

How Mindset Matters

The Direct and Indirect Effects of Employees' Mindsets on Job Performance

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Abstract: Individuals vary in their mindsets – their implicit beliefs regarding the malleability of human attributes. Because mindset influences responses to achievement situations, we hypothesize that employees with a more incremental mindset (i.e., believing that human attributes can be changed through effort and hard work) will have higher job performance and better relationships with their manager. We found that employees with a more incremental mindset have higher job performance. Also, when their manager has a strong learning goal orientation, employees with a more incremental mindset have a higher quality relationship with their manager, which, in turn, positively relates to their job performance.

Keywords: implicit person theory, job performance, individual differences

Individuals vary in their mindsets – that is, their implicit beliefs and assumptions regarding the malleability of human attributes (Dweck, 1999; Dweck & Leggett, 1988). At one end of the continuum are those with an entity mindset; they believe that human attributes are fixed and cannot be changed. At the other end of the continuum are those with an incremental mindset; they believe that human attributes can be changed through effort and hard work. Where individuals fall on this continuum has been found to have profound effects on their thoughts and behaviors (e.g., Dweck, 1999; Dweck, Chiu, & Hong, 1995).

To date, with few exceptions (e.g., Heslin, Latham, & VandeWalle, 2005; Heslin & VandeWalle, 2011; Heslin, VandeWalle, & Latham, 2006), most research on mindset has been conducted in nonwork settings (e.g., Dweck, 1999; Ommundsen, 2001). Due to the fact that individuals' mindset influences how they respond to achievement situations and how they relate to others (see Dweck, 1999 for a review), we contend that employees' mindset is likely to influence important work-related outcomes such as their job performance and their relationships with others. Namely, we expect that employees with a more incremental mindset will have higher job performance and have a higher quality relationship with their manager.

Managerial characteristics such as their learning goal orientation – the extent to which they focus on developing capabilities and increasing competencies in themselves and others may moderate the relationship between employees' mindset and the quality of their relationship. Because managers with a *strong* learning goal orientation are more focused on developing and supporting their employees, they may be well matched with employees with a more incremental mindset because these employees desire and believe they are capable of further development (Hong, Chiu, Dweck, Lin, & Wan, 1999).

The purpose of this study was to contribute to the potential theoretical and practical implications. First, we aim to further extend the literature on mindset in the work domain by examining whether employees' mindset influences their job performance and the quality of their relationship with their manager. Second, this study is also likely to extend theory on mindset by incorporating situational factors that may moderate the mindset-performance relationship. In this study we use a sample from the medical sales industry. The sales industry is a strong domain to examine contextual factors on the influence of mindset and performance. In particular, mindset is likely to have a significant direct influence on sales performance as sales people frequently encounter setbacks and failures making the persistence and desire to learn reflected by those with an incremental mindset very valuable. On the other hand, the sales domain offers a conservative context to examine the indirect influence on job performance through relationship quality with managers, as managerial relationships are less important in a sales setting because sales employees, at certain stages of their career, require less guidance from their manager (Kohli, Shervani, & Challagalla, 1998).

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Lastly, the results of our study may have implications for selection and performance management. Specifically, our findings may speak to whether employee mindset could be used in selection decisions and whether training to increase employee's incremental mindset should be conducted to increase employee performance.

Theoretical Background and Hypotheses

In this study, we draw on Dweck and colleagues' socialcognitive model of individual mindset (e.g., Dweck, 1999; Dweck & Leggett, 1988). In this model, individuals' implicit beliefs about the fixedness or malleability of ability influence their motivational and behavioral responses, particularly when experiencing failure. Those with more of an incremental mindset, who believe that ability is largely a function of effort, tend to respond to failure with perseverance, adopting behavioral strategies that facilitate task mastery (e.g., Henderson & Dweck, 1990). Those with more of an entity mindset, who believe that ability is largely immutable, tend to respond to failure with a helplessness response. They experience negative affect and seek to avoid further related challenges because they believe failure and a need for effort indicates low ability (e.g., Henderson & Dweck, 1990).

