

Chapter 10

Self-Concept Clarity, Self-Regulation, and Psychological Well-Being

Alysson E. Light

Abstract Previous research finds a robust positive relationship between self-concept clarity and well-being. However, the causal direction and mechanism of this relationship remains ambiguous. I propose that self-concept clarity may foster well-being by facilitating successful self-regulation and goal pursuit. This chapter outlines the role of the self-concept in several prominent theories of self-regulation, and details how, given these mechanistic roles, an unclear sense of self might undermine self-regulation and goal pursuit. Focusing on self-regulation may help to differentiate self-concept clarity from its close correlate, self-esteem, as low self-esteem and low self-concept clarity are associated with unique predictions in the domain of goal pursuit. I argue that thinking about the mechanisms linking self-concept clarity to positive outcomes can help us to better understand self-concept clarity more generally.

Keywords Self-concept clarity · Self-regulation · Goal pursuit · Well-being

From its origination, self-concept clarity—the subjective sense of clarity and certainty about one’s self-beliefs—has been understood to be closely linked to psychological well-being (Campbell, 1990; Campbell et al., 1996). Indeed, self-concept clarity was first identified as a means of understanding the behavior of its close correlate, self-esteem. Since the development of the construct and methods for measuring it, subsequent research has repeatedly demonstrated that people who feel clear and confident in their self-definition feel more positively about themselves (Campbell et al., 1996), experience greater subjective well-being (i.e., happiness; Ritchie, Sedikides, Wildschut, Arndt, & Gidron, 2011) and less social anxiety (Stopa, Brown, Luke, & Hirsch, 2010), report higher trait emotional stability (Campbell, Assanand, & Di Paula, 2003; Campbell et al., 1996), perceive greater purpose and meaning to

A. E. Light (✉)
University of the Sciences, Philadelphia, PA, USA
e-mail: a.light@uscience.edu

their lives, and experience fewer depressive symptoms (Bigler, Neimeyer, & Brown, 2001). Moreover in my own research, I have found that people with high self-concept clarity report better physical health, lower levels of loneliness (Light & Visser, 2013), more frequent experience of positive emotions and less frequent experience of negative emotions, and are higher in trait resilience and more likely to be psychologically “flourishing” (Light & Visser, unpublished data). With such a glowing record, one might be tempted to run out and buy one of the many self-help books purporting to increase self-knowledge in the hopes of gaining some of the benefits of high self-concept clarity!

Of course, one of the difficulties of studying trait-like individual differences like self-concept clarity concerns identifying the causal mechanism(s) underlying its association with life outcomes. The vast majority of studies looking at key outcomes of self-concept clarity have used cross-sectional correlational designs that do not provide empirical evidence regarding causal direction (e.g., Bigler et al., 2001; Campbell et al., 1996, 2003; Diehl & Hay, 2011; Hanley & Garland, 2017; Ritchie et al., 2011). It is also relatively easy to hypothesize a range of causal models regarding these associations—having clarity about oneself may make people happy, happiness may make people feel more confident in their beliefs about themselves, or both may occur in an iterative, upward spiral. In addition to these cross-sectional studies, a few longitudinal studies have used cross-lagged panel designs to explore the temporal dynamics of self-concept clarity’s relationship to adaptive functioning. Two studies focusing on self-concept dynamics in adolescents found that self-concept clarity prospectively predicted levels of anxiety (Schwartz, Klimstra, Luyckx, Hale, & Meeus, 2012) and depression (Schwartz et al., 2012; van Dijk et al., 2014) at later time points, consistent with the hypothesis that higher self-concept clarity improves (and that lower self-concept clarity erodes) well-being. However, in addition to concerns that results with this younger sample may not generalize to other age groups, these study designs cannot rule out the possibility that associations with self-concept clarity are driven by other related variables, such as self-esteem.

Although further research using such longitudinal designs will certainly help to clarify the role of self-concept clarity in relation to well-being, another complementary approach is to explore the social, behavioral, and cognitive consequences of having high (vs. low) self-concept clarity in order to flesh out theory regarding the mechanisms by which self-concept clarity might impact well-being. In this chapter, I will discuss one possible pathway through which self-concept clarity may impact well-being—namely, through fostering strong self-regulation. In elaborating on this particular proposed mechanism, I do not mean to suggest that this is the only possible pathway by which self-concept clarity impacts well-being. Indeed, given the centrality of the self-concept to human cognition, the consequences of lacking clarity about oneself are likely to be diverse and far reaching. Thus there are likely to be multiple mechanisms linking self-concept clarity to well-being to be explored in future research.

The causal model I propose suggests that having a clear, confident, and consistent sense of self fosters effective self-regulation and, conversely, that experiencing uncertainty and confusion about oneself undermines self-control and the process of goal pursuit. While limited empirical work has directly addressed this hypothesis,

numerous theories of self-regulation have posited a central role for the self-concept in self-regulation (e.g., Duval & Wicklund, 1972; Higgins, 1987; Markus & Nurius, 1986), suggesting that disruption to the self-concept—in the form of uncertainty and doubt about the contents of the self-concept—would have deleterious consequences for self-control and goal pursuit, and that maintaining high self-concept clarity would thus be necessary for one to effectively self-regulate.

Effective self-regulation in turn (a) improves psychological well-being by facilitating the balancing of multiple goals, which improves affect and reduces stress (Hofmann, Luhmann, Fisher, Vohs, & Baumeister, 2014), and increasing goal attainment, which increases positive affect and subjective well-being (Emmons, 1996; Sheldon, Jose, Kashdan, & Jarden, 2015); (b) improves social well-being by fostering pursuit of relationship goals (Brunstein, Dangelmayer, & Schultheiss, 1996), reducing conflict and smoothing daily interactions (Vohs, Finkenauer, & Baumeister, 2011), inhibiting aggression (DeWall, Finkel, & Denson, 2011), and facilitating constructive responses to close others' negative behavior (Finkel & Campbell, 2001); and (c) improves physical health by increasing consumption of nutritious food, promoting engagement in physical activity (Wills, Isasi, Mendoza, & Ainette, 2007), fostering medication adherence (de Bruin et al., 2012), and decreasing the use of unhealthy coping strategies, such as the use of drugs/alcohol (Boals, vanDellen, & Banks, 2001). Thus if high self-concept clarity does indeed facilitate effective self-regulation, this pathway may explain many of the positive outcomes associated with possessing clarity about the self.

