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Do Managers Use Feedback Seeking as a Strategy to Regulate Demands-abilities Misfit? The Moderating Role of Implicit Person Theory

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#### Abstract

**Purpose** – This study examined to what extent managers who hold an incremental implicit person theory (i.e., believe that personal attributes are relatively malleable) rely on proactive strategies to address imbalances between demands and abilities.

**Design/methodology/approach** – Data were collected from a convenient sample of managers in 12 organizations in Spain and Belgium (*N*=303). Given the well-known shortcomings of traditional congruence measures, we conducted polynomial regression.

**Findings** – Results indicated that implicit person theory was a significant moderator of the relationship between demands-abilities (D-A) fit and feedback seeking for two out of three task dimensions. Specifically, incremental theorists sought feedback to a great extent when misfit occurred between low to moderate demands and abilities.

**Implications** – The current study found preliminary evidence for a proactive framework of person-job misfit which could be used to guide future research. The results of this study suggest the use of self-persuasion techniques to influence managers' incremental person theory (Heslin, Latham & VandeWalle, 2005).

**Originality/value** – Research on person-environment fit is often guided by the assumption that individuals react negatively to misfit leading to maladaptive outcomes. However, this study tested a different perspective on P-E misfit by extending initial work (i.e., Simmering, Colquitt, Noe & Porther, 2003) on the positive relationship between P-E misfit and proactive behavior.

**Key words**: Demands-abilities Misfit, Implicit Person Theory, Feedback Seeking, Managers, Polynomial Regression

Do Managers Use Feedback Seeking as a Strategy to Regulate Demands-abilities Misfit? The Moderating Role of Implicit Person Theory

In the past decades, a continuous changing work environment is one of the most notable challenges that managers are confronted with. As job demands evolve due to increasing technical innovations on the shop floor and growth of decentralized organizational structures and increased competition, managers have to attempt to adapt their behavior (Erdogan & Bauer, 2005; Parker, Williams & Turner, 2006). Specifically, adequate abilities should be (further) developed to cope with these changing circumstances in which managers work. In the organizational behavior literature, the congruence between the characteristics of a person and his or her work-environment is described as personenvironment (P-E) fit (Edwards, 1996; Greguras & Diefendorff, 2009). Traditionally, "fit" is assumed to be related to positive behavior and attitudinal outcomes (e.g. job satisfaction, organizational commitment), whereas "misfit" is considered to be the cause of negative outcomes such as strain, turnover, and burnout (Edwards & Cooper, 1990; Karasek, 1979; Kristof, 1996; Kristof-Brown, Zimmerman & Johnson, 2005). However, the traditional fit perspective seems to overlook the possibility that experiencing misfit may also be associated with intentions to change oneself or the work environment to resolve the experienced misfit.

Simmering, Colquitt, Noe and Porter (2003) criticized the traditional perspective on P-E fit as being too narrow for depicting individuals only as reactive agents and proposed that they may also adopt a proactive role in dealing with imbalances between their abilities and the demands of their jobs. In an initial study examining this new perspective, they found that conscientiousness was positively related to employee development (i.e., activities that influence personal and professional growth) when misfit occurred between individuals' need for autonomy and the autonomy provided by the organization. Moreover, their results

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indicated that a greater engagement in developmental activities subsequently led to higher P-E fit.

In line with this conceptualization of the active role of individuals, the present study investigated the relationship between demands-abilities fit and the extent to which managers engage in proactive feedback-seeking behavior. That is, if managers take on an active role when dealing with P-E misfit as proposed by Simmering et al. (2003), we can expect them to seek diagnostic feedback that may be instrumental in developing their abilities with the goal of restoring the demands-abilities balance. On the basis of insights from feedback-seeking research, we propose that seeking feedback in response to demands-abilities misfit will occur only when managers are convinced that they can actually change their abilities, thus, when they hold an incremental implicit person theory. Previous work in social psychology suggests that an individual's beliefs about the malleability of one's personal characteristics and competences (i.e., implicit person theory), is a crucial variable explaining why some people engage in remedial behaviors in situations where performance is below expectations (Dweck & Legett, 1988; Rhodewalt, 1994).

Our study aims to extend initial work (i.e., Simmering et al., 2003) suggesting that people may proactively address P-E misfit by focusing on the relationship between taking remedial action (i.e., proactive feedback seeking) and P-E misfit. Moreover, we advance current insights by arguing that the relationships between remedial action and fit may be more complicated than initially assumed. Specifically, we propose that the direction and strength of the relationship between the degree of demands-ability misfit and the type of proactive behavior studied, might depend on one's implicit beliefs about the malleability of abilities. In doing this, we make a threefold contribution. First, we provide a better insight into the conditions surrounding person-environment misfit-outcome relationships. Second, as implicit person theory is a relatively new construct in organizational science, we want to further explore its effects on managerial proactive behavior. To date, no research has identified implicit person theory as a potential important moderator for proactive behavior. Third, by investigating how the interaction between previously unexamined individual and situational variables affect feedback-seeking behavior, our study also extends the feedbackseeking literature.

