

The careless or the conscientious? Who profits most from goal progress

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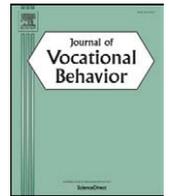
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The careless or the conscientious[☆] Who profits most from goal progress?

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ABSTRACT

Although research indicates that making progress on personal work goals predicts positive job attitudes, little is known about the role of conscientiousness in moderating this relationship. Congruence theories suggest that job attitudes will be more dependent on goal progress when employees are high in conscientiousness, whereas compensation theories suggest the opposite. We test these competing hypotheses in a three-wave, 4-month longitudinal panel study of 121 trainee teachers, who are at their early stages of career development. Conscientiousness moderated the relationships between progress on personal work goals and job attitudes according to the compensatory pattern, such that employees displayed stronger increases in job satisfaction and affective organizational commitment in response to goal progress when they were low rather than high in conscientiousness. Our results help to resolve conflicting findings about the relationship between goal progress and job attitudes and adjudicate competing hypotheses about the role of conscientiousness in moderating this relationship.

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In recent years, there has been a growing interest in investigating the role of personal goals individuals pursue in the work domain and their impact on well-being, job and career attitudes (Grant & Ashford, 2008; Harris, Daniels, & Briner, 2003; Hyvönen, Feldt, Salmela-Aro, Kinnunen, & Mäkikangas, 2009; Judge, Bono, Erez, & Locke, 2005; Kehr, 2003; Maier & Brunstein, 2001; Pomaki, Karoly, & Maes, 2009; Rappensperger, Maier, & Wittmann, 1998; Roberson, 1989, 1990; Wiese & Freund, 2005). Following the contextual action theory of career, goal-directed behaviour is a cornerstone and vital element of investigation when studying occupational careers (Young & Valach, 2004). Especially for new employees, who are eager to take an active role in their career development, personal work goals have been shown to play an important role (Hyvönen et al., 2009; Maier & Brunstein, 2001). Following social-cognitive career theory, goal progress is the key variable that helps individuals achieve high levels of well-being and satisfaction at work (Lent & Brown, 2006; Lent, Brown, & Hackett, 1994). Indeed, there is theoretical and empirical evidence suggesting that making progress on personal work goals predicts higher levels of job satisfaction and organizational commitment (Maier & Brunstein, 2001). Yet, other studies have failed to show that goal progress is related to favorable job attitudes (Duffy & Lent, 2009; Judge et al., 2005; Wiese & Freund, 2005). To resolve these conflicting findings and gain a deeper understanding of the conditions under which goal progress predicts positive job attitudes, researchers have called for additional research (Duffy & Lent, 2009; Judge et al., 2005; Pomaki et al., 2009).

One explanation for these conflicting findings is that attitudinal reactions to goal progress vary as a function of employees' personality traits. Researchers have paid surprisingly little attention to the role that personality plays in moderating attitudinal responses to goal progress. The personality trait most directly linked to goal progress is conscientiousness, which is often defined in terms of the extent to which employees are goal-oriented, industrious, and achievement-focused (Costa & McCrae, 1992).

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However, competing theories exist about whether employees high or low in conscientiousness will display more favorable attitudinal reactions to goal progress. On one hand, congruence theories (e.g. trait activation theory: Tett & Guterma, 2000; Tett & Burnett, 2003) predict that because employees high in conscientiousness place more value on goal achievement, they will respond more positively to goal progress as a personally meaningful experience. On the other hand, compensation theories (e.g. learned industriousness theory: Eisenberger, 1992) predict that because employees low in conscientiousness are less accustomed to goal achievement, they will respond more positively to goal progress as a personally novel experience.

Our objective in this article is to test these competing theoretical predictions about the direction of the moderating effect of conscientiousness on the relationship between goal progress and job attitudes. Using a three-wave longitudinal panel study of trainee teachers, we examine whether goal progress is more likely to predict increases in the attitudes of job satisfaction and organizational commitment for employees high or low in conscientiousness. We discuss theoretical implications for research on personal work goals, personality, and job attitudes.

Goal Progress and Job Attitudes

Our focus is on understanding how conscientiousness moderates the relationship between progress on personal work goals and job attitudes. Keeping with existing definitions, we conceptualize personal goals as “consciously accessible and personally meaningful objectives people pursue in their daily life” (Brunstein, Dangelmayer, & Schultheiss, 1996, p. 1006). Personal work goals refer to any objectives, projects, or plans employees set for themselves in the work context and that are related to their job, career, and occupation (Maier & Brunstein, 2001). We emphasize that these are self-set goals that are personally relevant, rather than externally assigned performance goals, which are the central focus of goal-setting theory (Locke & Latham, 1990). Whereas externally assigned goals are important for performance, personal work goals tend to have stronger implications for job attitudes, as employees base their attitudes on their experiences in pursuing the goals that they find personally meaningful.

We define progress on these personal goals as advancing toward their achievement or completion (Brunstein, 1993). Progress often takes the form of “small wins” (Weick, 1984), intermediate successes that signal to employees that they are moving forward. To understand the attitudinal effects of goal progress, we focus on job satisfaction and affective organizational commitment, the two most commonly studied work attitudes in applied psychological and organizational research (Harrison, Newman, & Roth, 2006). Job satisfaction describes the degree to which employees evaluate their work situations favorably (Weiss, 2002), and affective organizational commitment describes the degree to which employees feel emotionally attached and dedicated to their organizations (Meyer, Stanley, Herscovitch, & Topolnysky, 2002). Job satisfaction and affective organizational commitment are of considerable interest in organizational research because they are related to a series of important work-related outcomes, including higher job performance and citizenship behaviors, as well as lower absenteeism and turnover (e.g., Judge, Thoresen, Bono, & Patton, 2001; Meyer et al., 2002; Riketta, 2008). Furthermore, job satisfaction is an important indicator of career success (Ng, Eby, Sorensen, & Feldman, 2005).

