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## **Progress-Induced Goal Shifting**

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### Abstract

How does making progress impact motivation? Research has supported two seemingly competing hypotheses: First, studies have demonstrated that motivation increases as people make progress towards goal attainment (e.g., Forster, Higgins, & Idson, 1998; Hull, 1932); second, other studies have shown that motivation decreases as people make goal progress (e.g., Amir & Ariely, 2008; Fishbach & Dhar, 2005.) In the current chapter, we focus on when making progress leads to enhanced effort toward focal goal attainment, and when it leads to reduced effort toward focal goal attainment, and instead, enhanced effort toward alternate goals. Nine experimental studies investigate this issue, finding that progress-induced goal disengagement actually reflects goal **switching**, and accordingly, is most likely when multiple goals are highlighted, when the focal goal is long-term in nature, and when goal pursuers are high in the regulatory tendency of locomotion (Kruglanski et al., 2000).

Imagine setting a goal for yourself, say, to write a manuscript over your spring break. As the week goes on and you make progress – finishing the methods sections, for example – how would this affect your motivation to continue working? On the one hand, now that you have made progress, you are closer to goal attainment, which should motivate you. On the other hand, now that you have made progress, you may feel less motivated, choosing instead to switch to other goals that are not moving forward (e.g., catching up on reviews). In this chapter, we suggest that whether your progress inspires or de-motivates you will depend on features of both the goal environment and the goal pursuer. We will ask: When does progress lead to enhanced effort toward focal goal attainment, and when does it lead to reduced effort toward focal goal attainment – or even enhanced effort toward alternate goals?

Research by Fishbach and colleagues (see this volume), Förster, Liberman, and colleagues (see this volume) and Carver and Scheier (see this volume) describe exciting approaches to understanding the dynamics of motivation as progress is made. The current chapter adds a complementary perspective, describing recent research examining features of the goal system and the goal pursuer that may impact whether progress leads to ebbs or flows in motivation.

#### Background: Progress and Goal Pursuit

To begin, we review research on how progress impacts goal pursuit. Intriguingly, empirical support has been provided for two seemingly competing hypotheses. First, a large body of work has demonstrated that making progress towards goal attainment mobilizes resources towards achieving the goal. Second, recent research has found that making progress

towards goal attainment can also decrease effort towards achieving the goal. In this section we briefly review these findings, to provide background for the current research.

### *Progress Increases Motivation*

In a great deal of research, motivation has been shown to increase as the actor moves closer to goal attainment, a phenomenon described as the “goal gradient hypothesis” or the “goal looms larger” effect (Förster, Higgins, & Idson, 1998; Hull, 1934; Lewin, 1938.) In Hull’s original studies (Hull, 1934), rats were shown to run faster as they approached the food reward at the end of a maze. Support for the goal gradient hypothesis has emerged in both social and decision-making research as well (e.g., Förster, Grant, Idson, & Higgins, 2001; Losco & Epstein, 1977). For example, in the context of a customer loyalty program, Kivetz, Urminsky, & Zheng (2006) found that as customers got closer to receiving their free coffee, their purchases increased in frequency. Recently, Förster and Liberman have proposed a nuanced theoretical perspective on when to expect the “goal looms larger” effect, integrating ideas about expectancy and value into their predictions of when people will increase motivation as they near goal attainment (see this volume.)

### *Progress Decreases Motivation*

In recent research, motivation has also been shown to *decrease* as the actor moves closer to goal attainment. For example, Fishbach and Dhar (2005) demonstrated that goal progress can lead to decreased motivation, as reflected by goal-inconsistent choices and actions: When dieters were led to feel closer to their goal weight, they were more likely to choose a chocolate bar as a reward, an action clearly inconsistent with their goal of losing weight. However, these effects only occurred when participants perceived their actions as

indicating goal progress – when participants instead perceived their actions as indicating goal commitment, they showed *increased* goal-consistent action. By interpreting their actions as indicators of their own commitment, participants were more motivated to continue pursuing the goal. Fishbach and colleagues have proposed that these are two distinct dynamics of self-regulation (see Fishbach, this volume.)

Amir and Ariely (2008) have also found evidence that goal progress can undermine motivation. In particular, they have shown that exposure to clear markers of progress can cause people to see those markers as sub-goals, leading to a greater sense of accomplishment when reaching these sub-goals, and ultimately reducing effort toward the overarching goal.

