Becoming Oneself: The Central Role of Self-Concordant Goal Selection

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Abstract

Pursuing personal goals is an important way that people organize their behavior and mature as individuals. However, because people are typically unaware of their own implicit motivations and potentials, they may pick goals that do not serve them well. This article suggests that "self-concordant" goal selection is a difficult self-perceptual skill, with important ramifications for thriving. Various means of conceptualizing and measuring goal self-concordance are considered. Then, relevant literature is reviewed to show that goal self-concordance, as assessed by a self-determination theory methodology, is predicted by goal/motive fit; that goal self-concordance in turn predicts more persistent goal effort and, thus, better goal attainment over time; and that self-concordant goal selection is enhanced by personality variables and interpersonal contexts that promote accurate self-insight and personal autonomy. Implications for the nature of the self, the causes of personality thriving and growth, and the free will question are considered.

A single event can awaken within us a stranger totally unknown to us. To live is to be slowly born.

—Antoine de Saint-Exupéry

Resolve to be thyself; and know that he who finds himself, loses his misery.

—Matthew Arnold

It's a helluva start, being able to recognize what makes you happy.

—Lucille Ball

How do people know what to want, that is, what goals to pursue in their lives, and can they want the "wrong" things? And, can people only achieve self-fulfillment when they learn to strive for the "right" things? These questions are perennial within literature and film, as characters struggle to overcome their initial ignorance so they can discover the goals and purposes they seem meant to pursue. Surprisingly, however, these crucial questions of deeper purpose and more accurate self-knowledge have received relatively little attention in the research literature on personal goals and idiographic goal strivings. The current article addresses these questions from the perspective of the self-concordance model (SCM; Sheldon, 2004, 2009; Sheldon & Elliot, 1999), providing an up-to-date review of the assumptions and findings of the model, and then applying the model to consider how people can "strive wisely" to optimize their own development and well-being.

In only 30 years, idiographic personal goal research has become a rich tradition within personality psychology (Emmons, 1989; Klinger, 1977; Little, 1983; Sheldon, 2004). Goals and goal strivings represent the "intentionality/personal concerns" tier of personality, which McAdams (1996) argued is one of the three major aspects of personality, along with a "traits/dispositions" tier and a "self/self-narrative" tier. Examples of personal goal constructs include personal strivings (what people are characteristically trying to do; Emmons, 1989), personal projects (more concrete and short-term goals and projects that people pursue; Little, 1983), life tasks (age-graded goals that people take on at different developmental stages; Cantor & Sanderson, 1999), current concerns (what people are currently thinking about doing; Klinger, 1977), and possible selves (images of a desired future self which motivate behavior; Markus & Ruvolo, 1989).

Personal goal researchers assume that human beings are constantly pursuing goals, even when the goals are not focal in awareness (Emmons, 1989). From a cybernetic (Carver & Scheier, 1981, 1998) or goal-systems perspective (Kruglanski & Kopetz, 2009), goals provide the reference standards used

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in the hierarchically organized control (or negative feedback) processes that guide almost all behavior (Miller, Galanter, & Pribram, 1986; Powers, 2005). Goals specify and direct behavior, challenging people to marshal energy, be persistent, apply skills, and regulate themselves. Indeed, much research has demonstrated the potential of personal goal pursuit to bring about a wide variety of positive changes and positive outcomes in peoples' lives (Austin & Vancouver, 1996; Emmons, 1989; Sheldon, 2004). Pursuing goals allows people to introduce new organization into their lives, in the process "travelling through time" to future places they have decided to go (Sheldon & Vansteenkiste, 2005), rather than just drifting with the tide.

Most personal goal research has focused upon the *processes* and *outcomes* of goal pursuit, after a goal has been set. For example, factors such as making plans (Wilensky, 1983), feeling self-efficacious (Bandura, 1997), forming implementation intentions (Gollwitzer, 1999), interpreting failure feedback at the appropriate level of abstraction (Houser-Marko & Sheldon, 2008), and receiving social support (Ruehlman & Wolchick, 1988) have been studied as predictors of outcome variables such as goal progress and goal attainment, and also well-being and mental health. The question of how people *select* personal goals in the first place has been more of a black box, receiving very little research attention, with the exception of research showing non-conscious priming effects on goal selection (Bargh & Ferguson, 2000).

The SCM

Perhaps it does not matter what goals people select for themselves, as long as they attain those goals—in the process getting what they think they want, deriving feelings of competence, and avoiding feelings of helplessness. However, the central premise of the SCM is that it *does* matter what goals people select; some goals are better for people's mental health, well-being, and maturation than other goals (Ryan, Sheldon, Kasser, & Deci, 1996), because they better express the person's underlying interests, values, talents, needs, and motives. Conversely, if people select the "wrong" goals, they may waste much time and energy trying to approach possible futures that, even if attained, turn out to be empty or even harmful. If only they had known better!

The SCM takes an organismic perspective upon life span personality development (Rogers, 1964; Ryan, 1995; Sheldon, 2009), assuming that people have a natural tendency to grow and mature as personalities—that is, to assimilate and accommodate (Piaget, 1971), to differentiate and integrate (Werner, 1957), and to become both better embedded and more agentic within the larger community (Erikson, 1963). However, in further accordance with the organismic perspective, personal potentials are not necessarily realized. Many contextual factors can derail, or fail to support, peoples' talents and potentials, including lack of educational resources, lack of economic opportunity, and norms against self-development at the sociocultural level, and lack of supportive relationships, involved mentors, and fortuitous opportunities at the personal level (Deci & Ryan, 1985).

However, the SCM claims that people's *failure to identify proper personal goals*, goals which match and express their personalities and capacities, is another significant barrier to their personality development. There are a variety of ways to conceptualize matches and mismatches between peoples' goals and various aspects of their personalities, which will be considered in a later section. At the broadest level, however, the SCM is concerned with matching between a person's self-stated goals and his or her "growth potentials," a concept which, although difficult to quantify, seems crucial to consider. In deciding where to invest our energies, where can we derive the most pay-off, such that we maximize our own future happiness, our contribution to others and the world around us, and the overall richness of existence? Again, a central struggle for most people, at least at some point within their lives, involves overcoming ignorance to discover what they really want and what is truly most important to them.

The Ignorant Conscious Self

Indeed, much research in the last two decades supports the idea that people often operate in a state of ignorance. Wegner and colleagues (summarized in Wegner, 2002, 2003) have shown that people can be induced to think of their conscious choices as the causes of their own actions when they are clearly not. These findings support the "ignorant conscious self" theme and furthermore suggest that the experience of free will may be illusory (Wegner, 2002). Affective forecasting research (Wilson & Gilbert, 2005) shows that people are often ignorant in forecasting the effects of present events upon their own future emotional states, especially the intensity and duration of their future states. If we do not know what will make us happy, how can we choose well? Clore and Robinson (2012) showed that people's beliefs about their emotions often replace the actual feeling of the emotions that the beliefs represent, such that our prior emotions and feelings become less accessible in memory. Bargh and colleagues have shown that people can be subliminally primed to pursue goals, with no conscious knowledge of the real source of their impulse to act (Bargh, Gollwitzer, Lee-Chai, Barndollar, & Trotschel, 2001). Moreover, Custers, Eitam, and Bargh (2012) argued that much of people's goal-driven behavior takes place without consciousness. Indeed, Dijksterhuis and Aarts (2012) suggested that consciousness is not just irrelevant to effective goal-functioning, but that it may even be harmful to it. Is consciousness to be edged off the stage completely? Maybe not—although Wilson (2002) suggested that we are often "strangers to ourselves," he also argued that it is possible and important for people to become better acquainted with the non-conscious aspects of their thoughts and feelings (Hofmann & Wilson, 2010). Wilson (2002) suggested a variety of techniques for becoming better

known to ourselves, such that more of our own non-conscious knowledge can emerge within the conscious sphere (see also Wilson & Dunn, 2004).