In the following chapter, I will discuss existing evidence supporting an association between self-concept clarity and self-regulation. I will review the role of the self-concept in several prominent theories of the process of self-regulation and goal pursuit; based on these theories, I will describe the mechanisms by which having high (vs. low) self-concept clarity might foster (vs. hinder) self-regulation. Finally, I will discuss predictions regarding how the social environment might facilitate or hinder self-regulation for people with high vs. low self-concept clarity, thus potentially moderating the link between self-concept clarity and well-being.

As previously described, the bulk of research on potential consequences of self-concept clarity has used correlational designs, making it difficult to identify the mechanistic processes linking self-concept clarity to positive outcomes. However, some of the behavioral correlates of self-concept clarity suggest a link to self-regulation—for example, low self-concept clarity is associated with self-handicapping (Thomas & Gadbois, 2007), endorsement of passive and avoidant coping strategies (Smith, Wethington, & Zhan, 1996), and higher levels of aggression after experiencing failure or self-threat (Stucke & Sporer, 2002), all of which are similarly linked to poor self-control (Boals et al., 2001; Denson, DeWall, & Finkel, 2012; Uysal & Knee, 2012). Finally, measures of self-concept clarity have been found to correlate highly with measures of grit (Fite, Lindeman, Rogers, Voyles, & Durik, 2017) and trait self-control (Light & Hoyle, unpublished data). This evidence is bolstered by the fact that the self-concept features prominently in a number of central theories of self-regulation, indicating that self-concept clarity may actively impact self-regulated behavior.

Placing the Self in Self-Regulation

How, mechanistically, might feelings of uncertainty about the self-concept undermine self-regulation? To answer this question, it is useful to consider what active role (if any) the self-concept plays in self-regulation and goal pursuit. In structuring such an inquiry, it is useful to consider the process of self-regulated goal pursuit as encompassing four distinct phases—the predecisional phase, in which the individual compares and evaluates possible goals; the postdecisional/preactional phase, in which the individual considers how to implement the adopted goal; the actional or goal-striving phase, in which direct action is taken to achieve the goal; and the postactional phase, in which the individual evaluates the outcome of their goal pursuit (Heckhausen & Gollwitzer, 1987). While the predecisional, postdecisional, and actional phases have been well described in previous work, discussion of the postactional phase in the literature is limited and as such is not discussed further in this chapter.

The self-concept may first begin to influence the process of goal pursuit at the predecisional phase in which specific goals are chosen. In their discussion of “possible selves,” Markus and Nurius (1986) described desired and undesired end-states—that is, approach goals and avoidance goals—in terms of representations of the self. In this model, goals themselves are conceptualized as representations of the self. A goal to improve one’s athletic performance involves imagining the “self as a superior athlete,” and the goal to finish college involves imaging the “self as graduate.” While it could be argued that not all goals represent such a complex and self-relevant image (e.g., the goal of washing the dishes needn’t involve imagining the “self as dishwasher”), such lower-order goals that seem less relevant to the self may themselves be organized by higher-order goals that reflect possible selves to a greater degree (e.g., a goal to avoid being the undesired “self as slob”), and indeed Markus and Nurius argue that it is the association with personal desired or feared outcomes that motivates effort toward routine, lower-order goals. Not all possible selves are adopted as personal goals, but they represent the pool of options that an individual considers when selecting goals to pursue. While possible selves inherently involve some degree of imaginative thinking, they are still heavily influenced by representations of the current, actual self. For example, the salience of success or failure impacts the positivity of possible selves (Ruvolo & Markus, 1992), and representations of one’s ethnic group can constrain the kinds of possible selves one generates (Fryberg, Markus, Oyserman, & Stone, 2008).

Once a set of possible goals has been constructed, the individual must choose a specific goal (or goals) to pursue. This process of selecting an appropriate goal has often been described as the deliberative or predecisional phase of goal pursuit (Heckhausen & Gollwitzer, 1987), but the processes by which it unfolds can also be considered under a decision-making framework. With that in mind, there are many ways in which the self-concept can influence the process by which specific goals are adopted. Goals may be evaluated in terms of their expected value, which is comprised of the value associated with attaining the goal and the likelihood of its attainment, as well as their appropriateness for the individual. An assessment of

either dimension requires reflection on the self-concept, either as it relates to the individual's personal ability to attain the goal (i.e., their self-efficacy; Bandura, 1986) or the extent to which an action is consistent with their sense of self, and thus identity appropriate (Case, Sparks, & Pavey, 2016). Thus typically the self-concept is used as a guide in selecting which goals to actually pursue.

After selecting an appropriate goal to pursue, an individual must determine what means they intend to use to pursue that goal. This process of planning one's goal pursuit may take place immediately after goal setting or periodically throughout the process of goal pursuit. While relatively little empirical research has addressed the issue, it seems plausible that reflection on the self-concept would play an important role in deliberation and planning prior to goal striving, as the individual decides what means are most appropriate for him/her. An awareness of one's strengths, weaknesses, preferences, and personality more broadly might aid the individual in selecting goal pursuit strategies that play to his/her strengths. Supporting this notion, inducing a deliberative mind-set (vs. implemental mind-set)—that is, motivating participants to think about how to pursue their goals (vs. motivating them to begin striving for their goals)—increases preference for accurate information about the self over positive illusions, though only among participants with high self-esteem (Bayer & Gollwitzer, 2005). Presumably accurate information about the self is valued during deliberation because it allows the individual to construct an effective and realistic plan for goal pursuit, whereas positive illusions are valued in an implemental state because they increase goal expectancy, thus increasing motivation. Thus although research in this area is somewhat limited, preliminary evidence suggests that the self-concept is actively involved in the planning stage, as well.

After the planning phase, the individual begins to actively exert effort on the goal in the actional phase of goal pursuit. This is often referred to as the process of goal striving, and many of the theories that elaborate on goal striving focus on the signals that indicate that effort is needed on a specific goal. A few major theories on goal striving and self-control identify specific roles for the self, generally as a metric of position relative to goals and personal standards. The majority of these theories are based around the claim that motivation is sparked by perceptions of a discrepancy between one's current state and one's goal or personal standard. In Objective Self-Awareness Theory (Duval & Wicklund, 1972), the motivating discrepancy is described as being between one's self-concept and one's standards. Such a discrepancy would only motivate action, however, if it became salient, which the theory describes as occurring when attention is focused on the self. Attending to such discrepancies would evoke negative affect, which in turn would motivate action to reduce this negative affect, either by acting to reduce the discrepancy (i.e., through goal pursuit, thus modifying the self to be more similar to one's standards) or by escaping from self-awareness.