Finally, Carver and Scheier (1990) have described the phenomenon of progress-induced “coasting.” Their influential cybernetic control model of self-regulation (e.g., Carver & Scheier, 1990; Carver & Scheier, 1998; see Carver & Scheier, this volume) predicts that when individuals, on a path towards goal attainment, recognize that they are doing poorly (not maintaining the desired rate of progress), they will experience negative affect and respond with increased effort, to get back on track (Carver, 2003; Carver & Scheier, 1998). In contrast, when individuals are doing very well (surpassing the desired rate of progress) and feel positive affect, they will react with *decreased* effort, to maintain the desired rate of progress. In this fashion, the discrepancy feedback model makes the somewhat counter-intuitive prediction that successful goal progress can reduce motivation.

### Current Research: Progress-Induced Goal Shifting

The current research investigates features of goal systems and goal pursuers that may moderate the role of progress in shaping motivation. This chapter will describe nine studies that test a set of related hypotheses.

Before jumping into the hypotheses, however, we need to provide some background into the methodology used in this research. Recently, a series of studies examined how goal pursuit shapes evaluations of other people who vary in their instrumentality for active goals (Fitzsimons & Shah, in press). Significant others who were instrumental for a primed goal were evaluated more positively, and approached more readily, while non-instrumental significant others were evaluated more negatively and avoided more readily. These goal-dependent evaluations of others appeared to function as a self-regulatory strategy – a process that bolsters the chances that the self will succeed. By immersing oneself in a goal-supportive environment, drawing closer to others who are helpful and avoiding others who could disrupt goal pursuit, participants were likelier to succeed. Indeed, participants who evaluated others based on their instrumentality were the most successful, earning higher grades (Fitzsimons & Shah, in press).

For the current chapter, we will use the existence of goal-dependent interpersonal evaluations as indirect evidence for the operation of a given goal. Instead of measuring motivation via self-report or cognitive accessibility, we will use this indirect measure – evaluations of goal-instrumental others – as we have repeatedly found that only when a goal is active do people evaluate their social world with that goal's advancement in mind (Fitzsimons & Shah, in press).

*Hypotheses.* It was actually in the course of conducting these studies that we began to wonder how these processes would change across the course of goal pursuit: When people make progress, how would this impact the way they felt about others who were instrumental for this goal? Based on classic goal gradient findings, we felt, on the one hand, that progress could increase motivation, and, as motivation increased, so too should people's use of instrumentality information when evaluating others. From this perspective, progress should lead to enhanced use of instrumentality information when evaluating others – thus, our instrumentality pattern should be larger when progress cues are provided. However, based on work by Fishbach and Dhar (2005) and theorizing by Carver and Scheier (1998), we also believed it was likely that progress cues could undermine motivation in some circumstances, and thus, reduce people's reliance on instrumentality information when evaluating others. From this perspective, our instrumentality pattern should be smaller when progress cues are provided.

We began to consider factors that might impact when progress would lead to goal disengagement, and when it would lead to heightened goal engagement. We speculated that different features of goal systems, along with unique features of goal pursuers, would produce these two patterns. In particular, we hypothesized that progress cues would primarily lead to goal disengagement in a multiple-goal context, and when the goals were relatively long-term in nature. We also hypothesized that progress-induced goal disengagement would be likelier to occur among people high in the regulatory tendency of locomotion (Kruglanski et al., 2000.) We conducted studies to examine these hypotheses in more detail, but first, we kept these ideas in mind while designing a preliminary study to test whether progress cues could indeed cause

individuals to rely less on instrumentality information when evaluating their social world, ensuring that the goals we examined were long-term in nature, and that the context did not rule out the activation of multiple goals.

### *Study 1: Progress-Induced Goal Disengagement*

We conducted an initial study to test the idea that progress could lead to goal disengagement (Fitzsimons, Fishbach, & Bargh, in prep.) Participants first reported the names of significant others – family members, romantic partners, and friends – who were instrumental and non-instrumental for a variety of goals (health and fitness goals, achievement goals, financial goals, etc.) After filler tasks, participants then completed either an achievement or control version of a scrambled sentence task, designed to activate achievement goals in a subtle fashion for half of the participants (Bargh et al., 2001.) Following the achievement prime, participants completed a single-item manipulation of perceived progress in the academic achievement domain (modified from Fishbach & Dhar, 2005). In the high progress condition, participants were asked: “In thinking about the past and the work you have done so far, how much progress have you made towards your academic achievement goals?” This question was designed to lead participants to think back over all the work they had already completed, thus temporarily highlighting a sense of progress. In the low progress condition, in contrast, participants were asked: “In thinking about your future and the work you have remaining, how much progress do you still have to make towards your academic achievement goals?” This question was designed to cause participants to focus forward, on all the work still to come, and thus temporarily highlight a lack of progress. A third group of participants skipped this question. All participants then completed the main dependent measure: closeness ratings of significant

others earlier named as instrumental and non-instrumental for the goal of academic achievement.