This present study extends research on individuals' mindset that has been conducted in nonwork settings and work settings. Many studies in nonwork settings have examined the relationship between individuals' mindset and their performance on tasks (e.g., Dweck, 1999) and their approach to relationships (Knee, Nanayakkara, Vietor, Neighbors, & Patrick, 2001). There are a few studies that have examined individuals' mindset in work settings (e.g., Heslin et al., 2005, 2006). Of the studies in work settings we were able to locate, most have focused on managers' mindset and their consequent treatment of employees (Heslin & VandeWalle, 2011; Heslin et al., 2005, 2006). Thus, the present study expands on these studies' findings by considering how nonmanagerial employees' mindset affects their performance and other outcomes. Figure 1 summarizes the proposed hypotheses examined in the present study.

Employee Mindset and Employee Job Performance

Employees with more of an incremental mindset are likely to have better job performance for several reasons. First, they are likely to respond to work situations with a learning orientation. Past research has found that individuals with a more incremental mindset tend to view achievement situations as opportunities to learn and improve their skills and abilities (e.g., Mueller & Dweck, 1998). Additionally, some research suggests that they are more likely to adopt learning goals (e.g., Dweck, 1999; Dweck & Leggett, 1988). However, not all research has found support for the relationship between mindset and learning goal orientation (e.g., Cury et al., 2006; Tabernero & Wood, 1999; VandeWalle, 1997), suggesting that other mechanisms besides goal orientation – which I detail below – may link mindset to task performance.

Second, those with a more incremental mindset tend to be more self-efficacious and persistent when they experience failure (e.g., Henderson & Dweck, 1990). Rather than giving up, they tend to perceive failure as an indication that they need to increase their effort (Henderson & Dweck, 1990). In contrast, individuals with more of an entity mindset (i.e., less of an incremental mindset) tend to view achievement situations as an opportunity to validate their perceived fixed level of ability (Dweck & Leggett, 1988). They tend to perceive failure as an indication that success is beyond their reach – causing them to lose confidence and interest, and reduce effort or give up (e.g., Cury et al., 2006; Tabernero & Wood, 1999).

Third, employees with more of an incremental mindset are more likely to find work to be intrinsically motivating. Past research has found that, as compared to those with a more entity mindset, individuals with a more incremental mindset tend to be more intrinsically motivated (Dweck, 1986). Because they are more driven to learn and improve from achievement situations, they respond to challenges with feelings of interest – rather than with feelings of defeat.

Therefore, because those with more of an incremental mindset focus on learning, are more efficacious and persistent in the face of setbacks, we propose the following hypothesis:

Hypothesis 1: Employees who have a more incremental mindset have higher job performance.

Employees' Mindset and Relationship Quality

In addition to being related to job performance, employees' mindset may also be related to the quality of their relationship with their manager. Namely, employees with more of an incremental mindset are likely to have a better quality relationship with their manager. That is, consistent with Janssen and Van Yperen's (2004) definition of a high quality employee-manager relationship, the relationship with their manager is more likely to be characterized by a

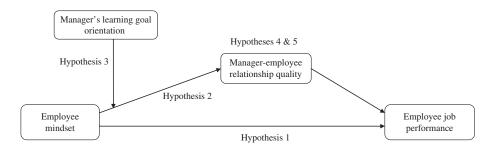


Figure 1. Proposed model of relationships.

high level of mutual trust, respect, and an open exchange of information. There are several reasons we expect this.

First, employees with more of an incremental mindset are likely to perceive relationships as worthy of effort and to be willing to invest effort into their relationship with their manager. High quality relationships need time to mature and develop; they often require concerted effort (Graen & Uhl-Bien, 1995). Because individuals with more of an incremental mindset are more likely to persist at situations that are effortful (Mueller & Dweck, 1998), we expect that employees with a more incremental mindset are likely to invest their time and effort into a relationship. Additionally, because they are more likely to view themselves and others as capable of change (Heyman & Dweck, 1998), they are more likely to view relationships as having the potential to improve. Research has found that individuals who believe that their intimate relationships can change overtime invest more effort in strategies designed to maintain that relationship (Knee, 1998).