Self-Discrepancy Theory (Higgins, 1989) similarly highlights the role of the self-concept in self-regulation but additionally states that personal standards often take the form of desired selves—that is, representations of what one's self-concept *could* be like. Higgins further differentiated these self-standards into two primary representations—the ought self and the ideal self. While they originate from differ-

ent developmental experiences and evoke different kinds of negative affect when discrepancies are identified, the overall model functions similarly to objective self-awareness theory, with salient discrepancies between the actual self and either the ought or the ideal self evoking aversive negative affect, which in turn motivates efforts to reduce the discrepancy.

Control Theory (Carver & Scheier, 1982) can be thought of as a generalized form of such discrepancy-based models, which describes the process of self-regulation in terms of linear feedback loops in which a reference point is set, input as to the current state is received, the distance between the input and the reference point is assessed, and some output occurs either in the form of continued self-regulation (in the event that there is a remaining discrepancy between the current state and the reference point) or in the form of exiting the feedback loop (in the event that no discrepancy remains). This broader form of the discrepancy model allows for description of instances in which self-regulation occurs without reference to the self-concept, without conscious awareness, and even without a mind, as in the case of mechanical self-regulating systems like thermostats.

In models of self-regulation in which the self is compared to goals or standards, an assessment of one's self-concept is a necessary precondition for self-regulating behavior to be initiated. In these models, feelings of uncertainty and confusion about the self-concept would undermine the individual's ability to clearly assess their distance from the goal. One potential consequence of the lack of a clear signal of discrepancy between self and standards is that such discrepancies will go unidentified, and action to reduce the discrepancy will never be initiated. Consider a person who desires to be patient with others. To the extent that she is not sure how patient or impatient she is, the goal of being a patient person is never activated, and thus she does not exert effort toward that goal. Thus one way that low self-concept clarity may undermine self-regulation is by making the self-discrepancies that typically motivate self-regulated behavior less accessible.

Notably, unlike Objective Self-Awareness and Self-Discrepancy Theory, Control Theory does not specify that either the current state or the reference point be defined in terms of the self. Indeed, it is quite possible for people to pursue goals that are not relevant to the self, for which an evaluation of the self-concept is not necessary to monitor progress. Consider the example of a worker filing papers. The worker may assess his progress by counting the number of papers left to file, knowing that the reference point he is ideally trying to reach is zero. In this case, progress toward the goal is clearly assessed, distance from the goal is easily quantified, and neither dimension is central to the self-concept.¹ In such cases, a lack of clarity about the self seems unlikely to interfere with effective self-regulation. However, for more

¹Although such lower-order, concrete goals are likely distally linked to the self-concept by virtue of being connected to higher-order goals with greater relevance to the self, such as the goal of being a productive worker, it seems likely that the impact of the self-concept on the pursuit of a particular goal (and vice versa) will depend on the goal's position in a hierarchically organized system of goals, with goals that are more closely linked to the self-concept having a stronger bidirectional relationship to the self (e.g., Emmons, 1986).

abstract, self-defining goals and standards, the self-concept is the most likely input to compare to the desired reference point. Thus confusion about the self-concept is more likely to undermine pursuit of long-term, abstract, self-relevant goals than goals that are more short-term and concrete.

Differentiating it somewhat from other goal discrepancy theories, Objective Self-Awareness Theory also posits an additional role for the self-concept. Namely, motivation to reduce discrepancies between the self and the goal is initiated when the self becomes the object of attention. According to Duval and Wicklund (1972), this self-focused attention automatically initiates self-evaluation processes, which in turn brings discrepancies between the self and one's standards and goals into conscious awareness. Although research on Objective Self-Awareness Theory has typically focused on aspects of the situation that might result in the self becoming the object of attention—such as placing a mirror in the room—researchers have explored the possibility that individual differences may also lead people to focus more attention on themselves (e.g., Silvia, Eichstaedt, & Phillips, 2005).

In Self-Discrepancy Theory, the standards against which the current state is judged are also defined in terms of the self-concept, namely, as the ought self and ideal self. As specific types of possible selves, the ought self and ideal self are associated with yet distinct from the actual self-concept, meaning that how they are affected by self-concept clarity is potentially complex. It is possible for an individual to have a clearer sense of who he would ideally like to be or who he ought to be than who he believes himself to actually be. However, to the extent that possible selves are rooted in representations of oneself in the past and present (Markus & Nurius, 1986), beliefs and metacognition about the current self-concept are likely to influence both the ideal self and ought self. Thus in Self-Discrepancy Theory, the self-concept impacts the process of self-regulation both by potentially serving as a marker of one's current position relative to the goal and also by shaping one's standards for behavior themselves.

To summarize, discrepancy-based theories suggest three mechanisms by which the self-concept facilitates self-regulation during the process of goal striving: (a) by serving as an indicator of the current state, (b) by serving as a basis for conceptions of one's goals, and (c) by initiating motivational processes when the self becomes the object of attention. In addition, other theoretical accounts suggest that the self-concept may be involved in the process of goal setting and planning.

Self-Concept Clarity and Goal Pursuit

As has been illustrated, theories of self-regulation and goal pursuit describe the self-concept as playing an active role throughout the process of self-regulated behavior. This suggests that disturbances to the self-concept in the form of reduced clarity and increased confusion about the self have the potential to undermine self-regulation. Beginning with the role of the self-concept in the predecisional phase of goal pursuit, as is clearly illustrated in the discussion of possible selves (Markus & Nurius,

1986), the self-concept can be used both to generate and to evaluate the value of possible goals. Lacking clarity about the self-concept may undermine the individual's ability to generate possible goals, leading to a diminished set of options that are considered, thus increasing the likelihood that the individual will adopt a suboptimal goal (Gollwitzer, Heckhausen, & Steller, 1990). Alternatively, to the extent that the self-concept is used as a template for generating desired and undesired possible selves, a lack of clarity about the (actual) self-concept may translate into vaguely defined goals. According to goal-setting theory, this should place individuals with low self-concept clarity at a disadvantage, as greater specificity in set goals is associated with higher levels of goal commitment (Wright & Kacmar, 1994) and higher and more consistent levels of performance (Locke, Chah, Harrison, & Lustgarten, 1989; Mento, Steel, & Karren, 1987). Moreover, the self-concept is often used as standard in decision-making, wherein options are evaluated based on their perceived fit with the self (i.e., self-to-prototype matching). Empirical evidence suggests that low self-concept clarity reduces the use of self-to-prototype strategies (Setterlund & Niedenthal, 1993). It is unclear what people do when such decision-making strategies are not available to them—they may default to another heuristic (e.g., conformity, salience, etc.) or may simply choose to delay decision-making (Anderson, 2003). The latter outcome is particularly problematic, as it suggests that people with low self-concept clarity may be unable to move to the postdecisional and actional phases of self-regulation, meaning that goal pursuit will never actually occur. Thus individuals stand to benefit from having a relatively clear self-concept in that it may facilitate the identification of personal goals, whereas people with low self-concept clarity may find the process of selecting goals to pursue more difficult.