### **Person-environment fit**

Within the context of this study, we relied on a relatively broad definition of Person-Environment fit as proposed by Edwards (1996). He describes P-E fit as the attitudes, behavior, and other individual-level outcomes (e.g., job satisfaction, better performance, organizational commitment) that are not exclusively caused by the person or environment separately but rather by the relationship between the two. Past P-E fit research approached this concept through several operationalizations of which "person-organization" and "personjob" fit (Kristof-Brown, 2000) are the two most prominent ones. A considerable number of P-E fit studies followed Schneider's (1987) "attraction-selection-attrition" (ASA) model. This model posits that people are attracted to organizations that provide a high level of fit and that they are selected by organizations on the basis of potential fit. If misfit occurs after the selection of an applicant, he or she is assumed to leave or is forced to leave the company. Although the main assumptions of this model have generally been supported by empirical findings (e.g. Edwards, 1996; Posner, 1992; Schneider, Smith, Taylor & Fleenor, 1998), the ASA framework does not explicitly consider a more proactive role for individuals when they are confronted with misfit. We argue that this assumption underestimates the ability that people may have to overcome the problems that are associated with misfit (i.e., strain, withdrawal). In the present study, we investigated this notion by focusing on the congruence between the characteristics of an individual and the properties of the job itself, that is personjob (P-J) fit (Edwards, 1996). P-J fit can be distinguished into two basic conceptualizations; supplies-values (S-V) and demands-abilities (D-A) fit (Livingstone, Nelson, & Barr, 1997). D-A fit, which is the focus of the current study, occurs when individual abilities meet the demands of the environment. For instance, when a manager's task is characterized by frequent and intense relationship-building with subordinates, and when the manager would have extraordinary social skills to make these relationships work, D-A fit is assumed to arise. On the other hand, when the work environment fulfills the needs and values of the individual, S-V fit takes place (Edwards, 1996). For instance, high S-V fit occurs in organizations with a strong focus on employee empowerment provided that individuals also have a high need for autonomy on the job.

# Feedback Seeking as a Proactive Self-regulation Strategy

Feedback-seeking behavior can be strategically used to improve professional competences and is therefore an appropriate proactive strategy for the purposes of this study. People who frequently seek feedback in their work environment (i.e., from superiors and coworkers) obtain more valuable information about their own performance and behavior than individuals who do not engage in feedback seeking (e.g., Renn & Fedor, 2001). Earlier research indicated that through feedback seeking, individuals are able to adjust their goal-oriented behavior, assess their capabilities in a better way, and improve their future effectiveness (Anseel, Lievens, & Levy 2007). Moreover, Parker and Collins (2010) identified three types of (higher-order) proactive behaviors; "proactive work behavior", "proactive strategic behavior" and "proactive person-environment (P-E) fit behavior. They considered feedback seeking as an instrumental, self-initiated behavior with the objective of

adapting one's own characteristics or the work environment to obtain a better fit between person and environment.

"A type of proactive behavior especially relevant to the demands-abilities fit perspective is proactive feedback-seeking, which involves actively gathering information about one's behavior..., the aim is to gather information to better respond to the demands of the environment and thereby perform more effectively within the context" (p.639).

Therefore, we expect managers to engage in feedback seeking when they are confronted with job assignments that are too demanding for their current abilities (i.e., situation of D-A misfit). By seeking feedback from others, managers may learn how to deal with these difficult demands, find out exactly what they are doing wrong and how they can improve their demand-specific abilities. In the end, increased feedback seeking may help managers to solve demands-abilities misfit.

However, feedback is not always being sought for performance improvement purposes. Feedback-seeking behavior is driven by a complicated interplay between three motives (Ashford, Blatt & VandeWalle, 2003). These three motives for seeking feedback can be distinguished as the "instrumental" motive, the "ego-based" motive and the "image-based" motive. Individuals who seek feedback because of the instrumental motive mainly want to obtain information that can help them to improve their performance to attain their goals. However, the need to protect and to improve the ego and image can also be motives for seeking feedback. People have a need to obtain information that can help them to create or maintain a positive self-view.

The interplay of these three motives often makes it difficult to make straightforward predictions about the direct effect of situational antecedents on feedback-seeking behavior.

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For instance, experiencing misfit between demands and abilities may not always lead to increased feedback seeking. Research shows that individuals often shy away from seeking feedback after poor performance out of fear of losing face in the presence of their colleagues or to avoid taking a blow to their self-esteem (Abraham, Morrison, & Burnett, 2006; Northcraft & Ashford, 1990). Indeed, the possibility of the self being harmed by certain information is often a reason why ego-related feedback is avoided. Furthermore, people want to preserve their positive image with others. If feedback is expected to be negative, individuals will try to obtain it privately or refrain from seeking feedback altogether. Thus, similar to previous findings relating poor performance to feedback seeking, it might be that face-loss costs exceed the instrumental value of feedback seeking and, therefore refrain managers from seeking feedback in case of D-A misfit (Fedor, Rensvold & Adams, 1992). When managers seek feedback from others about their current abilities to deal with excessive job demands, they may inadvertently communicate to their colleagues and bosses that they are not suited for this job and jeopardize future opportunities for promotion. As a result, taking individual difference variables as moderators into account is needed to understand when managers will engage in or refrain from feedback seeking in response to specific work situations (Ashford, Blatt, & VandeWalle, 2003). To explain the likelihood that managers will seek feedback for improving abilities in response to experienced D-A misfit, we turn to the literature on implicit person theories in social psychology (i.e., Dweck & Leggett, 1988). We argue that managers will only respond by seeking feedback if they hold strong beliefs that the act of feedback seeking is valuable and can result in an actual improvement in their abilities.

### The Role of Implicit Person Theory

The role of individual differences in reactions to P-E misfit is a relatively unexplored research area that may increase our understanding of the processes relating P-E fit to behavioral outcomes. In their study on supplies-values fit dynamics, Shaw and Gupta (2004) were among the first to suggest that insights from the concept "implicit-self theory" could be used in order to investigate possible proactive behavior evoked by P-E misfit.

"An incremental theorist would be more likely to react to poor performance by undertaking remedial action designed to improve performance. Under conditions of S-V misfit and low performance, then, such an individual is more likely to view the misfit situation as a challenge to be overcome or an opportunity for self-improvement, not as a hopeless situation" (p.837).