Second, employees with more of an incremental mindset may be more likely to view their manager as a resource that can assist in their development. Individuals with more of an incremental mindset are more concerned with their development and are less likely to believe that effort indicates low ability (see Chiu, Hong, & Dweck, 1997 for a review). Accordingly, more incremental employees may be more likely to seek feedback from their manager and to respond favorably to the feedback, thus, leading to better informational exchanges between the employees and their manager. In contrast, individuals with a more entity mindset have been shown to be less interested in personal growth and more interested in gaining self-validation in their relationships with intimate partners (Knee et al., 2001). Accordingly, more entity employees may seek less feedback from their manager and respond less favorably to the feedback, thus, leading to fewer and less informational exchanges between more entity mindset employees and their manager.

Third, employees with more of an incremental mindset may be more likely to elicit trust and respect from their manager, thus increasing the quality of their relationship. Since employees with an incremental mindset are expected to respond to setbacks with persistence or increased effort. This persistence and effort is likely to increase their manager's trust and respect of them, thus, increasing the quality of their relationship. In contrast, employees with a more entity mindset tend to respond poorly to setbacks and have deteriorating performance after setbacks (Tabernero & Wood, 1999). This maladaptive pattern of behavior is likely to erode their manager's trust and respect, thus, decreasing the quality of their relationship.

In sum, because those with a more incremental mindset will put forth more effort into the relationship, view the relationship as a valued resource for development, and garner more respect and trust from their manager, we propose the following hypothesis:

Hypothesis 2: Employees with a more incremental mindset have higher quality relationships with their manager.

Manager's Goal Orientation as a Moderator

Above we argued that employees with a more incremental mindset are likely to have higher quality relationships with their manager. It is possible that this relationship depends on the manager's learning goal orientation – the extent to which the manager focuses on developing capabilities and increasing competencies – as this orientation helps to establish the manager's expectations. Because the quality of a relationship depends on the expectations and behaviors of both employee and manager (Graen & Uhl-Bien, 1995), a manager's learning goal orientation may interact with their employees' mindset to determine the quality of their relationship.

When their manager has a *strong* learning goal orientation, the relationship between employees' mindset and the manager-employee relationship quality is expected to be more strongly positive than when their manager has a weak learning goal orientation. We expect this to be the case because, when their manager has a strong learning goal orientation, employees who have a more incremental

mindset are likely to have a high quality relationship with their manager due to a match between their mindset and the manager's goal orientation. Further, we expect that, when their manager has a strong learning goal orientation, employees who have a more entity mindset are likely to have a low quality relationship with their manager due to a mismatch between their mindset and the manager's goal orientation.

When individuals have a strong orientation toward learning goals, they are more focused on developing capabilities in themselves and others (Godshalk & Sosik, 2003). Employees with more of an incremental mindset are likely to be receptive to this orientation because they are also focused on developing their capabilities. In comparison, because employees with a less incremental mindset believe that their capabilities are fixed (Chiu et al., 1997), they are likely to be reluctant to invest time and effort in developing their capabilities, which would be at odds with their manager's strong learning goal orientation and potentially harm their relationship with their manager.

Further, managers with a strong learning goal orientation are likely to offer more information and feedback in order to support the learning process (Janssen & Van Yperen, 2004). Employees with more of an incremental mindset, who are likely to see their managers as a source of information and guidance that help cultivate their ability, are likely to respond favorably to this feedback and guidance. They are also likely to believe that their manager is responsive to their need for information and feedback. In contrast, for employees with a more entity mindset are likely to be unreceptive to the information and feedback offered by their manager.

Conversely, when their manager has a weak learning goal orientation, we expect the relationship between employee mindset and the manager-employee relationship quality to be less positive. When their manager has a weak orientation toward learning goals, employees who have a more incremental mindset may view their manager as not offering the guidance and feedback that they need to improve their capabilities. Due to their tendency to persevere and to accept challenges, we expect that incremental employees may adapt to the situation. When employees have a less incremental mindset, their manager's lack of focus on the employees' learning is also unlikely to harm their relationship. For these reasons, we expect that, when their manager has a weak learning goal orientation, the relationship between employee mindset and the manager-employee relationship quality will be less positively related.

Hypothesis 3: The relationship between employees' mindset and the quality of their relationship with

their manager is moderated by the manager's learning goal orientation, such that the relationship is more positive when a manager has a strong learning goal orientation than when their manager has a weak learning goal orientation.