After identifying goals to be pursued, people typically spend some amount of time planning how to pursue the goal in the postdecisional/preactional phase of goal pursuit. During this phase, the individual ideally considers the best available strategies to pursue the goal and develops a workable plan of action. While relatively little research has explored how people choose strategies to pursue their goals, as described previously, this stage of goal pursuit is associated with a desire for accurate—rather than enhancing—information about the self, suggesting that the self-concept serves as a guide in planning for goal pursuit. As such, low self-concept clarity would be particularly distressing and detrimental during this planning phase. Uncertainty about one's strengths and weaknesses would make it difficult to assess which strategies are most personally efficacious and appealing. In the absence of clear information about one's strengths, weaknesses, and preferences, the individual may default to imitating how others have pursued similar goals or may simply fail to construct a clear plan for implementing action toward the goal. Indeed, motivational styles associated with less self-determination (and thus less relevance of the self-concept to goal pursuit) are associated with lower likelihood of spontaneously forming implementation intentions (Brickell & Chatzisarantis, 2007). Thus it is plausible that experiencing uncertainty about the self-concept will reduce the likelihood that an individual will spontaneously construct specific plans for pursuing his or her goals. Given the overwhelming evidence that forming implementation intentions increases the likelihood of success (Gollwitzer, 2014), this would place people with low self-concept clarity at a clear disadvantage for achieving their goals.

Once a plan for action has been made, a goal pursuer enters the actional phase of goal pursuit or the act of *goal striving*. This is the phase of goal pursuit in which effort is put into closing the distance between one's current state and the goal. Notably, goal striving often does not occur all at once—rather, many goals are pursued over periods of days, weeks, months, or even years, and active striving occurs in spurts over time. It is within this context of on-again/off-again striving toward long-term goals that most discrepancy models of goal pursuit are positioned. Within these models, the perception of a discrepancy initiates motivation to put active effort into a pre-existing goal; thus detection of discrepancies activates goal striving. However, as described previously, the self-concept likely plays a role in the detection of discrepancies. To the extent that one's current state is influenced by judgments of the self, people with low self-concept clarity are likely to feel less certain about their current distance from the goal. As a result, discrepancies between one's current state and the goal should be more difficult to detect. Thus people with low self-concept clarity may be less likely to identify situations in which they need to put effort into their goals, resulting in the goals never being actively pursued.

In contrast to other discrepancy-based theories of self-regulation, objective self-awareness theory posits an eliciting condition under which discrepancies are likely to be noticed—specifically, when the self becomes the focus of conscious attention. Self-concept clarity might be expected to predict the frequency of self-focused attention; indeed, self-concept clarity is negatively correlated with the self-reflection subscale of the private self-consciousness scale and negatively correlated with rumination, a form of self-focused thought (Campbell et al., 1996). Thus people who feel less clear and certain about themselves report spending more time analyzing and ruminating about themselves, which could conceivably foster greater detection of self-discrepancies. However, studies specifically testing the hypothesis that trait rumination and reflection are forms of self-focused attention that can kick-start self-regulation suggest that people who tend to ruminate and reflect about themselves are *not* more likely to be the subject of their own attention (Silvia et al., 2005). Thus low self-concept clarity is unlikely to make up for the hindrances it poses to goal pursuit by increasing the likelihood that self-discrepancies are noticed.

What Guides the Unclear Self?

Thus far I have described the elements of the process of goal pursuit during which the self-concept typically plays a role and suggested that a lack of clarity about the self may undermine goal pursuit at these points in the process (or that, conversely, having a clear sense of self will facilitate the process). But in the absence of a clear self-concept to guide action at these points, what will determine behavior? I propose that control over behavior will shift away from internal cues (such as the self-concept and personal standards) and toward external cues (such as actions primed by the environment or social influence). This follows from the observation that low self-concept clarity implies that beliefs about the self are metacognitively “weak” in

ways that are analogous to the relative strength and weaknesses of attitudes (DeMarree, Petty, & Briñol, 2007). Attitudes that are relatively strong—i.e., clear, certain, unambivalent, mentally accessible, etc.—are better predictors of behavior than are attitudes that are relatively weak, that is, unclear, uncertain, ambivalent, and less easily called to mind (Holland, Verplanken, & van Knippenberg, 2002). When attitudes are weak, behavior is less likely to be consistent with attitudes but instead more likely to be determined by situational cues (Fazio & Olson, 2014). Similarly, I suggest that the metacognitive “weakness” of self-beliefs that defines low self-concept clarity will result in behavior being determined by situational factors.

Mechanistically, such an outcome could unfold from processes similar to those described in social cognition models of social priming. In the Situated Inference Model of priming (Loersch & Payne, 2011), priming is essentially a process of misattributing the primed concept to one’s own thoughts about a specific target. As such, the way in which priming influences perception and behavior depends on the target object the individual is focusing on when the primed construct is made accessible and features of the object itself that influence interpretation of the primed construct. Relevant to predictions about self-concept clarity, the situated inference model suggests that people are more likely to assimilate to primes (that is, alter their judgment or behavior to be more similar to attributes of the prime) when the object of attention is ambiguous with regard to the primed construct—for example, priming the concept of “speed” is more likely to lead to assimilative judgments of ambiguous targets (e.g., humans) and contrasting judgment of unambiguous targets (e.g., cheetahs, turtles). Since self-concept clarity renders the self-concept ambiguous with regard to *most* constructs, this suggests that people with low self-concept clarity are particularly likely to misattribute primed constructs to their judgments of themselves and their personal motivations.

