Recent changes in the global economy have presented organizations with the challenge of promoting continuous lifelong learning by their workers (London & Mone, 1999; London & Smither, 1999). Such learning is critical because job demands are increasingly dynamic, continually changing as a result of new technologies or increased competition (Hesketh & Neal, 1999). As a result, today’s employees are expected to become more self-directed in building their skills and managing their work environments (Hedge & Borman, 1995). Consequently, employee development has become an important component of maintaining an effective workforce.

Employee development is a self-initiated, self-directed means by which employees improve their competencies and work environment (London, 1989; London & Smither, 1999). As described by London (1989), employee development consists of activities that influence personal and professional growth. Developmental activities can impact personal growth by leading to improvements in skills and competencies (London, 1989; London & Smither, 1999). They can impact professional growth by leading to improvements in their work tasks and interactions (Wrzesniewski & Dutton, 2001). Thus, employee development can be a means of changing both oneself and one’s environment.

A variety of activities are used to promote employee development. These include setting goals for skill improvement, taking formal courses, assuming challenging job responsibilities, undergoing assessment activities, and engaging in facilitative interpersonal relationships (Birdi, Allan, & Warr, 1997; Noe, 1999). Whatever the activity, it is critical to build an understanding of how to promote individuals’ development efforts and how those efforts result in positive changes within the organization (Baldwin & Padgett, 1993). Unfortunately, the few studies that have been conducted on employee development have focused on a limited set of individual antecedents or contextual antecedents (Birdi et al., 1997; Maurer & Tarulli, 1994; Noe & Wilk, 1993). Research has failed to examine the type of individual–context interactions that predict most types of volitional behavior (e.g., Roberts, Hulin, & Rousseau, 1978).

In this study, we examined employee development as a function of both Conscientiousness and person–environment fit with respect to needs and supplies of autonomy. We argued that conscientious individuals should be more likely to engage in development, particularly when they are experiencing person–environment misfit. Such individuals can use development to proactively improve their fit, leading to better fit at a later point in time (see Figure 1). In the sections below we detail the proposed linkage between Conscientiousness and employee development, as well as the moderating role of person–environment fit.

Conscientiousness and Employee Development

Conscientious employees tend to be reliable, hardworking, self-disciplined, and persevering (McCrae & Costa, 1987). Conscien-
Conscientiousness has been linked to a number of important job outcomes (Barrick & Mount, 1991) but has yet to be explicitly linked to employee development. However, Hall’s (1986) model of career development suggests that achievement orientation, proactivity, hardiness, and independence will improve an employee’s career success. These traits are subsumed under the Conscientiousness factor and support a relationship with employee development.

Surprisingly, empirical research examining the relationship between Conscientiousness and learning-related outcomes has yielded inconsistent findings. Research has found positive relationships between Conscientiousness and goal commitment, motivation to learn, and learning (Barrick, Mount, & Strauss, 1993; Colquitt & Simmering, 1998), all of which are necessary for development to occur. Conversely, Martocchio and Judge (1997) found a negative relationship between Conscientiousness and learning, an effect that was mediated by self-deception. Specifically, conscientious individuals were more likely to believe they were doing better than they truly were—a tendency that harmed learning. LePine, Colquitt, and Erez (2000) also uncovered detrimental effects for Conscientiousness, with the trait being negatively related to posttraining performance in contexts requiring adaptability.

Two meta-analyses have added to the equivocal results regarding the relationship between Conscientiousness and learning-related outcomes. Barrick and Mount’s (1991) meta-analysis on the Big Five linked Conscientiousness to job proficiency ($\rho = .23$) and training proficiency ($\rho = .23$). However, Colquitt, LePine, and Noe (2000) conducted a meta-analytic review of the training literature that included Conscientiousness and several training outcomes (e.g., declarative knowledge and skill acquisition). Their review yielded $\rho = -.01$ for Conscientiousness and declarative knowledge and $\rho = -.05$ for Conscientiousness and skill acquisition. The results of both meta-analyses showed that sampling and measurement error could not fully explain the variance in effect sizes, suggesting that moderators may affect the relationships between Conscientiousness and learning-related outcomes.

The Moderating Role of Person–Environment Fit

Many researchers agree that to fully understand and predict employee behavior, one must examine both the person and the context (e.g., Chatman, 1989; Roberts et al., 1978). A key issue in the present study was identifying a potential moderator of the relationship between Conscientiousness and employee development. We focused on person–environment fit as that moderator. Whereas Conscientiousness can provide the resources for development (in the form of self-discipline, perseverance, etc.), person–environment misfit can provide the need for development, as development activities can be used to proactively restore fit.