One way to shed light on these difficult issues is to draw upon an important distinction between two basic types of cognition. Dual process theories are increasingly being applied in many areas of psychology (Kahneman & Fredrick, 2005; Stanovich & West, 2000). Dual process approaches distinguish between "System 1" (non-conscious, parallel, intuitive/automatic, and evolutionarily prior) and "System 2" (conscious, sequential, deliberate/controlled, and evolutionarily more recent) cognition. These two systems operate largely independently of each other, although there can be (and perhaps should be) cross-talk between them (Hofmann & Wilson, 2010). Conscious experience is usually identified as a System 2 phenomenon, which has little or no direct access to System 1 (Gawronski & Bodenhausen, 2012). Kahneman (2011, p. 390), in his comparison of "thinking fast" (System 1) and "thinking slow" (System 2), well summarized the dilemma of the consciously reflecting self: "Odd as it may seem, I am my remembering self, and the experiencing self, who does my living, is like a stranger to me." Reflective consciousness may exist in a kind of dream-world, at least partially cut off from relevant information inside the person's mind, providing only a biased read-out of the person's true state of mind. If this is correct, then perhaps the "remembering" self is prone to select inappropriate goals for the "experiencing" self. That is, the momentary goal-selecting agent may select wrong or non-optimal goals for the person who will later be pursuing those goals.

Consciousness and Goal Selection

An important question, before proceeding further, is "to what extent is consciousness involved in goal selection?" Again, we know that goals can be primed non-consciously (Custers et al., 2012), that much behavior is automatic and does not require consciousness (Bargh & Ferguson, 2000), and that people can be deceived regarding the true, non-conscious causes of their own behavior (Wegner, 2002). Moreover, consciousness tends to emerge last within the brain processes elicited by stimuli (Cacioppo, Berntson, & Crites, 1996) and may even emerge after the brain processes that initiate actions (Libet, 2004). Does Kahneman's "slow" (conscious) self, arriving late to interpret and verbalize the situation, actually do anything?

It seems likely that it does, although some might disagree (Bargh, 2004; Wegner, 2002). Carver and Scheier's (1982, 1998) influential control theory model of behavior focuses on the important role of conscious attention in the processes of self-regulation that serve goals. According to control theory, self-awareness facilitates the comparison of people's goals and standards to their current circumstances, helping to enact the "test" function of the test-operate-test-exit (TOTE) negative feedback process by which discrepancies

between desired standards and current circumstances are reduced. Carver and Scheier (1981, 1998) reviewed dozens of studies establishing the role of manipulated or measured self-awareness in facilitating TOTE processes. Control theory also claims that goal systems are hierarchically organized, from concrete segments of behavior up to broad and abstract life-goals. Carver and Scheier (1998, 2012) have shown that higher level (longer term, more complex) goals are more likely to be conscious than lower level goals because higher level goals are more likely to be self-defining (i.e., the goal to "become a lawyer" might express and shape the self-concept in important ways). In contrast, TOTE sequences associated with lower level (shorter term, simpler) goals are more often automatic and habitualized, executable without consciousness. Still, control theory also asserts that attention moves up and down between the levels of the control hierarchy, as needed, to reduce discrepancies arising at each level. Consciousness provides a "global workspace" (Baars, 1997; Hofmann & Wilson, 2010) in which elements can be intentionally juxtaposed and problems can be solved, even at lower ("thread this needle") as well as higher ("select an undergraduate major") levels of abstraction.

These ideas are consistent with other contemporary theories of self-regulation, which view the self as an active executive function that has the capacity to assess what is happening and then step in to take control, as well as having the capacity to select responses from various options (Baumeister & Vohs, 2012; Carver & Scheier, 2012; Kuhl, Kazen, & Koole, 2006). On the surface, our conscious wishes seem to make a difference: New Year's resolutions, decisions to seek counseling or therapy, and many of the smaller goals and projects we take up on a daily basis are initiated with an imprimatur of consciousness, that is, with an experience that one has, at a particular moment, personally endorsed a course of action that appears desirable ("I want that, how can I get it?"). Indeed, the best predictor of our behavior on a given day is likely our Outlook calendars, which we ourselves have programmed! Even though conscious experience may emerge late in the game, it appears to have the capacity to at least approve or disapprove of the behavioral possibilities that emerge within its view (Libet, 2004), throwing its weight behind one option or another, and then intentionally initiating behavior on that option's behalf (Baumeister & Vohs, 2012). This does not mean that all goals and goal-pursuit processes are accompanied by consciousness or conscious will, and in fact, many of them are not (Bargh & Huang, 2011). However, it does mean that in many cases, especially where choices are potentially self-defining, conscious thought is involved in the decision to take action—in "crossing the Rubicon" from deliberation to commitment, as addressed by the action phases model of goal pursuit (Gollwitzer, 2012; Heckhausen & Gollwitzer, 1987).
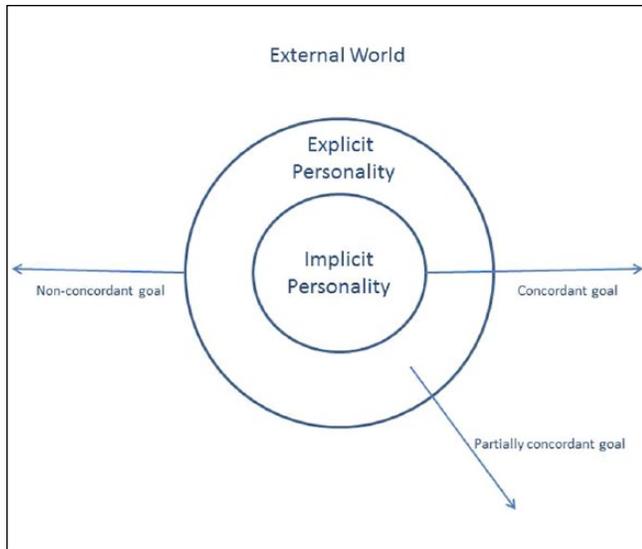
Figure 1. Graphic depiction of concordant and non-concordant personal goals.

Motivational Incongruence Within the Personality System

This brings us back to the central thesis of this article: that people are often ignorant of what goals they "should" want in order to best promote their own well-being and personality development. Considerable recent research supports this notion of motivational cluelessness. Bos and Dijksterhuis (2012) argued that people may not know what they actually think is important, even though they typically rely on conscious (deliberative) processes in their decision-making. This view depicts people as making conscious decisions without having the information needed to make the best decisions. Hofree and Winkielman (2012) reviewed research suggesting that people are often unaware of the core processes that underlie their feelings, desires, and choices, and showed that core liking and conscious wanting can be manipulated at a subconscious level, causing situations such as "wanting something one doesn't like." Kuhl and Kazen (1994) showed that people easily make "false self-ascriptions," in which they mistakenly believe that a goal was their own idea to pursue, when it was actually suggested by an authority. Such "self-infiltration" memory errors are especially likely when people are in negative moods, because negative affect limits people's conscious access to their own extended personality system (Kuhl, 2000).