Consistent with this hypothesis, people with low self-concept clarity show greater evidence of internalizing cultural ideals (Chap. 11 this volume), are more compliant to overt external recommendations in decision-making contexts (Lee, Lee, & Sanford, 2010), shift their behavior and self-ratings more based on social interactions (Cuperman, Robinson, & Ickes, 2014), and yet are less likely to undertake more purposeful self-changes like self-expansion (Emery, Walsh, & Slotter, 2015). Along with a number of related constructs like traitedness and self-monitoring, Dalal et al. (2015) recently proposed that self-concept clarity be understood as a moderator of the impact of situational influences: when self-concept clarity is low (and thus in Dalal’s terms, personality is said to be weak), the influence of situational factors on behavior will be stronger, holding constant the strength of the situation. Thus although relatively little research has focused on the effects of self-concept clarity on goal-directed behavior specifically, available evidence is consistent with the hypothesis that behavior is more likely to be determined by the situation when self-concept clarity is low.

Such a claim is consistent with the observation that self-control and external control appear to be substitutable and hydraulic—when external constraints on behavior are strong and consistent with one’s goals, individuals do not need to exert as much self-control in order to pursue their personal goals. Indeed, external sources

of control—such as effective parenting—seem to diminish the effect of trait differences in self-control on important outcomes like body mass index (Connell & Francis, 2014). In some cases, the presence of external control or support for goal pursuit leads individuals to withdraw self-control effort, presumably to conserve self-regulatory resources (Fishbach & Trope, 2005; Fitzsimons & Finkel, 2011). Moreover, people often take steps to create external controls when they are concerned that their self-control will not be sufficient to keep them away from temptations, for example, choosing a seat that is far from a tempting dessert table or by installing apps on their phones that prevent them from using Facebook during work hours (e.g., Ainslie, 1975; Ariely & Wertenbroch, 2002; Rachlin, 2000). Thus external cues and constraints often substitute in guiding goal pursuit when self-control is weak. This implies that the deficits to self-regulation that people with low self-concept clarity experience may be buffered to the extent that their social environments prominently feature cues that can guide behavior back to their personal goals.

Indeed, the scaffolding effects of a supportive social environment could potentially account for an obvious boundary condition of the link between self-concept clarity and well-being. While low self-concept clarity is associated with poorer outcomes for people in independent cultures, people with interdependent or relational self-construals tend to exhibit little or no correlation between self-concept clarity and various indicators of well-being (Campbell et al., 1996; English & Chen, 2011; Hannover, 2002). While this has typically been explained as resulting from differing cultural ideals—an independent ideal in which a consistent, coherent, and confident self is desired and an interdependent ideal in which a flexible, varied, and responsive self is desired (e.g., Spencer-Rodgers, Boucher, Mori, Wang, & Peng, 2009)—the present model suggests an additional mechanism by which culture may moderate the outcome of self-concept clarity. Specifically, the social environments cultivated in interdependent cultures may provide more cues consistent with goal pursuit that can provide external sources of control. While there may be a broad variety of ways in which social environments can be “culturally engineered” to scaffold goal pursuit, one notable example is the level of goal-focused support provided by significant others. Research both across and within cultures has noted that an interdependent or relational self-construal is associated with both offering (Chen, Kim, Mojaverian, & Morling, 2012) and receiving higher levels of goal support from others (Gore, Cross, & Kanagawa, 2009). Thus the link between self-concept clarity and well-being may be weaker among people with an interdependent or relational approach because their significant others do a better job of supporting and scaffolding their goal pursuit, leading to higher levels of goal attainment and thus greater well-being.

Distinctions Between Self-Concept Clarity and Self-Esteem

To summarize, I propose that low self-concept clarity (as compared to high self-concept clarity) undermines goal pursuit by (a) hindering the ability to identify clear, optimal, self-concordant goals, (b) reducing the extent to which one’s strengths

vs. weaknesses are taken into account when planning how to pursue the goal, and (c) reducing the salience of discrepancies between the self and goal such that active goal striving is less likely to occur. These hypotheses can potentially distinguish the consequences of low self-concept clarity from low self-esteem—while self-esteem certainly impacts goal pursuit (e.g., Di Paula & Campbell, 2002), it likely does so through quite different mechanisms. For example, underestimation of one's efficacy due to low self-esteem is generally associated with setting lower goals (Erez & Judge, 2001; Tang & Reynolds, 1993) which in turn likely lead to lower levels of achievement (Locke & Latham, 1990). Moreover, while difficult goals are typically associated with higher levels of achievement, it is also possible for goals to be set too high, and indeed high self-esteem is associated with setting unattainable, risky goals, especially following ego threats (Baumeister, Heatherton, & Tice, 1993). Thus high self-esteem does not necessarily lead to setting optimal goals—especially under conditions of threat. While the consequences of self-esteem for goal setting appear to be primarily limited to a direct correlation to the level at which goals are set, low self-concept clarity, by contrast, may result in setting goals that are suboptimal for a variety of reasons—they may be as likely to be too high as too low, may lack appropriate specificity, and may be poorly calibrated to the individual's values and preferences.

Similarly, while I propose that self-concept clarity will reduce the extent to which means that are selected to pursue the goal fit with the individual's strengths and personal preferences, it is less clear how low self-esteem alone would lead to a similar outcome. Some evidence links high levels of self-criticism to lesser adoption of implementation intentions (Powers, Milyavskaya, & Koestner, 2012), which the authors suggest is due to ruminative concerns about failure that presumably undermine motivation and co-opt cognitive resources. In addition, interventions in which participants are given implementation intentions are more effective when self-efficacy is high (Wieber, Odenthal, & Gollwitzer, 2010), again suggesting that positive beliefs about the self are associated with more effective planning for goal pursuit. More theoretical and empirical work is needed to elucidate the mechanisms linking negative self-beliefs like self-criticism and low self-efficacy to reduced efficacy of implementation intentions. At present, it is worth noting that high self-esteem does not seem to be immediately connected to the higher levels of specificity, and “fit” in action plans that I have hypothesized may be consequences of high self-concept clarity.