Indeed, we argue that individual differences in implicit person theory are crucial to our understanding of when people will respond to misfit with proactive feedback-seeking behavior. Levy, Stroessner and Dweck (1998) described implicit person theory as someone's beliefs and ideas about the malleability of personal traits (e.g. personality, abilities, intelligence) that influences behavior. We may expect that attributions regarding one's own and others' work performance, may depend on the implicit person theory one holds. Two types of implicit person theory can be distinguished; "entity implicit theory" and "incremental implicit theory" (Levy at al., 1998). People who hold an entity theory, assume that personal attributes are relatively fixed entities and cannot adapt or change in time. Moreover, social psychology researchers consider the type of implicit person theory that one holds to be a direct precursor of the kind of goals one pursues (Hong, Chiu, Dweck, Lin & Wan, 1999; Wood & Bandura, 1989). People holding an entity theory, tend to endorse performance goals as they are more preoccupied with demonstrating their competences and

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avoiding a demonstration of shortcomings. They are more focused on their fixed abilities and maximal performance outcomes rather than on the possibility to adapt their abilities. This implies that they will attribute poor performance to a lack of abilities rather than to a lack of effort. This makes them vulnerable to helpless and defensive behavior: In situations where they experience incompetence or low performance, they do not turn to strategies that may help them develop the right abilities or remedy performance (Rhodewalt, 1994). Therefore, we expect that when people who hold an entity theory are confronted with a situation of D-A misfit, instead of looking for solutions to resolve D-A misfit, they will not engage in behavior that could help them to improve their abilities as they are convinced that these cannot be altered. For people with an incremental implicit theory, personal attributes are relatively malleable. Consequently, individuals holding an incremental theory tend to attribute actions and outcomes to the result of these personal malleable attributes. As opposed to people who hold an entity theory, they pursue more learning goals as they assume that effort is related to steadily developing abilities. Consequently, individuals holding an incremental theory are more inclined to take remedial action if they are not satisfied with their work performance (Hong et al., 1999). Moreover, feedback seeking research suggests that goal orientations influence how the purposes and usefulness of feedback are interpreted (VandeWalle, 2003; VandeWalle & Cummings, 1997). Specifically, individuals with a learning goal orientation are assumed to consider feedback as very helpful because it contains the necessary information to improve their abilities. In contrast, people with performance goals will tend to perceive feedback (especially negative feedback) as a possible threat as it can reveal potential shortcomings. They will, therefore, seek feedback to a lesser extent.

On the basis of these insights from research on implicit person theory and feedbackseeking behavior, we expect that managers, who hold an incremental implicit theory, will be more likely to act proactively in a situation of demands-abilities misfit in order to address this misfit. Specifically, we propose that incremental implicit theorists will seek more feedback when a D-A misfit occurs on a certain task dimension than entity implicit theorists in order to resolve this misfit.

Hypothesis 1: Implicit person theory will moderate the relationship between D-A misfit and feedback-seeking behavior. When demands exceed abilities (D-A misfit), incremental theorists will engage in more frequent feedback-seeking behavior. In contrast entity theorists will be less inclined to do so.

### Method

### Sample and procedure

Data were collected from a convenient sample of 12 organizations in Spain and Belgium (Spanish participants: 63.7 %, Belgian participants: 36.3%). From the human resources department of each organization participating in this study, we obtained a list of managerial employees. Emails requesting voluntary participation were sent-out with links to an online anonymous survey. Reminder emails were sent three weeks later. In all emails, the overall objective of our study was described as the identification of those characteristics that facilitate proactive behavior in the work environment. Although confidentiality was guaranteed, the term 'person-environment' fit or 'misfit' was not mentioned in these emails as we wanted to avoid that participants would perceive the survey as a personal evaluation.

This study was conducted among a sample of 303 participants (37.6 % women, 62.4 % men). Their average age was 36.1 years (SD = 6.9, range = 23-60). The participants were employed on average 5.7 years (SD = 4.4) in their organization. Across the participating organizations, we obtained a response rate of 44.8%. In Table 1, more information about the sample composition can be found, as we report the industry sector, sample size (N), response rates (%), proportion of males (%), mean age (in years) and tenure (in years) per

organization. Data were collected among individuals at a managerial level (i.e., employees who are responsible for one or more subordinates). Managerial work is often complex and ambiguous and this is assumed to increase when the manager moves upwards in the organizational hierarchy (Ashford & Tsui, 1991). Thus, we expect that managers are a highly relevant organizational group to test our hypothesis (Hypothesis 1), as they have to cope with varying levels of demands-abilities misfit.

All data concerned self-report measures, collected at one point in time. However, it should be noted that although all data were self-report and cross-sectional, common method variance is unlikely to create nonlinear and interactive relationships such as those hypothesized in our study (Edwards, 1996; Evans, 1985). Thus, we are confident that the current research design is appropriate for the research question under study and common method variance is not a serious issue of concern.

# Measures

All questionnaires were originally designed in English and later translated into Spanish and Dutch using back-translation procedures as described by Brislin (1970) for the respective samples.

**Demands-abilities misfit.** Demands and abilities were measured separately for three relevant task dimensions for managers. The original survey consisted of five task dimensions (i.e., "planning-coordinating", "motivating-rewarding", "decision-making", "processing paperwork" and "exchanging information"). Due to an unsatisfactory reliability score, Edwards (1996) omitted two task dimensions (i.e., "processing paperwork" and "exchanging information"). Therefore, we included only the following three task dimensions: "planning-coordinating", "motivating-rewarding" and "decision-making", measured by 12 items (i.e., four item measures for each of the three task dimensions). The

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12 items were answered according to the demands side (i.e., *"How demanding would each activity be for most people?"*) and the abilities side (i.e., *"How much ability (expertise, training, experience) do you personally have regarding each activity?"*). Scales ranged from 1 (not at all) to 10 (a great deal).