As seen in Figure 1, participants showed no strong evaluative preference for instrumental others in the control-prime conditions. As in our past research (Fitzsimons & Shah, in press), participants only show evaluative preference for instrumental others when that given goal is active. In the control-prime condition, when the achievement goal is *not* particularly active, participants don't evaluate others based on their instrumentality for this inactive and thus temporarily irrelevant goal.

Importantly, in the goal priming conditions, participants in both the control- and low-progress conditions showed the typical pattern (Fitzsimons & Shah, in press), demonstrating an evaluative preference for people instrumental to their academic achievement goal. In fact, the low-progress manipulation strengthened the effect, suggesting that participants' motivation was increased when they felt they were making poor progress (Carver & Scheier, 1998; Fishbach & Dhar, 2005). In contrast, participants in the high progress condition – who had temporarily been led to perceive that they were progressing on their academic goals – showed no evaluative preference for instrumental others: High progress erased the evaluative preference for people who could help with academic achievement.

Thus, this initial study found, in line with Fishbach & Dhar (2005), and Carver & Scheier (1998), that perceptions of poor progress increased motivation, while perceptions of good progress decreased motivation. Carver and Scheier (this volume) describe this idea as “coasting” – people who detect their rate of progress is high may lower their use of resources

towards this goal, effectively coasting until they detect cues indicating that their progress has slowed.

*Study 2: Commitment-Framing and Progress-Induced Goal Disengagement*

Importantly, if our findings reflected participants' "coasting" after progress, then manipulating participants' interpretation of their performance from "progress towards the goal" to "commitment to the goal" should erase the effect of the progress manipulation (see Fishbach, this volume.) If participants see their performance as evidence of commitment to their achievement goal, they should feel continued motivation to move forward, and should thus prefer achievement-instrumental others when the goal is primed.)

To test this hypothesis, we manipulated whether the same action was perceived as demonstrating commitment or progress in academic achievement. Participants wrote down their long-term academic achievement goals, and then described an academic project they had recently completed. Those in the progress-frame condition were then asked to indicate: "How much progress towards your long-term achievement goals did you make by completing this task?" Those in the commitment-frame condition were asked to indicate: "How much commitment to your long-term achievement goals did you show by completing this task?" Participants then rated their closeness to achievement-instrumental and non-instrumental others.

As predicted, and shown in Figure 2, in the commitment-frame condition, participants showed the usual preference for achievement instrumental others, while in the progress-frame condition, they showed no such preference. Thus, when a past goal-directed action was framed as commitment, people appeared to feel motivated to continue working towards their goal, as

reflected in their evaluative preference for others who advance their achievement goals. When people saw the same past goal-directed action as progress, however, they appeared to become less motivated to continue to work towards this goal, as reflected by their lack of preference for goal-instrumental others.

*Study 3: Progress-Induced Goal Switching.*

Although the two studies just described provide evidence that perceived progress can temporarily “turn off” an active goal, they don’t provide any information as to why this would occur. From a self-regulatory perspective, it does not seem functional to disengage from a goal as one makes progress, unless one is doing so in order to reengage in another important goal. Indeed, we hypothesize that progress may (under some circumstances, as explained later) cause people to switch from the current goal to another goal. When we found that participants were no longer evaluating others with respects to their instrumentality for achievement, we believe that what is happening is that they have now switched goals and are thus evaluating others with respect to another currently important goal.

Why would progress on one goal cause people to immediately activate another goal? At any given point in everyday life, people are juggling a number of important goals. Most people are aiming to make progress towards not just their achievement/career goals, but also their health goals, social goals, financial goals, etc. So when people perceive they have made progress on one particular goal, we suggest they may use that information as a cue that this is an opportunity to switch to an alternate goal, one that is not progressing as well. In this fashion, we suggest that perceptions of progress can function as a cue to automatically inhibit the focal goal, and activate other goals.