As a concrete example of many of these issues, consider "Anna," a 30-year-old lawyer working in a large private firm. Anna cares about others and is sensitive to their emotions and feelings, but she is also a prickly and perfectionistic person, who sometimes has difficulty relating to others. She has been let down too many times, she thinks, and has become somewhat cynical. Still, people look up to her because of her acute perception, and in fact, Anna has the

potential to become a wise mentor and leader. Anna's primary work goal, at present, is to become partner, get rich, and retire by the age of 45. However, she experiences little joy at work—instead, she is made rather miserable by the fierce competition, intense politics, and long working hours. Her predominant goals (wealth and early retirement) further her negative patterns of being aloof from others and of buying into materialistic norms of success within our society. Is she really going to allow herself to remain unhappy for the next 15 years? Meanwhile, Anna's long-time best friend wonders what happened to the idealistic young woman who started law school, hoping to positively impact the world. It seems Anna became corrupted by her success in law school, switching to a "money" job goal instead of a "service" job goal (Sheldon & Krieger, 2004). Perhaps she would be better off with a different professional goal—say, of joining a firm working for the causes she once embraced, even at a lower salary? In so doing, she might regain contact with her youthful ideals, form rewarding new relationships with like-minded others, and become a happier person. Unfortunately, despite Anna's general perceptiveness, she does not seem to know (as her friend does; Wilson, 2002) that this would be best for her. In the terms developed earlier in this article, her conscious goals are "non-concordant" with certain positive potentials and dispositions within her personality, and she operates in a condition of relative ignorance.

Figure 1, modified from Sheldon and Kasser (1998), graphically depicts this hypothesized state of affairs. Goals are depicted as arrows, illustrating the fact that goals are vectors of activity emanating from the person. However, as the figure shows, not all goals emanate from deeper or growth-consistent parts of the person; some goals (such as "retire at the age of 45," for Anna) are non-optimal for a person's happiness and personal growth. According to this model of personality development (Sheldon, 2009), people's task is to first become aware of truly self-appropriate goal possibilities, and then, to find the courage to embrace those possibilities. The new channels of activity that are opened up by adopting new goals can bring about new learning experiences that help people to become happier, more mature people. Anna, in finding a job for lower pay at an environmental law firm whose causes she believes in, could become quite a different person at age 45 than the person her current goals will produce.

There are many possible ways to conceptualize the center of the Figure 1 circle, that is, the "deeper personality" that personal goals should represent and express if the person is to thrive. One way is to analyze a person's stated goals in relation to other aspects of the person's personality that are accessible to consciousness, such as the person's values, traits, explicit motives, or dominant self-narratives. Sheldon (2004) discussed these forms of person−goal matching at length, making use of McAdams' (1996) distinction between the trait, goal, and narrative "tiers" of personality (see also Little, 1996). Sheldon (2004) concluded that consistency (or content-matching) between goals and the other two tiers of

personality is generally beneficial. For example, McGregor, McAdams, and Little (2006) showed that having personal goals that are concordant with one's personality traits is predictive of happiness, and Diener and Fujita (1995) showed that the consistency of strivings with one's personal resources was associated with greater well-being. Sheldon and Kasser (1995) showed that consistency between personal goals and overarching values (a condition they termed *vertical coherence*) was positively related to vitality and life-satisfaction. Sheldon and Tan (2007) asked participants to rate the consistency of their goals with their traits, self-narratives, and their social context, finding that aggregate person-goal consistency was generally beneficial for well-being.

However, Sheldon (2004) also concluded that content-matching is not always beneficial. In the domain of traits, if a person suffers from a neurotic disposition that holds him back from accepting growth-relevant challenges, then it may be most beneficial for the person if his goals focus on suppressing, rather than expressing, that neurotic disposition. In the domain of values, not all values are equally healthy and salubrious for people (Kasser, 2002), and thus people should sometimes adopt goals that are inconsistent with or even contradictory to values previously held (as in the case of Anna, who it seems should adopt new goals that inconsistent with her current materialistic values). Sheldon (2004) suggested that the "ultimate arbiter" of whether goals should express or be consistent with a particular facet of personality (vs. suppress or be inconsistent with that facet) was whether that facet, as currently constituted, facilitates the psychological need-satisfaction of the person (Deci & Ryan, 2000; Sheldon, 2011). Since trait neuroticism and materialistic values tend not to promote need-satisfaction, these characteristics should not necessarily form the underlying basis of a person's goal-striving.

Another way to populate the center of Figure 1 is with non-conscious aspects of personality. These could include inchoate growth impulses of which the person is not yet aware. For example, Anna occasionally thinks about a very idealistic friend from her undergraduate days, wondering what she is doing now. One day recently, she was on the verge of trying to locate and contact that person; unfortunately, she became distracted and forgot. This was actually a growth impulse of Anna's, one that if followed, could ultimately have led her to a more satisfying style of life (and it may still). Of course, it would be very difficult for psychologists to measure, and evaluate the suitability and feasibility of, such growth impulses lurking on the fringe of consciousness! Other candidates for non-conscious aspects of personality that goals may or may not express and represent include peoples' genetic temperament and psychobiological dispositions (Rothbart, 2011), their cognitive talents and potentials not yet explored (Gardner, 2006), and the intuitive or non-rational aspects of their minds, in contrast to the conscious and rational parts of their minds (Epstein, 1991).

However, the non-conscious aspect of personality most frequently considered in relation to conscious goals is people's motive dispositions (McClelland, 1985). Motive dispositions are defined as pre-reflective tendencies to orient toward particular classes of incentives. Considerable research has investigated the potential mismatch between "implicit" (System 1) motivation dispositions, which are based on early learning and automatic behavioral preferences, and self-attributed goals, which are "explicit" (System 2) motivations based on self-perceptions and self-presentational concerns (McClelland, Koestner, & Weinberger, 1989; Schultheiss, 2008). Such research finds that implicit and explicit motive measures of the same content categories (e.g., achievement, affiliation, intimacy, or power) are typically uncorrelated, suggesting, again, that people often do not know their own deeper or non-conscious desires and preferences (Schultheiss, 2008). Supporting the idea that such mismatches can present real problems, Brunstein, Schultheiss, and Grassman (1998) showed that achieving motive-congruent goals enhances people's well-being, whereas achieving motive-incongruent goals does not.

Asking the same question as above, should peoples' self-attributed goals *always* match their implicit motives? Although there are little data on this, the earlier discussion suggests that matching might not be salubrious if the implicit motive itself is non-salubrious. The need for power may represent such a candidate, although the evidence is mixed on whether power motivation is negatively (Emmons & McAdams, 1991; Kasser, 2002) or positively (Kifer, Heller, Perunovic, & Galinsky, 2013) associated with well-being and positive functioning. According to the "ultimate arbiter" perspective discussed above (Sheldon, 2004), it depends on whether implicit power motivation helps people satisfy their psychological needs. One can imagine it going either way, depending on how power is exerted and exercised. Does the person use his or her power for good, or for exploitation?

Self-Determination and Self-Concordance

The discussion above touched upon many different types of matching between personal goals and other features of personality, considering the desirability or salubriousness of different types of matching. Is there any *general* technique for assessing the concordance of personal goals with other positive features of personality (conscious and/or non-conscious)? I believe so. As a postdoctoral fellow at the University of Rochester, working with Deci and Ryan's (1985, 1991) self-determination theory (SDT), I approached the goal/person matching question by measuring the "perceived locus of causality" (PLOC) of personal goals and strivings (Ryan & Connell, 1989). The PLOC construct references the extent to which people view their own behavior as caused by internal factors such as their interests, values, and identities (I-PLOC, or "autonomous" motivation) or as caused by external factors such as other people's demands or other external necessities (E-PLOC, or "controlled"

motivation). Typically, a "relative autonomy index" (RAI) is created by summing intrinsic ratings ("I do it because it is interesting and enjoyable") and identification ratings ("I do it because it expresses my deeply-held values") and then subtracting external ratings ("I do it for rewards or to appease others") and introjected ratings ("I do it to ameliorate my own guilt"). This locates the motivated behavior upon a continuum of internalization, ranging from not at all internalized into the phenomenal self, to somewhat internalized, to completely internalized into the self.

