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Motivational Mechanisms of Self-Concordance Theory: Goal-Specific Efficacy and Person–Organization Fit

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Abstract

Purpose The purpose of this study was to elaborate on two mechanisms of self-concordance theory (SCT; Sheldon and Elliot in Pers Soc Psychol 24(5):546, 1998)—goal-specific efficacy and perceived person–organization (PO) fit—as mediators of the relationships between autonomous and controlled goal motives and goal accomplishment and job satisfaction.

Design/Methodology/Approach Data were from two independently collected samples of administrative employees (N1 = 37, N2 = 102) and their significant others across two points in time.

Findings Results indicated that autonomous motives were positively related to goal-specific efficacy and perceived PO fit (Time 1), and showed indirect effects on goal accomplishment and other-rated job satisfaction (Time 2). Controlled motives were negatively related to the same intermediaries and outcomes.

Implications Goal motives implicate goal-specific outcomes, and individuals' overall composition of goal motives—across their goals—shape their goal efficacy and PO fit perceptions. These mechanisms relate to distal outcomes of goal accomplishment and job satisfaction. The research offers theoretical implications for the proximal outcomes of goal motives, but also practical implications for ways in which organizations can improve incumbent PO fit perceptions.

Originality/Value Although research has shown that having self-concordant goals is positively associated with individual outcomes, existing research has yet to understand why this is the case. In addition, most studies of SCT apply difference scores to study the construct at the individual-level rather than specifying motives separately and considering a multilevel perspective. Our research offers a novel investigation of the proximal outcomes of SCT and the levels at which they operate.

Keywords Self-concordance theory · PO fit · Efficacy · Autonomous goal motives

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Introduction

…the person-environment interaction, and thereby questions of congruence, involves relationships between multiple personal goals and multiple environmental demands or opportunities for goal attainment.
Pervin 1989, p. 356.

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Goals, or "levels of aspiration," have been well established as one of the primary factors of motivation. There is little question that goals direct attention and promote sustained effort toward levels of achievement (Frank 1935; Locke 1968; Locke and Latham 2006; Mace 1935). Factors such as goal-level, goal commitment, and feedback have generally been found to strengthen the relationship between goals and goal accomplishment (Locke and Latham 2002). Recently, scholars have expanded these factors to include the different types of motives that underlie specific work-related goals. Research based on self-concordance theory (SCT) generally supports the assertion that underlying motives are related to goal accomplishment and well-being at work (Bloom and Colbert 2011; Bono and Judge 2003; Judge et al. 2005; Sheldon and Krieger 2007; Sheldon et al. 2003).

Self-concordance theory (SCT; Sheldon and Elliot 1998, 1999; Sheldon and Kasser 1998) asserts that people will be happier and have higher levels of goal accomplishment when their goals are driven by autonomous versus controlled motives. Autonomous motives include pursuing goals because they are fun (intrinsic motives) or because of the fundamental belief that the goal is an important one to accomplish (identified motives). Goals pursued for these reasons are considered self-concordant because they emanate directly from the integrated self (Sheldon and Elliot 1999), comprised of individuals' most important core values and interests (Lee et al. 2003). Conversely, controlled motives include pursuing goals for external reinforcement (extrinsic motives), or to avoid feelings of guilt or anxiety that would result from not pursuing them (introjected motives). Goals pursued due to feelings of obligation are considered "controlled" in SCT because their motives originate outside the integrated core self, even if those feelings are still internal to the individual's psychology (Sheldon and Elliot 1999). Overall, controlled motives do not come from individuals' perceived core selves, and are thus theorized not to be concordant with individuals' preference or interest.

Much empirical evidence supports SCT's tenet that goals driven by autonomous, versus controlled, motives are more likely to be accomplished, and that pursuing and accomplishing such goals contributes to feelings of greater satisfaction and well-being than does accomplishing goals directed by controlled motives (Sheldon and Elliot 1999). Little is understood, however, about the mechanisms by which such motives relate to goal accomplishment. Improved efficacy is one mechanism that has been proposed as a link between autonomous motives and outcomes. Sheldon and Elliot (1999, p. 485) note that individuals who pursue goals for self-concordant reasons "are likely to feel more effective and competent" (p. 485). This implies that autonomous motives may increase

efficacy, which could induce sustained effort that results in improved performance and greater satisfaction. Yet, only a few studies have empirically examined the relationship of efficacy to motives (e.g., Debowski et al. 2001), and none have considered autonomous and controlled motives separately or in the context of multiple goals.

Although efficacy is the most frequently proposed mechanism to explain the relationship between motives and goal accomplishment and attitudes, other mechanisms likely exist as well. We propose a new explanatory mechanism–the perception of person–organization fit–may translate motives into subsequent goal attainment and satisfaction. Scholars are increasingly recognizing that individuals' motives convey a sense of value and meaning that extends beyond the goal itself (Greguras and Diefendorff 2010). When a person is allowed to pursue goals at work that are driven by autonomous motives, he or she develops a sense that the individual and organization value similar outcomes. When work-related goals are driven by controlled motives, however, it suggests the organization values different outcomes than does the individual. As Pervin (1989) noted in the quote that begins this article, goal pursuit opportunities are a ubiquitous way for individuals to assess the alignment of their personal values with those of the work environment. Thus, the goals an individual pursues at work can provide insight into whether personal- and work-environment values are aligned. Specifically, it can demonstrate an alignment (or lack thereof) between personal and organizational values, or person–organization (PO) fit—a particular type of person–environment fit (Chatman 1989; Kristof 1996). PO fit has consistently been reported as a contributor to work-related outcomes including positive attitudes and performance (Arthur et al. 2006; Kristof-Brown et al. 2005; Oh et al. 2013; Verquer et al. 2003). Thus, we propose perceived PO fit as a second possible mechanism by which motives relate to goal attainment and attitudes.

Therefore, the purpose of this article is to explore two mechanisms linking motives and work outcomes: efficacy—which was previously implied, but infrequently tested—and PO fit—which has not previously been associated with self-concordance. In doing so, we elaborate and refine SCT by specifying a more complete set of explanatory mechanisms through which motives influence goal accomplishment and satisfaction.

A second contribution is that we model autonomous and controlled motives separately to examine how each is related to the two proposed mechanisms. Previous SCT research has relied heavily on the use of difference scores, subtracting controlled from autonomous motives. This has obscured the unique contribution of each type of motive and constrained researchers' ability to test for distinct explanatory mechanisms. This separation of autonomous

and controlled motives is more consistent with a key SCT proposition that individuals may pursue goals for multiple reasons (Judge et al. 2005), and allows for testing of more complex relationships including interactions between motives.

A third contribution is that previous SCT research has studied motives exclusively at the person- or individual-level. This approach assumes that people have a set of motives (autonomous or controlled) that apply equally to all goals they are pursuing. Statistically, this has led to within-person variability of motives being overlooked even though SCT allows for the possibility that people pursue different goals for different reasons. Therefore, modeling within-person variability in addition to between-person variability is critical to understanding how motives work. To address this issue, we use multilevel structural equation modeling to examine relationships at both the person-level and within-person (i.e., goal)-level. Our results elaborate and refine SCT by illuminating how goal motives, at the individual- and goal-levels, differentially relate to outcomes through the mechanisms of efficacy and perceived PO fit.

Theoretical Background and Hypotheses

Goals have been defined simply as "levels of aspiration" (Locke and Latham 2002, p. 705) or "the object or aim of an action" (Locke 1997, p. 377). Roberson (1990) notes the importance of examining multiple goals simultaneously, commenting, "In natural settings, individuals are likely to have a variety of goals" (p. 30). Goals serve to direct attention, as well as to determine the requisite levels of effort and persistence needed for goal attainment (Locke and Latham 2002). In the next section, we review SCT (Sheldon and Elliot 1999) as an explanatory model for the cognitive processes underlying goal-directed behavior.

Self-Concordance Theory

The self-concordance model, formulated by Sheldon and Elliot (1998, 1999) and influenced by earlier work on self-determination theory (Deci and Ryan 1985), seeks to explain how underlying motives influence goals and subsequent goal-relevant processes, behavior, and attitudes. Sheldon et al. (2003), p. 359 describe self-determination theory as a "macro-theory consisting of several mini-theories," including cognitive evaluation theory and intrinsic motivation, which together assert that individuals are motivated by universal needs including affiliation, competence and autonomy. The need for competence is part of what drives goal-oriented behavior, because accomplishing

a goal indicates a level of capability. When those goals are induced by autonomous motives, the additional need of autonomy is fulfilled.