Person–environment fit can be generally defined as the compatibility between individuals and the environments in which they work. Although person–environment fit has traditionally been examined in terms of its direct effects on outcomes such as work attitudes, strain, and turnover (e.g., Chan, 1996; Chatman, 1991; Edwards & Harrison, 1993; Posner, 1992; Posner, Kouzes, & Schmidt, 1985), recent work has begun to examine fit as a moderator of individual difference effects. Kristof (1996) suggested that individual differences and fit may interact in their effects on outcomes. For example, Smith and Rogg (2000) conducted two studies showing that cognitive ability had a more positive relationship with sales performance when misfit between an employee’s need for and the presence of unique task–reward characteristics of the job existed.

Person–environment fit has been operationalized in many ways, including person–organization fit (e.g., Kristof, 1996) and person–job fit (e.g., Edwards, 1991). Research on fit has also examined fit between personality and organizational culture (e.g., Chatman & Barsade, 1995; Day & Bedeian, 1991; Downey, Hellriegel, &
Slocum, 1975) and between individuals’ needs and abilities and job characteristics (e.g., Edwards & Harrison, 1993). Much of this research has followed Schneider’s (1987) attraction-selection-attrition (ASA) model, in which he posits that employees are attracted to organizations that provide a high level of fit, are then selected by organizations that perceive this fit, and subsequently leave the organizations if misfit occurs. The ASA model implies that fit results in positive outcomes and that misfit results in negative outcomes. Because the ASA model has guided most of the fit research to date, empirical studies have attempted to demonstrate these effects. For example, several studies have linked fit to positive work attitudes (e.g., Posner, 1992; Posner et al., 1985), whereas others have linked misfit to strain and withdrawal (Chan, 1996; Chatman, 1991; Edwards & Harrison, 1993).

By its very nature, the ASA framework deemphasizes the possibility that individuals who experience misfit may change themselves (or their environments) rather than self-selecting out of their organizations. This is unfortunate because it portrays employees as reactive rather than proactive. Our contention was that conscientious individuals, when faced with misfit, will respond by proactively engaging in development to improve their fit. We examined this prediction using needs–supplies fit as the operationalization of person–environment fit. Needs–supplies fit occurs when a person’s job supplies the characteristics that meet his or her needs (e.g., Chatman, 1991; Posner, 1992; Posner et al., 1985).

We chose to examine the needs and supplies of autonomy because research has lacked a systematic investigation of characteristics relevant across a broad range of jobs. Autonomy, defined as “the degree to which the job provides substantial freedom, independence, and discretion to the individual in scheduling the work and in determining the procedures to be used in carrying it out” (Hackman & Oldham, 1980, p. 79), is an important form of fit for several reasons. First, development is often triggered by the existence of too much or too little autonomy, as can be seen in many models of career progression (e.g., Hall, 1986). Similarly, reviews of the literature indicate that development can be used to attain more discretion and control in the future or to cope with existing levels of job responsibility (e.g., Noe, Wilk, Mullen, & Wanek, 1997).

Autonomy is also one of the most commonly examined job characteristics in the person–environment fit literature (e.g., Edwards & Harrison, 1993; Edwards & Rothbard, 1999; Kulik, Oldham, & Hackman, 1987). Thus, using it in the present study provides a bridge to research in the area. Moreover, autonomy fit should become increasingly important as decision making and control get pushed to lower levels of an organization (Motowildo & Schmit, 1999). This trend makes it more likely that some employees will feel that they have too much autonomy, whereas others will respond to their newfound control with the desire to gain more control.

Theoretical Grounding

Our prediction that autonomy misfit will moderate the relationship between Conscientiousness and development can be supported with two different literatures: proactive socialization and situational strength. Proactive socialization researchers argue that new employees can engage in specific on-the-job behaviors that can help improve their skills, increase their understanding of organizational roles and norms, and build a supportive network of work relationships (Ashford & Black, 1996; Morrison, 1993; Saks & Ashforth, 1996; Wanberg & Kammeyer-Mueller, 2000). These behaviors, which can supplement the organization’s existing programs and rituals, include information seeking, feedback seeking, goal setting, networking, negotiating, framing, practicing desired behaviors, tracking progress, and self-rewarding. The use of such strategies has been shown to predict task mastery, role clarity, social integration, anxiety, intrinsic motivation, coping ability, job satisfaction, and withdrawal (Ashford & Black, 1996; Morrison, 1993; Saks & Ashforth, 1996; Wanberg & Kammeyer-Mueller, 2000).