Finally, although I have described how low self-concept clarity may reduce the likelihood that self/goal discrepancies are identified and acted upon, it is not clear that low self-esteem would lead to the same outcomes. Rather, the relationship between self-esteem and identification of such discrepancies is likely to be more complex. The initiation of goal striving in response to discrepancies between the self and goals/standards depends both on the individual attending to the discrepancy and identifying the discrepancy as a signal that effort needs to be exerted to move the self closer to the goal. Work on the detection of discrepancies has primarily taken the form of research under the umbrella of Objective Self-Awareness Theory, in which features of the person or the situation lead the individual to focus attention

on him—/herself, thereby drawing attention to any potential discrepancies. While it seems plausible that people with positive opinions of themselves might be more comfortable thinking about themselves (thus leading to greater self-focused attention), evidence typically suggests that higher levels of self-reflection are in fact associated with lower self-esteem (Conway & Giannopoulos, 1993). Thus existing evidence does not support the contention that high self-esteem would aid in the detection of discrepancies between the self and goals/standards, which is in contrast to my hypothesis that greater self-concept clarity would increase the likelihood that such discrepancies are detected.

Thus while self-esteem undoubtedly influences self-regulation and goal pursuit, it is not clear that self-esteem alone would lead to the same predictions I have outlined for self-concept clarity's influence on self-regulation. As researchers exploring these two interrelated constructs seek to clarify their unique contributions to affect, behavior, and cognition, more empirical work on how the two variables impact self-regulation may aid in distinguishing the constructs.

The Mechanisms Are Key

In this chapter, I have outlined a model in which clear, coherent, and accessible self-knowledge serves as a resource for goal pursuit, leading to higher levels of goal attainment for people with high self-concept clarity and subsequently improving health and happiness. Much research still remains to test this model. For example, it is worth noting that the majority of evidence linking self-concept clarity to self-regulation is itself correlational and thus ambiguous for interpretations regarding causality and mechanism. As research in this area moves forward, we should strive to incorporate research designs that enable greater clarity regarding causality, such as growth curve analysis in hierarchical linear modeling with longitudinal designs (e.g., Duckworth, Tsukayama, & May, 2010) or experimental designs. The former method focuses on relationships between short-term changes in variables within subjects, thus eliminating the influence of time-invariant individual differences that may confound analyses (e.g., trait neuroticism). This approach has already been used to provide further evidence that self-concept clarity increases meaning in life (Shin, Steger, & Henry, 2016) and in the future could be used to explore cognitive, affective, and behavioral consequences of changes in self-concept clarity. The experimental approach presents additional challenges, as manipulations of various facets of self-concept clarity (e.g., self-uncertainty) can sometimes be perceived as threats to the self and are met with defensive conviction (e.g., McGregor & Marigold, 2003), thus masking the effects of lowered self-concept clarity. However, programs of research that both manipulate and measure self-concept clarity across studies can help to triangulate the consequences of having low vs. high self-concept clarity. Moreover, careful manipulations targeting the mechanisms of associations between self-concept clarity and well-being variables can provide further causal evidence regarding these mechanisms (e.g., DeMarree & Rios, 2014).

In addition to presenting my model linking self-concept clarity to self-regulation, my hope is that this chapter persuades the reader that any research into understanding the underlying processes linking self-concept clarity and well-being are vital to an enhanced understanding of this construct. A better understanding of these mechanisms will help to elucidate its unique effects apart from close associates like self-esteem and insecure attachment style. Moreover, as the model I propose demonstrates, a mechanistic approach may generate new empirical questions about cultural differences related to self-concept clarity. While the challenges of applying social cognitive approaches to understanding trait-like individual differences remain, I hope that future work in this area will clarify our understanding, lend coherence to the literature, and increase our confidence in research on self-concept clarity!

References

- Ainslie, G. (1975). Specious reward: A behavioral theory of impulsiveness and impulse control. *Psychological Bulletin*, *82*, 463–496.
- Anderson, C. J. (2003). The psychology of doing nothing: Forms of decision avoidance result from reason and emotion. *Psychological Bulletin*, *129*, 136–167.
- Ariely, D., & Wertenbroch, K. (2002). Procrastination, deadlines, and performance: Self-control by precommitment. *Psychological Science*, *13*, 219–224.
- Bandura, A. (1986). *Social foundations of thought and action: A social-cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Baumeister, R. F., Heatherton, T. F., & Tice, D. M. (1993). When ego threats lead to self-regulation failure: Negative consequences of high self-esteem. *Journal of Personality and Social Psychology*, *64*, 141–156.
- Bayer, U. C., & Gollwitzer, P. M. (2005). Mindset effects on information search in self-evaluation. *European Journal of Social Psychology*, *35*, 313–327.
- Bigler, M., Neimeyer, G. J., & Brown, E. (2001). The divided self revisited: Effects of self-concept clarity and self-concept differentiation on psychological adjustment. *Journal of Social and Clinical Psychology*, *20*, 396–415.
- Boals, A., vanDellen, M. R., & Banks, J. B. (2001). The relationship between self-control and health: The mediating effect of avoidant coping. *Psychology & Health*, *26*, 1049–1062.
- Brickell, T. A., & Chatzisarantis, N. L. (2007). Using self-determination theory to examine the motivational correlates and predictive utility of spontaneous exercise implementation intentions. *Psychology of Sport and Exercise*, *8*, 758–770.
- Brunstein, J. C., Dangelmayer, G., & Schultheiss, O. C. (1996). Personal goals and social support in close relationships: Effects on relationship mood and marital satisfaction. *Journal of Personality and Social Psychology*, *71*, 1006–1019.
- Campbell, J. D. (1990). Self-esteem and clarity of the self-concept. *Journal of Personality and Social Psychology*, *59*, 538–549.
- Campbell, J. D., Assanand, S., & Di Paula, A. (2003). The structure of the self-concept and its relation to psychological adjustment. *Journal of Personality*, *71*, 115–140.
- Campbell, J. D., Trapnell, P. D., Heine, S. J., Katz, I. M., Lavallee, L. F., & Lehman, D. R. (1996). Self-concept clarity: Measurement, personality correlates, and cultural boundaries. *Journal of Personality and Social Psychology*, *70*, 141–156.
- Carver, C. S., & Scheier, M. F. (1982). Control theory: A useful conceptual framework for personality-social, clinical, and health psychology. *Psychological Bulletin*, *92*, 111–135.