SCT is an extension of this perspective and describes that *autonomous* goals are pursued for intrinsic or identified motives. The locus of these goal motives lies in the internal, integrated self. Because of their consistency with personal values, which reflect the fulfillment of individuals' need for autonomy, autonomous goals are more likely to be accomplished (Judge et al. 2005; Sheldon and Elliot 1999). Conversely, *controlled* goals are those that stem from either extrinsic or introjected motives, which reflect the desire to please someone else or to respond to pressure from outside the core self (Sheldon and Elliot 1999). Sheldon and Elliot describe that an individual pursuing goals with controlled motives might "…feel himself or herself to be in the grip of forces to which he or she does not give full assent" (p. 484). Even if goal motives stem from within mind of the individual (such as in feelings of guilt or obligation), the motives for pursuing the goal lie outside a person's own sense of core self. It is worth noting that autonomous and controlled motives are not mutually exclusive; individuals may pursue a single goal for multiple reasons. Moreover, in self-concordance research, goals are not objectively classifiable. Rather, two individuals may pursue the same goal for different reasons. Thus, one must ask people about their reasons for pursuing various goals rather than assuming certain goals stem from particular motivations (Sheldon and Elliot 1998).

The self-concordance model has been noted as a useful addition to traditional goal-setting theory, because it elaborates on *why* people select and commit to a particular set of goals (Judge et al. 2005; Sheldon and Elliot 1998, 1999). The core proposition of the theory argues that individuals who pursue self-concordant goals will enjoy greater goal accomplishment and higher levels of well-being. To test this proposition, previous research has calculated a difference score between individuals' average level of controlled motives and autonomous motives. When the difference is positive (i.e., autonomous motives are greater than controlled motives), the motives are considered self-concordant, and when the difference is negative (i.e., controlled motives are greater than autonomous), the motives are not self-concordant.

Yet, difference scores suffer from several methodological challenges (Edwards 1993, 2008), which has blurred the core tenets of SCT and made it difficult to test explanatory mechanisms. Specifically, the difference score method implies that autonomous motives and controlled motives are nonindependent; yet, as we have noted a single goal may be driven by multiple motives. For example, as academics we tend to be intrinsically interested in the research questions we pursue (i.e., driven by autonomous

motives), yet we fully recognize the presence of controlled motives to publish this research (e.g., gaining tenure or increased marketability). Using a difference score that collapses across these motives would preclude understanding the multiple drivers motivating researchers to design and publish their next study. To avoid such problems, we begin with the assumption that autonomous and controlled motives are independent, and we carry this supposition through hypotheses and analyses on these motives separately as they relate to fit perceptions and other concepts in the motivational chain.

Hypotheses

Figure 1 portrays our theoretical model linking the two motive types (autonomous and controlled) with two proposed mechanisms (goal-specific efficacy and PO fit perceptions), goal accomplishment, and attitudes across two points in time. Following the principles of SCT, we position motives as primary antecedents of PO fit perceptions and goal-specific efficacy. Efficacy and fit perceptions act as intermediaries between motive-driven goals and goal achievement, subsequent perceptions of fit, and ultimately satisfaction. Each of the predicted paths is discussed in detail.

The first mechanism through which motives are expected to function is through self-efficacy with associated goals. Efficacy is an individual's belief that he or she has the capacity to perform at a designated level or accomplish a specified objective (Bandura 1986). Although there are several ways to build efficacy, according to Bandura (1997) the most powerful is enactive mastery, or repeated experience getting closer to accomplishing a goal or task. When an individual is autonomously motivated to pursue a goal, enactive mastery should be enhanced, because he or she is likely to put sustained effort into accomplishing the objective, thus facilitating the development of expertise

(Callahan et al. 2003). Furthermore, their efforts will be sustained when obstacles are encountered because individuals are reluctant to abandon intrinsically motivated goals (Sheldon and Elliot 1998). Persistence in the face of adversity provides additional opportunities for increasing efficacy, because the individual gains confidence from overcoming obstacles (Bandura 1997). Thus, autonomous motives should lead to increased effort, persistence in the face of failure, and augmented confidence in overcoming barriers, all of which should bolster individuals' efficacy. Related evidence shows that intrinsic motivation and efficacy are positively related (Debowski et al. 2001; Maurer et al. 2003). Therefore, we expect that autonomous goal motives will be positively associated with goal-specific efficacy.

Conversely, controlled goals—those that are pursued because of someone else's wishes or from forces emanating outside the core self (Sheldon and Elliot 1999)—are less likely to receive sustained effort in the face of obstacles. When obstacles are encountered, controlled motivated goals are more likely to be abandoned or pursued less diligently than are autonomously motivated goals. As Sheldon and Elliot (1999), p. 484 note, because the locus of controlled goals lies outside a person's core sense of self, "the volitional strength behind them is likely to fade when obstacles are encountered." When goals are abandoned, there is little opportunity to learn from experience, and enactive mastery is unlikely to occur (Bandura 1997), inhibiting the development of self-efficacy. Furthermore, because the reward for goal accomplishment lies outside the core self (rather than in the enjoyment or mastery of the task itself), strategies such as cheating, avoiding seeking help, and self-handicapping have been reported under conditions of externally motivated goals (Anderman et al. 1998; Patrick et al. 1999). Use of these alternative strategies suggests that controlled motives may be associated with a lack of efficacy for goal accomplishment. In addition, although controlled motives could also be
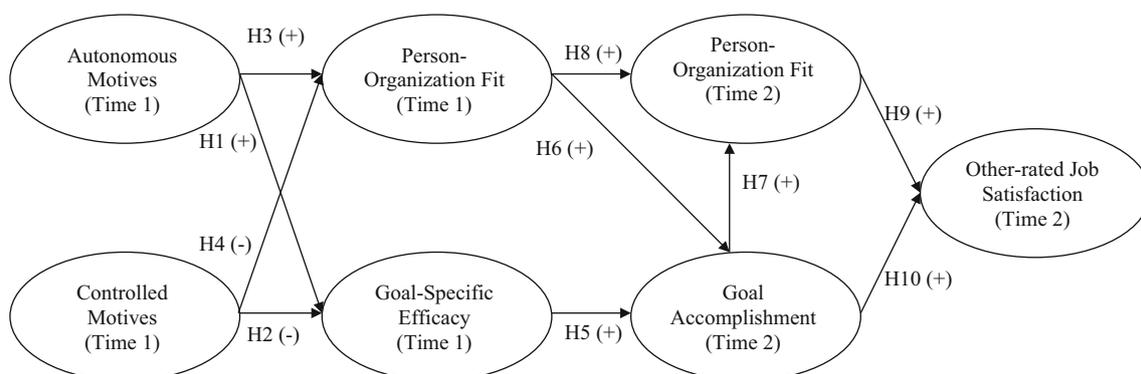

Fig. 1 Hypothesized model relating motives, goal-specific efficacy, perceived PO fit, and outcomes

autonomously held, when they are not they may run counter to what an individual personally wants to accomplish. It is this second factor that takes what might otherwise be a neutral or no relational, and turns it negative. If an individual knows in advance that goal abandonment is a strong possibility and may be resisting goals with controlled motives, efficacy should be decreased.

Preliminary evidence supports these assertions. Using a difference score approach to calculating self-concordant motives (autonomous—controlled), Sheldon and Houser-Marko (2001) present three studies which demonstrated that self-concordant goals were more sustainable and, therefore, more attainable than those that were less concordant. Similarly, Judge et al. (2005) report two studies in which the relationship between self-concordant motives, again measured by a difference score, and goal attainment is positive, but relatively small ($r = .16, .22$). Disentangling the two motives, we hypothesize that autonomous motives are positively related, and controlled motives are negatively related to goal-related efficacy.

Hypothesis 1 Autonomous motives underlying goal pursuit will be positively related to goal-specific efficacy.

Hypothesis 2 Controlled motives underlying goal pursuit will be negatively related to goal-specific efficacy.

The second mechanism that may link motives with outcomes is perceived PO fit. Perceived PO fit is generally described as the perception of "compatibility" between person and organization that results from a belief that the organization's values and objectives are similar to or supportive of those of the individual (Kristof 1996). When an individual pursues a goal at work that is driven by autonomous motives, that goal reflects not only work-relevance, but also the person's sense of self and identity. Having the space to complete autonomously motivated goals may signal to individuals that they are a good fit with the organization's values more broadly. Alternatively, when individuals must pursue work-related goals they do not find intrinsically motivating, these goals create interference with their core selves (Whitney and Miller 2002), signaling that the organization and individual may value different things.