**Implicit person theory.** The 8-item scale of Levy, Stroessner and Dweck (1998) was used to measure this moderator variable. The IPT scale measures the extent to which one can be characterized as an entity (*i.e.*, "everyone is a certain kind of person, and there is not much that they can do to really change that") or incremental theorist (*i.e.*, "everyone, no matter who they are, can significantly change their basic characteristics"). The response scale ranged from 1 ("strongly disagree") to 7 ("strongly agree"). After reversing the first four item scores, higher scores reflected a stronger incremental theory (Heslin, Latham & VandeWalle, 2005; Plaks, Grant, & Dweck, 2005).

**Feedback-seeking behavior.** Managers evaluated the extent to which they engaged in feedback-seeking behavior. The four feedback-seeking items of Ashford and Black (1996) were used. The response scale ranged from 1 (*"to no extent"*) to 5 (*"to a great extent"*). An example item for measuring this construct was: *"to what extent have you sought feedback on your performance after assignments"*.

### Analysis

Given the limitations of traditional congruence measures (i.e., difference scores) such as overly restrictive constraints, reduced reliability and confounded effects of environment and person, we opted for an analytical procedure described by Edwards (1994, 2001). This analytical procedure allowed us to examine the relative effects of the two components of interest in this study, the abilities scores and the demand ratings as measured on three task dimensions rather than just aggregating all of these effects into one difference score. We used the following quadratic regression equation in order to test our hypothesis (Hypothesis 1).

$$F = b_0 + b_1D + b_2A + b_3D^2 + b_4DA + b_5A^2 + b_6M + b_7(MD) + b_8(MA) + b_9(MD^2) + b_{10}(MDA) + b_{11}(MA^2) + e$$
 (Equation 1)

Equation 1 can be decomposed into two hierachically nested models. The baseline model (Model 1) represents the effects of the demands and abilities fit as well as the effect of IPT on feedback seeking. As such, Model 1 includes the dependent variable 'feedback seeking' (*F*), the intercept (*bo*), the effect of the independent variable 'demands' (*D*), the effect of the independent variable 'abilities' (*A*), the interaction effect between demands and abilities (*DA*), the squared terms related to demands and abilities (*D<sup>2</sup>*, *A<sup>2</sup>*), as well as the (main) effect of the moderator variable examined in this study, implicit person theory (*M*). The second model (Model 2) represents the full moderation model, including all terms of the baseline model (Model 1) augmented with the five moderation terms (*MD*, *MA*, *MD<sup>2</sup>*, *MDA*, *MA<sup>2</sup>*).

If results are in line with the central hypothesis (Hypothesis 1), the extent of misfit (i.e., difference) between abilities scores and the demands scores (i.e., more specifically, in case of exceeding demands) will lead to more feedback seeking when one has a strong incremental implicit theory (i.e., high IPT scores). Prior to conducting polynomial regressions, demands and abilities scores were scale-centered by subtracting the scale-midpoint to reduce multicollinearity and facilitate interpretation (Edwards, 1994).

When interpreting the results of polynomial regressions, one typically places less emphasis on the significance of specific regression weights than on the surface pattern yielded by the regression equation (Edwards, 2001). We relied on a hierarchical regression approach to test the moderating effect of implicit person theory. To this end we statistically compared the full moderation model (Model 2) with the baseline model (Model 1). If IPT moderates the relationship between D-A fit and feedback seeking, Model 2 should be preferred over Model 1, (i.e., the set of moderation terms should improve prediction accuracy substantially). Only if Model 2 is preferred over Model 1, the surface plot of this relationship was estimated and used in further analyses.

To facilitate the interpretation of the surfaces corresponding to the full moderation model (Model 2), an additional analysis was conducted on two reference lines of each plot using response surface methodology (Edwards & Rothbard, 1999). Specifically, we estimated the slope and curvature of the A = -D and A = D lines. The first reference line, the A = -Dline, runs from the far left corner to the far right corner of each graph. Along this line, from the right to the left, the abilities decrease in strength and demands increase until they are equal at point (0,0); from that point on, demands scores exceed abilities scores. A positive slope on this line would support the hypothesis (Hypothesis 1) that exceeding demands are related to increased feedback seeking. The second reference line concerns the line of perfect fit between abilities and demands (A = D), running from the back to the front corner of each graph. According to our hypothesis (Hypothesis 1) (i.e., increased feedback seeking only in case of D-A misfit), we do not expect to observe a significant curvature nor slope along this line. We calculated the statistical significance of all slope and curvature estimates of these lines using procedures for testing weighted linear composites of regression coefficients (Edwards & Rothbard, 1999).

With a total sample size of N = 303 and a statistical power of .80 ( $\alpha = .05$ ), an a priori power analysis showed that a small effect size ( $f^2$ ) of .042 could be detected (corresponding with an increase of  $R^2 = .042$ ) for the baseline regression model (Model 1). For the full moderation regression model (Model 2; power .80,  $\alpha = .05$ ) an effect-size of .025 could be detected.