To test this hypothesis, we asked participants to provide their most important goal other than academic achievement. The goals reported varied from general health concerns (e.g., “to lose weight”) to idiosyncratic personal goals (e.g., “to get through all the levels of Warcraft”). We then asked participants to nominate others who were instrumental for their achievement goal but NOT for their alternate goal, and vice versa. Thus, each participant nominated two others— one who was achievement-instrumental but not alternate-instrumental (e.g., a study partner who hates working out /makes fun of you for playing video games) and one who was alternate-instrumental but not achievement-instrumental (e.g., a gym buddy/video game rival who is not supportive of academic studies). After several other tasks, including one in which participants are asked to provide an extensive list of their current friends, participants completed either the control or achievement version of the scrambled sentence task and a progress manipulation, as in earlier studies.

Participants then completed an implicit approach and avoidance measure, as used in Fitzsimons & Shah (in press.) In this task, a modified version of one created by de Houwer and colleagues (De Houwer, Crombez, Baeyens, & Hermans, 2001), participants see a series of names appear in the center of the computer screen in either blue or green font. Participants are asked to press a key to move an onscreen square from its current location (above or below the names) *towards* names in blue and another to move the square *away* from names in green (counter-balanced). Participants are told that “some of the names will be taken from your list of friends given earlier; to succeed at the task, don’t let the familiarity of the names affect you.” The dependent measure is response times to approach versus avoid the names of achievement-instrumental and alternate-instrumental friends. Importantly, the task does not simply measure

cognitive accessibility; rather, it measures implicit approach and avoidance tendencies. Faster response times on approach trials indicate greater approach of the named other, while faster response times on avoidance trials indicate greater avoidance of the named other.

We predicted that the progress manipulation would induce goal switching, as reflected by participants' approach and avoidance of others: Participants who temporarily felt good about their progress in achievement would not approach and avoid others on the basis of their instrumentality for achievement, but would instead base their approach and avoidance on others' instrumentality for their alternate goal.

As shown in Figure 3, participants in the low progress condition demonstrated the usual pattern of results (Fitzsimons & Shah, in press), approaching achievement-instrumental others more quickly than alternate-instrumental others, while participants in the high progress condition showed a complete reversal of this pattern, approaching alternate-instrumental others more quickly than achievement-instrumental others. (The complementary pattern emerged for avoidance data.) Thus, results supported our assumption that the progress-induced decrease in achievement motivation found in our prior studies did not reflect participants' simple disengagement, but rather an active switch to other important goals.

To sum up, three studies provided initial support for our hypothesis that progress can induce goal switching. We then aimed to investigate what factors of the goal system might influence when progress induces goal switching and when it inspires renewed motivation. Because research has compellingly demonstrated that progress can produce both of these two effects, we set out to uncover features of goal systems that predict one versus the other pattern of results.

## Features of the Goal System

In everyday goal pursuit, when would progress lead to disengagement, and when would it lead to enhanced motivation to accomplish the current goal? We examined the impact of two essential features of the goal system that we believe may play a key role in determining how progress shapes motivation: First, whether the goal pursuer is in a single-goal or multiple-goal context, and second, whether the goal being pursued is of a short versus long-term nature.

### *Study 4: Single vs. Multiple Goal Contexts*

In many experimental tests of the goal gradient hypothesis, and in most experimental situations in which goals are manipulated, participants' efforts are focused on one key goal. For example, in Hull's classic studies (1934), rats aim to run through a maze to find a food reward. In Förster, Liberman, & Higgins (2005), participants' goal is to find a given word in a series.

And indeed, in many real-life contexts, people have one main goal to focus on. At work, for example, people are primarily focused on their professional goals and more specifically, on the task goal at hand. In class, students are (presumably!) focused on their goal to learn the material. However, there are also many contexts in everyday life in which multiple goals could be pursued. On a given Saturday, people can pursue a number of distinct social, personal, and fitness goals. Even at work, people can pursue networking goals, productivity goals, and impression management goals. In many of our everyday situations, then, we have more than one goal that is potentially pursuable. How does this feature of the goal system – whether there are single or multiple goals – affect the impact of progress cues on motivation?