The Mediating Role of Relationship Quality

As outlined above, we expect employees' mindset to have a direct effect on their performance. We also expect employees' mindset to influence performance indirectly through manager-employee relationship quality. That is, manager-employee relationship quality will serve as a mediator between employees' mindset on their job performance and, as suggested above, this mediated effect will be moderated by their manager's learning goal orientation. First, we will outline why relationship quality will mediate the effect of employees' mindset on their job performance. Then we will discuss how this mediation is dependent on their manager's learning goal orientation.

High quality relationships are marked by an open exchange of information between both parties in the relationship. In addition, these relationships characteristically have high levels of trust and loyalty resulting from the mutual investment of time and effort in the relationship (Graen & Uhl-Bien, 1995). When their manager is loyal to them, employees may reciprocate, demonstrating their loyalty to their manager by putting forth effort toward their job. Furthermore, high quality relationships are likely to foster the development of employees' competencies, through increased exchange of resources, information, and support, which in turn may increase employees' job performance. Indeed, prior research has found that high quality manager-employee relationships are positively related to employees' job performance (e.g., Basu & Green, 1997; Janssen & Van Yperen, 2004). Thus, we propose the following hypothesis:

Hypothesis 4: Manager-employee relationship quality mediates the relationship between employees' mindset and their job performance.

As we argued above, we expect manager's learning goal orientation moderates the relationship between employees' mindset and the quality of their relationship with their manager. Specifically, we proposed that employees' with a more incremental mindset will have a higher quality relationship with their manager when their manager has a strong learning goal orientation than when a manager has a weak learning goal orientation. Therefore, we hypothesize

that the mediating effect of relationship quality will be dependent on the strength of the manager's orientation toward learning goals. Thus we propose:

Hypothesis 5: Manager learning goal orientation moderates the strength of the mediated relationship between employees' mindset and their job performance via manager-employee relationship quality, such that the mediated relationship will be stronger when the manager has a strong learning goal orientation than when the manager has a weak learning goal orientation.

Method

Sample Descriptions and Procedure

Through the use of our business networks we collected data from two different sources, employees and their respective manager. First, we invited 129 medical sales employees in the United States with similarly sized territories and job scopes from the same company to complete a web-based survey including items regarding their mindset, their relationship with their manager, and other constructs. Then, we asked in person, each manager of each target employee to complete a survey including items on their learning goal orientation, the employee's job performance, and other constructs. Employees were notified that, with their consent, we would asking their respective managers to complete a survey as well. Of the 129 employees asked to participate, 96 completed the survey and had a survey completed by their manager, yielding a 74% overall response rate.

In terms of demographics, 68% of the sales employees in our sample were male. On average, they had 5.8 years of experience in the industry. Their managers were mostly male (62%) and had, on average, 8.1 years of experience in the industry. The average length of the manager-employee relationships was 2.4 years.

Measures

Employee Mindset

We used the 8-item general kind of person scale to measure employee mindset (Levy, Stroessner, & Dweck, 1998). We used this measure instead of a domain-specific measure because we were concerned with employees' implicit beliefs across various domains. Additionally, we believe that a general measure is more likely relevant to employees' work relationships and job performance. Research supports the construct validity of this measure. For example,

its discriminant validity is suggested by low correlations with academic aptitude, optimism, self-esteem, political beliefs, and locus of control (see Dweck, 1999 for review). The scale consists of eight items, including "Everyone, no matter who they are, can significantly change their basic characteristics" and "The kind of person someone is, is something very basic about them, and it can't be changed very much" (reverse-scored). Employees responded to each item using a 6-point Likert scale. We averaged the items, such that a higher score indicates a more incremental mindset ($\alpha = .93$).

Manager-Employee Relationship Quality

We used seven items based on the LMX-7 (Leadership-Member Exchange) scale developed by Graen, Novak, and Sommerkamp (1982) to measure the quality of the manager-employee relationship from the employee's perspective. Sample items are "My working relationship with my supervisor is effective," and "Usually know where I stand with my manager." Employees responded to each item using a 5-point Likert scale. We averaged the items, such that a higher score indicates a higher quality relationship ($\alpha = .84$).

Manager Learning Goal Orientation

Because the sales managers were also involved in sales, we measured the learning goal orientation of the managers using a 6-item measure of learning goal orientation designed for a sales context (Sujan, Weitz, & Kumar, 1994). Sample items are "It is important for me to learn from each selling experience I have," and "An important part of being a good salesperson is continually improving your sales skills." Managers responded to each item using a 5-point Likert scale. We averaged the items, such that a higher score indicates a stronger preference for a learning goal orientation (α = .88).