Proactive socialization and employee development both involve the use of self-managed behaviors for improving job skills and conditions (though proactive socialization focuses exclusively on newcomers). In fact, many of the actual behaviors are similar, particularly goal setting, feedback setting, practicing desired behaviors, and tracking progress. Wanberg and Kammeyer-Mueller (2000) found a significant correlation between Conscientiousness and two of four proactive behaviors, but its effects were nonsignificant after controlling for other individual and contextual variables. In reflecting on these nonsignificant findings, Wanberg and Kammeyer-Mueller speculated that “conscientious individuals may have a tendency to be more confident in socialization experiences and may feel less of a need to seek out information and feedback” (p. 382).

In other words, conscientious individuals might possess the resources for proactive behaviors—like socialization or development—but might not see the need for them. We argue that person–job misfit, with respect to autonomy, could supply that need. Ashford and Black (1996) showed that autonomy needs (labeled desire for control in their study) were one trigger of proactive socialization behaviors. This supports the notion that autonomy misfit could trigger conscientious individuals to use their perseverance and self-reliance to engage in development activities.

The idea that misfit amplifies the Conscientiousness–development relationship is also consistent with situational strength theory (Mischel, 1977; Weiss & Adler, 1984). Mischel (1977) described strong situations as those in which appropriate behaviors are clear, skill requirements are uniformly met, and assessments of the work environment do not vary. Interindividual variability is low in strong situations, preventing personality variables from predicting behavior. In contrast, weak situations are marked by cases in which appropriate behaviors are unclear, some skill requirements may be lacking, and perceptions of the work environment vary. Here, interindividual variability is high, allowing personality–behavior correlations to emerge.

We hypothesized that the existence of person–job misfit should create a circumstance in which appropriate behaviors are unclear, skill requirements may be unmet, and assessments of the work environment may vary. If so, then the responses of careful, reliable, hardworking, ambitious, and self-reliant individuals will be more distinct from the responses of careless, undependable, lazy, and helpless individuals, to use McCrae and Costa’s (1987) conscientiousness descriptors. In contrast, we hypothesized that the presence of person–job fit should constrain interindividual variability to a greater degree, weakening the Conscientiousness–development relationship. Thus, as shown in Figure 1, we predicted the following:
Hypothesis 1: The relationship between Conscientiousness and employee development will be moderated by person–environment fit, such that the relationship will be more positive where misfit exists for needs and supplies of autonomy.

In stating the above hypothesis, it is important for us to note that misfit can exist when an employee has too little autonomy and when an employee has too much autonomy. Both circumstances constitute weak situations, and both could create the need for development. Too little autonomy could trigger development activities as a means of attaining more important work assignments that supply more discretion and control. Too much autonomy could trigger development activities as a means of honing one’s skills to cope with job requirements. Unfortunately, research on fit and stress suggests that development may not occur in the latter situation. Excess job supplies have been associated with increased tension, role overload, and role conflict (Edwards, 1996), which can reduce commitment, well-being, and satisfaction (Bedeian & Armenakis, 1981; Parasuraman & Alutto, 1984). Development would likely be impractical in such circumstances, because it would simply create more demands on the employee. Nonetheless, our study tested the relationship between Conscientiousness and development as moderated by both types of misfit.

Employee Development and Subsequent Fit

Implicit in our proposal that conscientious individuals will respond to misfit by engaging in development is the assumption that development will improve fit at a subsequent time. To support a relationship between development and subsequent fit, we again turn to proactive socialization. Saks and Ashforth’s (1997) review of the socialization literature introduced a multilevel process model of organizational socialization. In that model, Saks and Ashforth argued that proactive strategies and behaviors would lead to increases in information and learning, which would then lead to improved person–job fit. Kristof (1996) made a similar prediction in her review of the fit literature.

We hypothesized that development activities could alter subsequent person–job fit via two mechanisms. For individuals with too little autonomy, the completion of coursework, job challenges, and assessment activities could lead to more job latitude, more enriching assignments, or more promotions, thereby increasing supplies of autonomy. For individuals with too much autonomy, those same activities could improve self-confidence to the point at which more autonomy is needed and desired. In one case, fit is restored by the alteration of subsequent supplies; in the other case, it is restored by the alteration of subsequent needs. Thus, as shown in Figure 1, we predicted the following:

Hypothesis 2: Employee development will be associated with increased subsequent needs–supplies fit in terms of autonomy.