Theoretical perspectives and empirical studies suggest that goal progress is related to higher job satisfaction and affective organizational commitment. Social and personality psychologists have long argued that making progress toward personal goals satisfies needs, and thereby results in more positive attitudes (Diener, 1984; Sheldon & Elliot, 1999), as attitudes tend to be more positive as individuals close gaps between goals and achievements (Michalos, 1980). Referring to need theories, goal researchers have presented arguments to explain the positive effects of goal progress: Diener (1984) suggested that personal goals are the conscious, situation-specific manifestations of basic human needs. Accordingly, the achievement of personally valued goals satisfies needs and thereby causes happiness. Sheldon and Elliot (1999) further elaborated on the role of need satisfaction in explaining the impact of goal progress on well-being. Building on self-determination theory (Deci & Ryan, 1985), Sheldon and Elliot argued that goal attainment, especially the attainment of self-concordant goals, fulfills three basic psychological needs: competence (the experience of acting effectively), autonomy (the feeling of self-determination and meaningfulness of ones' actions), and relatedness (the feeling of being connected to others). Accordingly, goal progress plays a key role in social cognitive career theory as the most proximal predictor of well-being and satisfaction (Lent & Brown, 2006).

Correspondingly, meta-analytic reviews have shown that goal progress is associated with enhanced well-being and satisfaction with oneself and one's life (Koestner, Lekes, Powers, & Chicoine, 2002). Further, work and organizational psychologists contend that job satisfaction and affective organizational commitment depend on the degree to which work provides individuals with opportunities to satisfy their needs and act in accordance with their values (Hochwarter, Perrew, Ferris, & Brymer, 1999; Maier & Brunstein, 2001). Indeed, at least one study has shown that when employees feel that they are making progress toward their personal work goals, they feel more satisfied with their jobs as providing opportunities to fulfill their needs (Maier & Brunstein, 2001). In addition, research indicates that when employees feel that they are making progress toward their personal work goals, they feel more affectively committed to their organizations as facilitating these opportunities—even if job satisfaction is statistically held constant (Maier & Brunstein, 2001, p. 1038). As Meyer and Allen (1997, p. 50) noted, “employees will develop affective commitment to an organization to the extent that it... allows them to achieve their goals.” However, other studies have found non-significant relationships between goal progress and job attitudes (Duffy & Lent, 2009; Roberson, 1990; Wiese & Freund, 2005). Researchers have therefore argued that the relationship between goals and job satisfaction might be more complex than previously expected (Judge et al., 2005; p. 266) and directly called for an investigation of moderators (Lent & Brown, 2006; p. 243). To explain these conflicting results, we therefore consider the moderating role of the personality trait of conscientiousness.

The Moderating Role of Conscientiousness

As noted previously, conscientiousness describes the extent to which employees are goal-oriented, displaying dispositional tendencies toward industriousness, achievement striving, and dependability (e.g., Moon, 2001; Roberts, Chernyshenko, Stark, & Goldberg, 2005). In the work context, the Big Five personality trait of conscientiousness is of particular relevance. Due to their disposition, conscientious individuals tend to display higher levels of work motivation (Judge & Ilies, 2002), achieve higher levels of job performance (Barrick, Mount, & Judge, 2001; Salgado, 1997) and career success (Judge, Higgins, Thoresen, & Barrick, 1999), and emerge more often as leaders (Judge, Bono, Ilies, & Gerhardt, 2002) than their less conscientious counterparts.

Research has demonstrated that conscientiousness influences how employees respond to work perceptions and conditions. For example, Kamdar and Van Dyne (2007) found that employees are more strongly affected by the quality of exchange relationships with their supervisors when they are low rather than high in conscientiousness. Similarly, psychological contract breach has been shown to be more strongly related to organizational loyalty, job satisfaction, and turnover intentions for employees low rather than high in conscientiousness (Orvis, Dudley, & Cortina, 2008). We therefore argue that conscientiousness moderates the goal progress–job attitudes relationship. With regard to the expected direction of the moderator effect, contrasting theoretical perspectives exist. In the following sections, we consider these theoretical perspectives independently and subsequently compare them by testing competing hypotheses.

Congruence Theories: Conscientious Employees are More Responsive to Goal Progress

Congruence theories predict that employees will be more attitudinally responsive to goal progress when they are high rather than low in conscientiousness. Their core premise is that because conscientious employees place more value on their personal goals and goal achievement (Little, 1989; Little, Lecci, & Watkinson, 1992), their attitudes are more sensitive to goal progress. Below, we discuss three different congruence theories—complementary fit, trait activation, and trait-congruent affect—that converge on this prediction.

First, complementary fit theories propose that employees develop more positive attitudes when their jobs and organizations fulfill their desires, values, motives, preferences, or needs (Cable & Edwards, 2004; Muchinsky & Monahan, 1987). Since conscientious employees have stronger desires to make goal progress, they should feel more satisfied with their jobs and affectively committed to their organizations when they are able to fulfill these desires.

Second, trait activation theory (Tett & Guterman, 2000; Tett & Burnett, 2003) maintains that trait-relevant cues trigger the expression of personality traits. Goal-related behavior and events are such trait-relevant cues that trigger the expression of conscientiousness. In a recent study goal-focused leadership served as a situational cue that triggered the expression of conscientiousness (Colbert & Witt, 2009). Accordingly, conscientiousness was more strongly linked to employee performance under conditions of high goal-focused leadership. Similarly, goal progress is a cue that may signal to conscientious employees that they can express their achievement-oriented traits in their current jobs and organizations. Therefore, employees high in conscientiousness should experience higher job satisfaction and affective organizational commitment when goal progress signals that they can express their traits, while employees low in conscientiousness may find goal progress less relevant to their traits and thus less likely to influence their attitudes.

