decision or to propose a solution ("judgment")," and "The person that I assess initiates and maintains interactions with others and is outgoing ("sociability")." The results-oriented competencies scale (analytical ability, perseverance, and action orientation) revealed a Cronbach's alpha of .81. The items were: "The person that I assess analyzes problems and distinguishes different elements ("analytical ability")," "The person that I assess is resistant to pressure and setback and shows discipline and tenacity ("perseverance")," and "The person that I assess takes initiative, is able to influence others and to overcome resistance in order to reach goals ("action orientation")." Responses were given on a five-point rating scale, ranging from 1 (not at all) to 5 (very much so). These competencies items are highly applicable to managerial jobs and correspond with earlier taxonomies (e.g., Bartram, 2005; Hassan & Rohrbaugh, 2009; Hooijberg & Choi, 2000; Tett, Guterman, Bleier, & Murphy, 2000). To validate the distinction in relationships- and results-oriented competencies by the different rater groups, factor analysis (PCA) was conducted per rater group. Its outcomes showed that the distinction is recognized by supervisors, but not by subordinates and peers. Apparently, supervisors are better capable of recognizing the difference between relationships- versus results-oriented competencies, possibly because of their experience and training (see, e.g., Mount, Judge, Scullen, Sytsma, & Hezlett, 1998). In order to allow for the possibility to investigate the predictive validity of the two types of competencies, we continued our analyses using the distinct relationships- and

Apparently, supervisors are better capable of recognizing the difference between relationships- versus results-oriented competencies, possibly because of their experience and training.

results-oriented competencies' scales for *all* rater groups.

Managerial effectiveness was measured using five items on a five-point rating scale (ranging from 1 to 5), combining the scales used by Tsui (1984) and Heinsman (2008). Both scales together contained six items, of which two items were interpreted to be overlapping in terms of construct validity (i.e., "To what extent is the overall functioning of the person you evaluate satisfactory?" and "Overall, to what extent do you feel this manager is performing his or her job the way you would like it to be performed?"). Therefore, the latter item was left out. The scale reliabilities yielded alpha coefficients of .94 for the subordinates ($N = 155$), .92 for the peers ($N = 59$), and .91 for the supervisors ($N = 28$). An example item was "How effective is the person you are evaluating as a leader?" The effectiveness scale measured the extent to which the manager meets the raters' performance expectations and provides an indication of how effective managers are perceived to be. The item sets for the groups of raters are nominally identical, except for the fact that the items in the subordinates measure refer to the subordinates, the items in the peers measure refer to the peers, and the items in the supervisors measure refer to the supervisors themselves.

Measures of *organizational effectiveness* have been collected using the Balanced Scorecard (BSC) ratings from each of the 40 participating departments of the organization. These ratings come from different administrative sources, such as personnel data, sales, client satisfaction research, and organizational targets as set by the board of directors. Four indicators were used: (1) healthy financial organization; (2) external confidence in the company; (3) efficient and reliable organizational processes; and (4) employees' confidence in the organization. The organization uses these BSC data for evaluation, amendment, and strategy, thereby referring to measures of organizational effectiveness (Conway et al., 2001; Koene et al., 2002; Waldman et al., 2001). Every indicator had three possible scores: (a) less than targeted (1 point), (b) as targeted (3 points), and (c) better than targeted (5 points). BSC data were obtained for the year of measurement and for the situation one year before. Average scores over the two measures were computed. In this way, bias caused by random fluctuations was prevented, and a somewhat longer-term measure of effectiveness was used (see also De Hoogh et al., 2004).

Gender (1 = female, 2 = male) and *tenure with the organization* (in years) were included as control factors.

Analyses

First, the mean values, standard deviations, and correlations between all model variables were calculated per rater group. Second, for each manager, mean peer and subordinate ratings were correlated with one another, and with the supervisor ratings.

To evaluate the significance of the difference between correlation coefficients found within and between rater groups, Fisher's *r*-to-*z* transformation was used (D. C. Howell, 1992; Raghunathan, Rosenthal, & Rubin, 1996). Fisher's *r*-to-*z* transformation provides a way to assess the significance of these differences in perspectives, while at the same time taking into consideration the (in our specific case, small and different) group sizes.

Regression analysis was used to test the effects of perceived managerial competencies on perceived managerial, as well as organizational effectiveness. Relative importance weights, or epsilons (ε's), were calculated as an index of the relative importance of the predictors (Johnson, 2000; Johnson & LeBreton, 2004). Epsilons provide estimates of importance for correlated predictors that, when rescaled by dividing them by the model R^2 and multiplying by 100, may be interpreted as the percentage of the model R^2 associated with each predictor. This characteristic makes the regression results more easily and better interpretable. Relative importance analysis is considered a useful supplement to the traditional regression analysis outcomes (Tonidandel & LeBreton, 2011). For more detailed information about the relative weight procedure, we refer to Johnson (2000) and Johnson and LeBreton (2004).

The BSC data, which are essentially multilevel in character, were disaggregated to the individual level. The sample size ($N = 242$) in relation to the number of departments involved ($N = 40$) failed to estimate a meaningful multilevel model.

Results

Preliminary Results

Means, standard deviations, and correlations between all model variables are presented for the three rater groups separately in Table I.

Correlations between perceived managerial and organizational effectiveness outcomes appeared to be only significant for subordinates, although they were rather low (.20). Significantly high correlations were found between the independent variables—that is, the competency ratings on the one hand and the perceived effectiveness outcomes on the other hand. Although high correlations were found between two sources of competency ratings themselves as well (i.e., for subordinates and peers), no evidence for multicollinearity among these independents was found.[1]

Rater Incongruence Regarding Managerial Competencies

Table II presents the interscale correlations for managerial competencies for all rater groups. It shows that the correlations between competencies within rater groups are higher in comparison with the correlations between competencies across rating groups. Thus, at first sight, intra-rater agreement on managerial competencies is higher than inter-rater agreement. However, to statistically examine the differences in scale correlations within and between rater sources, Fisher's r-to-z transformation (D. C. Howell, 1992; Raghunathan et al., 1996) was used. The mean inter-rater correlations for managerial competencies were .215 for subordinates versus peers, .250 for subordinates versus supervisors, and .395 for peers versus supervisors. The difference of the intra-rater correlation for subordinates appeared to be significantly different from the mean inter-rater correlations with peers ($z = 2.54$), and from the inter-rater correlations with supervisors ($z = 2.25$). The inter-rater correlations for peers versus supervisors appeared not to differ significantly from their respective intra-rater correlations ($z \leq 1.96$ and ≥ -1.96).

