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Some goals just feel easier: Self-concordance leads to goal progress through subjective ease, not effort



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ABSTRACT

The objective of the present study was to examine whether subjective ease of goal pursuit would mediate the relation between an individual's motivation for pursuing a goal and their subsequent goal progress. Toward the beginning of a university semester, participants (n=176) identified three goals they planned to pursue throughout the semester and reported their motivation for pursuing each of them. Participants then indicated, at two monthly follow-ups, how easy and natural it felt to pursue these goals and how much effort they were putting into attaining them. At the end of the semester, participants reported on their goal progress. Within-person analyses indicated that self-concordant goals were perceived as being easier to pursue relative to an individual's other goals. Using multilevel structural equation modeling, results indicated that subjective ease, but not effort, mediated the relation between motivation and goal progress, such that people were more likely to successfully accomplish self-concordant goals because pursuing those goals was perceived as being more effortless, and not because more effort was exerted. Discussion focuses on the implications and future directions for research on subjective effort and goal pursuit.

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1. Introduction

Dave has recently set a goal to complete a marathon. Running has always been one of his favorite hobbies and so he often competes in local races. In order to train for the marathon, he significantly increased the amount of time he spent running, often crushing his weekly milestones building up to the necessary 42.2 km. While to some this may seem like a daunting, or even impossible task, if you were to ask Dave, he would tell you that he was able to do it with great ease, often referring to being "in the zone" while running. Given the difficulty of this goal, how is it that Dave was able to surmount this task with seemingly little effort? The purpose of the present study is to investigate whether an individual's motivation can influence both subjective ease and exerted effort in pursuing their goals, which in turn affect goal progress.

While there are many different perspectives of self-regulation (e.g., Fujita, 2011), an important predictor of goal attainment is the reasons *why* a person is pursuing a goal. Research based on self-determination theory (Deci & Ryan, 2000) suggests that people's

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reasons for pursuing a goal can vary from autonomous (because you truly want to) to controlled (because you feel like you have to). Within the literature on goal pursuit, the term self-concordance describes the extent to which an individual feels a sense of autonomy when pursuing a goal (Milyavskaya, Nadolny, & Koestner, 2014; Sheldon & Elliot, 1998, 1999). This type of motivation stems from an individual's own values and interests, and therefore the goal is pursued with a greater sense of volition. Such reasons may include pursuing a goal because it is inherently fun or enjoyable (intrinsic), it is aligned with an individual's broader life goals (integrated), and/or it is personally meaningful and important (identified). In contrast, goals that are pursued to comply with internal or external demands tend to engender the feeling of being controlled. Such goals tend to be less representative of an individual's own interests and values, and instead are often pursued to quell anxiety and guilt (introjected) or to gain approval from others (external). According to self-determination theory, these various types of motivation fall along a continuum (Ryan & Connell, 1989), representing the extent to which an individual functions in a relatively autonomous versus controlled manner. As such, self-concordance is typically calculated by combining the average of the autonomous reasons with the reflected average of the controlled reasons (e.g., Milyavskaya, Nadolny, et al., 2014; Sheldon & Elliot, 1999).

Research has found that pursuing self-concordant goals is associated with better goal progress and ultimately attainment (Milyavskaya, Inzlicht, Hope, & Koestner, 2015; Sheldon & Elliot, 1999; Sheldon &

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Houser-Marko, 2001). However, the mechanism by which this occurs is currently subject to debate (Milyavskaya, Inzlicht, et al., 2015). The dominant explanation thus far comes from the self-concordance model, which suggests that pursuing self-concordant goals is associated with sustained effort, which in turn predicts goal attainment (Sheldon & Elliot, 1999; Sheldon & Houser-Marko, 2001). For example, Vasalampi, Nurmi, Jokisaari, and Salmela-Aro (2012) found that pursuing a selfconcordant educational goal was associated with the effort students invested into achieving that goal. This effort was associated with goal progress, which subsequently predicted successful transition into university. Along with the initial research on the self-concordance model (Sheldon & Elliot, 1999), these findings suggest that the amount of conscious effort an individual puts into achieving their goal is an important aspect of self-concordant goal pursuit. However, recent research (Milyavskaya, Inzlicht, et al., 2015) has challenged this claim, suggesting automatic goal pursuit as a potential alternative mechanism explaining why self-concordant goals are more likely to be attained.