The PLOC methodology has been applied to assess peoples' motivated behavior within a wide variety of particular domains (i.e., at school, at work, on the playing field; Ryan & Connell, 1989). Feelings of self-determination or relative autonomy have been shown to be affected by contextual factors such as the warmth and autonomy support that is received from authorities and have been shown to affect many outcomes such as domain-satisfaction, learning, performance, and creativity (see Deci and Ryan, 2000, for a summary). Indeed, the PLOC concept represents perhaps the most essential part of SDT, because it includes both intrinsic and extrinsic motivation, the original concepts upon which the theory is built, and shows how they are related both to each other and to intervening, intermediate forms of motivation (Sheldon, 2004). Research using the PLOC methodology has clearly shown that whether or not free will is real, *feeling* that one freely causes one's own behavior is quite beneficial for peoples' mental health (the free will issue will be considered further in the final section).

In my early research, I was unsure whether there would be much variation on people's PLOC for pursuing their own goals. After all, idiographic goals are spontaneously generated by the person—they are a discrete set of desires that the person has written down on a blank sheet of paper. Thus, shouldn't all goals feel internally caused? However, this is not what was found. Instead, many people wrote down goals that they then rated as being externally caused rather than being caused by their own beliefs and interests (Sheldon, 1995; Sheldon & Kasser, 1995). Consistent with past SDT research concerning domain motivation, we also found that rated autonomy for goals was associated with a variety of positive individual outcomes such as well-being and mood, autonomy orientation, self-esteem, and various measures of personality integration (Sheldon, 1995; Sheldon & Elliot, 1998, 1999; Sheldon & Kasser, 1995). Conversely, feelings of being controlled in one's goals tended to be associated with negative outcomes.

Why do some people write down personal goals that feel externally determined? Some early findings supplied clues: We discovered that these individuals were less open to experience and more reliant on external cues and controls in their lives (Sheldon & Kasser, 1995). They were less self-actualized and less creative (Sheldon, 1995). They also experienced more conflict between different roles in their lives (Sheldon & Kasser, 1995). They were also less mindful, that

is, less attentive to their inner experience (Sheldon, 2004). We postulated that people with low goal self-determination are out of touch with deeper or more stable aspects of themselves and thus have selected the "wrong" goals for themselves—goals that do not express their true interests, desires, and potentials. The symptom of this unfortunate state of ignorance: goal motivation that does not feel self-determined. Based on this thinking, we began to use the term "self-concordant" to describe goals that properly represent other aspects of personality, particularly aspects relevant to maturation and personal growth, and the term "non-concordant" to describe goals that fail to represent these tendencies.

Later studies (Sheldon & Elliot, 1998; Sheldon & Kasser, 1998) revealed that non-concordant strivers intended to try just as hard on a new set of goals as concordant strivers, but 6 weeks later, their actual effort levels had dropped off. Consciously, these individuals thought they would be able to try hard, but it seemed they were trying to force themselves in a direction they did not want to go. Stated differently, without the support of stable interests and dispositions within the personality, people's initially strong goal efforts faded, just as many people's New Year's initiatives fade. In further longitudinal studies, we discovered that non-concordant strivers did not do as well in attaining their semester goals, compared with concordant strivers (Sheldon & Elliot, 1999; Sheldon & Houser-Marko, 2001). As would be expected given their declining effort, non-concordant strivers were less likely to attain their goals in the end. They also did not benefit in terms of increased happiness, even if they did manage to attain their goals, whereas self-concordant individuals who attained their goals showed a happiness increase (Sheldon & Elliot, 1999; Sheldon & Kasser, 1998). It was as if non-concordant strivers should not have bothered—with the wrong goals, they were not going to derive much satisfaction even if they managed to obtain those goals.

To further justify the use of the term "goal self-concordance" (rather than the term "goal self-determination"), it is worth elaborating on the difference between PLOC ratings for motivation regarding experimenter-specified life-domains (i.e., on the job, in the classroom, in the relationship) and PLOC ratings for motivation regarding idiographic (subject-specified) personal goals. In the former (domain motivation) case, researchers do not know whether people have discrete goals or intentions within the domain, or at least, whether they have accessible intentions that they would spontaneously list. Researchers are also unsure which temporal frame the participants are using. Are they rating the motives behind their day-to-day behavior or behind their longer term aims within the domain? In addition, researchers do not know whether participants are rating some particular aspect or feature of the domain or the domain as a whole. In the latter (goal motivation) case, researchers know precisely what the motivational stems are—the listed goals themselves. Researchers also know that these stems are peoples'

spontaneously generated initiatives for forwarding and improving their own lives. Because of their idiographic nature, personal goal statements are likely influenced by both explicit and implicit processes. Indeed, Emmons and McAdams (1991) described personal strivings as "thought-operants" because they have features of both implicit and explicit motivational constructs. They are both spontaneous desires projected onto a blank goal listing sheet *and* conscious intentions that, once written down, can be evaluated and deliberated upon.

What can people's PLOC ratings of their spontaneous goals tell us about the self-concordance of their goals? Quite a lot, it seems. Again, a person's conscious self-views may be too limited, ego-involved, or in thrall to an inaccurate self-concept (Rogers, 1961, 1964), such that the person chooses sub-optimal goals for him- or herself. But in these cases, there is typically a residue of ambivalence or reluctance, which corresponds well with SDT's construct of controlled motivation. The non-concordant person feels controlled by his or her own goals, because the goal-selection computations that produced those goals were incomplete or biased with respect to the needs of the whole personality system (Hofmann & Wilson, 2010; Kahneman, 2011; Kuhl, 2000).

An advantage of the PLOC approach to measuring self-concordance is that it does not require people to have direct insight into whether their goals fit their "deep" personality; it merely requires people to be able to report that they feel some sense of pressure or constraint in pursuing their goals and that they do not really enjoy or believe in their goals. Such reports may be subject to social desirability effects, but on the other hand, it is commonplace (even normative in some cases) for people to disparage or de-value their goals and efforts. I suggest that such disparagement is especially likely to occur when the goals are non-concordant ones because non-concordant strivers may assume that everyone else feels controlled and ambivalent, just as they do.

A second characteristic of the PLOC methodology is that it does not require people to know what their implicit motives are (i.e., Anna does not have to know that she is high on the implicit need for achievement, as would be revealed by projective testing methodologies). The PLOC methodology merely requires people to know how they feel about the goals that they have written down—Do they feel whole-hearted about pursuing those goals, or is there instead reluctance and ambivalence? Reluctance and ambivalence can be the output of an innate "organismic valuing process" (Rogers, 1964; Sheldon, Arndt, & Houser-Marko, 2003) that can provide direct intuitive knowledge concerning whether a motivational initiative is healthy for one's organism. In this view, people need only learn to become mindful to the subtle signals that already exist inside themselves, regarding their own candidate goals (Brown & Ryan, 2003).

A third, more practical advantage of using the PLOC methodology to measure person-goal fit is that it does not require the participant labor of writing stories in response to pictures, nor the research labor of content-coding those stories to arrive at their implicit motives. Nor does it require the computation of potentially unreliable difference scores involving implicit and explicit motive scores derived by different methods (May & Hittner, 2003).