These outcomes imply that peers and subordinates disagreed most when rating managerial competencies, followed by the supervisors and subordinates. Hypothesis 1a was partly confirmed; intra-rater agreement was only higher than inter-rater agreement in two cases: when subordinates' outcomes were compared with, respectively, peers and supervisors. Hypothesis 1b was not confirmed, since the difference appeared to be largest between subordinates and peers, instead of the difference between supervisors and subordinates.

Peers and subordinates disagreed most when rating managerial competencies, followed by the supervisors and subordinates.

Predictive Value of Managerial Competencies for Managerial and Organizational Effectiveness Outcomes

Multiple regression analyses were conducted to estimate the effects of perceived managerial competencies on both perceived managerial effectiveness, as well as organizational effectiveness outcomes. The analyses were conducted for our three rater groups separately. Additionally, both the raw relative weights, or epsilons, were calculated for the predictors in the models, as well as their proportionate contribution in the explained variance (% of R^2). The results are presented in Table III.

As can be seen in Table III, for subordinates, managerial competencies plus the control variables gender and tenure explained 73 percent of the variance in managerial effectiveness ($F = 103.79$, $p < .01$). The ΔR^2 shows the increase in explained variance as compared to the model in which only the control variables were included as a first step ($\Delta R^2 = .726$). This means the managerial competencies almost entirely accounted

TABLE I **Means, Standard Deviations, and Correlations Between All Model Variables**

	M	SD	1	2	3	4	5	6	7	8
Subordinates ($N = 155$)										
1. Gender	1.45	0.50								
2. Tenure	12.12	9.14	–.24***							
3. Relationships-oriented competencies	3.59	0.88	–.07	–.03						
4. Results-oriented competencies	3.68	0.92	–.07	.05	.75***					
5. Perceived managerial effectiveness	3.45	0.92	–.08	–.01	.78***	.82***				
6. Healthy financial organization	3.00	0.51	–.07	–.10	–.06	–.03	–.07			
7. External confidence in the company	3.28	0.98	–.01	–.07	–.16**	–.09	–.13	.36***		
8. Efficient and reliable organizational processes	3.30	0.51	–.03	.04	–.10	–.06	–.02	–.10	.24***	
9. Employees' confidence in the organization	2.83	0.99	–.03	.20**	.20**	.19**	.20**	–.07	–.38***	–.13*
Peers ($N = 59$)										
1. Gender	1.34	0.48								
2. Tenure	9.66	7.09	.02							
3. Relationships-oriented competencies	3.59	0.77	–.18	.12						
4. Results-oriented competencies	3.63	0.74	–.15	–.01	.70***					
5. Perceived managerial effectiveness	3.47	0.83	–.13	.14	.81**	.78***				
6. Healthy financial organization	2.92	0.48	.06	–.20	–.06	.04	.00			
7. External confidence in the company	3.28	0.85	–.07	.05	.00	.02	–.03	.12		
8. Efficient and reliable organizational processes	3.34	0.46	–.21	.23*	.05	.24*	.21	.19	.35***	
9. Employees' confidence in the organization	2.65	1.01	.24*	.16	.06	–.03	.06	–.03	–.28**	–.17
Supervisors ($N = 28$)										
1. Gender	1.07	0.26								
2. Tenure	8.46	4.56	–.06							
3. Relationships-oriented competencies	3.65	0.70	.01	.11						
4. Results-oriented competencies	3.68	0.71	–.07	–.16	.46**					
5. Perceived managerial effectiveness	3.57	0.70	–.07	–.15	.43**	.83***				
6. Healthy financial organization	2.98	0.50	.08	–.29	.06	.32*	.05			
7. External confidence in the company	2.97	1.01	.22	.27	.04	.14	–.03	.35*		
8. Efficient and reliable organizational processes	3.26	0.53	.09	.30	–.25	–.03	.05	–.11	.34*	
9. Employees' confidence in the organization	3.04	1.03	–.19	–.04	.25	.09	.11	.03	–.29	–.26

* $p < .10$.
** $p < .05$.
*** $p < .01$.
All tests were two-tailed.
Gender: 1 = male, 2 = female.
Tenure in years.
A five-point rating scale was used for all other variables.

TABLE II Correlations Between Managerial Competencies Within and Between Rater Sources

	1	2	3	4	5
Subordinate					
1. Relationships-oriented competencies					
2. Results-oriented competencies	.84***				
Peer					
3. Relationships-oriented competencies	.21	.34			
4. Results-oriented competencies	.31*	.22	.58***		
Supervisor					
5. Relationships-oriented competencies	.10	.10	.39*	.33	
6. Results-oriented competencies	.23	.40**	.19	.40*	.50***

The peer ($N = 59$) and subordinate ($N = 155$) ratings were averaged for each manager before computing the correlations, because of the varying numbers of peers and subordinates per manager (ratee).
* $p < .10$.
** $p < .05$.
*** $p < .01$.
All tests were two-tailed.

for the 73 percent in explained variance. The relationships-oriented competencies showed a positive effect ($\beta = .374$, $p < .01$) and the results-oriented competencies did as well ($\beta = .536$, $p < .01$). To obtain more insight into the importance of both types of competencies among subordinates, their relative weights were calculated, revealing raw ε's of 0.334 and 0.395, respectively. The proportionate contributions to the explained variance (R^2) of the regression model are 45.6 percent for the relationships-oriented competencies and 53.9 percent for the results-oriented competencies. For peers, both relationships- and results-oriented competencies appeared to be important for perceived managerial effectiveness ($\beta = .51$, $p < .01$ and $\beta = .43$, $p < .01$, respectively). The relative weights revealed epsilon values of $\varepsilon = 0.388$ and $\varepsilon = 0.348$, resulting in contributions to the R^2 of 51.4 percent for relationships-oriented and 46 percent for results-oriented competencies. Thus, these weights among peers are even more equally important than among subordinates (their difference is smaller). For supervisors, especially the results-oriented competencies are important for effectiveness ratings ($\beta = .79$, $p < .01$). No effect of the relationships-oriented competencies was found. The relevant epsilon values of 0.577 and 0.095 revealed contributions to the R^2 of 83.7 percent for the results-oriented competencies and 13.7 percent for relationships-oriented competencies. In all, Hypothesis 2a, that *among subordinates, relationships-oriented and results-oriented competencies will both be perceived as equally important for managerial effectiveness, more equally than among peers and supervisors,* is confirmed when compared to supervisors but cannot be confirmed when compared to peers.