While the self-concordance model and other theories of self-regulation (e.g. Baumeister, Vohs, & Tice, 2007, Hagger, Wood, Stiff, & Chatzisarantis, 2010) have emphasized the importance of effort, recent research suggests that effective self-regulation is a function of more automatic processes (e.g., Gillebaart & de Ridder, 2015). For example, it was found that people high in trait self-control are more likely to achieve their goals without being distracted because they are able to make decisions in a more automatic way (Gillebaart & de Ridder, 2015) or rely on beneficial habits (Galla & Duckworth, 2015), consequently requiring less effort. It thus seems that successful goal pursuit may be a product of more effortless, rather than effortful, processes.

Initial evidence reconciling this proposition with the self-concordance model was provided by Koestner, Otis, Powers, Pelletier, and Gagnon (2008), who found that students who pursued self-concordant goals reported greater use of implementation intentions, subsequently making more goal progress. In other words, individuals who pursue selfconcordant goals do not have to consciously think about decisions related to their goals because responding is more automatic, therefore buffering against potential distractions (e.g. Brandstätter, Lengfelder, & Gollwitzer, 2001, Gollwitzer, 1999). Furthermore, Milyavskaya, Inzlicht and colleagues (2015) found that self-concordant goals were associated with an implicit bias away from goal-disruptive temptations — for example, people who report eating healthy for autonomous reasons tended to have a more positive hedonic response to healthy food and a more negative response to unhealthy food. In a subsequent study, they also found that people who pursued self-concordant goals reported experiencing fewer obstacles, which in turn enabled them to make more progress on their goals without needing to exert more effort. In contrast, people who pursued discordant goals reported both experiencing more obstacles and exerting more effort, which ended up impeding actual goal progress, likely because all of the effort was used to overcome the obstacles. While these studies indicate that self-concordance is associated with the perception of fewer obstacles and temptations, so far the latter study has been the only one to empirically examine this mechanism in relation to actual goal progress. This leads us to our current study, whereby we sought to more directly examine whether self-concordant goals would in fact be experienced as more effortless, and whether this would lead to more progress made toward attaining such goals.

2. Present study

The present study was designed to extend the work of Milyavskaya, Inzlicht, et. al. (2015) by examining the longitudinal impact of self-concordance on goal progress as a function of subjective ease and actual effort. Specifically, participants were asked to identify three personal goals and their reasons for pursuing them. Then, over the course of the semester they were asked to report how easy it felt to pursue those goals, as well as how much effort they were actually exerting in order to attain them. At the end of the semester, participants then

reported on their goal progress. We hypothesized that goals that are more self-concordant would feel easier to pursue. We also expected this subjective ease of goal pursuit to mediate the relation between self-concordance and goal progress, such that goals that feel easier to pursue would be more likely to be accomplished. While we did expect people to make more progress on those goals where they exerted more effort, we did not expect self-concordance to lead people to use more effort, and as such did not expect effort to act as the mechanism responsible for the greater attainment of self-concordant goals.

3. Method

3.1. Participants and procedure

Participants were 193 undergraduate students who took part in a semester-long study of goal pursuit. At the start of the winter semester, participants completed a 1.5-hour laboratory component where they completed measures related to their goals and their personality. Three online follow-up questionnaires were sent out and completed at 4-week intervals (in February, March, and April), each taking approximately 20 min to complete. At each follow-up, participants were reminded of their goals and responded to questions related to goal pursuit. We used effort and ease of goal pursuit assessed in February and March, and goal progress assessed in April. One hundred and seventy-six participants (120 females, 36 males, 20 did not report gender) ages $18-35 \, (M=20.16,\, SD=2.44) \, completed$ at least one of the three follow-ups. $100 \, (M=20.16,\, N=2.44) \, completed$

4. Measures

4.1. Goal descriptions

Participants were asked to list three personal goals that they planned to pursue during the semester, using the following instructions (e.g., Koestner et al., 2008): "Personal goals are projects and concerns that people think about, plan for, carry out, and sometimes (though not always) complete or succeed at. They may be more or less difficult to implement; require only a few or a complex sequence of steps; represent different areas of a person's life; and be more or less time consuming, attractive, or urgent. Please think of three personal goals that you plan to carry out this semester." Examples of goals listed by participants include "get a 3.6GPA", "find employment", "improve my health", and "learn French."

4.2. Goal self-concordance

After each goal, participants were asked to rate their motivation for pursuing that goal on a 7-point Likert scale from 1 (*not at all for this reason*) to 7 (*completely for this reason*) on four items that assessed external, introjected, identified and intrinsic reasons for goal pursuit (Sheldon & Elliot, 1999). As is commonly done with these items (Sheldon & Elliot, 1999), a combined score of relative autonomy was computed by averaging the intrinsic and identified scores with the reverse of the external and introjected scores.