Third, trait-congruent affect theories (Moskowitz & Coté, 1995) predict that employees experience more favorable attitudes and emotions when their behaviors are concordant with their traits. For instance, compared to disagreeable individuals, agreeable individuals experienced greater positive affect when engaging in friendly behaviors and greater negative affect when engaging in quarrelsome behaviors (Coté & Moskowitz, 1998), and extraverted individuals experienced more stress in terms of elevated heart rates when they were asked to express anger, an emotion that is inconsistent with their personality disposition (Bono & Vey, 2007). Extending this logic to conscientiousness, research shows that individuals high in conscientiousness associate more meaning with their personal goals than individuals low in conscientiousness (Little et al., 1992) and are less likely to feel happy when engaging in social activities that distract from goal progress (McGregor, McAdams, & Little, 2006). Thus, trait-congruent affect theories suggest that goal progress, as an experience congruent with the goal-oriented traits of conscientious employees, should have a more pronounced effect on the attitudes of employees high in conscientiousness than on those of employees low in conscientiousness.

In sum, these congruence theories suggest that conscientiousness should strengthen the relationship between goal progress and job attitudes.

Hypothesis 1. Conscientiousness strengthens the relationship between goal progress and job attitudes, such that goal progress is more positively related to (a) job satisfaction and (b) organizational commitment when employees are high rather than low in conscientiousness.

Compensation Theories: Conscientious Employees are Less Responsive to Goal Progress

In contrast, compensation theories predict that employees will be more attitudinally responsive to goal progress when they are low rather than high in conscientiousness. Their core premise is that because conscientious employees are accustomed to making goal progress, their attitudes are likely to be relatively stable, while employees low in conscientiousness may respond more favorably to goal progress as a novel experience. Supporting this compensation perspective, research shows that individuals with high dispositions toward gratitude derive fewer well-being benefits from specific experiences of gratitude than individuals with

low dispositions toward gratitude, for whom experiences of gratitude are more novel (McCullough, Tsang, & Emmons, 2004). Similarly, employees high in conscientiousness may be less responsive to the rewarding effects of goal progress and experience high job satisfaction and affective organizational commitment regardless of goal progress. In contrast, employees low in conscientiousness may be more responsive to goal progress. Indeed, research revealed that employees low in conscientiousness tend to show more attitudinal and behavioral variability in response to their work experiences (Grant, 2008; Kamdar & Van Dyne, 2007; Orvis et al., 2008). Consequently, employees low in conscientiousness might not always display low organizational commitment and job satisfaction. When they receive incentives and make rewarding experiences such as goal progress their organizational commitment and job satisfaction may be as high as for high conscientious employees.

Exemplifying this view, learned industriousness theory (Eisenberger, 1992) holds that receiving rewards for hard work increases industriousness, an important aspect of conscientiousness, by leading individuals to experience hard work as enjoyable in and of itself. This implies that working hard in and of itself may be sufficient to promote satisfaction among conscientious employees. Consistent with this theory, Grant (2008) showed that conscientious employees tend to perform well irrespective of situational cues, whereas the performance of less conscientious employees was more dependent on situational cues. This logic might also apply to satisfaction: conscientious employees take pride in working hard regardless of progress, whereas less conscientious employees are more likely to feel satisfied with their jobs—and more affectively committed to their organizations—when they are able to transcend their traits by making goal progress.

In sum, these arguments and findings suggest that due to their dispositional nature, employees high in conscientiousness tend to generally experience high levels of job satisfaction and affective organizational commitment. Their job attitudes may therefore be less susceptible to temporary influences such as the attainment of personal work goals. In contrast, job attitudes of less conscientious individuals may be dependent on their personal work goals and the progress they make towards attaining them.

Hypothesis 2. Conscientiousness weakens the relationship between goal progress and job attitudes, such that goal progress is more positively related to (a) job satisfaction and (b) organizational commitment when employees are low rather than high in conscientiousness.

In addition to goal progress and conscientiousness, we will consider extraversion and neuroticism in the present study. These personality traits are substantially related to goal content and goal progress (Bleidorn, Kandler, Hülshager, Riemann, Angleitner, & Spinath, *in press*; Little, 1989; Little, et al., 1992) as well as to job satisfaction and affective organizational commitment (Erdheim, Wang, & Zickar, 2006; Judge, Heller, & Mount, 2002; Thoresen, Kaplan, Barsky, Warren, & de Chermont, 2003). Therefore we will control for these personality traits to assure that any relationship found between goal progress and organizational commitment and job satisfaction can be ascribed to goal progress and not to extraversion or neuroticism.

Method

We test these competing hypotheses with a longitudinal study of new employees who are in the early stages of career development. Conscientiousness, perceptions of work goal progress, and the attitudes of job satisfaction and affective organizational commitment were assessed across three waves of measurement.

Participants and Procedure

Participants were trainee teachers who worked in elementary and secondary schools in North Rhine-Westphalia, Germany. In Germany, trainee teachers get appointed as teachers-in-training for a period of 2 years by the Ministry of Education. They were recruited via three training centers, where they gather on a regular basis in order to participate in advanced training, develop their teaching skills, and exchange experiences and information. Data were collected in group sessions in those training centers. Two hundred nineteen trainee teachers agreed to participate and provided valid questionnaires at Time 1. One hundred and twenty-one trainee teachers (55.3% of Time 1) with a mean age of 27.7 years ($SD = 3.8$ years) continued their participation at Times 2 and 3. Ninety participants (74.4%) were women and 30 men (24.8%), a distribution which is representative of German trainee teachers. When they filled in the Time 1 questionnaires they had a mean tenure of about 14 months (419 days; $SD = 181$) into training.

To estimate whether drop-outs and the follow-up sample differed in study characteristics (Rogelberg & Stanton, 2007), we compared the two groups with regard to age and gender, and all measures assessed at Time 1. A multivariate analysis of variance revealed that there were no significant differences between the groups on this set of dependant variables ($F(8,199) = 1.76; p > .05$).

Data were collected at three time points, each of which was 2 months apart. At Time 1, participants answered items on personality traits, job satisfaction and affective organizational commitment, and listed three personal work goals. At Time 2, participants reported on the progress they had made towards attaining the goals they had listed at Time 1. The dependent variables job satisfaction and affective organizational commitment were assessed again at Time 3. Because it is important to choose the appropriate time lag for a longitudinal study and to consider the time course of the variables under investigation (e.g., Zapf, Dormann, & Frese, 1996) we interviewed trainee teachers, their instructors, and directors of the training centers about the usual time frame of personal work goals that trainee teachers pursue. Following their recommendations, we asked trainee teachers to indicate personal work goals that they want to pursue in the next 6 months. Furthermore, we chose a time lag of 2 months so that we could examine the progress trainee teachers had made towards attaining their goals without completing them.