Job Performance

We measured employee job performance by asking managers to respond to three items from the job performance scale developed by Williams and Anderson (1991). Sample items are "This individual meets performance expectations," and "This individual fulfills the responsibilities specified in his or her job description." Manager responded to each item using a 5-point Likert scale. We averaged the items, such that a higher score indicates better job performance (α = .90).

Control Variables

We controlled for the *sex* of the employee because research has shown that there may be sex differences in performance ratings (Atwater, Brett, Waldman, DiMare, & Hayden, 2004) and perceived relationship quality (Bauer & Green, 1996). In addition, we controlled for

manager-employee *relationship length*, the number of years that each target employee has worked for his or her current manager, because the length of a relationship has been shown to influence relationship quality (Maslyn & Uhl-Bien, 2001) and because congruence in goal orientation may occur over time (Kristof-Brown & Stevens, 2001). Lastly, we controlled for the *employee's learning goal orientation* because we were interested in isolating the effect of employee mindset. We measured employees' learning goal orientation by asking each sales employee to respond to Sujan et al.'s (1994) 6-item measure of learning goal orientation ($\alpha = .85$).

Results

Table 1 includes descriptive statistics for and correlations between all study variables. Table 2 includes the standardized coefficients from the regression models used to test our study's hypotheses. Before proceeding, we tested and found that we had not violated the assumptions of regression, such as normality and the absence of multicollinearity. To test our hypotheses, we used the moderated path analysis framework developed by Edwards and Lambert (2007). First, we regressed the control variables, employees' mindset, their manager's learning goal orientation, and the interaction term on the manager-employee relationship quality. Second, we regressed the control variables, employees' mindset, and the manager-employee relationship quality on employees' job performance.

Hypothesis 1 predicted that employees who have a more incremental mindset will have higher job performance. In regard to Hypothesis 1, the significant regression coefficient associated with employee mindset when entered in the regression model predicting their job performance. As shown in Table 2, employees with a more incremental mindset have significantly higher job performance (β = .45, p < .001). The results supported Hypothesis 1.

Hypothesis 2 predicted that employees with a more incremental mindset will have higher quality relationships with their manager. The significant regression coefficient associated with employee mindset when entered in the regression model predicting the quality of their relationship with their manager. As shown in Table 2, employees' mindset is not significantly related to the quality of their relationship with their manager ($\beta = -.02$, ns). Therefore, the results did not support Hypothesis 2.

Hypothesis 3 stated that a manager's orientation toward learning goals will moderate the relationship between employees' mindset and the quality of their relationship with their manager, such that the relationship is more positive when a manager has a strong learning goal orientation than when the manager's orientation is weak. As shown in Table 2, the significant regression coefficient associated with the interaction term when entered in the regression model predicting the quality of their relationship with their manager ($\beta = .34$, p < .01). Next, we calculated the predicted values for relationship quality for managers had a strong orientation toward learning goals (1 standard deviation above the mean) and for managers had a weak orientation toward learning goals (1 standard deviation below the mean). As shown in Figure 2, employees' mindset is more positively related to relationship quality when their manager has a strong orientation toward learning goals than when their manager has a weak orientation toward learning goals. In fact, we found that employees' mindset is negatively related to the manager-employee relationship quality when the manager has a weak learning goal orientation. Thus, we found support for Hypothesis 3.

Hypothesis 4 predicted that manager-employee relationship quality mediates the relationship between employees' mindset and their job performance. To test Hypothesis 4, we conducted a Sobel test, which examines the joint significance of the two effects comprising the mediational effect. The results of this test fail to support Hypothesis 4 as the indirect effect of employee mindset on job performance was not significantly different from zero (z = 0.17, ns).