¹ Other research with this sample has examined the role of inspiration on goal progress (Milyavskaya, Ianakieva, Foxen-Craft, Colantuoni & Koestner, 2012), the effects of psychological need satisfaction and well-being (Milyavskaya, Philippe, & Koestner, 2013), trait perfectionism and goal pursuit (Powers, Milyavskaya, & Koestner, 2012), and support (Koestner, Powers, Milyavskaya, Carbonneau, & Hope, 2015). None of the other studies have examined the effects of goal motivation on goal progress, and there is no overlap between the content and the hypotheses of the present study and the other studies that have used this sample.

4.3. Goal difficulty

The perceived difficulty of each goal was assessed at the same time as motivation using the following item for each goal: "How challenging do you think it will be to attain this goal?" This was rated on a scale of 1 (not at all) to 7 (extremely).

4.4. Ease of goal pursuit

The extent to which participants found it easy to engage in their goal pursuit was measured with two items for each goal at each of the two intermediate follow-ups. The items were "how laborious and taxing does it feel to engage in activities related to this goal?" (reverse coded), and "how easy and natural is it for you to work on this goal?" Both were rated on a scale of 1 (not at all) to 9 (very much).

4.5. Effort

Effort for each goal was assessed at each of the follow-ups using one item: "I have tried really hard to achieve this goal". This item was rated for each goal on a 1 (*strongly disagree*) to 7 (*strongly agree*) scale.

4.6. Goal progress

Goal progress was assessed at the final follow-up using three items for each goal (e.g. Koestner, Lekes, Powers, & Chicoine, 2002, Koestner, Powers, Carbonneau, Milyavskaya, & Chua, 2012): "I have made a lot of progress toward this goal", "I feel like I am on track with my goal plan", and "I feel like I have achieved this goal." All ratings were made on a 7-point scale ranging from 1 ($strongly\ disagree$) to 7 ($strongly\ agree$). Reliability was excellent, α 's ranging from .93 to .96 for the three goals.

4.7. Analytic strategy

Since each person named three goals, we conducted multilevel analyses with goals nested within-person. For the preliminary analyses, the MIXED procedure in SPSS version 22 with goals nested within participants was used. To test for mediation, MPlus software was used to conduct multilevel structural equation modeling (MSEM) analyses (Preacher, Zyphur, & Zhang, 2010). In all analyses, a full information maximum likelihood (FIML) approach was used to deal with missing data (Enders & Bandalos, 2001).

5. Results

5.1. Preliminary analyses

Table 1 presents the means, variances, and intraclass correlations (ICCs) of all study variables. Results suggest that approximately 78% of the variance in motivation was within-person (between goals). Interestingly, the ICC for ease of goal pursuit was less than .01, meaning that over 99% of the variance in how easy goal pursuit was perceived to be was between-goals. This suggests that it is not the case that some people generally perceive goals to be more effortful compared to other people, but instead that working on some goals is perceived as

Table 1Descriptive statistics for all study variables.

	Mean	SD	ICC
Goal self-concordance	4.96	1.16	.22
Ease of pursuit	4.79	1.65	.005
Effort	4.59	1.60	.25
Goal progress	4.67	1.74	.15
Goal difficulty	5.25	1.54	.24

Note. Ease of pursuit was measured on a 9-point scale; all others on a 7-point scale.

Table 2Results from multilevel analyses.

	Effortless goal pursuit	Effort	Goal progress (Model 2)
	Estimate (SE)	Estimate (SE)	Estimate (SE)
Goal difficulty	35 (.04)**	.09 (.05)†	16 (.05)*
Mean goal self-concordance	.26 (.08)**	.01 (.10)	.01 (.09)
Goal self-concordance	.56 (.08)**	.03 (.08)	.04 (.09)
For Model 2 only			
Mean ease of pursuit			01 (.09)
Mean effort			.67 (.07)**
Goal ease of pursuit			.15 (.05)*
Goal effort			.66 (.05)**

^{***} p < .001, **p < .01, *p < .05, † <math>p < .10

effortful while others appear effortless. Results also showed that approximately 85% of the variance in goal progress was between-goals (within-person).

5.2. Primary analyses

We examined our primary hypotheses using multilevel analysis (MIXED command in SPSS), with self-concordance used to predict, in turn, ease of goal pursuit, effort, and goal progress. Self-concordance was person-centered, and included in the model along with the mean person-level value. This analytic strategy permits us to examine both between and within-person effects simultaneously, while precisely accounting for the source of the variance (Nezlak, 2012). Random effects were tested and found to be non-significant in all analyses; we thus report results from the fixed-effects model. Participants' ratings of goal difficulty at Time 1 were also included in the model to control for goal difficulty.