Measures

Listing of personal work goals and measuring goal progress

In assessing personal goals, we followed the procedure employed by Brunstein and colleagues (Brunstein, 1993; Brunstein et al., 1996; Brunstein, Schultheiss, & Grässmann, 1998). Participants were asked to generate a list of three personally relevant goals that are related to their current work, career, and occupation and that they are trying to attain in the next 6 months. Examples of personal work goals listed by participants are “I want to gain security in communicating with the children”, “I want to deal more calmly with disruptions in class and take them less personally”, and “I want to participate in the training program ‘remedial sports education’ and successfully pass the test”. At the second time point each participant received a copy of his/her personal goals and was asked to rate the progress s/he had made towards attaining each of these goals on four items adopted from Brunstein (1993). The items asked participants to evaluate the extent to which they have made progress concerning the goal, had quite a lot of success in pursuing the goal, hardly made any progress in advancing toward the goal (reverse-scored), and failed in many efforts toward achieving the goal ($\alpha = .89$). Items were rated on a scale ranging from 1 (*not at all true*) to 5 (*completely true*). We followed procedures described in other studies on goal progress (e.g., Brunstein, 1993; Kehr, 2003; Wiese & Freund, 2005) and aggregated items across goals to build the goal progress scale.

Conscientiousness, extraversion, and neuroticism

At Time 1, we measured conscientiousness, extraversion, and neuroticism. To measure the three personality traits, we used a short version of the Inventory of Minimal Redundant Scales (MRS 25, Schallberger & Venetz, 1999) originally developed by Ostendorf (1990). The MRS 25 measures each of the dimensions of the Five Factor Model of personality with five pairs of bipolar adjectives. Sample items are: conscientious vs. careless (conscientiousness), talkative vs. uncommunicative (extraversion), and good natured vs. irritable (neuroticism). On a scale offering six response options (a lot, fairly, a bit, a bit, fairly, a lot), participants indicated to which extent the description applied to them. The MRS 25 has been used in a number of previous studies (e.g. Grebner et al., 2003; Tschan, Rochat, & Zapf, 2005) to measure personality traits. Internal consistencies were good: conscientiousness $\alpha = .80$, extraversion $\alpha = .83$, neuroticism $\alpha = .81$.

Job satisfaction

Participants responded to an adapted short form of Neuberger and Allerbeck's (1978) Job Description Form, which has been previously used in a number of studies (e.g., Maier & Brunstein, 2001; Stumpp, Hülshager, Muck, & Maier, 2009; Stumpp, Muck, Hülshager, Judge, & Maier, in press). The scale consisted of six items assessing employees' satisfaction with different facets of their current job (i.e., satisfaction with tasks, working conditions, relationship with supervisor, relationship with colleagues, promotion opportunities, and organization and management). The items were answered on a scale ranging from 1 (*completely dissatisfied*) to 7 (*completely satisfied*; Time 1 $\alpha = .84$, Time 3 $\alpha = .88$).

Affective organizational commitment

Affective organizational commitment was measured with the German version (Schmidt, Hollmann, & Sodenkamp, 1998) of Allen and Meyer's (1990) Affective Organizational Commitment Scale (AOCS). As the original scale the German version consists of eight items and has previously been successfully employed to measure organizational commitment (e.g., Petersen & Dietz, 2008; Stumpp et al., in press). The wording was adapted to apply to the school context as the focal organization. Sample items are: “This school has a great deal of personal meaning for me,” “I do not feel like ‘part of the family’ at my school” (Time 1 $\alpha = .73$, Time 3 $\alpha = .75$). Items were rated on a scale ranging from 1 (*not at all true*) to 5 (*completely true*).

Table 1

Means, standard deviations, reliabilities, and intercorrelations of study variables.

	Variable	M	SD	1	2	3	4	5	6	7	8	9	10
1	Age	27.65	3.76	–									
2	Gender	–	–	.37***	–								
3	T1 extraversion	4.41	.85	.08	–.17	(.83)							
4	T1 neuroticism	3.09	.78	–.17	–.27**	–.12	(.81)						
5	T1 conscientiousn.	4.60	.73	–.19*	–.36***	.04	–.07	(.80)					
6	T1 org. commitment	3.60	.63	–.02	–.08	.23*	–.14	.15	(.73)				
7	T1 job satisfaction	5.51	1.02	.02	–.03	.24**	–.36***	.13	.52***	(.84)			
8	T2 goal progress	3.75	.60	–.01	–.14	.16	–.22*	.15	.13	.26**	(.89)		
9	T3 org. commitment	3.52	.60	–.20*	–.13	.26**	–.19*	.23*	.65***	.46***	.26**	(.75)	
10	T3 job satisfaction	5.35	1.06	–.02	–.10	.33***	–.28**	.13	.45***	.71***	.39***	.64***	(.88)

$N = 121$, except for correlations with age ($N = 117$) and gender ($N = 120$; 1 = female, 2 = male). Values in parentheses along the diagonal indicate reliability estimates (Cronbach's alpha).

*** $p < .001$. ** $p < .01$. * $p < .05$ (two-tailed).

Table 2
Regression of Time 3 organizational commitment and job satisfaction on goal progress and conscientiousness.

Step	Variable	T3-dependent variables					
		Organizational commitment			Job satisfaction		
		ΔR^2	<i>B</i>	<i>SE</i>	ΔR^2	<i>B</i>	<i>SE</i>
1	DV T1	.43***	.56***	.07	.50***	.60***	.07
2	Controls	.02			.03*		
	Extraversion		.09	.07		.15*	.06
	Neuroticism		-.06	.07		-.01	.07
3	Conscientiousness	.02	.11	.07	.00	.01	.06
4	T2 goal progress	.02*	.12	.07	.03**	.18**	.06
5	T2 goal progress × conscientiousness	.02*	-.15*	.06	.02*	-.13*	.06
<i>R</i> ² total		.50***			.58***		

N = 121. Regression analysis is based on standardized predictor and dependent variables. ****p* < .001. ***p* < .01. **p* < .05 (two-tailed).