#### Results

Table 2 represents the means, standard deviations, correlations and scale reliabilities (i.e., Chronbach's alpha) of the variables that are included in this study. Results of polynomial regression procedures are presented in Table 3. We report the unstandardized regression coefficients for the six equation terms of the baseline model (i.e., Model 1) included in each regression representing a particular task dimension, as well as the significance of the baseline model compared to the null model (i.e., model without predictor variables). Further, in column Fi (see Table 3), the F-(model) change values relate to the model comparison between Model 2 and Model 1. In column  $\Delta R^2 i$  of Table 3, the incremental variance explained by the five moderator terms is depicted. As can be seen in column Fi, implicit person theory moderates the relationship between demands-abilities fit and feedback seeking for two out of the three task dimensions, namely planning-coordinating and decision-making. For motivating-rewarding we found a significant effect of the demandsabilities fit on feedback-seeking behavior. However, implicit person theory did not moderate this relationship. Thus, the moderating role of implicit person theory was supported for two out of three task dimensions.<sup>1</sup> Below, the specific pattern of moderation results will be discussed for those two task dimensions.

# **Planning-coordinating**

The first significant moderated relationship was found for D-A fit of the planningcoordinating dimension. As hypothesized, the additional set of moderator terms explained an additional 3% of the variance (F(11, 291) = 2.26, p < .05; see Table 3, columns Fi and  $\Delta R^2 i$ ). We plotted the response surfaces at 1 *SD* above and 1 *SD* below a mean IPT score in order to interpret the relationships for managers with an entity (low IPT score) and an incremental (i.e., high IPT score) person theory. For a low IPT score (i.e., individuals who hold an entity theory; 1 *SD* below mean IPT), we obtained a rather flat surface (Figure 1a), indicating that the demands-abilities fit did not have a substantial effect on feedback seeking. In addition, the statistical basis for the A = D line (i.e., slope = -0.10, ns; curvature = 0.05, ns) and the A = -D line (i.e., slope = -0.02, ns; curvature = 0.01, ns) was not significant (see Table 4). This is in line with Hypothesis 1, as we did not expect an influence on feedback seeking for individuals holding an entity person theory (i.e., low implicit person theory score).

The surface in Figure 1b (incremental implicit theory; 1 SD above mean IPT) revealed a different pattern. First, this graph suggests a demands-abilities misfit effect (i.e., more feedback seeking in case of misfit) as the level of the surface along the front wall rose (i.e., when abilities = -4.5, scale-centered) when demands exceeded abilities accordingly (i.e., indicating increased feedback-seeking behavior). However, we observe the same effect for exceeding abilities when we look along the left wall (i.e., when demands = -4.5, scalecentered). The surface along this line also increased as the discrepancy (i.e., misfit) between demands and abilities grew. Thus, as hypothesized, exceeding demands were related to an increase in feedback seeking. Contrary to our hypothesis (Hypothesis 1), exceeding abilities had a similar effect on feedback seeking. The observed misfit-effect is reflected in a modest convex shape along the misfit line (A = -D). The curvature appeared to be positive, even though the statistical basis for the slope of this line estimate was not significant (i.e., slope = 0.04, ns). It should be noted that the earlier mentioned misfit-effects were found for low to average demands or abilities-scores only (i.e., as observed in Figure 1b). When we look along the back wall (i.e., when abilities = 4.5, scale-centered) and along the right wall (i.e., when demands = 4.5, scale-centered), we do not observe such a misfit-effect. Feedback seeking scores were high along these lines, regardless of the misfit level. Second, visual inspection of the second reference line showed that the slope of the congruence line (A = D) was positive

and the statistical basis showed that the slope of this line was significant (i.e., 0.32, p < .05). This positive slope indicates that people who hold an incremental person theory, sought more feedback when there was fit between high demands and high abilities scores (i.e., high level of fit), whereas feedback seeking was low when there was fit between low demands and low abilities scores (i.e., low levels of fit). This effect was not hypothesized as we assumed that D-A fit would not be related to increased feedback seeking and would remain low to moderate in a situation of D-A fit. Therefore, we conclude that for planning-coordinating, D-A misfit was positively related to feedback seeking for low to average demands (D < A) and abilities (A < D) scores. If the scores for demands and abilities are relatively high, we did not observe a misfit-effect on feedback seeking. Finally, feedback seeking scores were highest when high demands and high abilities were congruent (i.e., high level of fit) versus when low demands and low abilities were congruent (i.e., low level of fit).

### **Decision-making**

Implicit person theory also appeared to be a significant moderator of the D-A fit and feedback seeking for the decision- making task dimension. As can be seen in Table 3 (see columns *Fi* and  $\Delta R^2 i$ ), taking into account the moderating role of IPT, an additional 4% of the variance was explained (*F*(11, 291) = 2.90, *p* < .05). We depicted the response surfaces (i.e., 1 *SD* above and 1 *SD* below a mean IPT) in order to investigate the relationship pattern for managers with an entity as opposed to managers with an incremental implicit person theory. For individuals who hold an entity theory (Figure 2a), we observed along the line of misfit (*A* = *-D*) a negative slope indicating that people sought more feedback when abilities got higher and demands decreased. Along the congruence line (*A* = *D*) we observed a modest curvilinear relationship with the highest levels of feedback seeking when demands and abilities were both very high (i.e., high level of fit) and very low (i.e., low level of fit).

Although the statistical basis of the A = -D line (i.e., slope = -0.05, ns; curvature = -0.01, ns) and A = D line (i.e., slope = -0.21, ns; curvature = 0.06, ns) revealed that the signs of the estimates support our observations, results reported in Table 4 showed non-significant slopes and curvatures. As a consequence, these patterns should be interpreted cautiously.