Similarly, the SCT paradigm suggests that goal pursuit for controlled reasons may forestall individuals' ability to "internalize the doing of what has to be done" (Sheldon and Houser-Marko 2001, p. 152). As internalization is one of the core psychological processes underlying fit (Chatman 1989), controlled motives could undermine perceptions of PO fit. That is, a lack of consistency between goals that the organization promotes and those that are rooted in the values of a person's core self suggests that the organization and person value different things. In an

environment where attentional resources are limited, an individual who pursues one goal because of controlled motives will have less opportunity to pursue other goals that are personally meaningful. External reinforcement, such as supervisor approval, for accomplishing goals the organization encourages may be appreciated, but they send a message that what that organization values is not aligned with what the employee would personally choose to do. This misalignment signals poor PO fit. Therefore, we hypothesize:

Hypothesis 3 Autonomous motives underlying goal pursuit will be positively related to perceptions of PO fit.

Hypothesis 4 Controlled motives underlying goal pursuit will be negatively related to perceptions of PO fit.

Goal-setting theory incorporates efficacy as a key component of the high performance cycle (Locke and Latham 1990a). Efficacy encourages performance because it stimulates high levels of goal commitment (Wright and Kacmar 1995), and encourages persistence in the face of negative feedback (Bandura 1997; Locke and Latham 1990b). Meta-analytic evidence supports this positive relationship between efficacy and performance, through the mechanisms of enhanced motivation to act and persistence in the face of obstacles (Sitzmann and Yeo 2013). When targeted toward specific goals, high efficacy levels should work through these mechanisms to result in greater goal accomplishment.

Hypothesis 5 Goal-specific efficacy will be positively related to subsequent goal accomplishment.

Fit theory (Chatman 1989; Kristof 1996) would predict a similarly positive path between PO fit perceptions and subsequent goal attainment. Although more strongly associated with attitudinal outcomes, meta-analytic studies have reported a low to moderate relationship of perceived PO fit with overall performance ($\rho = .21$, Arthur et al. 2006; $\rho = .12$, Kristof-Brown, et al. 2005). This relationship strengthens when the definition of performance is expanded to include discretionary "will do," rather than "must do" behaviors, as in contextual performance ($\rho = .22$, Arthur et al., 2006; $\rho = .27$, Kristof-Brown et al. 2005). Researchers have concluded that individuals high in PO fit seek not just to perform a job, but also to benefit the organization as a whole. Because individuals with high perceived PO fit believe that their values are consistent with their organization, they view accomplishing work-related goals as beneficial to the organization, as well as to themselves. Expectancy theory (Vroom 1964) suggests that this "double payoff" increases the instrumentality of goal accomplishment for individuals with high PO fit. Furthermore, when individual and organizational goals align,

organizations are viewed as supportive and helpful, thereby increasing the expectancy for goal accomplishment. Taken together, the increased levels of instrumentality and expectancy generate greater motivation, making individuals with high perceived PO fit more likely to attain their goals.

Existing evidence suggests a weak but positive relationship between employees' PO fit and their overall performance at work. In a study using two samples, Witt (1998) reported correlations of .11 and .08 between goal-based PO fit and supervisory evaluations of performance. However, Witt examined actual, rather than perceived fit, and the outcome variable was supervisors' ratings of overall performance, rather than attainment of specific goals. Given the generally stronger effects of fit perceptions versus calculated objective fit measures, and a focus on goal-specific performance rather than overall performance, we anticipate a stronger, positive relationship between perceived PO fit and goal attainment in the current study (Cooper-Thomas et al. 2004). Specifically, when perceived PO fit is high the likelihood of achieving specific goals will be high, and when it is low, goal achievement will be lessened.

Hypothesis 6 Perceived PO fit will be positively related to subsequent goal accomplishment.

Although we hypothesize a relationship between PO fit perceptions and goal accomplishment, it is also possible that achieving a goal provides feedback that shifts subsequent perceptions of PO fit. Goal accomplishment, regardless of the original motive for the goal, is rewarding. When the goals that are accomplished are also personally meaningful, individuals may begin to see their organizations as facilitative of their personal success. This makes them more likely to view the organization as a place where they have found a good fit. In contrast, when individuals fail to achieve their goals, they may place the blame on their organizations for not facilitating, or even possibly inhibiting, their success. Such blame-placing introduces or reinforces uncertainty regarding compatibility with the organization's values. This logic reflects research suggesting a reciprocal relationship between performance and job attitudes more generally (Judge et al. 2001). Thus, we hypothesize a positive relationship between goal accomplishment and subsequent perceptions of PO fit.

Hypothesis 7 Goal accomplishment will be positively related to perceived PO fit at Time 2.

Although goal accomplishment may nudge PO fit perceptions, there is also reason to believe that PO fit perceptions will have substantial stability over time. In the most notable work on fit and time, Shipp and Jansen (2011) and Jansen and Shipp (2013) suggest that unless a strong

shock occurs or a deliberate strategy for improving fit is invoked, there is likely temporal consistency in fit perceptions. Empirical research has shown significant stability in fit and its component values over time (Saks and Ashforth 2002; Taris and Feij 2001). The source of this stability lies in the consistency of values themselves. Values are enduring beliefs grounded in both genetic factors and early childhood socialization (e.g., Keller et al. 1992; Meglino and Ravlin 1998). Organizational values and beliefs often stem from those of a company's founder and leaders, which are also a stable factor in the short-term (Schein 1992; Schneider 1987). Thus, although individuals' perceptions of PO fit may be strengthened or weakened over time, we expect substantial stability in these perceptions.

Hypothesis 8 Perceived PO fit at Time 1 will be positively related to perceived PO fit at Time 2.

Schneider's (1987) ASA theory purports that individuals are more likely to stay in organizations where they are a good fit. This implies that good fitting individuals will also be more satisfied. Both cognitive dissonance theory (Festinger 1962) and self-perception theory (Bem 1967) support the notion that perceived congruence is more satisfying than incongruence. Organizational values are fundamentally linked to psychological identity and meaning (O'Reilly et al. 1991), and individuals who perceive that their values are incongruent with their organization's values experience, at best, reduced meaning from their work and, at worst, work experiences that undermine their own values. Conversely, people who believe that their values are aligned with those of the organization experience enhanced meaning and satisfaction with their work. Perceptions of PO fit should be positively related to satisfaction at work, and meta-analytic evidence supports this assertion (Kristof-Brown et al., 2005).

Hypothesis 9 Perceived PO fit will be positively related to job satisfaction.

Because goal accomplishment signals personal success, its relationship with job satisfaction is well established (Koestner et al. 2002; Locke and Latham 1990b). Sheldon and Elliot (1999), p. 484, note "there are natural satisfactions to be found in the process of exercising one's competencies to move toward desired outcomes." This describes the intrinsic reward that results from goal accomplishment. White (1959) used the term effectance motivation to describe individuals' basic need to deal with the world effectively. When this need is fulfilled by accomplishing a goal, regardless of its original motives, satisfaction should result. Furthermore, there is often external reinforcement at work that is associated with goal accomplishment, such as peer and supervisor approval,

which contributes to satisfaction (Locke and Latham 1990b). In short, there is reason to believe that goal accomplishment will relate to job satisfaction.

Hypothesis 10 Goal accomplishment will be positively related to job satisfaction.

The previous hypotheses reflect an assumption that is replete in the SCT literature—that motives relate to work outcomes at the person-level. In other words, collapsing across all goals, individuals who on average pursue more autonomous goals experience better outcomes. Yet, because people may pursue different goals for a variety of motives, there may be meaningful relationships occurring at the goal-level (within-person) as well. At a minimum, it is necessary to demonstrate that the traditional SCT approach of aggregating across goals within person is justifiable. More thoroughly, however, a robust test of our theory requires exploring the degree to which motives are functioning at the goal-specific level and at the person-level. Thus, in addition to the person-level hypotheses articulated herein, we also examine the goal-specific mechanisms that may add explanatory value to the motives–outcomes relationship.

Method

Sample

The data were collected from two samples: university administrative employees and administrative employees registered at Studyresponse.net, an internet research database. Several studies have provided evidence for the quality and usefulness of such databases for organizational research (O'Neil et al. 2003; Stanton and Weiss 2002; Stanton 1998), particularly when it can be demonstrated that the empirical relationships are consistent with those from another sample. Studies using such data sources have been published in most major applied psychology journals (i.e., Inness et al. 2008; Piccolo and Colquitt, 2006; Tepper et al., 2009; Triana et al. 2010).