For organizational effectiveness, only one negative effect was found among subordinates. Relationships-oriented competencies appeared to be negatively related to external confidence in the company ($\beta = -.23$, $p < .10$), with a proportionate contribution to R^2 of 67.2 percent. Compared to the contributions among peers (5.2 percent) and supervisors (1.8 percent), this value showed a much larger proportion for its importance. Thus, as far as the external confidence in the company outcome is concerned, Hypothesis 2b is confirmed. However, for the other organizational outcomes, no effects were found among subordinates. For peers and supervisors, negative effects were found for relationships-oriented competencies on efficient and reliable organizational processes ($\beta = -.33$, $p < .10$ and $\beta = -.39$, $p < .10$, respectively). Therefore, Hypothesis 2b is not confirmed for the other organizational outcomes.

For peers, we found that the managerial competencies, measured together with the

TABLE III Results of Regression Analyses

	Perceived Managerial Effectiveness			Healthy Financial Organization			External Confidence in the Company		
Subordinate ($n = 155$)	**Beta**	**Epsilon (ε)**	**%R^2**	**Beta**	**Epsilon (ε)**	**%R^2**	**Beta**	**Epsilon (ε)**	**%R^2**
Gender	–.02	0.003	0.4%	–.11	0.008	32.4%	–.04	0.001	2.3%
Tenure	–.03	0.001	0.1%	–.13	0.012	48.2%	–.09	0.005	15.2%
Relationships-oriented comp.	.37***	0.334	45.6%	–.10	0.004	16.0%	–.23*	0.024	67.2%
Results-oriented comp.	.54***	0.395	53.9%	.04	0.001	3.4%	.08	0.005	15.3%
R^2		.733			.024			.036	
F		103.18***			0.923			1.383	
ΔR^2		.726			.005			.031	
Peer ($n = 59$)	**Beta**	**Epsilon (ε)**	**%R^2**	**Beta**	**Epsilon (ε)**	**%R^2**	**Beta**	**Epsilon (ε)**	**%R^2**
Gender	.02	0.006	0.8%	.07	0.004	8.2%	–.07	0.005	52.1%
Tenure	.08	0.013	1.8%	–.19	0.037	70.6%	.06	0.003	33.5%
Relationships-oriented comp.	.51***	0.388	51.4%	–.11	0.006	11.0%	–.05	0.000	5.2%
Results-oriented comp.	.43***	0.348	46.0%	.13	0.005	10.3%	.05	0.001	9.2%
R^2		.756			.053			.009	
F		41.790***			0.750			0.126	
ΔR^2		718			.009			.001	
Supervisor ($n = 28$)	**Beta**	**Epsilon (ε)**	**%R^2**	**Beta**	**Epsilon (ε)**	**%R^2**	**Beta**	**Epsilon (ε)**	**%R^2**
Gender	–.02	0.003	0.4%	.09	0.008	4.4%	.29	0.056	30.4%
Tenure	–.03	0.015	2.1%	–.22	0.065	38.0%	.34*	0.088	48.4%
Relationships-oriented comp.	.06	0.095	13.7%	–.70	0.006	3.6%	–.12	0.003	1.8%
Results-oriented comp.	.79***	0.577	83.7%	.33	0.093	54.0%	.27	0.035	19.4%
ΔR^2		.689			.172			.183	
F		12.730***			1.193			1.284	
ΔR^2		.660			.087			.055	

TABLE III Results of Regression Analyses (Continued)

	Efficient and Reliable Organizational Processes			Employees' Confidence in the Organization		
Subordinate ($n = 155$)	**Beta**	**Epsilon (ε)**	**$\%R^2$**	**Beta**	**Epsilon (ε)**	**$\%R^2$**
Gender	–.03	0.001	8.3%	.03	0.001	0.7%
Tenure	–.03	0.001	8.4%	.21**	0.040	48.4%
Relationships-oriented comp.	–.14	0.010	68.1%	.16	0.025	29.7%
Results-oriented comp.	–.05	0.002	15.2%	.06	0.018	21.1%
R^2		.014			.083	
F		0.529			3.391**	
ΔR^2		.012			.043	
Peer ($n = 59$)	**Beta**	**Epsilon (ε)**	**$\%R^2$**	**Beta**	**Epsilon (ε)**	**$\%R^2$**
Gender	–.21*	0.042	20.9%	.25*	0.059	63.4%
Tenure	.28**	0.059	29.8%	.13	0.021	23.2%
Relationships-oriented comp.	–.33*	0.022	11.0%	.16	0.009	9.6%
Results-oriented comp.	.45**	0.076	38.3%	–.10	0.004	3.8%
R^2		.200			.093	
F		3.381**			1.378	
ΔR^2		.102			.013	
Supervisor ($n = 28$)	**Beta**	**Epsilon (ε)**	**$\%R^2$**	**Beta**	**Epsilon (ε)**	**$\%R^2$**
Gender	.13	0.010	4.8%	–.21	0.039	34.2%
Tenure	.39*	0.112	51.1%	–.10	0.004	3.9%
Relationships-oriented comp.	–.39*	0.084	38.4%	.30	0.066	58.1%
Results-oriented comp.	.23	0.012	5.7%	–.08	0.004	3.8%
ΔR^2		.219			.113	
F		1.612			0.734	
ΔR^2		.116			.073	

ΔR^2: as compared to the model in which only control variables are included.
* $p < .10$.
** $p < .05$.
*** $p < .01$.
All tests are two-tailed.
% R^2 refers to the translated value of epsilon (ε) that indicates the unique percentage contribution of the predictor to the R^2.