One final observation: An important implication of using the PLOC methodology to assess self-concordance is that the "center" of Figure 1 is thus occupied by the active agent-self that is discussed by SDT. According to SDT, people are engaged in a dialectical struggle to become more self-regulating and more self-determined in the face of various internal and external impedances that they face. To be self-determined is to feel that one's phenomenal self is "in the driver's seat," rather than feeling that one is being driven by external pressures or by non-assimilated aspects of the self. Sheldon and Kasser (1995) originally interpreted the PLOC measure of goal self-concordance as a measure of personality integration, viewed from an organismic (or congruence-based) perspective upon integrated functioning, rather than a systemic (or coherence-based) perspective upon integrated functioning (Ryan, 1995; Seeman, 1983; Werner, 1957). According to this interpretation, the PLOC measure indexes the fit of goals with the active center or "I" of the person, functioning in the now, not just the fit of goals with other aspects or contents of personality, such as traits, motives, temperament. This may help to explain why self-concordance predicts sustained effort and long-term success in goals, as will be explained below.

The initial self-concordance research generated several interesting findings. First, some people have difficulties in deciding what to want and in overcoming influences that may impair such decisions. Perhaps this finding should not have been surprising: Again, finding a sense of voice and true agency is a central developmental project for countless characters in books and film, as well as for most of us personally. This is probably why narratives of personal growth and self-discovery are universally compelling (McAdams, 2008) and why the quotations and aphorisms that began this article have such resonance for people. The findings are also consistent with emerging knowledge of the limitations of "System 2," that is, the verbal, conscious, explicit mind. Indeed, the findings suggest that people really can be "out of touch with themselves" in the sense that the conscious mind (System 2) does not know what to want and typically does not even know that it does not know. In such cases, people may easily be led astray in their goal selections by malign contextual forces and influences, or by inaccurate or outmoded beliefs about themselves. Finally, these findings suggest that pursuing non-concordant goals is risky; people are more likely to give up or fail to achieve such goals, and when they do achieve the goals, they may fail to benefit from such achievement.

Let's return briefly to the example. "Anna" is struggling at work because her career goals of getting rich and retiring at age 45 are non-concordant with her true dispositions and

developmental potentials. She takes no joy in pursuing this goal. Researchers could measure this conflict via Anna's self-reported PLOC ratings, because Anna would be able to tell them that she does not really enjoy and believe in her goals, and that she feels pressure and ambivalence regarding those goals. Because of this non-concordance, Anna may fail to make partner at her firm and fail to get rich and retire early. Even if she does achieve these goals, she may still remain unhappy because they have not provided outlets for the positive growth potentials within her personality (i.e., her youthful ideals, and her suppressed desire to connect with and contribute to others). She may be better off re-evaluating herself, perhaps with the help of a therapist, in order to switch to a different set of goals. Working in a different area of the law (environmental law?), or changing her career altogether, might suit her better. Making such a change would, of course, be difficult; as noted earlier, it would require not only new self-insight but also considerable courage.

Evidence Supporting the SCM

In this section, I will review the accumulated evidence in support of the SCM. Not all research that has used the term "self-concordance" is covered, because not all research has conceptualized the term as I have here, in terms of the match between goals and positive personality. This evidence will be organized under three related hypotheses:

> **Hypothesis 1:** The PLOC measure of self-concordance assesses "fit" between personal goals and deeper, non-conscious, or growth-oriented aspects of the personality.
> **Hypothesis 2:** Because self-concordant goals represent stable aspects of personality such as long-term interests and strongly held values, the PLOC measure predicts persistent goal effort.
> **Hypothesis 3:** Goal self-concordance is enhanced by intrapersonal and interpersonal variables that promote accurate self-insight and personal autonomy.

After this literature review, I will consider some possible critiques of the PLOC measure. Finally, I will briefly consider the implications of the findings for some broader issues concerning the psychology of the self, the nature of optimal psychological health, and the meaning of free will.

Self-Concordance Ratings Index Person–Goal Fit

Again, a central assumption of the SCM is that PLOC ratings of idiographic personal goals can be used to index person-goal fit, or motivational congruence between goals and healthy, proactive aspects of the personality. Internal PLOC (indicated when goals are underlain by feelings of identification and enjoyment, rather than by feelings of pressure and compulsion) appears when the person has identified goals

that represent deeper aspects of his or her personality. Below, I discuss research supporting this first hypothesis.

Sheldon and Cooper (2008) conducted a year-long study of personal goals within a large community sample in which they asked participants, at Time 1, to generate both "communion"-type goals and "agency"-type goals. These represent two major categories of psychosocial experience, encompassing sociality and mutuality on the one hand and achievement and individuation on the other (Bakan, 1966). Participants also completed measures of agentic and communal motive dispositions. Consistent with Hypothesis 1, participants rated their self-generated goals as more self-concordant when the goals were of the category that matched their motive dispositions. Stated differently, participants high in the need for achievement felt more self-determined while pursuing agentic goals, and participants high in the need for affiliation felt more self-determined while pursuing communion goals.

Sheldon and Schuler (2011) reported conceptually similar results in a between-subjects longitudinal experiment in which participants were randomly assigned to pursue only achievement goals or only affiliation goals during the course of a semester. Significant interactions were found involving both the measured need for achievement and the measured need for affiliation. When participants were assigned to pursue disposition-congruent goals they evidenced higher self-concordance scores, which in turn predicted greater goal attainment over time. For example, participants high in the need for achievement, when assigned to pursue achievement goals, rated those goals as more concordant, and did better in those goals—and vice versa for participants high in the need for affiliation.

Notably, the measures of motive dispositions used in the latter two studies were self-report rather than implicit, so these studies did not address congruence of goals with non-conscious motives. However, Sheldon, Halusic, and Prentice (2014) found the same pattern of effects using the Picture-Story Exercise (Schultheiss, Liening, & Schad, 2008); participants randomly assigned to pursue achievement goals rated those goals as higher in self-concordance when they were higher in the implicit need for achievement, with the converse effect being found for participants high in the implicit need for affiliation who had been randomly assigned to pursue relationship goals. Thus, there is reason to believe that high self-concordance reflects matching of goals with both explicit and implicit motive dispositions.

Data supporting Hypothesis 1 also come from a study (Sheldon, King, Houser-Marko, Osbaldiston, & Gunz, 2007) of implicit affiliation versus power dispositions, as measured by both the Thematic Apperception Test (TAT; Murray, 1938), a traditional non-conscious motivation measure based on coding spontaneous stories written in response to picture prompts, and by the Implicit Associations Test (IAT; Greenwald, McGhee, & Schwartz, 1998), a measure of non-conscious attitudinal dispositions based on reaction time

differences. The IAT and TAT represent two very different approaches to assessing non-conscious motivational or attitudinal dispositions. Sheldon et al. (2007) used these methodologies to derive two implicit measures of the relative disposition toward affiliation versus power. A PLOC-based measure of the relative self-concordance of participant-generated affiliation goals and power goals was also obtained. The relative self-concordance measure predicted both the IAT and the TAT scores, meaning that a person who feels more self-concordant in pursuing affiliation goals than power goals also prefers affiliation over power as measured by both the TAT and the IAT. Thus, the PLOC-based self-concordance measure again predicted person-goal fit, which in this case was represented as consistency between conscious goals and both implicit motives (TAT) and implicit attitudes (IAT).