Method

Study Context

We conducted this study in the context of a 360° feedback intervention. Using 360° feedback to facilitate development is an approach that has increased in popularity in recent years (Hazucha, Hezlett, & Schneider, 1993; London & Beatty, 1993). It typically involves providing employees with feedback about their skill strengths and weaknesses from multiple sources, including supervisors, peers, and themselves (Hazucha et al., 1993). The intervention was used in this study to create the opportunity for developmental activities while preserving natural variance that could be predicted by Conscientiousness and misfit.

Participants

Participants were 83 managers working in 21 different industries; 78% were male, and 22% were female. They each had an average of six people who directly reported to them, and they each had worked in an average of two companies prior to working for their current employer. Average tenure in the current organization was over 5 years, and the average age of the sample was 32 years. This sample is particularly appropriate for this study because researchers in the areas of person–environment fit and development have long emphasized the need for samples that span several organizations and occupations (e.g., Downey et al., 1975). The study participants were enrolled in an executive Masters of Business Administration (MBA) program at Michigan State University, East Lansing, Michigan.

Procedure

The procedure included three phases: before, during, and after the 360° feedback was received by the participants. The procedures in these phases are described in Table 1.

Prefeedback phase. Upon acceptance to the MBA program, participants took part in a variety of orientation exercises, including one related to their Managerial Skills course. This exercise required participants to complete a 360° feedback instrument, called SKILLSCOPE (2002),1 which was provided and scored by the Center for Creative Leadership, Greensboro, North Carolina. Participants rated their own skills and weaknesses and asked their supervisors and peers to complete the instrument. Several weeks later, the participants completed a measure of person–environment fit and gave their managers a measure of development activities. On this measure, managers were asked to evaluate the development activities of the study participants over the past 6 months. The measures were mailed back to the researchers and were not shared with the participants. These surveys provided a baseline measure of person–environment fit and development.

Feedback phase. Approximately 1 month later, participants received an individualized SKILLSCOPE feedback report during the first week of their Managerial Skills course. The instructor explained how to interpret the feedback report, described various types of developmental activities, and explained how to create a development plan. This communication process was similar to that used by most organizations, in which only employees see the results and in which subsequent development is not closely monitored by the organization (London & Smither, 1995).

Postfeedback phase. Six months after the initial measure of fit and employee development, participants were again asked to assess their fit. They also completed a measure of Conscientiousness. As before, participants were asked to give a questionnaire to their manager to evaluate the participants’ development activities. The managers’ survey responses were mailed directly to the researchers and were never seen by the study participants.

Measures

Conscientiousness. Conscientiousness was measured using Costa and McCrae’s (1992) 48-item revised NEO Personality Inventory scale (1 =

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1 Center for Creative Leadership, CCL, its logo, and SKILLSCOPE are registered trademarks owned by the Center for Creative leadership. Copyright 2003 Center for Creative Leadership. All rights reserved.
A five-item scale, based on the independence subscale of the Work Aspect Preference Scale (Pryor, 1998), measured the amount of autonomy the employees felt was present in their current jobs, which is the other component of autonomy fit. Employees answered the question “How much of the characteristic do you personally feel is acceptable?” for items including “The opportunity to work as fast or as slowly as I like” and “The opportunity to do my work in my own way” (1 = none at all to 5 = very much).

Development. The participants’ managers were asked to rate the degree to which the participants were involved in development activities over the previous 6 months using 10 items from Noe’s (1996) study. Participants’ managers were told “The purpose of this survey is to collect information about the extent to which [participant] has participated in various types of career development activities during the past six months. Please use the following scale in making your responses: (1 = little to 5 = a great deal).” Items began with “To what extent has this individual during the past six months:” and included endings such as “asked you for projects, committee work, or special assignments in order to improve skills or acquire new ones,” “sought information from you regarding personal and/or professional development courses,” “asked you for feedback regarding his/her skill weaknesses (other than the SKILLSCOPE feedback you recently completed),” and “changed an aspect of his/her behavior because of feedback.”