control variables, explained about 72 percent (of the total 76 percent) of the variance in managerial effectiveness ($F = 41.79$, $p < .01$, $\Delta R^2 = .718$). Relationships-oriented competencies appeared to be the most important ($\beta = .51$, $p < .01$, $\varepsilon = 0.388$, % $R^2 = 51.4$ percent), although the results-oriented competencies also appeared to capture substantial importance ($\beta = .43$, $p < .01$, $\varepsilon = 0.348$, % $R^2 = 46$ percent). Concluding for peers, both relationships- and results-oriented competencies are important predictors for managerial effectiveness, thus confirming Hypothesis 3a. For organizational outcomes, results-oriented competencies especially showed a positive effect on efficient and reliable organizational processes ($\beta = .45$, $p < .05$, $\varepsilon = 0.076$, % $R^2 = 38.3$ percent). The relationships-oriented competencies showed a negative effect ($\beta = -.33$, $p < .10$, $\varepsilon = 0.022$, % $R^2 = 11$ percent). This implies that Hypothesis 3b, stating that *among peers relationships-oriented and results-oriented competencies are both important for organizational effectiveness*, can be confirmed, although the importance of results-oriented competencies captured a larger proportion of the explained variance in the regression model and it only accounted for the efficient and reliable organizational processes outcome. For the other dependents, no effects were found among peers.

The relationships-oriented competencies appeared to have more relevance in explaining managerial effectiveness among peers than among supervisors.

As can be seen from Table III, the relationships-oriented competencies appeared to have more relevance in explaining managerial effectiveness among peers ($\beta = .51$, $p < .01$) than among supervisors. Among supervisors, no effect is found of relationships-oriented competencies on managerial effectiveness. Hypothesis 3c is therefore confirmed as well. The negative effects of relationships-oriented competencies on organizational effectiveness (i.e., the efficient and reliable organizational processes) among peers and supervisors revealed epsilon values of 0.022 and 0.084, respectively, translated to contributions in R^2 of 11 percent and 38.4 percent. These results imply that Hypothesis 3d, stating that *among peers, relationships-oriented competencies are more important for organizational effectiveness than among supervisors*, cannot be confirmed.

Among supervisors, 66 percent of the variance in managerial effectiveness was explained by managerial competencies in addition to the control variables included ($F = 12.73$, $p < .01$, $\Delta R^2 = .660$). The results-oriented competencies ratings appeared to have a large significant effect ($\beta = .79$, $p < .01$) and captured 83.7 percent of the explained variance in the model (with $\varepsilon = 0.577$), while the relationships-oriented competencies showed no effect. With these outcomes Hypothesis 4a, stating that *among supervisors, results-oriented competencies will be more important for managerial effectiveness than relationships-oriented competencies,* is confirmed. However, the results-oriented competencies appeared not important for organizational effectiveness when rated by supervisors; only a minor significant negative effect of the relationships-oriented competencies was found on the efficient and reliable organizational processes outcome ($\beta = -.39$, $p < .10$). Based on these results, our final Hypothesis 4b, stating that *among supervisors, results-oriented competencies will be more important for organizational effectiveness than relationships-oriented competencies*, was rejected.

Overall, our results showed that results-oriented competencies are perceived to be more important, implying that all rater groups perceived an effective manager as somebody who takes initiative, who is able to influence others, and who is able to overcome resistance in order to reach goals. At the same time, subordinates and peers especially valued relationships-oriented competencies for managerial effectiveness as well; peers even more so, in comparison with subordinates. Both relationships- and results-oriented competencies showed significant effects on *organizational* outcomes as well. Peer ratings showed significant effects in this regard for both subtypes of competencies, but especially for the results-oriented type. Subordinates and supervisors showed negative effects of only relationships-oriented competencies when explaining some of the distinguished organizational outcomes. Finally, the explained variance of the models predicting organizational outcomes appeared to be highest when using supervisor ratings as predictors (R^2 varies from .11 to .22).

Discussion

This empirical study was intended to relate managerial competencies ratings on the one hand with managerial effectiveness, and more objective organizational outcomes, on the other hand. Subordinate, peer, and supervisor ratings were incorporated, thus reflecting a multisource approach. More specifically, the distinction between relationships-oriented versus results-oriented managerial competencies was used. Based on earlier research into implicit leadership theories, different effects for different rater groups were hypothesized, in addition to the expectation that differences in ratings would be larger between rater groups than within rater groups.

The findings of this study indicate that ratings on competencies are indeed more similar within rater groups than between rater groups. Across sources, peers and supervisors appear to agree most, while *disagreement* is highest between peers and subordinates. For subordinates, peers, and supervisors, the relationships- and results-oriented competencies received different value ratings, indicating that the raters differed in terms of the perceived importance of these competencies for managerial effectiveness.

Earlier research showed that subordinates related *both* relationships- and results-oriented competencies to effective managers, yet *prefer* relationships-oriented competencies in this regard (e.g., Bradley, 2004; Heinsman, 2008; O'Driscoll et al., 1991). However, in our study, the results-oriented competencies are considered to be slightly more important when rated by the subordinates. Buttery and Holt (2000) explained that in the United States "friendly and supportive" personality characteristics and people orientation are regarded as important aspects for managers by subordinates, whereas Northern European subordinates value the more instrumental or task-oriented approach. This explanation may apply to our findings. They may also reflect a more results-oriented culture of the specific organization in this study (an organization-specific bias).

With regard to organizational effectiveness, it was found that the relationships- and results-oriented managerial competencies do not explain a significant amount of variance in effectiveness when subordinates' ratings are used. It is possible that subordinates are not in the best position to observe *organizational* results, at least not in the current sample. Conway and colleagues (2001) suggested that organizational results are most visible to supervisors, as they have greater opportunity to observe the ratee's planning and organizing behavior. More than other sources, supervisors probably also have access to the ratee's results (e.g., financial). However, in this study, *peers* seem to be in the best position to perceive and point out some relations between managerial competencies and organizational outcomes. Possibly, their own managerial experience is making a difference here.

For peers, relationships- and results-oriented competencies seem to be most similar in terms of importance for managerial effectiveness of all rater groups. For the prediction of organizational outcomes, the emphasis lies on the results-oriented competencies. Perhaps this finding is also related to the results-oriented culture of the organization. Possibly, peers need to be resistant to pressure and setback and show discipline and tenacity in order to attain satisfactory processes. This "stamina," however, seems no prerequisite for being perceived effective. In the organization that participated in this study, many departments are involved—and interdependent—in the production process. Thus, peers may especially value a relationships-oriented colleague, although in effect it is more important to be results-oriented, to insure that all departments are cooperative and attain the desired efficiency and reliability in the organizational processes.