Imagine an individual, Jacques, who has multiple goals – he wants to save for an upcoming trip, improve his relationship with his daughter, and lose a few pounds. If he commits

his resources of time and energy to only one goal, the others will suffer: If he uses all his spare time to work to earn extra money, he won't have time to take his daughter to the zoo or make it to the gym. Thus, he needs to balance the pursuit of these goals if he hopes to maximize success. We hypothesize that this need to balance goals will impact responses to progress: When Jacques receives information that he is doing well on one of these goals, it may be to his advantage to switch to one of his other goals. If he makes some extra money one week, and recognizes he is well on his way to earning enough for his vacation, then he may decide to spend the next weekend enjoying quality father-daughter time. If, in contrast, Jacques has only one goal that can conceivably be pursued (imagine that the gym is closed and his daughter is out of town), there is no self-regulatory benefit to disengaging when progress is made. In this single-goal context, progress should motivate him to move forward towards goal completion.

Thus, we predict that in multiple-goal contexts, or when multiple goals are highlighted, individuals will use progress information as a cue to disengage from the progressing goal and switch to a goal whose progress is less advanced. To test this hypothesis, we conducted a study in which we manipulated multiple vs. single goal focus. Participants provided instrumentality information about their friends for their academic achievement goal among other goals, and completed either a low or high progress manipulation, as in earlier studies. To this manipulation, we added a short description of the importance of achievement goals that served as the manipulation of multiple vs. single goal focus. In the multiple-goal focus condition, participants read that although academic achievement is predictive of success and happiness in life, community involvement and social activities are just as important. In the single-goal focus condition, participants read that although community involvement and social activities are

rewarding, academic achievement is by far the most predictive of success and happiness in life. Via this manipulation, we hoped to create a temporary focus on either multiple goals or just a single goal. Finally, participants evaluated their closeness to a number of friends, including those nominated as instrumental and non-instrumental for achievement.

As shown in Figure 4, this manipulation had a significant moderating impact on the effects of progress. In the multiple goal condition, high progress erased the effects of instrumentality on evaluations, as it has done in previous studies. In contrast, in the single goal framing condition, the preference for achievement-instrumental others was maintained (and non-significantly strengthened) in the high progress condition. This experiment supported our hypothesis that progress will induce goal disengagement in multiple-goal contexts, while in single-goal contexts, the “goal looms larger” effect should occur.

#### *Study 5: Short vs. Long Term Contexts*

We also hypothesized that progress cues would be more likely to lead to goal disengagement in a long-term goal context. If Jacques’ goal will take him several years to accomplish, he is unlikely to pursue only this goal until it is accomplished – he would surely need to attend to other goals (or take a break) before he achieved this goal. Thus, in a long-term context, progress cues may be useful as a signal that this goal is proceeding as planned, allowing an individual to take a break or turn to another goal. If, though, Jacques could accomplish his goal within a few hours, it would be of little self-regulatory advantage to switch goals within this context, and instead, would likely be in his best interest to push towards completion.

To test this hypothesis, we conducted an experiment replicating the previous studies, but adding a manipulation of short versus long-term focus. Participants provided instrumentality information and completed a progress manipulation that also consisted of the manipulation of short versus long term focus. Participants were asked to think about their academic achievement goal, and to write down either what they hoped to accomplish within the upcoming two weeks or within the next year. Participants then evaluated their feelings of closeness to instrumental and non-instrumental other.

As shown in Figure 5, this manipulation again significantly moderated the impact of the progress manipulation on evaluations. When participants were in a long-term goal focus, they ceased to show an evaluative preference for achievement-instrumental others. In contrast, when participants were in a short-term goal focus, progress had no impact on their evaluations: In both low and high progress conditions, participants strongly preferred instrumental others. Again, the effect was marginally stronger in the high progress condition, supporting the “goal looms larger” phenomenon.

#### Features of the Goal Pursuer

Thus, two studies demonstrated that in long-term and multiple-goal contexts, people use progress cues as signals to disengage, while in short-term and single-goal contexts, people respond to progress cues by reengaging in the current goal.

Beyond the goal context, we wondered to what extent features of the *goal pursuer* could moderate the effects of progress on goal disengagement. We hypothesized that the individual difference of regulatory mode – in particular, people’s tendency towards locomotion (Kruglanski et al., 2000) – could be an important predictor of the tendency to respond to goal

progress by switching goals (Orehek, Fitzsimons & Kruglanski, in prep). Indeed, Förster and colleagues (Förster, Higgins, & Idson, 1998; Förster, Grant, Idson, & Higgins, 2001) have found that the “goal looms larger” effect is influenced by regulatory focus, such that, for example, people high in promotion orientation increase in motivational strength as the goal nears more under promotion (versus prevention) focus. The finding that regulatory focus impacts responses to progress gave us confidence in our hypothesis that regulatory mode may also play an important role.