Evidence that the self-concordance measure indexes person-goal fit also emerges from more indirect sources. Trait mindfulness is the general disposition to be attentive to one's feelings, desires, sensations, and emotions (Brown & Ryan, 2003)—to simply observe one's reactions and emotions rather than being pulled immediately into action or reaction. As such, mindful people should have greater access to the subtle (System 1) information required to make self-appropriate goal choices. And indeed, self-concordance typically correlates positively with trait mindfulness (Sheldon, 2004). Similarly, Burton (2008) found that faith in intuition is correlated positively with goal self-concordance. Faith in intuition (Epstein, Pacini, Denes-Raj, & Heier, 1996) reflects people's willingness to use intuitive, "gut" feelings when making decisions. Intuitive individuals rely more on holistic information when selecting goals, which presumably enhances the congruence between System 1 and System 2 (Kuhl & Kazen, 1994).

Another relevant line of research comes from studies of autobiographical and narrative memory. Moberly and MacLeod (2006) used a cueing paradigm to find that general event knowledge relating to self-concordant goals was more accessible than general event knowledge relating to non-self-concordant goals. In other words, participants were better able to recognize autobiographical information that was consistent with self-concordant goals, suggesting that self-concordance is associated with greater integration between the explicit goal-setting system and implicit memory and cognitive systems. Crane, Pring, Jukes, and Goddard (2012) reported similar findings.

Self-Concordant Goals Receive Stable and Persistent Effort

Hypothesis 2 states that self-concordant goals receive more, and longer lasting, effort. People can write down whatever goals they like, but if these goals do not reflect their implicit motives and stable values and interests, little may happen. Sheldon and Elliot (1998, 1999) provided early evidence for this thesis of sustained energization, but more evidence has

emerged since. One line of evidence concerns the setting of implementation intentions (Gollwitzer, 1999). Implementation intentions are a form of planning, in which a person resolves to take specific action toward goals at a future point in time or in response to a particular cue. Many studies have shown positive effects of setting implementation intentions upon goal attainment (Gollwitzer, 1999). However, some studies also show that these effects emerge, or emerge most strongly, only when the underlying goals are self-concordant ones. Koestner, Lekes, Powers, and Chicoine (2002) found Self-Concordance by Implementation Intention interactions in two longitudinal studies, such that implementation intentions helped only in the achievement of self-concordant personal goals and did not boost achievement of non-concordant goals. Koestner, Otis, Powers, Pelletier, and Gagnon (2008) replicated this basic finding. Again, having a plan is good, but if the person does not really want the goal at the future moment when the plan becomes relevant, then action may not occur (see also Sheeran, Webb, & Gollwitzer, 2005).

Similarly, Carraro and Gaudreau (2011) showed that self-concordant motivation facilitated the spontaneous creation of implementation intentions for goals, partially mediating the effect of self-concordance upon goal attainment. Koestner et al. (2006) showed similar effects of self-concordant goal motivation upon people's spontaneous employment of implementation intentions. Moving beyond personal goal studies to health behavior, Chatzisarantis, Hagger, and Wang (2010) showed, in an experimental study with random assignment, that the combination of self-concordant goal motivation and an implementation intention manipulation produced the highest levels of compliance with a multivitamin intake regimen, over a 2-week period.

Sheldon, Kasser, Smith, and Share (2002) conducted a longitudinal experimental study in which half the participants were coached on goal-pursuit strategies, after identifying goals for the semester. They found an interaction similar to that found for implementation intentions (Chatzisarantis et al., 2010; Koestner et al., 2002) such that the experimental intervention boosted goal attainment only for participants whose goals were initially more self-concordant. Again, plans and strategies set to occur in the future may work only if there is stable motivation to pursue the goal, such that the person still wants the goal when the critical moments arrive.

Further evidence in support of Hypothesis 2 can be found in a study of continuing health club membership (Bailis & Segall, 2004). These researchers reported that participants with self-concordant goals at the time they joined a health club were more likely to still be members 2 years later. This effect occurred because self-concordant club members favored self-improvement reasons over self-esteem reasons as reasons to get healthy (supporting SCM assumptions about the growth- and health-relevance of goals rated as self-concordant). In addition, self-concordant club members less often compared themselves to others and were less negatively

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influenced by social comparisons. For them, their club membership was about promoting their health, not about looking good to others.

In the same vein, Bailis, Fleming, and Segall (2005) compared two types of motivational message as predictors of later physical activity. They found that self-concordant individuals stayed active longer in response messages emphasizing the challenge of seeking health, whereas non-concordant individuals stayed active longer in response to messages emphasizing the reception of social support. For self-concordant individuals, their motivation was stable, and the question was "How can I maximize my performance of this goal?" For non-concordant individuals, their motivation was unstable, and the question was "How can I get others to help prop up my motivation?"

Further supporting Hypothesis 2, Sheldon and Lyubomirsky (2006) examined the efficacy of two happiness-relevant exercises, finding that self-concordant goal motivation to engage in the exercises predicted the largest and most sustained increases in happiness, because self-concordant individuals remained engaged in the exercises longest. Similarly, Dickerhoof (2007) found that the happiness-boosting activities of expressing gratitude and feeling optimism both worked better when there was self-concordant motivation to do the activities.

Finally, Houser-Marko and Sheldon (2006) addressed the sustained energization question in a different way by introducing the "self-as-doer" concept. This construct represents people's propensity to define themselves as a verb (as the doer of a goal) rather than as a noun (as the haver of a goal). Houser-Marko and Sheldon first asked participants to turn their goals into doer verb-phrases (i.e., "boost my GPA" became "good grade-getter," and "work on my social life" became "friend-maker"). Participants then rated their identification with each doer phrase, and ratings were summed. The self-as-doer construct was found to predict long-term effort in personal goals, mediating the effect of self-concordance upon sustained effort. In other words, self-concordant individuals define themselves to a greater extent as "doers," consistent with the claim that self-concordant goals tap stable interests and values inside the person. As a result such individuals do better in their goals.

Self-Concordance Is Enhanced by Factors That Promote Self-Insight and Personal Empowerment

How can self-concordance be increased? Hypothesis 3 states that internal and external factors that promote accurate self-insight and/or personal empowerment can make a difference. As discussed above, accurate self-insight is needed to know what goals to pursue, and personal empowerment is needed to find the courage to pursue them. Concerning *internal* factors that promote self-insight, Burton (2008) showed that participants instructed to "follow their gut" in setting goals reported greater self-concordance for the resulting goals, compared

with participants instructed to "be very rational" in making their goal selections. "Following one's gut" presumably enhances a participant's access to System 1, containing implicit processes, so that more personality-appropriate goals can be selected. Findings that self-concordance is associated with trait mindfulness (Sheldon, 2004) echo the same theme: Mindful individuals, who habitually pay attention to their subtle internal responses, may be better able to select self-appropriate goals to pursue. Greguras and Diefendorff (2010) showed that the construct of "proactive personality" (Bateman & Crant, 1993) predicted self-concordant goal selection. According to Parker, Bindl, and Strauss (2010), proactive personality has three key attributes: It is self-starting, change oriented, and future focused. It appears that a self-directed focus on positive change promotes self-concordant goal selection. Finally, Judge, Bono, Erez, and Locke (2005) showed that "positive core evaluations" predicted self-concordant goal selection. Essentially, those with a greater sense of self-worth were able to take their own needs and potentials into greater account in making their goal choices.