360° feedback. Although not relevant to the hypotheses, it was necessary to control for the SKILLSCOPE feedback participants received between the two fit and development measurement administrations. The SKILLSCOPE feedback focused on broad managerial skills such as managing conflict, negotiating, building relationships, selecting and developing people, developing influence, being flexible, and coping with pressure. For each item, respondents indicated whether the item was a strength (5) or an area where there was development needed (0). Our analyses controlled for the supervisor, peer, and self SKILLSCOPE ratings.

Other controls. Because participants’ tenure and span of control were expected to correlate with autonomy supplies and development, participants indicated the number of months they had worked at their present organization (i.e., tenure) and the number of employees who directly reported to them in their present position (i.e., span of control).

Results

Descriptive Statistics

The means, standard deviations, and zero-order correlations for all variables are shown in Table 2. Notably, the zero-order relationship between Conscientiousness and postfeedback development ($r = .17, p < .10$, one-tailed) fell between Barrick and Mount’s (1991) $p = .23$ for training proficiency and Colquitt et al.’s (2000) $p = -.01$ and $p = -.05$ for declarative knowledge and skill acquisition. Finally, only the self ratings in the SKILLSCOPE feedback were significant predictors of subsequent development ($r = -.33, p < .05$, one-tailed), with lower self ratings associated with increased subsequent development.

Conscientiousness and Misfit as Predictors of Development

Hypothesis 1 predicted that the relationship between Conscientiousness and postfeedback development would be moderated by autonomy fit, with Conscientiousness more positively related to development for individuals experiencing misfit. To test this, we analyzed fit as the interaction of two separate variables: prefeedback autonomy needs and supplies. By using the two fit components as separate variables in a moderated regression, we avoided problems related to the use of difference scores (e.g., poor reliability, questionable construct validity, and difficulties in interpretability; Edwards, 1994; Edwards & Parry, 1993). One should recall that we speculated that Conscientiousness would predict development more when individuals had too little autonomy than it would when they had too much. This type of analysis allowed these differences in types of fit and types of misfit to be directly examined.

Thus, the test of Hypothesis 1 regressed postfeedback development onto the following variables in the following steps:

1. tenure and span of control,
2. supervisor, peer, and self SKILLSCOPE feedback,
3. prefeedback development,
4. Conscientiousness,
5. the prefeedback needs and supplies fit components,
6. the 2 two-way interaction terms using Conscientiousness and the fit components,
7. the two-way interaction between the fit components, and
8. the three-way interaction of Conscientiousness and the fit components.

Support for Hypothesis 1 would be found if the interaction term in the final step contributed significant incremental variance explained, with the pattern of the effect as predicted.

The regression results are shown in Table 3. As shown in the eighth step, the prefeedback autonomy fit interaction did interact
with Conscientiousness in relating to development ($\Delta R^2 = .05, p < .05$). One should note that although this interaction was significant, the separate components of fit were not significantly correlated with Conscientiousness; this indicates that it is indeed the combination of fit and Conscientiousness that relates to development and not simply an increase in autonomy needed or autonomy supplied. The pattern of this effect can be seen in Table 4, which lists the four possible configurations of autonomy fit: (a) fit in which autonomy needs and supplies are both high; (b) misfit in which supplies exceed needs; (c) misfit in which needs exceed supplies; and (d) fit in which needs and supplies are both low. These subgroups were formed by performing median splits of the prefeedback autonomy needs and autonomy supplies variables. Table 4 clearly shows that the correlation between Conscientiousness and development is higher where misfit exists ($r = .36$ and

<table>
<thead>
<tr>
<th>Regression step</th>
<th>Development (postfeedback)</th>
<th>$\Delta R^2$</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Tenure</td>
<td>.02</td>
<td>.01</td>
<td>.01</td>
</tr>
<tr>
<td>2 Span of control</td>
<td>.08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Supervisor 360° feedback</td>
<td>-.06</td>
<td>.12*</td>
<td>.32*</td>
</tr>
<tr>
<td>4 Peer 360° feedback</td>
<td>-.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Self 360° feedback</td>
<td>-.33*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Development (prefeedback)</td>
<td>.46*</td>
<td>.19*</td>
<td>.32*</td>
</tr>
<tr>
<td>7 Conscientiousness</td>
<td>.20*</td>
<td>.04*</td>
<td>.36*</td>
</tr>
<tr>
<td>8 Conscientiousness \times Autonomy Needs</td>
<td>-.02</td>
<td>.00</td>
<td>.38*</td>
</tr>
<tr>
<td>9 Conscientiousness \times Autonomy Supplies</td>
<td>.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Autonomy Needs \times Autonomy Needs</td>
<td>-.04</td>
<td>.00</td>
<td>.38*</td>
</tr>
<tr>
<td>11 Autonomy Supplies \times Autonomy Supplies</td>
<td>-.39*</td>
<td>.05*</td>
<td>.43*</td>
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Table 4