Figure 2b represents the surface for individuals who hold an incremental person theory. Again, this pattern substantially differs from the estimated surface of Figure 2a (i.e., surface for people who hold an entity theory). Similar to the response surface of Figure 1b (i.e., surface for planning-coordinating), we observe a misfit-effect. When we look along the front wall of this response surface (i.e., when abilities = -4.5, scale-centered), we see that feedback seeking increased as demands exceeded abilities. However, we observe the same effect for exceeding abilities when we look along the left wall (i.e., when demands = -4.5, scale-centered). The surface along this line (i.e., left wall) also increased as the discrepancy (i.e., misfit) between demands and abilities grew. However, the statistical basis of the A = -Dline did not provide significant slope or curvature estimates (i.e., slope = 0.06, ns., curvature = -0.01, ns.). As was the case for the planning-coordinating task dimension, a misfit effect did not occur when demands and abilities scores were high. Contrary to what we expected, the most notable effect on feedback seeking can be perceived along the line of fit (A = D). We can see that feedback-seeking scores were highest when high demands and high abilities were congruent (i.e., high level of fit) versus when low demands and low abilities were congruent (i.e., low level of fit). Although our statistical basis of the A = D line estimate revealed that the sign for the slope was positive, it was not significant (i.e., slope = 0.14, ns; curvature = 0.01, ns). In sum, for the decision-making task dimension, when the managers held an incremental person theory, D-A misfit had a modest effect on feedback seeking for low demands (D < A) and abilities (A < D) scores. Similar to the planning-coordinating task dimension, D-A fit also had an impact on feedback seeking: People who hold an incremental

theory engaged more in feedback seeking when high demands and high abilities (i.e., high level of fit) were congruent than when low demands and low abilities were congruent (i.e., low level of fit).

# Discussion

First, our study aimed to extend the traditional perspective on P-E fit by examining whether and when managers rely on proactive behavior (i.e., feedback-seeking behavior) to resolve issues of demands-abilities misfit instead of reacting negatively to it. A second aim of this study was to extend the IPT literature by further exploring the impact that managers' implicit person theories may have on their proactive behavior. Third, we extend the feedback-seeking literature by examining how the interaction between previously unexamined individual and situational variables affect feedback-seeking behavior.

In line with previous theoretical work in social psychology, we argued that proactive feedback-seeking behavior would be exhibited only by managers who hold an implicit incremental theory (Hong et al., 1999; Rhodewalt, 1994; Shaw & Gupta, 2004). This moderated relationship was tested for three managerial task dimensions: planning-coordinating, motivating-rewarding and decision-making. We also want to note that in this study, we opted exclusively for a focus on demands-abilities fit due to the fact that in the fit literature, incongruent demands and abilities mainly were observed to have detrimental consequences on behavioral outcomes, whereas supplies-values misfit is related to job attitudinal outcomes such as job dissatisfaction (Edwards, 1996; Edwards & Shipp, 2007; Kristof-Brown et al., 2005). In addition, as this study focused on proactive behavioral strategies to improve performance-related variables such as skills and abilities, the demands-abilities approach is from a conceptual point of view more aligned with the focus of our study than the supplies-values approach.

In general, we found partial evidence for the central hypothesis (Hypothesis 1).

Results showed that implicit person theory moderated the relationship between the demandsabilities fit and feedback seeking for two of the three investigated task dimensions: planningcoordinating and decision-making, but not for the motivating rewarding dimension. Hence, only these two dimensions were further examined using response surface methodology. After plotting the moderated relationships, we obtained two figures for each task dimension representing managers with a low (entity) and high (incremental) IPT score, respectively. As hypothesized, effects on feedback seeking were found only for managers who hold an incremental implicit theory. However, the observed effect was less clear than hypothesized and yields new data that require further investigation.

First, in line with our hypothesis (Hypothesis 1), results showed that D-A misfit had an effect on feedback seeking, but for low (decision-making) to average (planningcoordinating) demands and abilities scores only. The response surfaces observed for both task dimensions also revealed that there was not only an effect when demands exceeded abilities (as hypothesized) but also when abilities exceeded demands. The latter effect was unanticipated and additional research is needed to better understand why this effect occurred. One possible explanation for such a pattern is suggested by Edwards (1996). He depicts two different underlying processes to explain the positive effects of exceeding abilities on individuals' wellbeing. The first process of abilities exceeding demands involves maintaining or "conserving" these abilities in anticipation of increasing demands in the future. In other words, when someone has an excess of abilities for specific task demands, this does not automatically imply that the remaining 'unused' abilities get lost or are wasted. Even in this situation, abilities can be maintained or improved in order to meet possible increasing demands for this task dimension in the future. This implies for the current study that managers may engage in increased feedback seeking to improve their abilities even if this is not really necessary given the current demands (i.e., as they anticipate future increasing demands). The second process of abilities exceeding demands involves the "carryover" of resources to other task dimensions. The extra time and energy that come with exceeding abilities for one specific task allow improvement of several other abilities in order to meet the specific demands for other tasks. For instance, managers with exceptional coordinating abilities could invest the time won through excellent coordinating in improving their motivating-rewarding abilities to keep their subordinates motivated. Thus, exceeding abilities on one domain could lead to increased feedback seeking on another domain. Given that we only had a general measure of feedback seeking at our disposal, the current results do not allow testing and disentangling these two processes. Future research addressing this issue would benefit from measuring task-specific feedback-seeking behaviors.

Second, on both response surfaces (i.e., planning-coordinating and decision-making) we observed that fit of high demands and high abilities (A = D), was related to high values of feedback-seeking behavior. This was a second unanticipated finding as we expected that in situations of perfect D-A fit, people would engage less in feedback-seeking behavior as opposed to a situation of D-A misfit. However, earlier P-E fit research using polynomial regression procedures, revealed relationships that are different from traditional assumptions of 'symmetrical fit' (i.e., assumption that low levels of P-E fit and high levels of P-E fit would yield comparable effects on the outcome variable). Instead, these polynomial regression studies demonstrated that in the case of high person and high environment (i.e., high level of fit), outcomes such as attitudes are more positive when compared to the case of low person and low environment (i.e., low level of fit; Edwards & Rothbard, 1999; Kristof-Brown et al., 2005). Furthermore, Locke and Latham (1990) suggested that the combination of high abilities and high demands are typical for situations in which performance goals are challenging but attainable, leading to increased motivation and enhanced performance.