A separate line of research has examined the construct of referential competence as a predictor of motivational congruence (Schultheiss, 2008; Schultheiss & Brunstein, 1999). Schultheiss (2008) argued that non-verbal and verbal-symbolic information are represented differently in the brain, such that non-verbal codes must be translated into verbal codes for motive-congruent goals to be selected. The term *referential competence* refers to individual differences in this ability and is typically operationalized in terms of the participant's speed and accuracy in verbally naming non-verbally presented information (Schultheiss & Brunstein, 1999). Referential competence can be also be manipulated experimentally: Schultheiss, Patalakh, Rawolle, Liening, and MacInnes (2011) asked some participants to vividly imagine the pursuit and attainment of a goal while attending to their affective responses to the experience, showing that those in this condition (compared with a control condition) thereafter evidenced greater implicit/explicit motive congruence. In a similar vein, Job and Brandstatter (2009) showed that participants induced to focus on motive-specific affective incentives while engaging in goal fantasies set goals that were more in line with their implicit motive dispositions. It appears that conscious and non-conscious information can become better aligned by such procedures. Unfortunately, no research has yet combined referential competence measures or manipulations, with self-concordance measures or manipulations. Still, the current theoretical analysis, along with the finding that self-concordance predicts congruence between goals and implicit motives (Sheldon, Prentice, & Halusic, 2014), suggests that individual differences in referential competence should predict individual differences in self-concordance. However, this remains to be demonstrated.

A variety of studies have examined *external* (i.e., interpersonal or contextual) factors as predictors of high self-concordance. One study of employee creativity, conducted in

China by Hon (2011), examined three such factors: empowering leadership, coworker support/helping, and organizational modernity. All three factors had independent effects upon self-concordant work motivation, which in turn predicted the supervisor-rated creativity of employees. These findings demonstrate effects of three levels of contextual variable (received empowerment at the coworker, supervisor, and organization levels) upon self-concordance. Another study of organizational behavior conducted by Burke and Linley (2007) found that executive coaching increased the goal self-concordance of senior business managers. This is one of the few controlled trials demonstrating the efficacy of life-coaching; in this case, coaching empowered participants to make more self-appropriate goal selections. As a third organizational example, Bono and Judge (2003) showed, in two studies, that transformational leaders (Burns, 1978) enable workers to select goals which they then rated as higher in self-concordance. Transformational leaders are said to improve follower's motivation and morale by connecting the follower's sense of identity to the project and by tailoring messages to the strengths of followers. Followers treated in this way are empowered and inspired to identify what they really want within the organizational setting.

Autonomy support is a key contextual construct within SDT (Deci & Ryan, 2000), defined as the extent to which authorities support subordinate choice, take the subordinate's perspective, and provide meaningful rationales supporting their recommendations, rather than being controlling or pressuring. Smith, Ntoumanis, and Duda (2007) examined self-concordance within the sports domain, showing that the perceived autonomy supportiveness of coaches predicted self-concordant goal selection in athletes. By supporting choice and agency, coaches can empower athletes to select self-concordant goals. Sheldon and Watson (2011) demonstrated similar effects, showing that student athletes participating in recreational sports, club sports, and varsity sports reported more self-concordant motivation when their coaches were autonomy supportive. Sheldon and Watson also showed that this effect was significantly stronger in the varsity athlete group and argued that this occurred because the pressures upon varsity athletes are very intense. Having a supportive coach may be especially important for elite-level athletes, so that they can remain in touch with their original motivations to compete.

Discussion

This article has considered the nature of person/goal fit using a SDT lens. The SCM assumes that (a) conscious processes are often involved with goal selection, (b) conscious processes are often disassociated from relevant non-conscious processes, and, thus, (c) verbally articulated goal choices often fail to represent other important aspects of personality correctly. In this case, pursuing and achieving one's goals may fail to contribute to one's well-being and development. The PLOC methodology that I have used to assess this divided state assumes that

non-concordant goals tend to feel externally caused, meaning that they are motivated by guilt and introjects or by pressuring environmental forces and contingencies. In contrast, self-concordant goals feel internally caused, meaning that they are undertaken willingly because they are challenging, interesting, and meaningful. The SCM assumes that goals that feel internally caused likely better represent the developing interests, core values, and long-term potentials of the person. Thus, striving for such goals is more likely to benefit the striver.

The literature review found support for three hypotheses: that the self-concordance measure indeed indexes the "fit" between explicit goals and deeper personality processes, that self-concordant goals tap enduring interests and values within the personality, and self-concordant goal selection is enhanced by intra- and interpersonal factors that promote self-insight and personal autonomy and empowerment. I am grateful that other researchers have employed the SCM within their studies, providing this new information. I now turn to some broader conceptual issues suggested by these findings.

Becoming Oneself

The SCM is built on the assumption that conscious goal-setting processes may not accurately reflect and represent "deeper" processes within personality, such that a person's goals may be "out of touch" with that person's potentials (as were Anna's goals). Are there really two different entities inside people—a deep one that needs to be contacted, accessed, and developed, and a shallow one, which does the contacting, accessing, and developing? The self-concordance perspective provides one way of making sense of these expressions, by distinguishing between the other aspects of our personalities, including our implicit motives and long-term growth potentials, and our explicit conscious goals and intentions (which Kahneman, 2011, described as "oddly out of touch with the self that does our living"). According to this perspective, to "get in touch with oneself" is for the goal-setting aspect of System 2 to gain better access to relevant information within System 1, so that positive trends and potentials within System 1 are better represented and forwarded by the person's goals. To "be true to oneself" is to consciously refer to one's stable values, motives, and beliefs as one makes decisions, which can be difficult when momentary social influences are insensitive or contradictory to these values and beliefs. To "become oneself" is to reduce the discrepancy between the conscious information that we have about ourselves and the rest of our personality, especially the healthy, proactive aspects of personality (Hofmann & Wilson, 2010; Rogers, 1964).

The Possibility of Free Will

People often feel that they freely make decisions and take action, and indeed, that is the primary diagnostic of self-concordance (self-concordant individuals feel self-determined

as they pursue their self-stated goals and initiatives, and do not feel controlled by internal or external pressures). Should such feelings be taken at face value? Probably not; there are many ways that a deterministic scientific perspective might reduce such apparent free will to something else. Conscious experience is always undergirded by non-conscious brain processes, which are always temporally prior to and thus potentially causal of conscious states (Libet, 2004); there will always be influences on our own behavior that we do not know about, or misinterpret (Wegner, 2002); and we can never escape from our learning history, nor our current situation. Our choices are highly constrained.

Still, the fact that *feelings* of being self-determined are associated with obtaining the outcomes that the person prefers, promoting growth and happiness, and the fact that feelings of being externally controlled are less likely to bring about such favorable outcomes, are highly suggestive. Perhaps free will is neither a certain reality, nor a certain illusion (Wegner, 2002); perhaps it is instead a *variable*, such that in practice, some people have more of it than others (Baumeister & Vohs, 2012). Perhaps the only kind of free will that matters, for our lives, comes from the ability to make goal choices that allow us to act according to our genuine, self-determined inclinations, turning us into more fulfilled individuals. Again, making correct choices is apparently not easy to do, given that consciousness lacks access to so much of what goes on in people's minds (Hofmann & Wilson, 2010).

Is consciousness really necessary, or is it merely epiphenomenal? Although this question goes well beyond the scope of this article, it has been suggested (Baars, 1997; Baumeister, 2011) that a primary function of consciousness is to serve as a partially autonomous interface (Allport, 1955) between our internal cognitive/emotional machinery, on the one hand, and the external world-as-found, on the other. Momentary consciousness may have evolved so that people could adapt flexibly and creatively to the circumstances at hand. However, this creative capacity comes with the risk that consciousness can be cut off from internal information relevant for decision-making. In the extreme, people's conscious thoughts may give them only limited or distorted access to their true preferences and feelings, and the imperative, for such people, is to find a way to reach beneath such limitations to re-connect with who they really are (Hofmann & Wilson, 2010; Rogers, 1964). Again, "becoming oneself" is promoted by the ability to select goals that provide an outlet for positive dispositions and developmental trends within one's own implicit personality. I argue that this is an ability that is always latent within people, because we have an organismic valuing process (Rogers, 1964; Sheldon et al., 2003) that can help us know how we really feel about what we are doing, if we are able to mindfully attend to the output of that process (Brown & Ryan, 2003).