Results

Table 1 shows descriptive statistics, reliabilities, and zero-order correlations for all study variables. Following the suggestions of Cohen, Cohen, West, and Aiken (2003) in testing interaction effects we first converted all variables to z scores. To proof our hypotheses we conducted two hierarchical regression analyses, one for job satisfaction and one for organizational commitment: In Step 1, we entered T1 job satisfaction respectively organizational commitment. Controlling for T1-dependent variables in predicting T3 dependent variables is functionally equivalent to predicting changes in these outcome measures. This has been described as the method of choice in analyzing longitudinal data (e.g., Zapf et al., 1996). After entering the control variables extraversion, and neuroticism in Step 2, we entered conscientiousness in Step 3, and entered T2 goal progress in Step 4. We entered the interaction between T2 goal progress and conscientiousness in the last step. Results are presented in Table 2.

To test whether and how conscientiousness moderates the relationship between goal progress and the attitudes of job satisfaction and organizational commitment, we examined the interaction term between conscientiousness and goal progress. Step 5 of the regression analysis reveals that the interaction term between goal progress and conscientiousness significantly

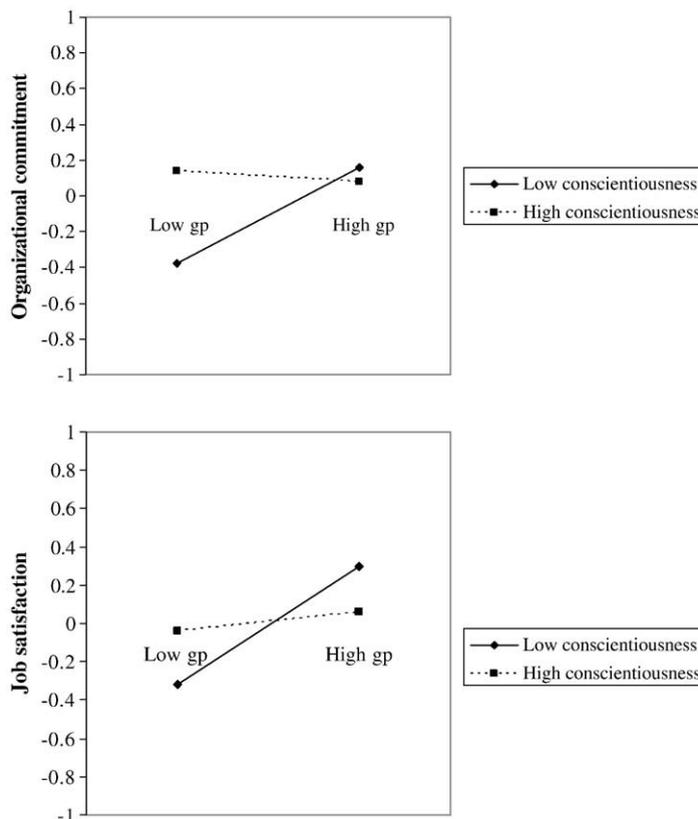


Fig. 1. Interactions of goal progress (gp) and conscientiousness.

predicts changes in job satisfaction ($B = -.13, p < .05$) and affective organizational commitment ($B = -.15, p < .05$). The negative coefficients suggest support for the compensation perspective (H2a and 2b) rather than the congruence perspective (H1a and H1b).

To directly examine the specific form of the interaction, we plotted the simple slopes at one standard deviation above and below the means of conscientiousness (Aiken & West, 1991, pp. 14–22; see Fig. 1). When we compared the simple slopes to zero, we found that for employees high in conscientiousness (+1 SD), goal progress was not significantly related to job satisfaction ($B = .05, ns$) or affective organizational commitment ($B = -.02, ns$). However, for employees low in conscientiousness (–1 SD), goal progress was positively and significantly related to both job satisfaction ($B = .32, p < .001$) and affective organizational commitment ($B = .27, p < .01$). This reveals that goal progress predicted increases in job satisfaction and affective organizational commitment for employees low but not high in conscientiousness. Thus, our results fully support the compensation perspective presented in Hypotheses 2a and 2b, stating that the relationship between goal progress and job attitudes is stronger for low-conscientiousness than for high-conscientiousness employees.

Discussion

Our research deepens existing knowledge about the relationship between personal work goals and job attitudes. First, our findings help to explain conflicting evidence about whether goal progress is positively related to job attitudes. Our finding that goal progress is not equally important for all employees takes a step toward illuminating why previous research yielded inconsistent findings with regard to the association between goal progress and job satisfaction (Duffy & Lent, 2009; Judge et al., 2005; Maier & Brunstein, 2001; Wiese & Freund, 2005). Our results suggest that employees have different attitudinal reactions to goal progress as a function of whether they are high or low in conscientiousness. These findings highlight the importance of considering personality traits as moderators of the relationship between goal progress and the attitudes of job satisfaction and affective organizational commitment.

Second, our findings take a step toward adjudicating competing hypotheses about the direction of the moderating effect of conscientiousness. The congruence perspective has tended to dominate applied psychological and organizational research, as there are entire literatures on complementary fit (Cable & Edwards, 2004) and trait activation (Tett & Burnett, 2003). However, our data clearly support the prediction of the compensation perspective that affective job attitudes of employees high in conscientiousness are unaffected by goal progress, while the attitudes of employees low in conscientiousness tend to be dependent on goal progress. These findings accentuate the importance of continuing to develop theory and empirical research to explain when, why, and how trait-discordant experiences can promote positive attitudes and well-being.