Participants in the university sample were employed as support staff at four Midwestern universities. They worked in jobs such as: administrative assistant, librarian, information technology support, and student advisor. Studyresponse.net participants were solicited from the categories of administration and support positions, employed in different organizations and different industries to obtain a broad sample of types of comparable positions. We focused on administrative positions because they possess a moderate level of autonomy and goal direction, which should be most likely to generate variability in autonomous versus controlled motives. The O-NET classification system, which scores occupations by various work context characteristics, assigns such positions a score of 76 on "freedom to make decisions" (O-NET job code: 43-6014.00), as compared to 95 for postsecondary business school teachers (O-NET job code: 25-1011.00), and 45 for team assemblers (O-NET job code: 51-2092.00).

Of the 377 university employees solicited to participate in the study, 51 returned completed surveys, for an initial response rate of 13.5 %. Between 2 and 3 months later, 37 completed and returned a second survey along with a survey completed by a significant other (i.e., a "close friend or family member—somebody who knew them well"), which was used to reduce the likelihood that our results would be biased by same-source errors (Judge et al. 1998). This resulted in a complete response rate of 9.8 %. A majority ($N = 30$, or 81.1 %) of participants were female. Two-hundred eighteen of the 628 employees contacted through Studyresponse.net completed the survey, for a response rate of 34.7 %. Of these, 102 returned completed follow-up and significant other surveys, for a final usable response rate of 16.2 %. Again, most participants ($N = 93$, or 91.2 %) were female. Although these response rates were lower than the ideal, they likely reflected the combination of the in-depth assessment of work-related goals required in Survey One and the need to enlist a significant other to complete Survey Two.

Because of the response rates, we took several steps to evaluate the quality of the sample. First, to determine whether the group who dropped out at Time 2 was different from those who provided complete data, we conducted a Fisher's r-to-Z test on the intercorrelations between Time 1 variables in the two samples. No correlations differed significantly, suggesting that those who withdrew from Time 2 of the study did not meaningfully differ on the Time 1 variables from those who completed both parts of the study. Second, to determine the appropriateness of combining the samples, using Fisher's r-to-Z transformation we tested whether the correlations for variables were significantly different across samples. Of the 28 possible comparisons, only two correlations were significantly different. Because 1.5 correlations would be expected to be significant by chance (given a .05 Type I error rate), we concluded that the correlations between the two samples were not significantly different. Moreover, the pattern of the correlations was quite similar across the two samples, as evidenced by a .81 correlation between the two profiles of correlations. In the combined sample, eight individuals were later eliminated due to listwise deletion of data, leaving a final sample size of 131 individuals reporting 632 goals.

Procedure

University participants were contacted via email, with a description of the study and an invitation to participate by

logging onto a website created for this research. Internet participants were contacted via the Studyresponse.net administrator, following standard procedures. This entailed the administrator sending an email describing the study, and a link directly to the research project's webpage. The first page of the website provided a description of the project, and all consent information required to inform participants. If individuals were interested in participating, they indicated their consent by entering a self-generated user ID and password to access the survey. Participants were promised that their individual responses would remain confidential, and were provided a $10 honorarium. Participants were asked to identify five work-related goals that they would be pursuing over the next few months. After listing each goal, participants were asked to respond to five questions regarding their motives for pursuing that goal and their confidence that they would achieve it. They then responded to a series of questions about their perceived PO fit.

Four months later, participants were mailed a second survey that asked them to report the level to which they had accomplished each of their five goals, their current level of perceived PO fit, and their job satisfaction. Each survey was personalized so that the five goals the participant had initially reported were listed on his or her follow-up survey. This was done to remind participants of their specific goals. Participants also received a hard copy of the job satisfaction survey, which they were asked to give to a significant other who would provide an independent evaluation of the participants' job satisfaction. To allow matching of self- and other reports, the username generated by participants on the first survey was pre-printed on their significant other survey. Significant others returned their surveys directly to the research team in postage paid envelopes. Thus, participants did not have access to the survey completed by their significant other. The majority of significant others were spouses (78.1 %), followed by close friends (10.9 %), family members (8.8 %), and others (2.2 %). Previous research on job attitudes has also collected data from significant others (e.g., Judge and Hulin, 1993; Judge et al. 1998) in order to reduce common source bias.

Measures—Time 1

Motives Underlying Goal Pursuit

Consistent with research in the area of personal goals (Sheldon and Elliot 1998, 1999; Sheldon and Kasser 1998), individuals were asked to list work-related goals that they would be pursuing over the next few months. They were told, "The organizational goals can be about things your organization wants to achieve or things it wants to avoid, and they can be general or specific. The organization's

goals may be your goals, but make sure that they are goals that your organization wants you to pursue." The following examples were provided to give participants a sense of the types of goals that they might include, "Complete fall travel vouchers," "Reduce long distance phone expenses," "Improve leadership skills/capabilities," and "Stop fighting with a coworker I'm having trouble with." An open-ended response format was used to allow participants the maximum level of response flexibility. After listing each goal, individuals responded to four statements representing autonomous and controlled motives for pursuing the goal. The controlled statements were: "I pursue this goal because someone else wants me to" (*extrinsic*) and "I pursue this goal because I would feel guilty, anxious, or ashamed if I didn't" (*introjected*). The autonomous motive items were: "I pursue this goal because I really believe it is an important goal to have" (*identified*) and "I pursue this goal because of the fun and enjoyment it provides" (*intrinsic*). Participants indicated how true each of the statements was for each of their goals, using a 9-point Likert scale (1 = *Not at all*, 2 = *Very little*, 3 = *In small part*, 4 = *Somewhat*, 5 = *To a moderate degree*, 6 = *Quite a bit*, 7 = *In large part*, 8 = *Very much*, 9 = *Completely*), and responses were averaged across the two items for autonomous and controlled motives.

We followed standard SCT procedures for assessing person-level motives. Specifically we averaged across the five goals to create one score for each motive (e.g., Judge et al. 2005; Koestner et al. 2002; Koestner et al. 2008; Sheldon and Elliot 1998, 1999; Sheldon and Houser-Marko 2001; Sheldon and Kasser 1998; Smith et al. 2007). Although this is the standard practice, this approach ignores possible differences between goals within individuals. Therefore, we calculated ICCs to assess what variance existed at the goal- and the person-levels in our data. The ICCs were calculated based on the two-item averages for each of the two motives (i.e., across the 5 goals: autonomous motives: ICC(1) = .37, ICC(2) = .75; controlled motives: ICC(1) = .43; ICC(2) = .79). These statistics meet recommended criteria for aggregation to the person-level in goal research (Lüdtke and Trautwein 2007), indicating that the person-level of analysis is indeed meaningful. However, these statistics also demonstrate that within-individual variability exists in the data. Thus, we modeled motives both across goals (i.e., the traditional between-person approach) and for specific goals (i.e., the within-person approach).

Goal-Specific Efficacy

Participants were asked to respond to a fifth item related to each goal: "I am confident that I will attain this goal." The same 9-point Likert scale for motive items was used. ICC

values again indicated that a much of the variance in goal efficacy existed at the individual-level (ICC(1) = .44, ICC(2) = .79).

Perceived PO Fit

Perceived PO fit was assessed using 3 items from Cable and DeRue (2002) on PO fit (i.e., "The things that I value in life are very similar to the things that my organization values."). A 7-point Likert scale (*1 = Strongly Disagree; 7 = Strongly Agree*) was used. The reliability of the 3-item scale was α = .97.

Measures—Time 2

Perceived PO Fit

Participants completed the same 3-item scale on perceived PO fit during the second survey administration. The response scale was changed to a 5-point Likert scale (*1 = Strongly Disagree; 5 = Strongly Agree*) to be consistent with the 5-point scale used for job satisfaction also measured at this time. The reliability at Time 2 was α = .94.

Goal Accomplishment

Two items from past self-concordance research (Sheldon and Elliot 1999) were used to assess goal accomplishment for each of the five goals listed on the participants' Time 1 survey. For each goal, participants were asked how much they agreed with the following items: "I have made considerable progress toward attaining this goal," and "I accomplished what I set out to do with this goal." Responses were reported on a 7-point Likert scale (1 = *Strongly Disagree* to 7 = *Strongly Agree*). Reliability of the 2-item scale was α = .89. ICC values (ICC(1) = .21, ICC(2) = .57) again indicating both person- and goal-level variations.