Across sources, peers and supervisors appear to agree most, while disagreement *is highest between peers and subordinates.*

For supervisors, the results-oriented competencies contribute clearly to perceived managerial effectiveness. However, only relationships-oriented competencies are associated with organizational effectiveness, yet to a small extent. Perhaps managerial competencies, judged by supervisors, exist at a different level of analysis than organizational effectiveness. Organizational measures are more closely aligned to the organization's goals and objectives, whereas managerial competencies are judged by supervisors at the individual level, unlike, for instance, average workgroup performance. Supervisors may also be more prone to the influence of contextual factors (non-performance information) when rating their reporting managers (Spence & Keeping, 2010). For instance, organizational rating norms or self-interest (results of the supervisors' reports are part of their own evaluation) may influence their rating decisions as well.

For all rater groups, the results-oriented competencies are important for managerial effectiveness (see also the corresponding relatively high correlations in Table I). These types of competencies thus especially feed the image of managerial effectiveness, rather than being related to more objective effectiveness outcomes. This finding can well be explained by the presence of ILTs, as raters have already formed an impression of the ratee that also affects the rating for effectiveness (Heinsman, 2008; Viswesvaran, Schmidt, & Ones, 2005). ILTs thus influence the extent to which raters consider *all* relevant information when giving their ratings, or just a selection.

A better understanding of the reasons for ratings and rating incongruence, and further insight into perspectives and possible biases of specific rater groups, may help to improve multisource feedback methodology and practice.

A better understanding of the reasons for ratings and rating incongruence (Borman, 1997; Bradley, 2004; Hassan & Rohrbaugh, 2009), and further insight into perspectives and possible biases of specific rater groups, may help to improve multisource feedback methodology and practice (Atwater, Brett, & Charles, 2007; Bracken, Timmreck, Fleenor, & Summers, 2001; Bradley, 2004; Mersman & Donaldson, 2000). This may, in turn, help to guide managers' behavioral change aimed at increased effectiveness (Borman, 1997; Heinsman, 2008; Mersman & Donaldson, 2000; Murphy & Cleveland, 1995).

Practical Implications

The current findings have implications for HR practices regarding the use of multisource feedback for individual development and appraisal of employees (see also Atwater et al., 2007; Dalessio, 1998; Hazucha et al., 1993; London & Smither, 1995). An assumption made by HR practitioners is that multiple sources of ratings offer unique and valuable data on the ratee (Borman, 1997), and herewith provide a suitable starting point for future career development plans of the human capital in their working organization (in our case, managers). However, managers, on the other hand, who receive inconsistent patterns of feedback from rater groups may find these differences in perceptions confusing and unhelpful, and may feel rather unmotivated to rely on it for improving their performance (Luthans & Peterson, 2003; Miller & Cardy, 2002). Therefore, we would like to recommend that differences in the perspectives provided by different sources of raters are carefully considered when providing feedback to managers (Hassan & Rohrbaugh, 2009), with cooperation of HR, the supervisor, and the ratee. They can reveal useful and meaningful information for guidance on and development of managerial effectiveness. Preferably, this information is translated in clear guidelines for the managers' future growth plans, and a follow-up assessment of his/her managerial effectiveness.

In contrast to previous outcomes from US-based research, where a relationships-oriented style was highly advocated (Buttery & Holt, 2000), we have found in our European sample that a more balanced (both relationships- and results-oriented) managerial style is perceived to be more effective by subordinates, and especially by peers. Obviously, cross-cultural differences should be taken into account by HR managers when interpreting multisource outcomes in order to better understand different causal patterns between managerial competencies and valued outcomes.

Also, it is advisable to compare the ratings of different sources across the full range of the organization's desired outcomes, such as, in our case, managerial and organizational effectiveness. Our outcomes indicated that, obviously, managerial competencies are stronger related to managerial effectiveness in comparison with organizational effectiveness. However, the patterns for organizational effectiveness reveal valuable information for HR managers as well. The efficiency and reliability of organizational processes are considered to be negatively related to the more relationships-oriented competencies, suggesting relational skills are good for the people but bad for the organization. This outcome may be especially relevant for an organization in which results-oriented performance criteria are preferred, herewith stressing the need for investment in different types of managerial competencies by clear communication and goal setting in developmental policies, aligned with consistent HR practices.

We would like to recommend that in order to fully benefit from multisource feedback within organizations, more intensive communication and collaborations on the subject are to be advised, as they will positively influence the quality of the ratings. Here, a role for the HR manager can be seen as well, in facilitating these processes.

Using different rater perspectives, customized multisource assessment instruments can be created, in line with the organizational assessment purpose at hand. Working out these issues in organizational practice by HR practitioners critically and respectfully will also help to enhance awareness of (valuable) differences in perspectives among rater groups *within* the organization itself. Instead of being misled by inconsistent and confusing feedback, this can lead to strengthening a shared responsibility regarding managerial and organizational development. In this way, the value of obtaining multiple points of view, which is the foundation of multisource feedback, can be realized.

Limitations of the Study and Recommendations for Further Research

Intra-rater agreement might be inflated as a result of extra survey factors such as discussion between raters (Atkins & Wood, 2002). This may concern the survey, or, for instance, the ratee's behavior. Our results may also be inflated because the same respondents were asked to rate competencies and managerial effectiveness, referring to common-method bias. However, there are indications that this effect is not so large that it invalidates most theoretical interpretations and research conclusions (Doty & Glick, 1998). Since this study is based on cross-sectional data, we can only speculate on the causal direction of our findings.

The small sample size for this study is a limitation of concern. Although the results-oriented perspective of supervisors found in the present study is highly plausible, findings for supervisors should be interpreted with caution. The study is based on a relatively small sample of 39 managers for whom ratings were collected, and there are differences in the number of raters per source for each manager. The small number of supervisors that completed the survey ($N = 28$) may have negatively influenced the power of the analyses and, consequently, the strength of the relationships found. Obtaining more ratings per rater group would be an important requirement for further studies in different contexts. Moreover, future research is needed to better understand the impact of the hierarchical level of management (for instance, middle-level management versus executive management) (see also Sala, 2003) upon our outcomes. Further research should also go beyond case-study designs and consider appropriate (possibly multilevel) organizational outcome variables.