More generally, our findings join a growing body of research studying variables that moderate the effects of goal progress. Previous studies have focused on aspects of the goal pursuit process or goals themselves, such as goal difficulty, rate of goal progress, congruence between goals and motives (Wiese, 2007), answering the question of *when* goal progress matters. We extended these findings by studying characteristics of the person, addressing the question of *for whom* goal progress matters. Our findings suggest that due to their dispositions, employees high in conscientiousness tend to be more satisfied with their jobs and to be more emotionally attached to their organizations irrespective of goal progress.

Furthermore, our findings confirm and refine Lent and colleagues' (Duffy & Lent, 2009; Lent & Brown, 2006; Lent et al., 1994) social cognitive career theory. Our study confirms that making progress at personally valued goals is a proximal predictor of job satisfaction. Yet, findings show that personality traits do not only have a direct effect on satisfaction, but that conscientiousness moderates the link between goal progress and job satisfaction. This may explain why goal progress did not emerge as a significant predictor of job satisfaction in a recent investigation of the model in a sample of teachers (Duffy & Lent, 2009).

Practical Implications

Our research focused on personal work goals of new employees at their early career development stages. Personal work goals are especially important for newcomers, who are eager to take an active role in their professional development (Maier & Brunstein, 2001). Previous research has shown newcomers to place great importance on goals relating to career establishment tasks, especially competence and progression goals (Hyvönen et al., 2009). Our study suggests that facilitating progress on these work and career goals may be especially important for employees with lower levels of conscientiousness. Since their job satisfaction and organizational commitment is strongly linked to goal progress, supervisors may find it fruitful to train less conscientious employees in effective task strategies, remove barriers and distractions, and take additional steps to increase the likelihood that they will make progress toward achieving their goals. As less conscientious employees set personal goals, it may be useful for supervisors and mentors to be attentive to these personal goals and to help employees align their goals with organizational demands.

Limitations and Future Directions

Although we used multi-wave longitudinal data, our research has its limitations. First, the sample consisted of trainee teachers, newcomers in the educational sector. Therefore, we cannot rule out that the findings of the present study are specific to job newcomers. Future research might reveal whether the interplay between goal progress and conscientiousness plays a similar role for more experienced workers as it does for job newcomers. Second, all measures were assessed via self-report. Especially for goal progress, it would be useful to use peer-reports or objective data in future studies. Third, although we used three measurement

points, the generalizability of our findings is still restricted to the time intervals we chose. Future studies could investigate the duration of the effects of goal progress by using more measurement points and by covering a longer time period.

Future research might investigate whether the interaction between goal progress and conscientiousness extends to other outcome variables as well, such as job performance, organizational citizenship behavior, absenteeism, and turnover. In addition, researchers may wish to conduct a finer-grained analysis of the moderating effects of conscientiousness to examine whether they are driven by the achievement striving, duty and responsibility, and/or industriousness facets of conscientiousness (cf. DeYoung, Quilty, & Peterson, 2007; Moon, 2001; Roberts et al., 2005). Researchers may also consider examining the conditions under which the congruence predictions hold rather than the compensation predictions, although this may depend on their ability to obtain adequate statistical power and reliability. Last, antecedents of goal progress in the workplace deserve closer attention. For instance, it might be interesting to investigate whether a participative leadership style, job autonomy, empowerment, or support by supervisors and co-workers facilitate the attainment of personal work goals. Nevertheless, our research helps to clarify how conscientiousness moderates the relationship between goal progress and the attitudes of job satisfaction and affective organizational commitment. All in all, it appears that goal progress is more important to shaping job attitudes of the careless rather than the conscientious.