Job Satisfaction

Because same-source bias has been cited as common in fit research (Kristof-Brown et al. 2005), we collected significant others' reports of participants' job satisfaction (Judge and Hulin 1993; Judge et al. 1998) using the five-item version of the Brayfield and Rothe (1951) job satisfaction scale, responding as they thought the participants would respond. Example items include: "Most days s/he is enthusiastic about his/her work," and "S/he feels fairly satisfied with his/her present job." Significant others' reports were correlated (*r* = .59) with participants' self-reports of job satisfaction. Therefore, significant others' reports of job satisfaction were used for the remainder of the analyses. A 5-point Likert scale ranging from

(*1 = Strong Disagree* to *5 = Strongly Agree*), and the reliability of the scale was α = .87.

Analysis

CFA on the Time 1 variables (motives, efficacy and PO fit) demonstrated that the measurement model had an acceptable fit to the data (χ^2_{14} = 67.63, RMSEA = .078 [90 % CI .060–.097], CFI = .98. The CFA on the Time 2 variables (PO fit, goal accomplishment, and job satisfaction) also fit the data acceptably (χ^2_{32} = 173.77, RMSEA = .085 [90 % CI .073-.098], CFI = .97. All CFA results supported the distinctiveness of the measures at Time 1 and Time 2.

Correlations and descriptive statistics for the study variables are provided in Table 1. SCT suggests that motives are generally orthogonal, but that specific goals can be simultaneously driven by multiple motives. The correlation in our data between motives at the goal-level was *r* = .04 (*n.s.*) and at the individual-level was .02 (*n.s.*), suggesting the motives may be orthogonal. Examining a scatterplot of motives, however, revealed wide variation in the extent to which motives are correlated across goals within individuals. Approximately 25 % of the sample had a strong negative correlation (i.e., motives were either autonomous or controlled, but not both), whereas approximately 30 % had a strong positive correlation (i.e., both motives were high or low). Motives were orthogonal (i.e., correlation near zero) for less than half of the sample. This analysis casts doubt on the orthogonality of motives for many individuals, and suggests that goal-specific analyses may be useful to capture this variability.

Consistent with prior SCT research, all individual-level analyses were carried out by aggregating motives across goals. However, the lack of orthogonality in motives for over half of the sample and the high ICC(1 s) for motives, efficacy, and goal accomplishment suggest substantial within-individual variation across goals. Therefore we conducted a multilevel structural equation model analysis using Mplus 6.1 (Muthén and Muthén 2010) to account for the nonindependence of goals nested within individuals. In the multilevel structural model, we allowed autonomous motives, controlled motives, efficacy, and goal accomplishment to vary within (i.e., at the goal-level) and between individuals (i.e., at the individual-level).

Results

Person-Level Analyses

The Mplus results testing the hypothesized individual-level model are provided in Fig. 2. We separated the measurement and structural models using total aggregation

Table 1 Means (M), standard deviations (SD), and intercorrelations of study variables

Variable	M	SD	1	2	3	4	5	6	7
1. Autonomous motives for goal pursuit (T1)	6.33	1.78	.78[b]						
2. Controlled motives for goal pursuit (T1)	6.14	2.12	.04	.80					
3. Goal-specific efficacy (T1)	7.38	1.75	.39*	−.13*	–				
4. Perceived PO fit (T1)[a]	5.69	2.29	.11*	−.12*	.18*	.93			
5. Goal Accomplishment (T2)	5.28	1.59	.12*	−.11*	.31*	.17*	.79		
6. Perceived PO fit (T2)	3.31	1.08	.08*	−.05	.05	.52*	.09*	.92	
7. Job satisfaction (T2; significant other)	3.60	0.93	.06	−.11*	.11*	.32*	.13*	.42*	.87

$N_{(individual)} = 131$, $N_{(goals)} = 632$. *$p < .05$ (two-tailed). T1 = Time 1. T2 = Time 2

[a] 7-point Likert scale for T1 administration; 5-point Likert scale for T2 administration

[b] Coefficient alpha (α) reliability estimates are listed on the diagonal

parceling whereby indicators are averaged into a single manifest variable for each latent construct. In order to correct for measurement error, we constrained the error term of manifest variables to

$$\theta_\varepsilon = \sigma_y^2 \times \left(1 - \alpha_y\right),$$

where θ_ε is the error variance (theta epsilon) for endogenous variables (theta delta [θ_δ] is the error term for exogenous [x] variables), σ_y^2 is the variance of variable y, and α_y is the reliability of variable y. In the model, autonomous and controlled motives were allowed to correlate. The hypothesized model fit the data well ($\chi_{10}^2 = 7.17$; SRMSR = .031; RMSEA = .000 [90 % CI .000–.072]; CFI = .999). We compared our hypothesized model to alternative models to determine whether they might provide a better fit to the data. First, we tested a model where PO Fit (T1) and goal-specific self-efficacy were specified as predictors of autonomous and controlled motives, rather than the reverse relationships that were hypothesized. This model exhibited substantially poorer fit than the hypothesized model ($\chi_{9}^2 = 68.63$; SRMSR = .113; RMSEA = .226 [90 % CI .178–.277]; CFI = .553). Next, we tested a model with direct paths from each goal motive to goal accomplishment ($\chi_{8}^2 = 4.68$;

$\Delta\chi_2^2 = 2.49$, n.s.). Finally, we tested a model with direct paths from motives to job satisfaction ($\chi_8^2 = 7.08$; $\Delta\chi_2^2 = 0.09$, n.s.). Neither alternative presented a significantly superior fit to the data. In addition, we modeled the data by controlling for sample source (i.e., 0 for university sample, 1 for Study Response sample); substantive conclusions were identical in each analysis.

Supporting Hypotheses 1 and 3, autonomous motives for goal pursuit are positively related to self-efficacy ($\beta = .53$, $p < .05$) and perceived PO fit ($\beta = .21$, $p < .05$). Hypotheses 2 and 4 posited a negative effect of controlled motives on goal-specific efficacy and PO fit. Results show that controlled motives are negatively related to perceptions of fit ($\beta = −.21$, $p < .05$) as well as goal-specific efficacy ($\beta = −.22$, $p < .05$). Therefore, Hypotheses 1 through 4 are supported.

Hypothesis 5 argued that goal efficacy would be positively related to subsequent goal accomplishment. Results support Hypothesis 5, as individuals with higher average goal efficacy were more likely to achieve their goals ($\beta = .48$, $p < .05$). Hypothesis 6, which posited that perceived PO fit at Time 1 would be positively related to subsequent goal accomplishment, is not supported at traditional levels of significance, although the fit indices
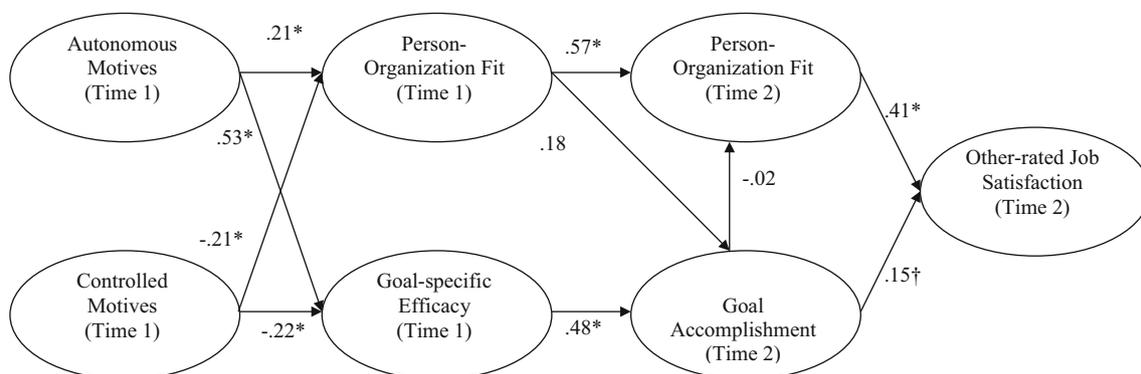

Fig. 2 Standardized path coefficients for hypothesized model relating motives, efficacy, perceived PO fit, and outcomes. *Notes*: $N = 131$. *$p < .05$ (two-tailed). $\chi_{10}^2 = 7.17[ns]$; SRMR = .031, RMSEA = .00 [90 % CI .000–.072]; CFI = .99

imply that the path should be included in the model, and the regression coefficient is in the predicted direction ($\beta = .18$, two-tailed $p \sim .055$). Perceived PO fit at Time 2 was not meaningfully predicted by individual-level goal accomplishment ($\beta = -.02$, n.s.), providing no support for Hypothesis 7. It was, however, predicted by perceived PO fit at Time 1 ($\beta = .57$, $p < .05$), supporting Hypothesis 8. In support of Hypothesis 9, perceived PO fit at Time 2 was strongly related to job satisfaction as rated by a significant other ($\beta = .41$, $p < .05$). Finally, although goal attainment was positively related to significant others' ratings of job satisfaction, this path did not reach traditional levels of statistical significance ($\beta = .15$, $p \sim .085$). Thus, Hypothesis 10 was not supported using significant others' ratings of job satisfaction.