- Case, P., Sparks, P., & Pavey, L. (2016). Identity appropriateness and the structure of the theory of planned behaviour. *British Journal of Social Psychology, 55*, 109–125.
- Chen, J. M., Kim, H. S., Mojaverian, T., & Morling, B. (2012). Culture and social support provision: Who gives what and why. *Personality and Social Psychology Bulletin, 38*, 3–13.
- Connell, L. E., & Francis, L. A. (2014). Positive parenting mitigates the effects of poor self-regulation on body mass index trajectories from ages 4–15 years. *Health Psychology, 33*, 757–764.
- Conway, M., & Giannopoulos, C. (1993). Self-esteem and specificity in self-focused attention. *The Journal of Social Psychology, 133*, 121–123.
- Cuperman, R., Robinson, R. L., & Ickes, W. (2014). On the malleability of self-image in individuals with a weak sense of self. *Self and Identity, 13*, 1–23.
- Dalal, R. S., Meyer, R. D., Bradshaw, R. P., Green, J. P., Kelly, E. D., & Zhu, M. (2015). Personality strength and situational influences on behavior: A conceptual review and research agenda. *Journal of Management, 41*, 261–287.
- de Bruin, M., Sheeran, P., Kok, G., Hiemstra, A., Prins, J. M., Hospers, H. J., & van Breukelen, G. J. P. (2012). Self-regulatory processes mediate the intention-behavior relation for adherence and exercise behaviors. *Health Psychology, 31*, 695–703.
- DeMarree, K. G., Petty, R. E., & Briñol, P. (2007). Self and attitude strength parallels: Focus on accessibility. *Social and Personality Psychology Compass, 1*, 441–468.
- DeMarree, K. G., & Rios, K. (2014). Understanding the relationship between self-esteem and self-clarity: The role of desired self-esteem. *Journal of Experimental Social Psychology, 50*, 202–209.
- Denson, T. F., DeWall, C. N., & Finkel, E. J. (2012). Self-control and aggression. *Current Directions in Psychological Science, 21*, 20–25.
- DeWall, C. N., Finkel, E. J., & Denson, T. F. (2011). Self-control inhibits aggression. *Social and Personality Psychology Compass, 5*, 458–472.
- Di Paula, A., & Campbell, J. D. (2002). Self-esteem and persistence in the face of failure. *Journal of Personality and Social Psychology, 83*, 711–724.
- Diehl, M., & Hay, E. L. (2011). Self-concept differentiation and self-concept clarity across adulthood: Associations with age and psychological well-being. *The International Journal of Aging and Human Development, 73*, 125–152.
- Duckworth, A. L., Tsukayama, E., & May, H. (2010). Establishing causality using longitudinal hierarchical linear modeling: An illustration predicting achievement from self-control. *Social Psychological and Personality Science, 1*, 311–317.
- Duval, S., & Wicklund, R. A. (1972). *A theory of objective self-awareness*. Oxford, England: Academic Press.
- Emery, L. F., Walsh, C., & Slotter, E. B. (2015). Knowing who you are and adding to it: Reduced self-concept clarity predicts reduced self-expansion. *Social Psychological and Personality Science, 6*, 259–266.
- Emmons, R. A. (1986). Personal strivings: An approach to personality and subjective well-being. *Journal of Personality and Social Psychology, 51*, 1058–1086.
- Emmons, R. A. (1996). Striving and feeling: Personal goals and subjective well-being. In P. M. Gollwitzer & J. A. Bargh (Eds.), *The psychology of action: Linking cognition and motivation to behavior* (pp. 683–708). New York, NY: Guilford Press.
- English, T., & Chen, S. (2011). Self-concept consistency and culture: The differential impact of two forms of consistency. *Personality and Social Psychology Bulletin, 37*, 838–849.
- Erez, A., & Judge, T. A. (2001). Relationship of core self-evaluations to goal setting, motivation, and performance. *Journal of Applied Psychology, 86*, 1270–1279.
- Fazio, R. H., & Olson, M. A. (2014). The MODE model: Attitude-behavior processes as a function of motivation and opportunity. In J. W. Sherman, B. Gawronski, & Y. Trope (Eds.), *Dual-process theories of the social mind* (pp. 155–171). New York, NY: Guilford Press.
- Finkel, E. J., & Campbell, W. K. (2001). Self-control and accommodation in close relationships: An interdependence analysis. *Journal of Personality and Social Psychology, 81*, 263–277.

- Fishbach, A., & Trope, Y. (2005). The substitutability of external control and self-control. *Journal of Experimental Social Psychology, 41*, 256–270.
- Fite, R. E., Lindeman, M. I. H., Rogers, A. P., Voyles, E., & Durik, A. M. (2017). Knowing oneself and long-term goal pursuit: Relations among self-concept clarity, conscientiousness, and grit. *Personality and Individual Differences, 108*, 191–194.
- Fitzsimons, G. M., & Finkel, E. J. (2011). Outsourcing self-regulation. *Psychological Science, 22*, 369–375.
- Fryberg, S. A., Markus, H. R., Oyserman, D., & Stone, J. M. (2008). Of warrior chiefs and indian princesses: The psychological consequences of American Indian mascots. *Basic and Applied Social Psychology, 30*, 208–218.
- Gollwitzer, P. (2014). Weakness of the will: Is a quick fix possible? *Motivation and Emotion, 38*, 305–322.
- Gollwitzer, P. M., Heckhausen, H., & Steller, B. (1990). Deliberative and implemental mind-sets: Cognitive tuning toward congruous thoughts and information. *Journal of Personality and Social Psychology, 59*, 1119–1127.
- Gore, J. S., Cross, S. E., & Kanagawa, C. (2009). Acting in our interests: Relational self-construal and goal motivation across cultures. *Motivation and Emotion, 33*, 75–87.
- Hanley, A. W., & Garland, E. L. (2017). Clarity of mind: Structural equation modeling of associations between dispositional mindfulness, self-concept clarity and psychological well-being. *Personality and Individual Differences, 106*, 334–339.
- Hannover, B. (2002). One man's poison ivy is another man's spinach: What self-clarity is in independent self-construal, a lack of context-dependency is in interdependent self-construal. *Revue Internationale de Psychologie Sociale, 15*, 65–88.
- Heckhausen, H., & Gollwitzer, P. M. (1987). Thought contents and cognitive functioning in motivational versus volitional states of mind. *Motivation and Emotion, 11*, 101–120.
- Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review, 94*, 319–340.
- Higgins, E. T. (1989). Continuities and discontinuities in self-regulatory and self-evaluative processes: A developmental theory relating self and affect. *Journal of Personality, 57*, 407–444.
- Hofmann, W., Luhmann, M., Fisher, R. R., Vohs, K. D., & Baumeister, R. F. (2014). Yes, but are they happy? Effects of trait self-control on affective well-being and life satisfaction. *Journal of Personality, 82*, 265–277.
- Holland, R. W., Verplanken, B., & van Knippenberg, A. (2002). On the nature of attitude-behavior relations: The strong guide, the weak follow. *European Journal of Social Psychology, 32*, 869–876.
- Lee, G., Lee, J., & Sanford, C. (2010). The roles of self-concept clarity and psychological reactance in compliance with product and service recommendations. *Computers in Human Behavior, 26*, 1481–1487.
- Light, A. E., & Hoyle, R. Unpublished data.
- Light, A. E., & Visser, P. S. (2013). The ins and outs of the self: Contrasting role exits and role entries as predictors of self-concept clarity. *Self and Identity, 12*, 291–306.
- Light & Visser. Unpublished data.
- Locke, E. A., Chah, D. O., Harrison, S., & Lustgarten, N. (1989). Separating the effects of goal specificity from goal level. *Organizational Behavior and Human Decision Processes, 43*, 270–287.
- Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting & task performance*. Englewood Cliffs, NJ: Prentice-Hall.
- Loersch, C., & Payne, B. K. (2011). The situated inference model: An integrative account of the effects of primes on perception, behavior, and motivation. *Perspectives on Psychological Science, 6*, 234–252.
- Markus, H., & Nurius, P. (1986). Possible selves. *American Psychologist, 41*, 954–969.
- McGregor, I., & Marigold, D. C. (2003). Defensive zeal and the uncertain self: What makes you so sure? *Journal of Personality and Social Psychology, 85*, 838–852.