References

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: Sage.
- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, 63, 1–18.
- Barrick, M. R., Mount, M. K., & Judge, T. A. (2001). Personality and performance at the beginning of the new millennium: what do we know and where do we go next? *International Journal of Selection and Assessment*, 9, 9–20.
- Bleidorn, W., Kandler, C., Hülsheger, U. R., Riemann, R., Angleitner, A., & Spinath, F. M. (in press). Nature and nurture of the interplay between personality traits and major life goals. *Journal of Personality and Social Psychology*.
- Bono, J. E., & Vey, M. A. (2007). Personality and emotional performance: extraversion, neuroticism, and self-monitoring. *Journal of Occupational Health Psychology*, 12, 177–192.
- Brunstein, J. C. (1993). Personal goals and subjective well-being: a longitudinal study. *Journal of Personality and Social Psychology*, 65, 1061–1070.
- Brunstein, J. C., Dangelmayer, G., & Schultheiss, O. C. (1996). Personal goals and social support in close relationships: effects on relationship mood and marital satisfaction. *Journal of Personality and Social Psychology*, 71, 1006–1019.
- Brunstein, J. C., Schultheiss, O. C., & Grässmann, R. (1998). Personal goals and emotional well-being: the moderating role of motive dispositions. *Journal of Personality and Social Psychology*, 65, 1061–1070.
- Cable, D. M., & Edwards, J. R. (2004). Complementary and supplementary fit: a theoretical and empirical integration. *Journal of Applied Psychology*, 89, 822–834.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analyses for the behavioral sciences*, (3rd ed.). Hillsdale, NJ: Erlbaum.
- Colbert, A. E., & Witt, L. A. (2009). The role of goal-focused leadership in enabling the expression of conscientiousness. *Journal of Applied Psychology*, 94, 790–796.
- Costa, P. T., Jr., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual*. Odessa, FL: PAR.
- Coté, S., & Moskowitz, D. S. (1998). On the dynamic covariation between interpersonal behavior and affect: prediction from neuroticism, extraversion, and agreeableness. *Journal of Personality and Social Psychology*, 75, 1032–1046.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.
- DeYoung, C. G., Quilty, L. C., & Peterson, J. B. (2007). Between facets and domains: 10 aspects of the Big Five. *Journal of Personality and Social Psychology*, 93, 880–896.
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, 95, 542–575.
- Duffy, R. D., & Lent, R. W. (2009). Test of a social cognitive model of work satisfaction in teachers. *Journal of Vocational Behavior*, 75, 212–223.
- Eisenberger, R. (1992). Learned industriousness. *Psychological Review*, 99, 248–267.
- Erdheim, J., Wang, M., & Zickar, M. J. (2006). Linking the Big Five personality constructs to organizational commitment. *Personality and Individual Differences*, 41, 959–970.
- Grant, A. M. (2008). The significance of task significance: job performance effects, relational mechanisms, and boundary conditions. *Journal of Applied Psychology*, 93, 108–124.
- Grant, A. M., & Ashford, S. J. (2008). The dynamics of proactivity at work. *Research in Organizational Behavior*, 28, 3–34.
- Grebner, S., Semmer, N. K., Lo, Faso L., Gut, S., Kälin, W., & Elfering, A. (2003). Working conditions, well-being, and job-related attitudes among call centre agents. *European Journal of Work and Organizational Psychology*, 12, 341–365.
- Harris, C., Daniels, K., & Briner, R. B. (2003). A daily diary study of goals and affective well-being at work. *Journal of Occupational and Organizational Psychology*, 76, 401–410.
- Harrison, D. A., Newman, D. A., & Roth, P. L. (2006). How important are job attitudes? Meta-analytic comparisons of integrative behavioral outcomes and time sequences. *Academy of Management Journal*, 49, 305–325.
- Hochwarter, W. A., Perrewe, P. L., Ferris, G. R., & Brymer, R. A. (1999). Job satisfaction and performance: the moderating effects of value attainment and affective disposition. *Journal of Vocational Behavior*, 54, 296–313.
- Hyvönen, K., Feldt, T., Salmela-Aro, K., Kinnunen, U., & Mäkikangas, A. (2009). Young managers' drive to thrive: a personal work goal approach to burnout and work engagement. *Journal of Vocational Behavior*, 75, 183–196.
- Judge, T. A., Bono, J. E., Erez, A., & Locke, E. A. (2005). Core self-evaluations and job and life satisfaction: the role of self-concordance and goal attainment. *Journal of Applied Psychology*, 90, 257–268.
- Judge, T. A., Bono, J. E., Ilies, R., & Gerhardt, M. W. (2002). Personality and leadership: a qualitative and quantitative review. *Journal of Applied Psychology*, 87, 765–780.
- Judge, T. A., Heller, D., & Mount, M. K. (2002). Five-Factor Model of personality and job satisfaction: A meta-analysis. *Journal of Applied Psychology*, 87, 530–541.
- Judge, T. A., Higgins, C. A., Thoresen, C. J., & Barrick, M. R. (1999). The Big Five personality traits, general mental ability, and career success across the life span. *Personnel Psychology*, 52, 621–652.
- Judge, T. A., & Ilies, R. (2002). Relationship of personality to performance motivation: a meta-analytic review. *Journal of Applied Psychology*, 87, 797–807.
- Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction–job performance relationship: a qualitative and quantitative review. *Psychological Bulletin*, 127, 376–407.
- Kamdar, D., & Van Dyne, L. (2007). The joint effects of personality and workplace social exchange relationships in predicting task performance and citizenship performance. *Journal of Applied Psychology*, 92, 1286–1298.
- Kehr, H. M. (2003). Goal conflicts, attainment of new goals, and well-being among managers. *Journal of Occupational Health Psychology*, 8, 195–208.
- Koestner, R., Lekes, N., Powers, T. A., & Chicoine, E. (2002). Attaining personal goals: Self-concordance plus implementation intentions equals success. *Journal of Personality and Social Psychology*, 83, 231–244.