Although our hypotheses did not explicitly propose mediation of the effects of goal motives, our conceptual model implies indirect effects through efficacy and perceived PO fit on subsequent PO fit, goal accomplishment, and job satisfaction. Table 2 provides the indirect effects as computed by Mplus 6.1. As Table 2 illustrates, autonomous motives have a positive and statistically significant indirect relationship with job satisfaction, time-lagged PO fit perceptions, and goal accomplishment. In contrast, controlled motives have a negative and statistically significant indirect relationship with job satisfaction, time-lagged PO fit perceptions, and goal accomplishment. Table 2 also identifies that although goal-specific efficacy was directly and positively related to goal accomplishment, it was not meaningfully related to the more distal attitudinal outcomes of job satisfaction and time-lagged PO fit perceptions.

Goal-Level Analyses

Because we collected data on five distinct goals for each individual, a multilevel SEM could be conducted on the measures that were goal-specific: motives, efficacy, and

goal accomplishment. Goal-level analyses could not be conducted for the perceived PO fit mechanism, because perceived PO fit is only conceptualized at the individual-level, not the goal-level. For motives and efficacy, results from the multilevel SEM (Fig. 3) are generally consistent with the aggregated individual-level model, suggesting that similar relationships emerge for specific goals as emerge for individuals' overall set of goals. The effect sizes were quite similar, across the two techniques, suggesting that even the relationships hold both with respect to specific goals and also when considering an individual's set of goals as a whole.

Comparing the original, individual-level model with the multilevel analysis demonstrates that even when jointly modeling within-person variation in motives, the hypothesized model is supported. Autonomous motives were positively related, and controlled motives were negatively related, to efficacy at the individual-level as well as the goal-level. At the goal-level, the relationship between the controlled motives and efficacy became statistically significant, which was not the case in the aggregated individual-level model (i.e., Fig. 2); autonomous motives remained statistically significant. The direction of all relationships was the same. One noticeable difference, however, was that the relationship between self-efficacy and goal accomplishment was stronger at the individual-level ($\beta = .66$, $p < .05$) than at the goal-level ($\beta = .21$, $p < .05$). We comment further on this finding in the Discussion.

Post-Hoc Analyses

SCT theory suggests that a goal can be motivated by more than one motive (e.g., I want to develop my communications skills and my supervisor wants me to pursue this goal as well). Roughly 35 % of the goals in our sample could be characterized as "multiple-motive"(using a cutoff of motives being rated at least 5—"*to a moderate degree*"—

Table 2 Indirect effects in hypothesized model (individual-level analysis)

	Goal Accomplishment (T2)			PO Fit (T2)			Job Satisfaction (T2)		
	Indirect[a]	Direct	Total	Indirect[a]	Direct	Total	Indirect[a]	Direct	Total
Autonomous motives (T1)	.29*		.29*	.11		.11	.09*		.09*
Controlled motives (T1)	−.14*		−.14*	−.12*		−.12*	−.07*		−.07*
Goal-specific efficacy (T1)		.48*	.48*	−.01		−.01	.07		.07
Perceived PO fit (T1)		.18*	.18*		.57*	.57*	.26*		.26*
Goal accomplishment (T2)					−.02	−.02	−.01	.15	.15
Total R^2			.28*			.32*			.21*

$N_{(individual)} = 131$. *$p < .05$ (two-tailed). T1 = Time 1. T2 = Time 2. Estimates are standardized

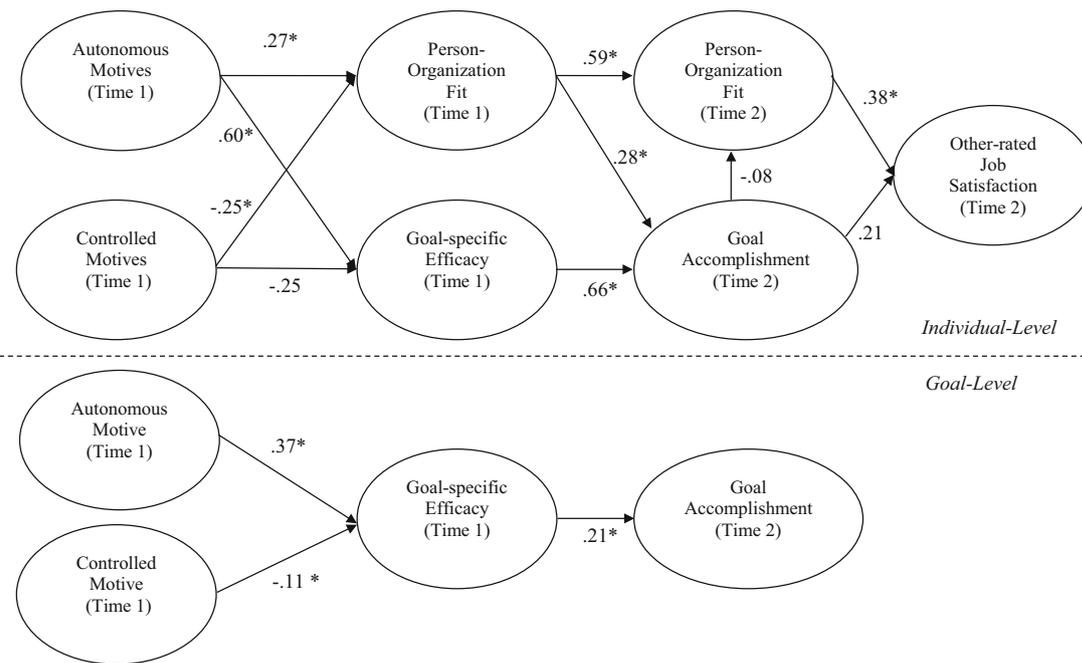[a] Total indirect effect through all specific paths

Fig. 3 Standardized path coefficients for multilevel model of motives, efficacy, perceived PO fit, and outcomes. *Notes*: $N_{\text{between}} = 131$, $N_{\text{within}} = 632$. *$p < .05$. $\chi^2_{12} = 7.05$; $\text{SRMR}_{\text{between}} = .049$, $\text{SRMR}_{\text{within}} = .011$; $\text{RMSEA} = .000$

on a 9 point scale). This raises the possibility of a multiplicative effect between motives. One benefit of modeling autonomous and controlled motives separately is that we can examine this potential interaction. Therefore, we conducted a post-hoc analysis of the interaction between autonomous and controlled motives on goal accomplishment. An OLS regression for the individual-level model did not support a statistically significant interaction between motives ($b = .06$, *n.s.*). At the goal-level, we then group-centered the goal-specific motives, efficacy, and goal accomplishment to test for a level-1 interaction of motives. Results revealed no statistically significant interaction ($b = .06$, *n.s.*).

We did, however, find statistically significant cross-level interaction. This analysis is based on the logic that individuals may have an "average" or typical set of motives that drive their goals, and that the effects of specific goal motives (i.e., level-1 effects) may vary depending on individuals' typical motives. Results from this analysis are reported in Table 3. Consistent with multilevel SEM results, Model 1 shows that when goal- and individual-level motives are entered simultaneously, the autonomous motives at the individual-level and both types of motives at the goal-level are related to efficacy. Models 2-5 show results entering each interaction term separately, and Model 6 displays results with all interaction terms in the model. Because Model 6 best reflects the reality of multiple motives held simultaneously, we focus on interpreting Model 6. These results show a cross-level interaction

between individual-level controlled motives and goal-specific autonomous motives. Individuals with higher average controlled motives had a stronger positive relationship between goal-level autonomous motives and efficacy than did individuals with lower average controlled motives. We further explored the nature of this interaction (see Fig. 4) using techniques described by Preacher et al. (2006); the simple slopes ($b = .67$ and 1.10) were both positive and statistically significant.