- Mento, A. J., Steel, R. P., & Karren, R. J. (1987). A meta-analytic study of the effects of goal setting on task performance: 1966–1984. *Organizational Behavior and Human Decision Processes*, *39*, 52–83.
- Powers, T. A., Milyavskaya, M., & Koestner, R. (2012). Mediating the effects of self-criticism and self-oriented perfectionism on goal pursuit. *Personality and Individual Differences*, *52*, 765–770.
- Rachlin, H. (2000). *The science of self-control*. Cambridge, MA: Harvard University Press.
- Ritchie, T. D., Sedikides, C., Wildschut, T., Arndt, J., & Gidron, Y. (2011). Self-concept clarity mediates the relation between stress and subjective well-being. *Self and Identity*, *10*, 493–508.
- Ruvolo, A. P., & Markus, H. R. (1992). Possible selves and performance: The power of self-relevant imagery. *Social Cognition*, *10*, 95–124.
- Schwartz, S. J., Klimstra, T. A., Luyckx, K., Hale, W. W., III, & Meeus, W. H. J. (2012). Characterizing the self-system over time in adolescence: Internal structure and associations with internalizing symptoms. *Journal of Youth and Adolescence*, *41*, 1208–1225.
- Setterlund, M. B., & Niedenthal, P. M. (1993). ‘Who am I? Why am I here?’ Self-esteem, self-clarity, and prototype matching. *Journal of Personality and Social Psychology*, *65*, 769–780.
- Sheldon, K. M., Jose, P. E., Kashdan, T. B., & Jarden, A. (2015). Personality, effective goal-striving, and enhanced well-being: Comparing 10 candidate personality strengths. *Personality and Social Psychology Bulletin*, *41*, 575–585.
- Shin, J. Y., Steger, M. F., & Henry, K. L. (2016). Self-concept clarity’s role in meaning in life among American college students: A latent growth approach. *Self and Identity*, *15*, 206–223.
- Silvia, P. J., Eichstaedt, J., & Phillips, A. G. (2005). Are rumination and reflection types of self-focused attention? *Personality and Individual Differences*, *38*, 871–881.
- Smith, M., Wethington, E., & Zhan, G. (1996). Self-concept clarity and preferred coping styles. *Journal of Personality*, *64*, 407–434.
- Spencer-Rodgers, J., Boucher, H. C., Mori, S. C., Wang, L., & Peng, K. (2009). The dialectical self-concept: Contradiction, change, and holism in East Asian cultures. *Personality and Social Psychology Bulletin*, *35*, 29–44.
- Stopa, L., Brown, M. A., Luke, M. A., & Hirsch, C. R. (2010). Constructing a self: The role of self-structure and self-certainty in social anxiety. *Behaviour Research and Therapy*, *48*, 955–965.
- Stucke, T. S., & Sporer, S. L. (2002). When a grandiose self-image is threatened: Narcissism and self-concept clarity as predictors of negative emotions and aggression following ego-threat. *Journal of Personality*, *70*, 509–532.
- Tang, T. L., & Reynolds, D. B. (1993). Effects of self-esteem and perceived goal difficulty on goal setting, certainty, task performance, and attributions. *Human Resource Development Quarterly*, *4*, 153–170.
- Thomas, C. R., & Gadbois, S. A. (2007). Academic self-handicapping: The role of self-clarity and students’ learning strategies. *British Journal of Educational Psychology*, *77*, 101–119.
- Uysal, A., & Knee, C. R. (2012). Low trait self-control predicts self-handicapping. *Journal of Personality*, *80*, 59–79.
- van Dijk, M. P. A., Branje, S., Keijsers, L., Hawk, S. T., Hale, W. W., III, & Meeus, W. (2014). Self-concept clarity across adolescence: Longitudinal associations with open communication with parents and internalizing symptoms. *Journal of Youth and Adolescence*, *43*, 1861–1876.
- Vohs, K. D., Finkenauer, C., & Baumeister, R. F. (2011). The sum of friends’ and lovers’ self-control scores predicts relationship quality. *Social Psychology and Personality Science*, *2*, 138–145.
- Wieber, F., Odenthal, G., & Gollwitzer, P. (2010). Self-efficacy feelings moderate implementation intentions. *Self and Identity*, *9*, 177–194.
- Wills, T. A., Isasi, C. R., Mendoza, D., & Ainette, M. G. (2007). Self-control constructs related to measures of dietary intake and physical activity and adolescents. *Journal of Adolescent Health*, *41*, 551–558.
- Wright, P. M., & Kacmar, K. M. (1994). Goal specificity as a determinant of goal commitment and goal change. *Organizational Behavior and Human Decision Processes*, *59*, 242–260.