- Lent, R. W., & Brown, S. D. (2006). Integrating person and situation perspectives on work satisfaction: a social-cognitive view. *Journal of Vocational Behavior*, 69, 236–247.
- Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior*, 45, 79–122.
- Little, B. R. (1989). Personal projects analysis: trivial pursuits, magnificent obsessions, and the search for coherence. In D. M. Buss & N. Cantor (Eds.), *Personality psychology: recent trends and emerging directions* (pp. 15–31). New York, NY: Springer.
- Little, B. R., Lecci, L., & Watkinson, B. (1992). Personality and personal projects: linking big five and PAC units of analysis. *Journal of Personality*, 60, 501–525.
- Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting and task performance*. Englewood Cliffs, NJ: Prentice-Hall.
- Maier, G. W., & Brunstein, J. C. (2001). The role of personal work goals in newcomers' job satisfaction and organizational commitment: a longitudinal analysis. *Journal of Applied Psychology*, 86, 1034–1042.
- McCullough, M. E., Tsang, J., & Emmons, R. A. (2004). Gratitude in intermediate affective terrain: links of grateful moods to individual differences and daily emotional experience. *Journal of Personality and Social Psychology*, 86, 295–309.
- McGregor, I., McAdams, D. P., & Little, B. R. (2006). Personal projects, life stories, and happiness: on being true to traits. *Journal of Research in Personality*, 40, 551–572.
- Meyer, J. P., & Allen, N. J. (1997). *Commitment in the workplace: theory, research, and application*. Thousand Oaks, CA: Sage.
- Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnitsky, L. (2002). Affective, continuance, and normative commitment to the organization: a meta-analysis of antecedents, correlates, and consequences. *Journal of Vocational Behavior*, 61, 20–52.
- Michalos, A. C. (1980). Satisfaction and happiness. *Social Indicators Research*, 8, 385–422.
- Moon, H. (2001). The two faces of conscientiousness: duty and achievement striving in escalation of commitment dilemmas. *Journal of Applied Psychology*, 86, 533–540.
- Moskowitz, D. S., & Coté, S. (1995). Do interpersonal traits predict affect? A comparison of three models. *Journal of Personality and Social Psychology*, 69, 915–924.
- Muchinsky, P. M., & Monahan, C. J. (1987). What is person–environment congruence? Supplementary versus complementary models of fit. *Journal of Vocational Behavior*, 31, 268–277.
- Neuberger, O., & Allerbeck, M. (1978). *Messung und Analyse von Arbeitszufriedenheit [Measurement and analysis of job satisfaction]*. Bern, Switzerland: Huber.
- Ng, T. W. H., Eby, L. T., Sorensen, K. L., & Feldman, D. C. (2005). Predictors of objective and subjective career success: a meta-analysis. *Personnel Psychology*, 58, 367–408.
- Orvis, K. A., Dudley, N. M., & Cortina, J. A. (2008). Conscientiousness and reactions to psychological contract breach: a longitudinal field study. *Journal of Applied Psychology*, 93, 1183–1193.
- Ostendorf, F. (1990). *Sprache und Persönlichkeitsstruktur: Zur Validität des Fünf-Faktoren Modells der Persönlichkeit [Language and the structure of personality: On the validity of the Five Factor Model of personality]*. Regensburg, Germany: Roderer.
- Petersen, L. -E., & Dietz, J. (2008). Employment discrimination: authority figures' demographic preferences and followers' affective organizational commitment. *Journal of Applied Psychology*, 93, 1287–1300.
- Pomaki, G., Karoly, P., & Maes, S. (2009). Linking goal progress to subjective well-being at work: the moderating role of goal-related self-efficacy and attainability. *Journal of Occupational Health Psychology*, 14, 206–218.
- Rappensperger, G., Maier, G. W., & Wittmann, A. (1998). Die Bedeutung von Mitarbeiterzielen bei der Einarbeitung [The meaning of employee's goals during job training]. In L. von Rosenstiel F. W. Nerdinger & E. Spieß (Eds.), *Von der Hochschule in den Beruf: Wechsel der Welten in Ost und West (S. 115-126) [From university to occupation: Change of the worlds in east and west]*. Stuttgart: Verlag für Angewandte Psychologie.
- Roberson, L. (1989). Assessing personal work goals in the organizational setting: development and evaluation of the Work Concerns Inventory. *Organizational Behavior and Human Decision Processes*, 44, 345–367.
- Roberson, L. (1990). Prediction of job satisfaction from characteristics of personal work goals. *Journal of Organizational Behavior*, 11, 29–41.
- Roberts, B. W., Chernyshenko, O. S., Stark, S., & Goldberg, L. R. (2005). The structure of conscientiousness: an empirical investigation based on seven major personality questionnaires. *Personnel Psychology*, 58, 103–139.
- Rogelberg, S. G., & Stanton, J. M. (2007). Introduction: understanding and dealing with organizational survey nonresponse. *Organizational Research Methods*, 10, 195–209.
- Rickett, M. (2008). The causal relation between job attitudes and performance: a meta-analysis of panel studies. *Journal of Applied Psychology*, 93, 472–481.
- Salgado, J. F. (1997). The Five Factor Model of Personality and job performance in the European community. *Journal of Applied Psychology*, 82, 30–43.
- Schallberger, U., & Venetz, M. (1999). *Kurzversion des MRS-Inventars von Ostendorf (1990) zur Erfassung der fünf "großen" Persönlichkeitsfaktoren [Short version of the MRS inventory from Ostendorf (1990) measuring the Big Five personality factors]*. Zürich, Switzerland: Psychologisches Institut der Universität Zürich.
- Schmidt, K. H., Hollmann, S., & Sodenkamp, D. (1998). Psychometrische Eigenschaften und Validität einer deutschen Fassung des "Commitment"-Fragebogens von Allen und Meyer (1990) [Psychometric properties and validity of a German version of the commitment questionnaire from Allen and Meyer (1990)]. *Zeitschrift für Differentielle und Diagnostische Psychologie*, 19, 93–106.
- Sheldon, K. M., & Elliot, A. J. (1999). Goal striving, need satisfaction, and longitudinal well-being: the self-concordance model. *Journal of Personality and Social Psychology*, 76, 482–497.
- Stumpp, T., Hülsheger, U. R., Muck, P. M., & Maier, G. W. (2009). Expanding the link between core self-evaluations and affective job attitudes. *European Journal of Work and Organizational Psychology*, 18, 148–166.
- Stumpp, T., Muck, P. M., Hülsheger, U. R., Judge, T. A. & Maier, G. W. (in press). Core self-evaluations in Germany: Validation of a German measure and its relationships with career success. *Applied Psychology: An International Review*.
- Tett, R. P., & Burnett, D. D. (2003). A personality trait-based interactionist model of job performance. *Journal of Applied Psychology*, 88, 500–517.
- Tett, R. P., & Guterman, H. A. (2000). Situation trait relevance, trait expression, and cross-situational consistency: testing a principle of trait-activation. *Journal of Research in Personality*, 34, 397–423.
- Thoresen, C. J., Kaplan, S. A., Barsky, A. P., Warren, C. R., & de Chermont, K. (2003). The affective underpinnings of job perceptions and attitudes: a meta-analytic review and integration. *Psychological Bulletin*, 129, 914–945.
- Tschan, F., Rochat, S., & Zapf, D. (2005). It's not only clients: studying emotion work with clients and co-workers with an event-sampling approach. *Journal of Occupational and Organizational Psychology*, 78, 195–220.
- Weick, K. (1984). Small wins: reflecting the scale of social problems. *American Psychologist*, 39, 40–49.
- Weiss, H. M. (2002). Deconstructing job satisfaction: separating evaluations, beliefs and affective experiences. *Human Resource Management Review*, 12, 173–194.
- Wiese, B. S. (2007). Successful pursuit of personal goals and subjective well-being. In B. R. Little, K. Salmela-Aro & S. D. Phillips (Eds.), *Personal project pursuit: Goals, action, and human flourishing* (pp. 301–328). Mahwah: Lawrence Erlbaum.
- Wiese, B. S., & Freund, A. M. (2005). Goal progress makes one happy, or does it? Longitudinal findings from the work domain. *Journal of Occupational and Organizational Psychology*, 78, 287–304.
- Young, R. A., & Valach, L. (2004). The construction of career through goal-directed action. *Journal of Vocational Behavior*, 64, 499–514.
- Zapf, D., Dormann, C., & Frese, M. (1996). Longitudinal studies in organizational stress research: a review of the literature with reference to methodological issues. *Journal of Occupational Health Psychology*, 1, 145–169.