#### *Locomotion – An overview*

As proposed by Kruglanski et al. (2000), self-regulation consists of two distinct regulatory modes – assessment and locomotion. Assessment is the evaluative mode of self-regulation, consisting of the evaluation of potential behaviors and comparison of one’s current state to the desired state (also see Carver & Scheier 1998). In contrast, locomotion is the action mode of self-regulation, consisting of initiating goal-directed action and moving from state to state. Locomotion and assessment are both essential components of the self-regulation system, and each occur both temporarily – cued by aspects of the situation – and chronically, reflected in individual differences in the tendency to engage each regulatory mode. The individual difference variables have been measured by self-report scales created by Kruglanski and colleagues (2000). Items in the locomotion scale include such statements as “I am a doer,” “When I decide to do something, I can’t wait to get started,” and “I am a workaholic.”

#### *Locomotion and Responses to Goal Progress*

According to regulatory-mode theory, people high in locomotion view goals as ‘excuses’ to engage in psychological movement. In this fashion, locomotors may be less interested in the

rewards or benefits that come from accomplishing the goal, and more interested simply in pursuing the goal itself (Pierro, Kruglanski, & Higgins, 2006). As noted by Avnet and Higgins (2003), “the essential nature of locomotion as a regulatory orientation involves simply initiating movement away from a current state to a new state with no necessary ultimate destination, direction or place in mind” (p. 526.)

If locomotors are primarily driven by the yen to move, then they may be particularly unlikely to pause and reflect in the glow of accomplishments. Instead, they may dive right in to another goal, to get back to the movement they find inherently enjoyable. Interestingly, locomotors may *believe* that they care about attaining the goal – indeed, we hypothesize that they will forecast caring even more about goal attainment than those low in locomotion – but this would be an example of an affective forecasting error (Gilbert et al., 1998.) We propose that locomotors may believe themselves to be driven by their need to attain the goal, when in reality they are driven simply by their enjoyment of goal pursuit. When goal attainment arrives, we hypothesize that people high in locomotion will fail to receive the emotional reward they so strongly anticipate: They will feel either equal or even less enjoyment than individuals low in locomotion. However, because of their belief in the importance of goal attainment, they are likely to believe that the next goal will bring them more joy, and will thus chase that positive affect again by engaging in another goal immediately.

Given these ideas, we predict that locomotors may be particularly likely to switch goals following progress cues. Rather than pausing to enjoy the feeling of progress, or renewing their motivation to stick with the current goal, and because of their primary drive towards movement, we predict that locomotors will see progress cues as a sign that movement has

occurred towards the end-state, and will be motivated to engage in another goal in which progress is not occurring.

This hypothesis may intuitively seem at odds with past theorizing about locomotion. Locomotors care more about goal attainment, and are thought to thus be more energized to stick with a goal until it is completed. Because of this aspect of locomotion, it is also possible to hypothesize that locomotors may ignore progress information and simply power through to goal completion. Indeed, individuals high in locomotion have been shown to tend to focus on moving ahead as opposed to deliberating over choices and alternatives (Higgins et al., 2003). However, we believe that this tendency may only hold in a single-goal context, where the options are all ways to implement the active goal. In this situation, the locomotor's desire to move is best suited to committing resources to the current goal; thus, in a single-goal context, locomotors are highly likely to show a "goal looms larger" effect.

This single-goal context, however, is contrasted from the current situation of interest – how do people high in locomotion deal with the everyday situation in which they have multiple goals that are already "implementable"? We hypothesize that in such situations, the goal to move is best suited by the decision to switch resources from a progressing goal to one in which progress has not been made.

In four studies, we test two related hypotheses (Orehek, Fitzsimons, & Kruglanski, in prep). First, we hypothesize that locomotors will place increased value on goals prior to making progress (the value exaggeration hypothesis), and second, that locomotors will devalue goals after progress (the systemic shift hypothesis), already moving on to the next goal.

*Study 5: Emotional Responses to Goal Attainment.* Undergraduate students completed the locomotion scale (Kruglanski et al., 2000) and made an affective forecast regarding their expected happiness after completing an important paper assignment in a psychology course. After handing in the assignment, students were asked about their current feelings of happiness.