We would like to recommend that in order to fully benefit from multisource feedback within organizations, more intensive communication and collaborations on the subject are to be advised, as they will positively influence the quality of the ratings.

More research is also needed into the origins of the underlying differences in perspectives of rater groups. The research on ILTs seems a useful road in this regard. The content stream of ILT research is substantial, but the issue of the actual composition of ILTs has yet to be fully resolved, and there are no standardized widely used measures for ILTs (Koommoo-Welch, 2008). Some ILT researchers believe that all individuals possess a specific ILT, but managers in particular utilize their ILTs as part of their *role*, and assume that these ILTs are manifested as either behaviors, personality, or both. Future research should therefore explicitly look into the influence of ILTs on the assessment of competencies and effectiveness. Moreover, examining the congruence between the ILTs of each rater group and perceptions of managerial competencies could lead to a better understanding of how these perspectives influence effectiveness ratings.

Examining the congruence between the ILTs of each rater group and perceptions of managerial competencies could lead to a better understanding of how these perspectives influence effectiveness ratings.

The culture and external environment of the organization in this study are stable factors. The particularities of the organization may complicate the generalization of findings and conclusions to other organizations, industries, and countries. There is a need to explore similar phenomena in other organizations, industries, and countries, and take culture-specific profiles of effective management into account. Future research may also look into the effects of "non-performance information" and broaden the scope of variables that influence ratings (Spence & Keeping, 2010).

Finally, the low and mostly nonsignificant correlations between organizational and managerial effectiveness outcomes are even smaller than in previous studies. However, they confirm that the two effectiveness measures are assessing substantially different aspects of effectiveness (Bommer et al., 1995; Campbell et al., 1990). The regression analyses showed few significant relations between competencies and organizational effectiveness. Organizational effectiveness may reflect outcomes on a different level from that of individual managerial effectiveness, requiring multilevel designs. These findings provide a fruitful avenue for future studies. Obviously, in order to more safely conclude, more research is needed to better understand these effects. Future studies could, for example, include *domain-specific* managerial effectiveness outcomes, to incorporate the relevance of the specific occupational sector.

Note

1. We followed Green and Carroll (1978), who argued that multicollinearity should not be a concern unless the correlations among the independent variables ≥ .80. For subordinates, the intercorrelation between relationships- and results-oriented competencies was .75, while it was .70 for peers. The variance inflation factor values for these variables were 2.31 for subordinates and 1.94 for peers, respectively—that is, well below the test statistic of 5. The tolerance values were all below .1, but this value would only be a concern if the variance inflation factor values exceed 10 at the same time (Field, 2000). Furthermore, the condition index summative values were 14.45 for subordinates and 15.54 for peers. This is well below the test statistic of 40 (Hair, Anderson, Tatham, & Black, 1992, p. 48).

JUDITH H. SEMEIJN is an associate professor in the Faculty of Management, Science & Technology at Open Universiteit in the Netherlands. She graduated with a degree in psychological health sciences from Maastricht University in the Netherlands and received her PhD from the Faculty of Economics & Business Administration of Maastricht University. Her research interests include (strategic) human resource management, sustainable employability, and career management.

BEATRICE I. J. M. VAN DER HEIJDEN is a professor of strategic human resource management in the Institute for Management Research in the Nijmegen School of Management at Radboud University Nijmegen, in the Netherlands. Moreover, she is affiliated with the Open Universiteit in the Netherlands and the University of Twente in the Netherlands. Van der Heijden graduated with a specialization in work and organizational psychology from Radboud University Nijmegen. She holds a PhD from the University of Twente. Her main research areas are career development, employability, and aging at work. Van der Heijden is an associate editor of the *European Journal of Work and Organizational Psychology*.

ANNE VAN DER LEE is working as a service manager at a large health service organization and as a freelance strategic human resource management consultant. She earned her MS in management from the Open Universiteit in the Netherlands. Her research interests include strategic human resource management and multisource feedback.

References

Atkins, P. W. B., & Wood, R. E. (2002). Self- versus others' ratings as predictors of assessment center ratings: Validation evidence for 360-degree feedback programs. Personnel Psychology, 55, 871–904.

Atwater, L. E., & Brett, J. F. (2005). Antecedents and consequences of reactions to developmental 360° feedback. Journal of Vocational Behavior, 66, 532–548.

Atwater, L. E., Brett, J. F., & Charles, A. C. (2007). Multisource feedback: Lessons learned and implications for practice. Human Resource Management, 46, 285–307.

Atwater, L. E., Ostroff, C., Yammarino, F. J., & Fleenor, J. W. (1998). Self-other disagreement: Does it really matter? Personnel Psychology, 51, 577–598.

Atwater, L. E., Waldman, D. A., & Brett, J. F. (2002). Understanding and optimizing multisource feedback. Human Resource Management, 41, 193–208.

Atwater, L., Waldman, D., Ostroff, C., Robie, C., & Johnson, K. M. (2005). Self-other agreement: Comparing its relationship with performance in the US and Europe. International Journal of Selection and Assessment, 13, 25–40.

Atwater, L. E., & Yammarino, F. (1997). Self-other rating agreement: A review and model. Research in Personnel and Human Resources Management, 15, 121–174.

Barling, J., Weber, T., & Kelloway, E. (1996). Effects of transformational leadership training on attitudinal and financial outcomes: A field experiment. Journal of Applied Psychology, 81, 827–832.

Bartram, D. (2005). The great eight competencies: A criterion-centric approach to validation. Journal of Applied Psychology, 90, 1185–1203.

Bass, B. M. (1990a). Bass & Stogdill's handbook of leadership: Theory, research, and managerial applications (3rd ed.). New York, NY: Free Press.

Bass, B. M. (1990b). From transactional to transformational leadership: Learning to share the vision. Organizational Dynamics, 18(3), 19–31.

Blake, R. R., & Mouton, J. S. (1982). Grid principles versus situationalism: A final note. Group and Organization Studies, 7, 211–215.

Bommer, W. H., Johnson, J. L., Rich, G. A., Podsakoff, P. M., & MacKenzie, S. B. (1995). On the interchangeability of objective and subjective measures of employee performance: A meta-analysis. Personnel Psychology, 48, 587–605.

Borman, W. C. (1997). 360° ratings: An analysis of assumptions and a research agenda for evaluating their validity. Human Resource Management Review, 7, 299–315.