Discussion

This study examines two possible mechanisms through which autonomous and controlled motives are related to subsequent goal accomplishment and attitudes. Validating the early conceptual writings on SCT, our results demonstrate that individuals pursuing work goals driven by autonomous motives have higher levels of goal-specific efficacy, which results in greater goal accomplishment and satisfaction. Results also showed that autonomous motives are associated with higher degrees of perceived PO fit, suggesting that work-related goals may induce holistic perceptions about organizations and prompt assessments of compatibility with organizational values. In contrast, controlled motives evoke the opposite reactions, being negatively associated with individuals' efficacy and perceptions of PO fit. Consistent with Bandura's social cognitive theory (1986), goals with higher efficacy at Time 1 were more

Table 3 HLM results of cross-level interactions of goal motives predicting goal-specific efficacy

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Level-1 variables (goal-level)						
Intercept (γ_{00})	5.07*	5.07*	5.07*	5.07*	5.07*	5.06*
Autonomous motives (γ_{10})	.31*	.32*	.31*	.27*	.27*	.27*
Controlled motives (γ_{20})	−.08*	−.50*	−.06	−.07	−.09*	−.45*
Level-2 variables (individual-level)						
Autonomous motives (γ_{01})	.47*	.47*	.47*	.47*	.47*	.48*
Controlled motives (γ_{02})	−.11	−.11	−.11	−.11	−.11	−.11
Cross-level interactions						
Autonomous motives (individual-level) × controlled motives (goal-level) (γ_{21})		.07*				.05
Controlled motives (individual-level) × controlled motives (goal-level) (γ_{22})			.00			.01
Autonomous motives (individual-level) × autonomous motives (goal-level) (γ_{11})				.06		.07
Controlled motives (individual-level) × autonomous motives (goal-level) (γ_{12})					.09*	.10*

$N_{\text{(individual)}} = 131$, $N_{\text{(goals)}} = 632$. *$p < .05$; (two-tailed). Level-1 variables are group mean centered
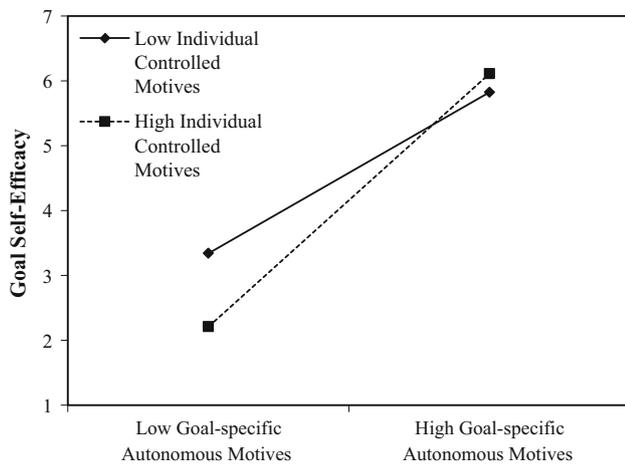

Fig. 4 Cross-level interaction of goal-level controlled motives by individual-level autonomous motives predicting goal-specific efficacy

likely to have been attained by Time 2. Goal accomplishment was also higher overall for individuals who reported higher levels of perceived PO fit at Time 1, supporting a PO fit-performance relationship that is often reported as weak when performance is assessed more broadly (Arthur et al. 2006; Kristof-Brown et al. 2005). Considerable stability in PO fit perceptions was demonstrated, with Time 1 PO fit being the strongest predictor of PO fit at Time 2, and goal accomplishment having minimal impact. This reinforces theory by Shipp and Jansen (2011) on the stability of perceived fit over time. Consistent with past research, we report a strong positive relationship between perceived PO fit and job satisfaction ($r = .52$), similar to meta-analytic estimates ($r = .45$, Kristof-Brown, et al. 2005; $r = .52$, Arthur et al. 2006). This is notable, given that the meta-analytic estimates are based primarily on studies in which fit and job satisfaction were reported by the same respondents. Finally, goal accomplishment was positively associated with significant other ratings of job satisfaction, supporting prior goal research and SCT theory.

Theoretical and Empirical Contributions

Taken as a whole, these findings make several important contributions to SCT. First, we introduce a new explanatory mechanism, perceived PO fit, through which motives can influence goal accomplishment and satisfaction. This expands SCT theory by demonstrating that efficacy is not the only mechanism through which motives operate. We demonstrate distinct contributions of goal-specific efficacy and PO fit perceptions as explanatory mechanisms linking motives to goal accomplishment and satisfaction. This reinforces existing theory regarding the role of efficacy (Debowski et al. 2001; Sheldon and Elliot 1999), and introduces PO fit as a viable additional mechanism. PO offers a valuable addition in part because self-efficacy and PO fit represent different cognitive assessments. Whereas self-efficacy involves an assessment of one's capacities (Bandura 2012), PO fit involves an assessment of both the individual and the organization (Kristof 1996). Further PO fit perceptions are not necessarily rooted in capacities (Kristof-Brown et al. 2005), but rather in the compatibility of the values held by the individual and the organization. For this reason, the combination of such distinct

psychological processes offers a more complete explanation for how individuals interpret motives and translate them into goal-related action. This opens the door for additional SCT research to consider other behaviors and attitudes that might be influenced by goal motives, such as global (rather than task-based) job performance or other workplace assessments (e.g., Moran et al. 2012).

Empirically, we demonstrated that autonomous and controlled mechanisms have differential impact on the explanatory mechanisms. Heretofore, SCT research subtracted controlled motives from autonomous motives, which obscured the distinct impact of each (Edwards 1993). Our results at the individual-level suggest that the dominant effects are coming from the positive relationship of autonomous motives with efficacy and perceived fit. Although controlled motives had negative relationships with each outcome, these relationships were weaker than those of the autonomous motives. Prior studies (e.g., Judge et al. 2005; Sheldon and Elliot 1998; Sheldon and Houser-Marko 2001) using difference scores masked these differences; whereas, modeling them separately allowed us to parse out the unique impact of each type of motive. Theoretically, this supports the importance of autonomy as a fundamental need, as articulated by self-determination theory (Deci and Ryan 1985). To continue to add clarity to SCT research, we recommend modeling autonomous and controlled mechanisms separately.

Through the multilevel analysis, we also contribute to SCT theory by demonstrating that the propositions of SCT operate similarly at the individual- and goal-levels. Specifically, we provide evidence of the efficacy mechanism functioning at both the person- and the goal-levels. Previous SCT research has worked almost exclusively at the person-level (e.g., Sheldon and Elliot 1999), limiting empirical evidence of SCT to the explication that *individuals* who pursue self-concordant goals are more likely to accomplish their goals than individuals who pursue non-self-concordant goals. Our findings are to some degree consistent with that conclusion by providing evidence that SCT's aggregation across goals within individuals is justified. However, our data also showed considerable variability in individuals' configuration of motives across their goals. Some individuals had primarily autonomous or controlled motives, and others had goals motivated by both autonomous and controlled purposes. As some nascent research might suggest (Sheldon et al. 2015), individuals appear to have tendencies to pursue goals driven by similar motives. Our study advances this line of reasoning by identifying significant cross-level interactions that suggest that goal accomplishment is not only a function of the motives for that goal, and not only a function of individuals' typical motives across all their goals, but also a function of the interaction between the motives for a particular goal and the kinds of motives individuals typically have for pursuing all their goals.

One unexpected finding that came from the multilevel analysis was the relatively weaker relationship of efficacy with goal accomplishment in the goal-level model versus the individual-level model. Bandura has typically argued that self-efficacy is fairly narrow, and is assigned to a specific task or "activity domains" (p. 17, 2012). Yet, recent debates over the appropriate scope for self-efficacy have described a broader set of beliefs that individuals have about their abilities across activity domains. We are careful not to over-interpret these differences, as they could be artifactual given that people who generally reported higher levels of efficacy across all their goals may also have reported generally higher accomplishment in their goals. More generally, our results provide some support for both conceptualizations of self-efficacy in terms of their role within the self-concordance model of goal pursuit in that relationships have consistent directions across both levels of analysis. We advocate for more research on self-efficacy, at levels of domain specificity, within the context of SCT.

Strengths and Limitations

As with any research, these findings should be considered in light of the study's strengths and weaknesses. The strengths include the independence of data sources and the time-separated design. Because job satisfaction was reported by significant others, the relationship between perceived PO fit and job satisfaction is not biased by common source variance. By collecting data across two points in time, we were able to relate earlier motives and goal—relevant attitudes with later goal attainment and work-related attitudes. This allows us to investigate the relationship of motives with longer-term outcomes.