Promoting Self-Concordance

What can be done to promote greater self-concordance in people's goal strivings? One approach suggested by the current review is to promote cultural or organizational change, so that leaders and authorities are more sensitive to subordinate's autonomy and choices and also sensitive to the fact that subordinates may need to be helped to identify their own best choices (Assor, 2012; Reeve, 2009). As we have seen, organizational modernity, transformational leadership, empowering leadership, leader autonomy support, and life-coaching can all facilitate these processes. Another approach to enhancing self-concordance, suggested by the current review, might be to enact exercises or activities that enhance people's self-attunement. These may include teaching people to listen to and follow their "gut" intuitions about what to do rather than their rational mind (Burton, 2008); teaching people to be more mindful, as is accomplished by Mindfulness-Based Stress Reduction (MBSR; Kabat-Zinn, 2003) classes; teaching people to imagine the affective responses they would actually have to various choices they might make (Brunstein & Schultheiss, 1999; Job & Brandstatter, 2009); teaching people (such as Anna) to seek out other's opinions regarding what may be the best choices for them (Wilson, 2002); engaging people in value clarification exercises, in which they imagine the effects of pursuing various types of values (Lekes, Hope, Gouveia, Koestner, & Philippe, 2012); and teaching people about their own affective forecasting errors, so that they can better predict the effects of various events and possible choices upon their mood and well-being (Wilson & Gilbert, 2005).

Another route might simply be to do a goal-PLOC assessment, then teach people the meaning of the PLOC-based self-concordance measure. When there is non-concordance, people might be asked to reflect on why they feel external rather than internal motivation for the candidate goals they have identified (Sheldon, 2012). This measure purports to provide a fairly direct measure of goal/personality matching, and people may benefit from prompted consideration of why they have been infiltrated (Kuhl & Kazen, 1994) by goals that they do not believe in and/or do not enjoy pursuing.

Critiquing the PLOC Measure

As noted, there are a variety of ways of conceptualizing and measuring the construct of self-concordance, and in my research, I have relied primarily on a measure based on SDT's PLOC construct. Although considerable evidence supports the validity of this measure, it is also important to consider possible limitations of the measure. One is that the measure is a difference score representing the extent to which a person endorses autonomous goal-reasons more than controlled goal-reasons. With this methodology, a person with low scores on both types of reason could get the same self-concordance score as a person with high scores on both types of reason; the difference between the two reasons might be

the same in either case. One argument in defense of the measure is that it is only the "quantity" of motivation (the sum) that varies between these two cases, while the "quality" of motivation (the difference) is being measured accurately in both cases. This analysis suggests that for some purposes researchers may want to examine the sum of the two types of reason scores as well as the difference between them, so that both quantity and quality of motivation can be considered. Another defense is based on SDT's "internalization continuum" concept, which views the quality of motivation in terms of the degree that the motivation has been assimilated into the self. The difference score approach is necessary to locate a motivated behavior upon the specified internalization continuum. Notably, some approaches to calculating RAIs double-weight the extremes of the continuum (e.g., they double-weight the external and intrinsic motivation scores; Deci & Ryan, 2000). In my self-concordance research, I have not done this, because it is a more complex way of treating the data that makes more starting assumptions, and because usually it makes little difference which way the score is computed.

Another potential critique of the PLOC measure is that it is based on self-report, and people are often said to be unable to self-report accurately on their true motivations (Schultheiss, 2008). However, as explained earlier, the PLOC measurement approach does not assume that people know what they actually want; it only assumes that people can know how they *feel* about what they *think* they want. This is a subtle but crucial difference. The ignorant conscious mind may project goals onto the response sheet that are inconsistent with the person's implicit motives or potentials, but in such cases, there is often a residue of ambivalence that is accessible to self-report. Another critique is that people may not know whether a goal really came from them or not; for example, Kuhl and Kazen's (1994) earlier-discussed work on false self-ascription indicates that people sometimes misremember the source of their goals, thinking goals suggested by authorities were their own idea. However, the SCM does not require that goals rated as self-concordant were originally the participant's own idea; naturally, we take in many ideas for behavior from the environment, some good and some bad. What matters is whether the person has a feeling of ownership of the goal, once it has been stated. If he or she does not, then the goal may not represent his or her long-term potentials. Of course, feeling ambivalent about a goal does not *always* have to mean that it is the "wrong goal"; a person may feel ambivalent simply because she is afraid or lacks courage, or because he is worried about what others may think if he pursues a truly authentic goal. The PLOC measure of self-concordance does not purport to categorize goals flawlessly; instead, it provides a tool that, on average, works fairly well. There may well be better approaches, as yet undiscovered.

Finally, what if the PLOC measure is really just a measure of goal commitment? Some goal-commitment scales have items similar to the PLOC measure (Brunstein et al., 1998; Hollenbeck, Williams, & Klein, 1989), such as "I fully identify myself with this goal" and "I am strongly committed to pursuing this goal." I have two responses to this critique. First, measures of simple goal commitment have been assessed and controlled in some self-concordance research (Sheldon & Elliot, 1999; Sheldon & Kasser, 1998), as well as measures of goal importance and goal expectancy. Self-concordance effects typically remain when these constructs are controlled, indicating that the self-concordance measure gets at something more. Second, it is true that some items in goal-commitment scales are similar to items in the PLOC scale (especially items tapping identified motivation). However, none of these scales refer to the full range of motivations identified by SDT (intrinsic, introjected, and external, as well as identified), nor do they refer to the internalization process and continuum, which are central to the SDT account. Thus, in my view, mere goal commitment and importance measures fail to directly address the issue of "deep person/goal fit." People can be (and often are) strongly committed, at least initially, to goals that they later abandon. For example, in research by Sheldon and Elliot (1998), people with strong controlled motivation initially intended to try hard, but this intention faded because it was not supported by their enduring interests and values. People who initially feel strongly committed to their goals may sometimes suffer the same fate.

Other limitations of the SCM research so far include its focus primarily on college-age participants (but see Sheldon & Kasser, 2001, and Sheldon, Kasser, Houser-Marko, Jones, & Turban, 2005 for research on community participants), from western countries (although see Sheldon et al., 2004, for research comparing U.S., Taiwanese, Singaporean, and Korean participants). In addition, there has been very little research to date combining the SCM with motive disposition theory and measures, a highly relevant avenue of exploration (but see Sheldon & Schuler, 2011, and Sheldon et al., 2014, for recent examples of such combinations). Finally, there needs to be research examining the neurological and brain correlates of self-concordant activity (but see Lee, Reeve, Xue, & Xiong, 2012, for some recent evidence connecting self-determination with anterior gyrus activity).

Conclusion

In this article I have described a theory of goal self-concordance that is consistent with contemporary knowledge concerning implicit and explicit motivation, System 1 and System 2 functioning, conscious versus non-conscious thought, goal-system organization and self-regulation, and the humanistic perspective of SDT. I used the theory to make three predictions which were confirmed by a literature review. It appears that personality development can be in part self-directed, and not just a function of encountering favorable or activating environments and contexts. However,

people will be most successful in taking action to "become themselves" if they are able to identify and commit to goals that are somehow consistent with their innate talents and implicit processes.

Declaration of Conflicting Interests

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