Borman, W. C., & Brush, D. H. (1993). More progress toward a taxonomy of managerial performance requirements. Human Performance, 6, 1–21.

Bracken, D. W., Timmreck, C. W., Fleenor, J. W., & Summers, L. (2001). 360 feedback from another angle. Human Resource Management, 40, 3–20.

Bradley, T. P. (2004). Analysis of leadership perceptions using multirater feedback (Unpublished doctoral dissertation). University of North Texas, Denton, TX.

Buttery, N., & Holt, J. (2000). Subordinate perceptions of what constitutes an effective manager in different cultural settings: Review and research agenda. Sydney, Australia: School of Industrial Relations and Organisational Behaviour.

Campbell, J. P., McHenry, J. J., & Wise, L. L. (1990). Modelling job performance in a population of jobs. Personnel Psychology, 43, 313–333.

Cheung, G. W. (1999). Multifaceted conceptions of self-other ratings disagreement. Personnel Psychology, 52, 1–36.

Conway, J. M., Lombardo, K., & Sanders, K. C. (2001). A meta-analysis of incremental validity and nomological network for subordinate and peer ratings. Human Performance, 14, 267–303.

Dalessio, A. T. (1998). Using multisource feedback for employee development and personnel decisions. In: J. W. Smither (Ed.), Performance appraisal: State of the art in practice (pp. 279–330). San Francisco, CA: Jossey-Bass.

De Hoogh, A. H. B., Den Hartog, D. N., Thierry, H., Van den Berg, P. T., Van der Weide, J. G., & Wilderom, C. P. M. (2004). Charismatic leadership, environmental dynamism, and performance. European Journal of Work and Organizational Psychology, 13, 447–471.

Doty, D. H., & Glick, W. H. (1998). Common method bias: Does common methods variance really bias results? Organizational Research Methods, 1, 374–406.

Eckert, R., Ekelund, B. Z., Gentry, W. A., & Dawson, J. (2010). "I don't see me like you see me, but is that a problem?" Cultural influences on rating discrepancy in 360-degree feedback instruments. European Journal of Work and Organizational Psychology, 19, 259–278.

Field, A. (2000). Discovering statistics using SPSS for Windows. London, UK: Sage.

Fleishman, E. A. (1957). A leader behavior description for industry. In R. M. Stogdill & A. E. Coons (Eds.), Leader behavior: Its description and measurement (pp. 103–119). Columbus, OH: Ohio State University, Bureau of Business Research.

Fraser, C., & Zhu, C. (2008). Stakeholder perception of construction site managers' effectiveness. Construction Management and Economics, 26, 579–590.

Furnham, A., & Stringfield, P. (1998). Congruence in job-performance ratings: A study of 360 degree feedback examining self, manager, peers, and consultant ratings. Human Relations, 51, 517–530.

Green, P. E., & Carroll, J. D. (1978). Analyzing multivariate data. Hinsdale, IL: The Dryden Press.

Hagan, C. M., Konopaske, R., Bernardin, H. J., & Tyler, C. L. (2006). Predicting assessment center performance with 360-degree, top-down, and customer-based competency assessments. Human Resource Management, 45, 357–390.

Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. (1992). Multivariate data analysis: With readings (3rd ed.). New York, NY: Macmillan.

Halpin, A. W., & Winer, B. J. (1957). A factorial study of the leader behavior descriptions. In R. M. Stogdill & A. E. Coons (Eds.), Leader behavior: Its description and measurement (pp. 39–51). Columbus, OH: Ohio State University, Bureau of Business Research.

Harris, M. M., & Schaubroeck, J. (1988). A meta-analysis of self-supervisor, self-peer, and peer-supervisor ratings. Personnel Psychology, 41, 43–62.

Hassan, S., & Rohrbaugh, J. (2009). Incongruity in 360-degree feedback ratings and competing managerial values: Evidence from a public agency setting. International Public Management Journal, 12, 421–449.

Hazucha, J. F., Hezlett, S. A., & Schneider, R. J. (1993). The impact of 360-degree feedback on management skills development. Human Resource Management, 32, 325–351.

Heinsman, H. (2008). The competency concept revealed: Its nature, relevance and practice (Unpublished doctoral dissertation). Vrije Universiteit, Amsterdam, the Netherlands.

Hemphill, J. K., & Coons, A. E. (1957). Development of the leader behavior description questionnaire. In R. M. Stogdill & A. E. Coons (Eds.), Leader behavior: Its description and measurement (pp. 6–38). Columbus, OH: Ohio State University, Bureau of Business Research.

Heneman, R. L. (1986). The relationship between supervisory ratings and results-oriented measures of performance: A meta-analysis. Personnel Psychology, 39, 811–826.

Hensel, R., Meijers, F., Van der Leeden, R., & Kessels, J. (2010). 360 degree feedback: How many raters are needed for reliable ratings on the capacity to develop competences, with personal qualities as developmental goals. International Journal of Human Resource Management, 21, 2813–2830.

Hogan, R., & Shelton, D. (1998). A socioanalytic perspective on job performance. Human Performance, 11, 129–144.

Hollenbeck, G. P., McCall, M. W., & Silzer, R. F. (2006). Leadership competency models. Leadership Quarterly, 17, 398–413.

Hooijberg, R., & Choi, J. (2000). Which leadership roles matter to whom? An examination of rater effects on perceptions of effectiveness. Leadership Quarterly, 11, 341–362.

Howell, D. C. (1992). Statistical methods for psychology. Boston, MA: Duxbury Press.

Howell, J. M., & Avolio, B. J. (1993). Transformational leadership, transactional leadership, locus of control, and support for innovation: Key predictors of consolidated-business-unit performance. Journal of Applied Psychology, 78, 891–902.

Johnson, J. W. (2000). A heuristic method for estimating the relative weight of predictor variables in multiple regression. Multivariate Behavioral Research, 35, 1–19.

Johnson, J. W., & LeBreton, J. M. (2004). History and use of relative importance indices in organizational research. Organizational Research Methods, 7, 238–257.

Judge, T. A., Bono, J. E., Ilies, R., & Gerhardt, M. W. (2002). Personality and leadership: A qualitative and quantitative review. Journal of Applied Psychology, 87, 765–780.

Keller, T. (1999). Images of the familiar: Individual differences implicit leadership theories. Leadership Quarterly, 10, 589–607.