Therefore, it is plausible that motivation could have facilitated the relationship between a situation of D-A fit and feedback seeking for performance improvement. These findings could explain why feedback seeking was lower for low levels of D-A fit and why people who hold an incremental theory engaged considerably more in feedback seeking at high levels of D-A fit.

Even though this study has its merits, it is not without limitations. First, given the cross-sectional design, causal conclusions cannot be drawn. Longitudinal studies are needed to provide more robust evidence for causal conclusions. Second, although our data encompass a multi-level structure (i.e., individual and organizational level), we only modelled the individual level as we did not hypothesize cross-level interactions. Consequently, this may have affected our parameter estimates to some extent (LaHuis & Ferguson, 2007). Third, as we did not obtain similar results for all three task dimensions, the issue of generalizability of task dimensions should be raised. More specifically, this study faced methodological drawbacks such as high intercorrelations between a limited set of task dimensions (Edwards, 1996). These drawbacks also complicated the interpretation of the observed task-specific effects (e.g. why implicit person theory did not moderate the relationship between D-A fit and feedback seeking for all three task dimensions). Future studies should include more task dimensions or global evaluations of demands and abilities in order to investigate to which extent the results of the current study are task-specific. A fourth limitation is that one cannot completely exclude the possibility that common method variance may have distorted observed relationships among our measures due to the use of self-reported data (Williams & Brown, 1994). However, as mentioned previously, it is unlikely that common method variance induces nonlinear and moderated relationships as hypothesized and observed in the current study (Edwards, 1996; Evans, 1985). Nevertheless, future research could move beyond using self-report measures and rely on colleagues, superiors or

subordinates to measure the demands and abilities, as well as the extent of feedback seeking of the manager. By including multiple sources, a more accurate representation of the D-A fit could be obtained.

Finally, in future research the organizational culture could also be accounted for. There may be more factors affecting the decision whether or not to seek feedback when experiencing D-A misfit. For example, it could be assumed that individuals will be more likely to seek feedback in case of P-E misfit when their organization has a supportive feedback-climate in comparison with individuals who work in organizations where the feedback-climate is not as supportive (i.e., London, 2003). Finally, a broader range of proactive behaviors and development activities could be targeted as dependent variables. We believe that this could result in a new line of research testing potential positive effects of misfit.

As results of this study indicate that people who hold an incremental theory engage in feedback-seeking behavior when D-A misfit occurs (i.e., for low to average demands and abilities), some interesting implications for practitioners can be formulated. Heslin, Latham and VandeWalle (2005) demonstrated that an incremental implicit theory can be influenced by self-persuasion techniques. If organizations want managers to proactively deal with demanding situations, they could provide specific IPT training sessions for their managers. In addition, feedback-seeking behavior could also be stimulated directly in the organizational environment, as it appears to be a useful strategy to cope with D-A misfit (e.g., for example through mentor programs, socialization activities and coaching).

In sum, although we found partial support for our initial hypothesis (Hypothesis 1), results were more complicated than hypothesized. Further research in this field is needed to broaden and develop a more systematic conceptual framework of proactive manager reactions to D-A misfit. By focusing on other types of proactive behavior, different task dimensions and other moderator variables, new meaningful insights in this research area could be provided.

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#### Footnotes

<sup>1</sup> Due to the fact that the sample of our study consists of managers from several organizations, we conducted a homogeneity test to see if organizational differences could be accounted for the observed effects. We tested the homogeneity of our sample by conducting a one-way ANOVA test (Welch Vw) of variable means (i.e., all variables included in Equation 1) with post hoc comparisons (Games-Howell post hoc test, which assumes unequal variance and unequal sample size between groups; see Clinch & Keselman, 1982; Games, Keselman, & Rogan, 1981). Organization 12 (M = 6.9 and M = 8.1) appeared to have lower abilities for the planning coordinating task dimension than organization 1 (Vw = 2.890, p < .05). Organizations 3 and 8 (M = 3.3 and M = 3.0) scored lower on feedback seeking than organization 1 (vs. M = 3.7, Vw = 2.741, p < .05). To check whether mean-level differences on key variables across organizations drastically affected our results and the conclusions drawn, we reran our analyses without organizations 3, 18 and 12 from the sample and we were able to replicate the results of our initial analysis (i.e., sample including all 12 organizations) with a significant moderation effect of IPT on the relationship between D-A fit and feedback seeking for the planning-coordinating (*Fchange* (11, 242) = 2.41, p < .05) and for decision making task dimensions (*Fchange* (11, 242) = 3.82, p < .01). Given that our results appeared to be relatively robust, we present the analysis where all 12 organizations were included in the sample (N = 303).