<table>
<thead>
<tr>
<th>Fit or misfit?</th>
<th>Fit type</th>
<th>$r_{\text{Conscientiousness, development}}$</th>
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<tr>
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</tr>
<tr>
<td>Misfit</td>
<td>Low autonomy needs, high supplies</td>
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</tr>
<tr>
<td>Misfit</td>
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<td>.40</td>
</tr>
<tr>
<td>Fit</td>
<td>Low autonomy needs, low supplies</td>
<td>-.11</td>
</tr>
</tbody>
</table>

Table 4

The $N = 66$ after listwise deletion. * $p < .05$. ** $p < .01$.

Table 3

Note. Subgroups were created by performing median splits of the prefeedback autonomy needs and autonomy supplies variables.
Development as a Predictor of Subsequent Fit

Hypothesis 2 predicted that postfeedback development would be associated with increased postfeedback autonomy fit. As with the other analyses, we operationalized fit using autonomy needs and supplies as two separate variables. Many of the same criticisms leveled against difference scores as independent variables are also relevant for difference scores as dependent variables. Edwards (1995) outlined a procedure that allows the components of a difference score to remain distinct while being used as a dependent variable. The procedure uses multivariate regression that, like multivariate analysis of variance, allows one to test the effects of predictors on two separate variables while conducting multivariate tests of the association between the predictors and components as a set.

We assessed the effect of postfeedback development on postfeedback autonomy needs and supplies (as a set) while controlling for tenure, span of control, and prefeedback autonomy needs and supplies. The multivariate effect of a predictor can be gauged using several statistics, and we reported Hotelling's Trace, Wilks's lambda, and eta squared. Multivariate regression further allows for the decomposition of the overall effect, allowing insight into which component(s) of fit are affected and how. For example, if participants' initial misfit was characterized by too little autonomy, fit could be restored by increasing subsequent autonomy supplies.

The multivariate regression results are presented in Tables 5 and 6. The test of Hypothesis 2 can be seen in the Development (postfeedback) row of Table 5. Postfeedback development did have a statistically significant multivariate effect on the two autonomy fit components, $F(2, 60) = 3.00$, $p < .05$. These results can be interpreted as univariate regression output would be interpreted. The observed multivariate effect was primarily due to development's positive relationship with postfeedback autonomy supplies ($\beta = .21$, $p < .05$). Thus, development improved fit primarily by increasing supplies of autonomy.

Discussion

This study examined the relationships among Conscientiousness, person–environment fit, and development in a longitudinal study, using employees from several different organizations. Notably, conscientious individuals were more likely to engage in development activities but only when they felt that their jobs were not meeting their autonomy needs. Considering the entire sample, the relationship between Conscientiousness and development only approached significance, falling between the levels of Barrick and Mount's (1991) and Colquitt et al.'s (2000) meta-analyses. The correlation was much higher for those experiencing misfit.

The strongest correlation between Conscientiousness and development was exhibited by participants who possessed too little autonomy. Our results showed that fit improved for those individuals who engaged in development, because development activities led to increased supplies of autonomy in their jobs. Autonomy supplies increased by .13 from prefeedback to postfeedback conditions for the most conscientious individuals who engaged in the most development (those above the median on Conscientiousness and development). These supply changes illustrate the exchange nature of development from the individual and organizational perspective, as participation in development seemed to be met with the employees' increased ability to do work at the pace and in the manner of their choosing. Because the development did nothing to alter employees' autonomy needs, the result was improved person–environment fit. This supports our prediction that conscientious individuals can use development as a means of proactively reducing misfit, rather than reactively turning over, as the ASA model would predict.

Although the Conscientiousness–fit interaction results supported our predictions, conscientious individuals who possessed too much autonomy also tended to engage in development activities. This was somewhat surprising, because research on person–job fit has linked excess supplies to increased tension, role overload, and role conflict (Edwards, 1996). Our results suggest that development activities could further exacerbate misfit for those individuals by increasing supplies and thereby widening the needs–supplies gap. It may be that employees undertook development to increase their skills to cope with job demands. However, if development ultimately results in even more supplies of autonomy, a vicious cycle could be created. Thus, future research should continue to examine how conscientious individuals react when faced with too much autonomy.