Koene, B. A. S., Vogelaar, A. L. W., & Soeters, J. L. (2002). Leadership effects on organizational climate and financial performance: Local leadership effect in chain organizations. Leadership Quarterly, 13, 193–215.

Koommoo-Welch, P. (2008). Implicit leadership theories: Perceptions of charisma, people, and performance (Unpublished doctoral dissertation). North Carolina State University, Raleigh, NC.

Levy, P. E., & Williams, J. E. (2004). The social context of performance appraisal: A review and framework for the future. Journal of Management, 30, 881–905.

London, M., & Smither, J. W. (1995). Can multi-source feedback change perceptions of goal accomplishment, self-evaluations, and performance-related outcomes? Theory-based applications and directions for research. Personnel Psychology, 48, 803–839.

Luthans, F., & Peterson, S. J. (2003). 360-degree feedback with systematic coaching: Empirical analysis suggests a winning combination. Human Resource Management, 42, 243–256.

Luthans, F., Welsh, D. H. B., & Taylor, L. A. (1988). A descriptive model of managerial effectiveness. Group & Organization Studies, 13, 148–162.

Merchant, K. A., Stringer, C., & Theivananthampillai, P. (2010). Relationships between objective and subjective performance ratings. Presented at the AFAANZ Conference, Christchurch, New Zealand.

Mersman, J. L., & Donaldson, S. I. (2000). Factors affecting the convergence of self-peer ratings on contextual and task performance. Human Performance, 13, 299–322.

Miller, J. S., & Cardy, R. L. (2002). Self-monitoring and performance appraisal: Rating outcomes in project teams. Journal of Organizational Behavior, 21, 609–626.

Mount, M. K., Judge, T. A., Scullen, S. E., Sytsma, M. R., & Hezlett, S. A. (1998). Trait, rater and level effects in 360-degree performance ratings. Personnel Psychology, 51, 557–576.

Murphy, K. R., & Cleveland, J. N. (1995). Understanding performance appraisal: Social, organizational, and goal-based perspectives. Thousand Oaks, CA: Sage.

O'Driscoll, M. P., Humphries, M., & Larsen, H. L. (1991). Managerial activities, competence and effectiveness: Manager and subordinate perceptions. International Journal of Human Resource Management, 2, 313–326.

Offerman, L. R., Kennedy, J. K., & Wirtz, P. W. (1994). Implicit leadership theories: Content, structure, and generalizability. Leadership Quarterly, 5, 43–58.

Posner, B. Z., & Kouzes, J. M. (1988). Development and validation of the leadership practices inventory. Educational and Psychological Measurement, 78, 483–496.

Raghunathan, T. E., Rosenthal, R., & Rubin, D. B. (1996). Comparing correlated but non-overlapping correlations. Psychological Methods, 1, 178–183.

Sala, F. (2003). Executive blind spots: Discrepancies between self- and other-ratings. Consulting Psychology Journal: Practice and Research, 55, 222–229.

Salam, S., Cox, J., & Sims, H. (1997). In the eye of the beholder: How leadership relates to 360-degree performance ratings. Group and Organization Management, 22, 185–209.

Smither, P. E., London, M., & Reilly, R. R. (2005). Does performance improve following multisource feedback? A theoretical model, meta-analysis, and review of empirical findings. Personnel Psychology, 58, 33–66.

Spence, J. R., & Keeping, L. M. (2010). The impact of non-performance information on ratings of job performance: A policy-capturing approach. Journal of Organizational Behavior, 31, 587–608.

Spencer, L. M. (2003). The talent management handbook (L. A. Berger & D. R. Berger, Eds.). New York, NY: McGraw-Hill.

Stogdill, R. M. (1950). Leadership, membership and organization. Psychological Bulletin, 47, 1–14.

Tabernero, C., Chambel, M. J., Curral, L., & Arana, J. M. (2009). The role of task-oriented versus relationship-oriented leadership on normative contract and group performance. Social Behaviour and Personality, 37, 1391–1404.

Tett, R. P., Guterman, H. A., Bleier, A., & Murphy, P. J. (2000). Development and content validation of a 'hyperdimensional' taxonomy of managerial competence. Human Performance, 13, 205–251.

Toegel, G., & Conger, J. A. (2003). 360-degree assessment: Time for reinvention. Academy of Management Learning and Education, 2, 297–311.

Tonidandel, S., & Le Breton, J. M. (2011). Relative importance analysis: A useful supplement to regression analysis. Journal of Business Psychology, 26, 1–9.

Tornow, W. (1993). Perceptions or reality: Is multi-perspective measurement a means or an end? Human Resource Management, 32, 221–230.

Tsui, A. S. (1984). A role-set analysis of managerial reputation. Organizational Behavior and Human Performance, 34, 64–96.

Tsui, A. S., & Ohlott, P. (1988). Multiple assessment of managerial effectiveness: Interrater agreement and consensus in effectiveness models. Personnel Psychology, 44, 779–803.

Van Der Heijde, C. M., & Van Der Heijden, B. I. J. M. (2006). A competence-based and multidimensional operationalization and measurement of employability. Human Resource Management, 45, 449–476.

Van Der Heijden, B. I. J. M. (2000). The development and psychometric evaluation of a multidimensional measurement instrument of professional expertise. High Ability Studies, 11, 9–39.

Van Der Heijden, B. I. J. M., & Nijhof, A. H. J. (2004). The value of subjectivity: Problems and prospects for 360-degree appraisal systems. International Journal of Human Resource Management, 15, 493–511.

Viswesvaran, C., Schmidt, F. L., & Ones, D. S. (2005). Is there a general factor in ratings of job performance? A meta-analytic framework for disentangling substantive and error influences. Journal of Applied Psychology, 90, 108–131.

Waldman, D., Atwater, L., & Antonioni, D. (1998). Has 360 feedback gone amok? Academy of Management Executive, 12(2), 86–94.

Waldman, D. A., Ramirez, G. G., House, R. J., & Puranam, P. (2001). Does leadership matter? CEO leader attributes and profitability under conditions of perceived environmental uncertainty. Academy of Management Journal, 44, 134–143.

Warr, P., & Bourne, A. (2000). Associations between rating content and self-other agreement in multi-source feedback. European Journal of Work and Organizational Psychology, 9, 321–334.