We first tested whether self-concordance affected how easy goal pursuit was perceived to be. Results show both within and betweenperson effects for self-concordance (see Table 2). This shows that pursuing more self-concordant goals was generally associated with more 'effortless' goal pursuit, but that people also found it easier to pursue those goals that were pursued for more autonomous and less controlled reasons compared to their other goals. Next, we conducted the same analyses using reports of actual exerted effort as the dependent variable. Here, self-concordance was not a significant predictor of effort.² Finally, we ran a model that included self-concordance, ease of goal pursuit, and actual effort in predicting goal progress (Model 2 in Table 2). In this model, both ease of goal pursuit and actual effort were predictors of goal progress, such that people who generally exerted more effort on their goals made more progress, and that people make more progress on goals that they perceive as easier to pursue compared to their other goals.

5.3. Mediation

To test whether ease of goal pursuit mediated the relation between motivation and goal progress, we used MPlus software that allowed us to test multiple mediators simultaneously while accounting for the multilevel nature of our data (Preacher, Zhang, & Zyphur, 2011). The model tested is illustrated in Fig. 1, resulting in 4 indirect effects (see Table 3).³ The within-person indirect effects of motivation through subjective ease of goal pursuit were significant (b = .127, SE = .037, 95% CI [.053; .204]). This suggests that people are more likely to successfully accomplish goals that are more self-concordant because pursuing

² Further analyses looking separately at autonomous and controlled components of self-concordance showed that both positively predicted effort, although only autonomous motivation was significant. This suggests that the strength or amount, rather than the type of motivation (i.e., autonomous vs. controlled) affects effort.

³ Adding goal difficulty to the model did not change the mediation results.

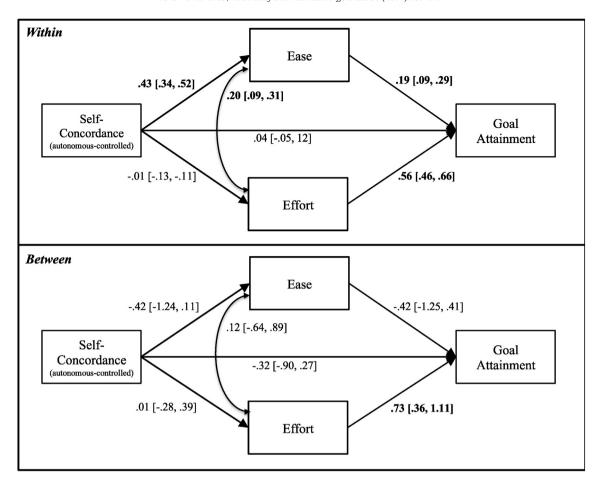


Fig. 1. MSEM model of within and between-person effects on goal attainment, including coefficients with their 95% confidence intervals. All results are standardized using the MPlus SDTXY procedure. Values in bold are significantly different from zero at *p* < .05.

those goals feels easier, and not because they exert more actual effort on those goals.

6. Discussion

So how did Dave's motivation help him complete the marathon, despite it being a seemingly difficult task? The objective of the present study was to examine whether subjective ease of goal pursuit would mediate the relation between an individual's motivation for pursuing a goal and their subsequent goal progress. Our results indicated that subjective ease, but not effort, mediated this relation, such that people were more likely to successfully accomplish more self-concordant goals because pursuing those goals was perceived as being more effortless, and not because more effort was exerted. In other words, Dave was able to complete this goal because his love for running allowed him to

Table 3Between and within-person indirect effects on goal progress.

Indirect effects	Estimate (SE)	95% CI
Within Ease of pursuit	.127 (.038)	[.053; .202]
Effort Between Ease of pursuit	008 (.051) .228 (.320)	[109; .092] [399; .855]
Effort	.052 (.167)	[274; .379]

Note. Values in bold are significantly different from zero at p < .05.

feel like his training was natural and enjoyable, rather than effortful, thus making the goal easier to accomplish.