These results make theoretical contributions to both the person–environment fit and employee development literatures. Research on fit has cast the employee in a reactive light in which misfit is met with strain and eventual turnover. The socialization literature offers an important lesson in this regard, as reactive research on

<table>
<thead>
<tr>
<th>Variable</th>
<th>Hotelling’s Trace</th>
<th>$\Lambda$</th>
<th>$F$</th>
<th>$\eta^2$</th>
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</thead>
<tbody>
<tr>
<td>Tenure</td>
<td>.01</td>
<td>.99</td>
<td>0.38</td>
<td>.01</td>
</tr>
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<td>Span of control</td>
<td>.00</td>
<td>.99</td>
<td>0.04</td>
<td>.00</td>
</tr>
<tr>
<td>Autonomy needs (prefeedback)</td>
<td>.17</td>
<td>.86</td>
<td>5.19*</td>
<td>.15*</td>
</tr>
<tr>
<td>Autonomy supplies (prefeedback)</td>
<td>.48</td>
<td>.68</td>
<td>14.53*</td>
<td>.32*</td>
</tr>
<tr>
<td>Development (postfeedback)</td>
<td>.10</td>
<td>.91</td>
<td>3.00*</td>
<td>.09*</td>
</tr>
</tbody>
</table>
organizational rituals and practices has been balanced by proactive research on newcomers’ strategies and behaviors (Ashford & Black, 1996; Morrison, 1993; Saks & Ashforth, 1996; Wanberg & Kammeyer-Mueller, 2000). Just as newcomers can rely on goal setting, feedback seeking, networking, practicing behaviors, and tracking progress to increase person–job fit, established employees can use similar strategies to improve their fit levels.

Moreover, this study is unique in that we did not view fit as uniformly positive, because fit seemed to stifle conscientious individuals’ developmental activities. We therefore suggest that fit researchers devote further attention to the potential “dark sides” of fit (e.g., Schneider, Smith, & Goldstein, 1994). Similarly, our study provides evidence that Conscientiousness is not always positively related to work behaviors, particularly those relevant to learning (Colquitt et al., 2000; LePine et al., 2000; Martocchio & Judge, 1997). Scholars may need to rely more on Person × Situation approaches to illustrate when Conscientiousness can and cannot have beneficial effects.

From an applied perspective, although organizations’ exuberance to “win the war for talent” may have them focusing on using resources for formal development programs (e.g., mentoring and job experiences), our results suggest that informal development behaviors are also important. Behaviors such as asking for project or committee work and seeking feedback regarding skill weaknesses may have a payoff in increased person–job fit. To the extent that fit reduces (rather than facilitates) turnover, informal development behaviors can result in cost savings for the organization.

This study has several strengths: a field sample with participants from many different organizations in several different industries, a longitudinal design that controlled for initial development and fit levels, and the use of multiple sources to prevent same source bias. Nevertheless, our study has some limitations that should be noted. Our sample had an average age of 32 years, so most participants were in the relatively early stages of their organizational progression. The extent to which our findings would generalize to older employees at later career stages is an empirical question. In addition, the employees who participated in the study were enrolled in many different companies in several industries, a fact that limits the generalizability of our findings to groups of employees at later career stages.

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### Table 6

<table>
<thead>
<tr>
<th>Variable</th>
<th>Autonomy needs (postfeedback)</th>
<th>Autonomy supplies (postfeedback)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
<td>t</td>
</tr>
<tr>
<td>Tenure</td>
<td>−.08</td>
<td>−0.70</td>
</tr>
<tr>
<td>Span of control</td>
<td>.03</td>
<td>0.29</td>
</tr>
<tr>
<td>Autonomy needs (prefeedback)</td>
<td>.43*</td>
<td>3.15*</td>
</tr>
<tr>
<td>Autonomy supplies (postfeedback)</td>
<td>.26*</td>
<td>1.98*</td>
</tr>
<tr>
<td>Development (postfeedback)</td>
<td>−.06</td>
<td>−0.60</td>
</tr>
</tbody>
</table>

Note. N = 68 after listwise deletion.
*p < .05.

References


side” of “good fit.” Paper presented at the 54th Annual Meeting of the National Academy of Management, Dallas, TX.


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