A key limitation of the study is the poor response rate we received from each of the samples. Although the final numbers were adequate to conduct the analyses, the low response rate means that we are not able to determine whether these respondents are representative of the larger population. For surveys of this nature, where people are asked to produce responses to open-ended questions that request them to think deeply (i.e., we asked about 5 goals, not just 1), the response rate is low but not unexpected. Conducting a time-separated second survey with an additional significant other survey compounded this concern. Compared to nonrespondents, we conjecture that our participants were people who were willing to think deeply about their goals and record progress toward them. This raises the possibility that people who are more intrinsically motivated may have been more inclined to respond. However, the mean of autonomous goals (6.33) was only

slightly higher than the mean of controlled motives (6.14), suggesting that they were not more strongly driven by one type of motive than another. The relationships in our final sample were internally consistent with the subsamples, as well as within a range of other related works (Sheldon and Elliot 1998, 2000). However, the possibility of sampling bias cannot be ruled out. Another sample-based limitation is that because participants' jobs were of a similar O-NET job code, we only examined jobs with medium levels of autonomy. Thus, the results should not be extrapolated to other types of jobs, in which more discretion or less discretion over work-related goals might be found. We would expect greater autonomy in one's job would allow for more autonomous and less controlled motives, and vice versa for lower autonomy jobs. This would produce greater variability in the means of the motives and may change the nature of the relationships between these motives and efficacy, fit, goal attainment, and satisfaction. Finally, although we made our best efforts to buttress the causal orientation of the study, several links in our model were measured at the same time or with the same source. Our study may loosely support influence, but it clearly does not meet all of the conditions necessary for strong causal inference. Ideally, motives would be assessed at a time prior to the first measurement of PO fit and goal-specific efficacy. This would help to reduce the likelihood of reverse causality, in which one's perceived fit and goal-specific efficacy might influence the motives for goal pursuit. A second measure of efficacy (generalized rather than goal-specific, because efficacy becomes moot if the goal is already accomplished by Time 2), could have also been collected to determine how goal accomplishment influenced later levels of efficacy. This would have provided a more complete examination of how these concepts are related over time.

Future Research

Our results demonstrate that individuals who pursue goals driven by autonomous motives perceive higher levels of efficacy and fit with their organizations. However, we do not know what stimulates them to pursue such goals in the first place. For example, it would be interesting to know if there is within-individual variation over time in self-concordance such that, week-to-week, individuals vary in the motives underlying goal pursuit. Does within-individual variance systematically vary such that it explains within-individual variation in job satisfaction, which is substantial (Judge and Ilies 2004)? Also, are there individual differences in this within-individual variation? For example, given that neuroticism is closely linked to difficulties in emotional regulation (Kokkonen and Pulkkinen 2001), it seems possible that neurotic individuals may exhibit more

variation in self-concordance than more emotionally stable individuals.

The time-separated design of this study could also be applied to a longer-term study of motives, efficacy, fit and goal-related outcomes. Goal accomplishment can create a condition of enactive mastery (Bandura 1986), in which efficacy would increase after success. The success or failure of a goal pursuit episode could carry over into individuals' next phases of goal-setting for similar goals or other unrelated goals. Sheldon and Houser-Marko (2001) describe the positive side of this cycle as an "upward spiral" generated over time as goals driven by autonomous motives are more likely to be accomplished, resulting in higher levels of subsequent efficacy for similar goals. To best study this type of cycle, we recommend that an average or generalized efficacy measure, rather than goal-specific efficacy be used. For example, the general perceived self-efficacy (GSE) scale (Schwarzer and Jerusalem 1995), which is designed to capture the person's self-beliefs about the ability to cope with a variety of life demands, might be useful. Our finding that average goal-related efficacy had a stronger relationship with average goal accomplishment than did goal-specific efficacy with specific goal accomplishment reinforces the importance of the more global assessments of efficacy.

Another promising area for research on the antecedents of goal motivation may stem from research on subconscious goals. Locke and Latham (2004) suggested that the subconscious has been underemphasized in motivation research, and called for more research on the topic. Bargh et al. (2001) have argued that subconscious goals have independent effects on behavior beyond conscious goal-levels. Is it possible that individuals hold in their minds subconscious goals, and might these subconscious goals affect appraisals of fit independent of explicit goals?

Furthermore, because we assessed autonomous and controlled motives separately, we were able to test the possibility of an interaction between these higher order motives. Such an interaction is conceptually appealing, in that having high levels of *both* autonomous and controlled motives might result in more positive outcomes because goal accomplishment would satisfy multiple motives. We tested for this possibility using OLS regression, but an interaction between autonomous and controlled motives did not have a statistically significant impact on fit perceptions or efficacy at any level in our data. Although our data did not support an interaction, we maintain its theoretical plausibility and believe it to be a potential area for exploration. In an increasingly fast-paced world, it seems reasonable that goals pursued for multiple reasons may be most motivating and therefore command individuals' attentional and personal resources. Further exploration into how "mixed motives" may influence fit perceptions,

efficacy, and eventual goal attainment is needed. Finally, we note that our focus on PO fit does not preclude other types of fit perceptions, such as person–job (PJ) fit, as being influenced by goal motives. We emphasize PO fit in this manuscript because we believe that people's motives for various work goals convey to themselves a broader sense of meaning about themselves which is most comparable to the broader values of the organization. PJ fit emphasizes more heavily whether abilities are commensurate with task requirements, which has more to do with what a person "can" do, rather than what they "choose" to do. We argue that the motivations behind an individual's set of work goals collectively inform the perception of fit with the broader organization; however, there may also be interesting relationships between task-related goals, efficacy and perceived PJ fit.

Practical Implications

These findings have implications for organizations and individuals. For organizations, the positive relationship of autonomous motives with perceptions of PO fit, and subsequent goal accomplishment and satisfaction, suggest that organizational managers should seek to link work-related goals with employees' value systems. Our study supports motives as antecedent conditions to fit perceptions, which provides insight into an ongoing source of fit perceptions. This is a notable departure from the vast majority of PO fit research, which has concentrated on pre- and immediately post-hire practices to influence fit (i.e., Cable and Judge 1996; Cable and Parsons 2001; Kim et al. 2005). As useful as these early tenure studies have been, they, however, do not address how fit perceptions can be managed in incumbent employees. Our results suggest a possible way that managers and employees may influence fit perceptions for employees who are already on the job. If motives for goal pursuit are meaningfully related to PO fit perceptions, they offer one way that fit perceptions may be influenced and changed over the course of employees' ongoing experience at work. This method of connecting with followers' values is something that transformational leaders are thought to do (Bono and Judge 2003), and something that can be included in leadership-development programs in an effort to enhance fit perceptions in incumbents.

The positive implications of pursuing self-concordant motives are also obvious for individual employees. Thus, career-development programs that seek to link employees' personal goals and values with work-related objectives may have benefits for the individual employees as well as the organization. Further, goal accomplishment is as much about implementation plans as the goal itself (Gollwitzer and Brandstätter 1997). Even if an organization sets a series of specific goals for individuals, ultimately it is up to

the individual to self-regulate so as to accomplish the goal. Thus, organizations can help employees refrain from inferring controlled motives by showing employees why goals are important to them and to the organization (i.e., directly addressing the issue of PO fit), how goal attainment can fulfill employees' needs and values, and convincing employees they are capable of accomplishing the goals (Ryan and Deci 2000).

These suggestions may be particularly important for individuals who are working under conditions of misfit. Although Schneider's ASA model suggests that turnover is the natural consequence of misfit, recent research suggests that misfit is often endured (Wheeler et al. 2007). If managers can encourage misfitting individuals to set and pursue self-concordant goals, they may be able to stimulate increases in perceived fit. Recent research suggests that individuals may endure misfit in the present, because they perceive a greater fit developing in the future (Johnson et al. 2013). Autonomous goal pursuit may hold the key to reframing current levels of misfit into a state of fit anticipation, with positive future trajectories. This is a notable departure from the vast majority of PO fit research, which has concentrated on pre- and immediately post-hire practices to influence fit (i.e., Cable and Judge 1996; Cable and Parsons 2001; Kim et al. 2005). Our results suggest a possible way that managers may influence fit perceptions by encouraging autonomous goal pursuit. Because motives for goal pursuit are meaningfully related to PO fit perceptions, they offer one way that fit perceptions may be influenced and changed over the course of employees' ongoing experience at work. This process can shapes "fit narratives," or the story individuals construct around their perceptions of fit (Shipp and Jansen 2011). Managers' encouraging the setting of autonomous goals, regardless of their content, may be a strong influence over these narratives.

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