Table 1. Means, standard deviations, and correlations among variables

Variable	М	SD	1	2	3	4	5	6
1. Employee job performance	3.58	0.90						
2. Relationship quality	3.45	0.96	0.17					
3. Employee sex	1.31	0.47	0.07	-0.07				
4. Relationship length	2.12	1.51	0.14	-0.04	0.02			
5. Employee learning goal orientation	4.14	0.63	0.08	0.26*	0.00	-0.06		
6. Employee mindset	3.38	1.10	0.42***	0.04	-0.13	-0.10	0.19	
7. Manager learning goal orientation	3.77	0.87	-0.13	0.09	-0.03	0.00	0.09	-0.01

Notes. N = 96. Employee sex is male = 1 and female = 2; relationship length is how many years the employee has worked for the manager. *p < .05, ***p < .001.

Table 2. Regression analyses predicting relationship quality and job performance

	Relations	Job performance		
Variable	β	t	β	t
Step 1				
Employee sex	-0.07	-0.65	0.06	0.61
Relationship length	-0.03	-0.27	0.14	1.36
Employee learning goal orientation	0.26	2.56*	0.09	0.87
ΔR^2	0.07		0.03	
Step 2				
Employee sex	-0.07	-0.65	0.12	1.28
Relationship length	-0.03	-0.29	0.18	1.93
Employee learning goal orientation	0.25	2.45*	0.01	0.05
Employee mindset	-0.02	-0.17	0.45	4.76***
Manager learning goal orientation	0.07	0.67		
ΔR^2	0.01		0.19***	
Step 3				
Employee sex	-0.09	-0.91	0.13	1.43
Relationship length	0.00	-0.01	0.19	2.02*
Employee learning goal orientation	0.23	2.33*	-0.04	-0.44
Employee mindset	-0.09	-0.92	0.46	4.87***
Manager learning goal orientation	0.11	1.12		
Relationship quality			0.18	1.91
Employee mindset × Manager learning goal orientation	0.34	3.41**		
ΔR^2	0.12**		0.03	

Notes. N = 96. Total $R^2 = .18$ and $R^2_{adj} = .13$ for relationship quality; total $R^2 = .25$ and $R^2_{adj} = .21$ for job performance. *p < .05, **p < .01, ***p < .001.

Hypothesis 5 predicted a moderated mediation effect with a first stage moderation. Specifically, we predicted that the learning goal orientation of the manager moderates the mediated effect (via manager-employee relationship quality) of employees' mindset on their job performance. Using the moderated path analysis framework developed by Edwards and Lambert (2007), we applied bootstrapping procedures to generate 1,000 random samples with replacement from the full sample and used the bootstrapped estimates to constructed bias-corrected confidence intervals. Support would be indicated by a significant difference between the indirect effect when a manager has a weak orientation toward learning goals and the indirect effect when a manager has a strong orientation.

As shown in Figure 3, when a manager had a weak learning goal orientation, the indirect effect was -.07 and the 95% confidence interval excluded zero [-.16, -.01], thus supporting an indirect effect. When a manager had a strong learning goal orientation, the indirect effect was .04 but the 95% confidence interval included zero [.00, .11], thus failing to find support for an indirect effect. Finally, the difference in indirect effect size between strong and weak levels of manager's learning goal orientation was .10 and the 95% confidence interval also excluded zero [.01, .24] showing the indirect effect of employees' mindset on job

performance varies significantly with the learning goal orientation of the manager. Thus, we found support for Hypothesis 5.

Discussion

The primary aim of this study was to examine whether and how employees' mindset is related to their job performance and their relationship with their manager. We found that employees' mindset had a direct relationship with job performance - employees with a more incremental mindset had higher job performance. Although employees' mindset was not directly related to the quality of their relationship with their manager, we found that employees' mindset interacted with their manager's learning goal orientation to determine the manager-employee relationship quality. Consistent with our predictions, employees with more of an incremental mindset had a higher quality relationship with their manager when their manager had a strong learning goal orientation. Conversely, employees with a more incremental mindset had a lower quality relationship quality with their manager when their manager had a weak learning goal orientation. Finally, we found that, depending on their managers' learning goal orientation, the manager-employee relationship quality mediated the

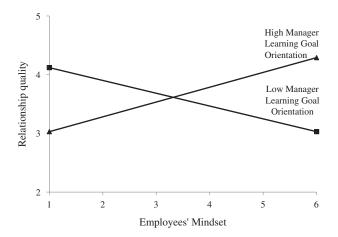


Figure 2. Relationship quality and employees' mindset for managers with strong and weak orientation toward learning goals.

relationship between employees' mindset and their job performance. Namely, the mediated relationship was stronger when managers' learning goal orientation was strong.