# MISFIT AND FEEDBACK SEEKING

# Table 1

Sample composition of employees at managerial level across the 12 organizations

Organization	Industry sector	N	Response rate (%)	Proportion of males	Age (in years)		Tenure (in years)	
					М	SD	М	SD
1	Consumer goods	193	49.5	46.1	33.7	5.0	4.7	3.2
2	Chemicals	12	46.2	75.0	38.0	5.6	5.7	3.9
3	Healthcare	14	41.2	78.6	44.1	8.4	6.9	5.1
4	Service	4	66.7	100	40.5	5.0	8.6	6.3
5	Consumer goods	12	35.3	58.3	37.2	5.2	6.9	5.2
6	Financial	7	38.9	57.1	40.1	6.4	7.5	7.2
7	Food	8	53.3	37.5	35.5	6.0	4.6	2.6
8	Industrial goods	22	48.9	90.9	44.0	9.2	9.9	6.5
9	Utility	9	37.5	88.9	41.3	9.4	6.5	6.7
10	Service	6	38.0	100	41.3	6.1	6.2	7.0
11	Media	4	45.8	100	35.5	9.6	5.5	4.0
12	Service	12	36.3	75.0	38.0	7.4	8.1	5.8
	Overall	303	44.8	62.4	36.1	6.9	5.7	4.4

### MISFIT AND FEEDBACK SEEKING

# Table 2

Descriptive statistics and correlation coefficients

Variables	М	SD	1	2	3	4	5	6	7	
1. Planning-Coordinating (D)	5.82	2.16	(.89)							
2. Motivation-Rewarding (D)	5.97	2.28	.76**	(.86)						
3. Decision-making (D)	5.91	2.00	.69**	.64**	(.84)					
4. Planning-Coordinating (A)	7.90	1.21	.12*	.12*	.01	(.82)				
5. Motivation-Rewarding (A)	7.70	1.30	.11	.13*	.07	.49**	(.79)			
6. Decision-making (A)	7.94	1.20	.03	.04	.09	.47**	.38**	(.72)		
7. Implicit person theory	3.94	1.15	.03	.03	.10	.01	.07	.00	(.88)	
8. Feedback seeking	3.54	.83	.17**	.15**	.13*	.20**	.20**	.09	.18**	(.85)

*Note.* D = demands, A = abilities. Scale reliabilities (Chronbach's alpha) are reported on the diagonal.

\*p < .05, \*\*p < .01

### Table 3

Results of Quadratic Regressions of Feedback seeking on Demands and Abilities Scores

				Full moderation model (Model 2)					
Task dimensions	D	А	D²	DA	A²	М	R²	Fi	∆R²i
Planning-Coordinating	.08	.09	.01	01	.00	.12**	.10**	2.26*	.03
Motivating-Rewarding	03	.09	.01	.03	.00	.11**	.10**	1.20	.02
Decision-making	02	06	.00	.02	.02	.12**	.06**	2.90*	.04

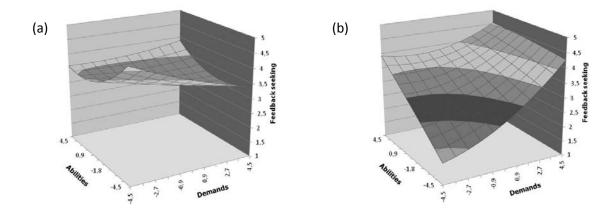
entries are unstandardized regression coefficients for equations with all predictors entered simultaneously (i.e. baseline model: Model 1). The column labeled  $R^2$  represents the significance of the baseline model (i.e. Model 1) compared to the null model (i.e. the model without predictor variables). The column labeled *Fi* contains *F*-change values for the model comparison between the full moderation model (Model 2; that is, including the 5 moderation terms: *MD*, *MA*, *MD*<sup>2</sup>, *MDA*, *MA*) and the baseline model (i.e. Model 1), \* p < .05, \*\* p < .01

#### Table 4

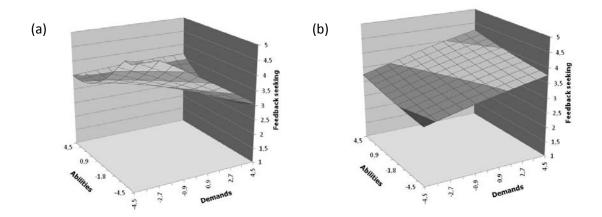
Results of shape estimates along the A = D and A = -D line of the moderated relationships

		Shape along A = D line		Shape along A = -D line		
Dimensions	IPT	Slope <i>b1+b2</i>	Curvature b3+b4+b5	Slope <i>b1-b2</i>	Curvature b3-b4+b5	
Planning-Coordinating	Entity	10	.05	02	.01	
	Incremental	.32*	01	.04	.04	
Decision-making	Entity	21	.06	05	01	
	Incremental	.14	.01	.06	.01	

*Note.* (*D*= Demands, *A*= Abilities, IPT= Implicit Person Theory) Columns labeled b1+b2 and b3+b4+b5 represent respectively the slope and curvature along the A = D line, and columns labeled b1-b2 and b3-b4+b5 represent respectively the slope and curvature of each surface along the A = -D line. The coefficients of the full moderation model ( $F = b0 + b1D + b2A + b3D^2 + b4DA + b5A^2 + b6M + b7$  (*MD*) +  $b8(MA) + b9(MD^2) + b10(MDA) + b11(MA^2) + e$ ) were converted to the compound coefficients b1,b2, b3,b4,b5 (i.e. on the terms *D*, *A*, *D*<sup>2</sup>, *DA*, *A*<sup>2</sup>) and were tested using procedures for testing weighted linear combinations of regression coefficients, \* p < .05, \*\* p < .01



*Figure 1.* Estimated Surface relating D-A(planning-coordinating) to Feedback Seeking for two levels of Implicit Person Theory: (a) low IPT score (i.e., entity theory). (b) high IPT score (i.e., incremental theory). The different shades on both figures depict the various feedback seeking levels on the surface pattern going from 1 to 5 with intermediate steps of .5.



*Figure 2.* Estimated Surface relating D-A(decision making) to Feedback Seeking for two levels of Implicit Person Theory: (a) low IPT score (i.e., entity theory). (b) high IPT score (i.e., incremental theory). The different shades on both figures depict the various feedback seeking levels on the surface pattern going from 1 to 5 with intermediate steps of .5.