Using multilevel analyses, we were able to examine both the between and within-person effects on goal progress, thus allowing us to rule out the potential effects of individual differences. Consistent with previous research (Milyavskaya, Inzlicht, et al., 2015; Milyavskaya, Nadolny, et al., 2014; Milyavskaya, Nadolny, et al., 2015), our withinperson analyses revealed 78% variability in motivation and 85% in goal progress. This suggests that people generally tend to pursue different goals for very different reasons, and that the extent to which they are successful varies widely from goal to goal. Additionally, our analysis also showed that 99% of variability in subjective ease was between goals, and that goal motivation was significantly related to subjective ease at only the within-person level. However, there was no relation between motivation and actual effort at either the between or withinperson levels, suggesting that people did not exert more effort when pursuing generally more self-concordant goals compared to other people, nor did an individual exert more effort in pursuing a self-concordant goal in relation to their other goals. These findings hold true after controlling for goal difficulty, indicating that self-concordant goals feel easier to pursue, regardless of whether they are actually difficult or not.

The findings from the current study support the idea that there is potential for people to engage in successful, effortless self-regulatory strategies that extend beyond impulse inhibition (Adriaanse, Kroese, Gillebaart, & De Ridder, 2014; De Ridder, Lensvelt-Mulders, Finkenauer, Stok, & Baumeister, 2012; Fujita, 2011; Gillebaart & De Ridder, 2015; Milyavskaya, Inzlicht, et al., 2015). This suggests that people who pursue goals because they want to are able to make

more efficient decisions without compromising progress toward their goals, likely because they use more unconscious strategies (e.g., implementation intentions, habits) that help buffer against potential obstacles or distractions that may arise when pursuing a goal (Koestner et al., 2008). Extending this idea, Milyavskaya, Inzlicht, and colleagues (2015)have shown that pursuing self-concordant goals was associated with experiencing fewer obstacles, which in turn predicted goal progress over time. The present study further compliments these findings by emphasizing the role of subjective ease. Not only do people encounter fewer temptations and obstacles that stand in their way of self-concordant goals, but they also *feel* like these goals are easier to pursue.

Our findings also revealed that subjective ease was positively related to effort, suggesting that exerting effort to pursue a goal can feel more "natural." At first glance our findings may contradict previous research indicating that difficult goals lead to better performance (Locke & Latham, 2002); however, we suggest that even though a goal may be objectively difficult, an individual's motivation can alter their subjective perception of how easy it really is (e.g., it is easier to pursue a goal that is fun rather than because you should). This idea is related to flow, which is characterized by a person performing an activity with a sense of full immersion, the loss of conscious awareness, and experiencing the activity or goal as intrinsically rewarding (Engeser & Rheinberg, 2008; Nakamura & Csikszentmihalyi, 2002). Research suggests that when intrinsic incentives that come from pursuing an activity are congruent with an individual's motivation, a flow state is more likely to occur (Schattke, Brandstätter, Taylor, & Kehr, 2014). Therefore, because Dave enjoyed running he was able to receive the associated intrinsic rewards of running the marathon (e.g., personal satisfaction), which facilitated the feeling of being "in the zone," subsequently making this goal easier

The present study may also have some important implications for self-determination theory (Deci & Ryan, 2000) and the selfconcordance model of goal pursuit (Sheldon & Elliot, 1999). Previous research on self-concordance has shown that the dominant mechanism for successful goal pursuit is centered on sustained effort (Sheldon & Elliot, 1999). While this perspective is very much in-line with classic research suggesting that effortful self-regulation leads to greater success, our findings do not support these claims. Although both subjective ease and effort were significantly related to greater goal progress, selfconcordance was not associated with increased effort. One potential explanation for this discrepancy is that in some studies, effort and goal progress were assessed at the same time points (e.g., Sheldon & Elliot, 1999), making it possible that participants used progress as a heuristic for the amount of effort that they exerted, subsequently producing an error in judgment (e.g. Cho & Schwarz, 2008, Kruger, Wirtz, Van Boven, & Altermatt, 2004). For example, if a person sees that they made a lot of progress on their goal, this may bias their perception so that they believe they put in more effort than they actually did (i.e., if I made progress, I must have tried hard). In order to understand effort as a mechanism, future research is necessary in order to unpack the concept of effort itself. Specifically, future research could examine the effects of motivation on objective measures of effort (e.g., heart rate, pupil dilation). Similarly, it would be beneficial for future research to include objective measures of goal progress. Given that we took an idiographic approach to goals, we were limited to using self-report measures of goal progress, which, like effort, can be influenced by heuristics (Kruger et al., 2004) and participant recall bias (Hassan, 2005).

In sum, this study is the first to examine subjective ease as an alternative mechanism for the effectiveness of self-concordant goals. By demonstrating that self-concordant goals are perceived as being easier to pursue, this research supports past studies suggesting that automatizing goal pursuit can lead to greater progress. This research thus enhances our understanding of how unconscious self-regulatory processes can facilitate successful goal progress.

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