Theoretical Implications

The results of this study have several theoretical implications. First, our findings provide further support and suggest refinements of Dweck and colleagues' social-cognitive model of individual mindset (e.g., Dweck, 1999; Dweck & Leggett, 1988). We found that employee mindset does matter, as it directly and indirectly predicted job performance, thus we extended findings regarding individuals' mindset on performance to work settings. Possibly due to their higher level of persistence and focus on learning, employees with a more incremental mindset performed higher than those employees with a more entity mindset. Second, by examining the role of manager's learning goal orientation, we contribute to the person-supervisor fit literature. Specifically, we identified a managerial characteristic, their learning goal orientation, which, combined with employees' mindset, appears to results in fit between the employee and his or her manager that influences their job performance. Future researchers could further explore the influence of fit between employee mindset and manager's goal orientation by incorporating performance goal orientation as well as learning goal orientation. It is possible there could be some benefit to relationship quality when an employee has an entity mindset and their manager has a performance goal orientation.

Lastly, the results of this study also have theoretical implications for research on relationships at work, more broadly, and on leader-member exchange relationships, more specifically. Namely, our results suggest a possible

mechanism by which managers form stronger LMX relationships with employees: managers may form stronger relationships with employees who have a mindset that is complementary to their own goal orientation. Thus, our results extend LMX theory by suggesting a possible situational factor that determines the quality of manager-employee linkages.

Practical Implications

The results of this paper also have several practical implications. First, employees with a more incremental mindset had higher job performance, companies' human resource department and hiring managers may want to assess the mindset of job candidates as part of the selection process. At least for sales positions, it appears that employees who have a more incremental mindset may be better equipped to deal with the inevitable setbacks and rejection that sales employees experience. Furthermore, human resource departments and managers may want to adjust their performance management process to recognize improvement overtime to help cultivate a learning culture. Second, because other research suggests that individuals' mindset can be changed through interventions (e.g., Heslin et al., 2005), organizations may want to use such interventions as a way to increase employee performance. Third, our findings supporting the importance of employees' mindset "fitting" with their manager's goal orientation suggests that companies may wish to use this information when assigning employees to managers or other work roles (e.g., project teams).

Limitations and Future Research Directions

This study does have some limitations. First, we collected data from sales employees; therefore, we do not know the extent to which our findings generalize to employees in other types of jobs. However, we contend that the sales setting of this study offered a relevant and conservative test of our hypothesis, as managerial relationships are less important in a sales setting because sales employees, at certain stages of their career, require less guidance from their manager (Kohli et al., 1998). Future research should replicate this study with nonsales employees to examine the generalizability of these results.

Second, we measured manager's goal orientation using a self-reported measure. It is possible that employees may not always perceive their manager's goal orientation consistent with how the manager perceives his or her own goal orientation. Future research should examine how managers communicate their goal orientation and how consistently it is perceived by employees.

Difference in indirect effect = .10*

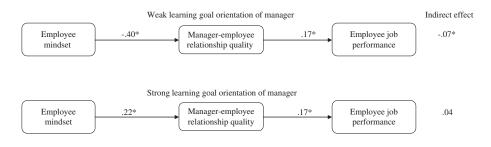


Figure 3. Analysis of the indirect effects for weak and strong levels of manager's learning goal orientation (N = 96. *p < .05).

Third, our study examined one situational factor manager's learning goal orientation - that moderates the relationship between employees' mindset and their job performance. Other situational factors (including other managerial characteristics) may also moderate this relationship. More empirical research is needed on whether other managerial characteristics combine with employees' mindset to shape the quality of the manager-employee relationship. For example, managers' leadership style, such as the extent to which they engage in transformational leadership behaviors, may be similarly beneficial when managing employees with more incremental mindsets. This may be due to transformational leaders trying to motivate their employees to exceed expectations (Judge & Piccolo, 2004), a situation employees with a more entity mindset might find threatening.

Conclusion

The present study extends a vast literature examining mindset in nonwork settings and a budding literature examining mindset in work settings. Our findings show the value of examining employees' mindset – and demonstrate the value of examining situational factors that serve as determinants of its effect. We hope this study encourages more research on how employees' mindset relates to other organizationally relevant outcomes.

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