As shown in Figure 5, high locomotors expected to be significantly happier following completion of the goal than did low locomotors, but, as predicted, they did not feel any happier once the goal was completed. This study provides initial support for a key assumption of our thinking – that locomotors appear to care more about goal attainment, and predict that their positive affect will be strong when a goal is attained; however, when the goal is attained, they do not feel any happier about goal attainment than do those low in locomotion.

*Study 6: Evaluations of Instrumental Others for Current and Past Goals.* Undergraduate students completed the locomotion scale (Kruglanski et al., 2000) and wrote down either a goal they had previously attained and a significant other who helped them attain that goal, or a goal that they were in the process of pursuing and a significant other who is helping them attain the goal. Participants then provided liking ratings of the instrumental other.

As shown in Figure 6, the pattern of data supported our hypotheses: High locomotors reported greater liking of instrumental others than did low locomotors for current – but not past – goals. For an ongoing goal, high locomotors exaggerated the goal's value, demonstrating a stronger preference for instrumental others than did low locomotors. When thinking about an already attained goal, however, high locomotors no longer exaggerated the value of the goal, and thus, showed no greater preference for instrumental others than low locomotors. As

predicted, high locomotors showed more liking of instrumental others in the current than past condition, while low locomotors were unaffected by condition.

*Study 7: Perceptions of Progress and Evaluations of Others.* Stanford University students completed the locomotion scale and were asked about the progress they had made on their academic achievement goal: In the high progress condition, participants were asked to compare their progress with that of the average U.S. student (presumably a favorable comparison). In the low progress condition, they were asked to compare their progress with that of the average Stanford student (presumably a less favorable comparison). (A manipulation check supported the use of this manipulation.) Participants then provided ratings of closeness to various friends including those instrumental and non-instrumental for achievement.

As shown in Figure 7, as predicted, low locomotors' ratings of closeness to others were unaffected by the progress manipulation. However, as predicted, high locomotors felt significantly closer to instrumental others in the low progress condition as compared to the high progress condition, suggesting they devalued their instrumental others after progress.

*Study 8: Locomotion and Progress-Induced Goal Switching.* Undergraduate students completed the locomotion scale and, as in Study 3, nominated others who were instrumental for their achievement goal but NOT for an important alternate goal, and vice versa. In a second session, participants considered either the past progress they had made (high progress condition) or the future progress they still needed to make (low progress condition). Next, participants completed the same implicit approach/avoidance measure used in Study 3 (de Houwer et al., 2001; Fitzsimons & Shah, in press).

As shown in Figure 8, low locomotors were not impacted by the progress manipulation: They maintained the same level of evaluative preference for achievement-instrumental others in both high and low progress conditions. However, as predicted, individuals high in locomotion showed a strong effect of progress. In the low progress condition, when the goal was presumably active, high locomotors showed a strong significant evaluative preference for their achievement-instrumental others, approaching them more readily. This preference was stronger than the preference shown by low locomotors, consistent with findings in Studies 5 – 7. However, in the high progress condition, high locomotors showed a complete reversal of preference: Once they perceived that they were making good progress on their achievement goal, they ceased to show an evaluative preference for achievement-instrumental others, and instead, showed a strong preference for others who were instrumental for their *alternate* goal. High locomotors, after progress, appeared to disengage from their achievement goal and “switch” to another important goal on which progress had not been made.

### Conclusions

In this chapter, we set out to address the question: When does progress lead to enhanced effort toward focal goal attainment, and when does it lead to reduced effort toward focal goal attainment – or even enhanced effort toward alternate goals? Nine studies investigated this question, and found evidence that progress is likeliest to reduce effort toward focal goal attainment when other goals are also pursuable, such as when multiple goals are highlighted or when the goal is long-term in nature, and when the goal pursuer values locomotion. Thus, these studies suggest that when you make progress on a manuscript, you will be likeliest to feel less motivated, choosing instead to switch to other goals that are not moving forward (e.g.,

catching up on reviews), when the manuscript is longer in nature (a seven-study JPSP?), when you have been reminded of your other goals (e.g., you receive a review-reminder email), or if you are high in locomotion. When, in contrast, your manuscript project is shorter-term (a one-study Psych Science?), you are able to focus only on that current goal (e.g., you turn off your wireless access), or you are low in locomotion, progress is likeliest to motivate you to work all the harder on your manuscript.

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