Wanting to Be Different Predicts Nonmotivated Change: Actual–Desired Self-Discrepancies and Susceptibility to Subtle Change Inductions

Kenneth G. DeMarree¹, Kimberly Rios², J. Adam Randell³, S. Christian Wheeler⁴, Darcy A. Reich⁵, and Richard E. Petty⁶

Abstract
Actual–desired discrepancies in people’s self-concepts represent structural incongruities in their self-representations that can lead people to experience subjective conflict. Theory and research suggest that structural incongruities predict susceptibility to subtle influences like priming and conditioning. Although typically examined for their motivational properties, we hypothesized that because self-discrepancies represent structural incongruities in people’s self-concepts, they should also predict susceptibility to subtle influences on people’s active self-views. Across three studies, we found that subtle change inductions (self-evaluative conditioning and priming) exerted greater impact on active self-perceptions and behavior as actual–desired self-discrepancies increased in magnitude. Exploratory analyses suggested that these changes occurred regardless of the compatibility of the change induction with individuals’ desired self-views.

Keywords
self-discrepancies, priming, self-concept, self-esteem

People often have discrepancies between the views they have of themselves and the views they desire to have (Carver & Scheier, 1998; Higgins, 1987). Such self-discrepancies can create negative affect and motivate change in the direction of desired self-views (Carver & Scheier, 1998; Markus & Nurius, 1986). In this article, we propose that in addition to predicting motivated change, self-discrepancies can also predict nonmotivated changes in accessible self-conceptions. This is because self-discrepancies reflect incongruity in available self-representations, so they can promote instability in the active self-concept. In this article, we test this notion by examining whether people with larger self-discrepancies are more susceptible to subtle forms of influence, such as priming and evaluative conditioning, and whether this susceptibility can manifest regardless of the consistency of the change induction with a person’s desired self-views.

Self-Discrepancies
In addition to the views people hold of their actual characteristics, people also have possible self-views that serve as standards against which their actual self-views are compared (Higgins, 1987; Markus & Nurius, 1986). Research has shown that discrepancies between actual and desired self-views produce negative affect (e.g., Higgins, Bond, Klein, & Strauman, 1986). As a result, self-discrepancies motivate people to align their actual self-views with their desired self-views through a variety of behavioral and cognitive strategies (e.g., Carver & Scheier, 1998; Higgins, 1989). Although typically examined in domains such as the regulation of achievement or health behaviors (e.g., Huang, Zhang, & Broniarczyk, 2012; Sanderson, Darley, & Messinger, 2002), other work has shown that people also try to regulate their emotions (Gross, 1999), personality (Hudson & Fraley, 2015), and evaluations (DeMarree, Clark, Wheeler, Briñol, & Petty, 2016). Typically self-discrepancies motivate change in the direction of desired selves.
Discrepancies between one’s actual and desired self-views indicate the presence of incongruent self-concept content (Maio & Thomas, 2007; Markus & Nurius, 1986). This incongruent self-concept content includes not just the actual and desired self-views themselves but also the content associated with each, such as related traits, memories (e.g., interpersonal feedback), behaviors, and identities (Markus & Nurius, 1986; Markus & Wurf, 1987; McConnell, 2011). This incongruence in self-knowledge could make the self-conceptions of people who possess relatively large (vs. small) self-discrepancies more susceptible to subtle influences like primes or conditioning procedures.

Although no work has directly tested whether self-discrepancies predict susceptibility to subtle influences, some data are consistent with this idea. Notably, correlational and experimental studies have demonstrated that discrepancies between people’s actual and desired attitudes on a range of topics (e.g., abortion, exercising, oneself) predict the experience of conflict in people’s evaluations (DeMarree & Rios, 2014; DeMarree, Wheeler, Briñol, & Petty, 2014), which existing research (e.g., Haddock, 2003) and theory (e.g., van Harreveld, van der Plig, & de Liver, 2009) argues predicts attitude malleability. In addition, actual–desired attitude discrepancies predict reduced correspondence between attitudes and behavioral intentions (DeMarree et al., 2014), and properties of attitudes that predict reduced attitude-behavior correspondence often also predict the malleability of those attitudes (Petty & Krosnick, 1995). These prior studies suggest that actual–desired self-discrepancies may be predictive of malleability in people’s self-views.

Subtle Influences on the Active Self-Concept

Because more content can be stored in long-term memory than in working memory, it is not possible for all self-concept content to be accessible at once. Rather, currently accessible self-concept content, despite being only a subset of one’s total self-knowledge, is particularly predictive of people’s behavior (DeSteno & Salovey, 1997; Markus & Wurf, 1987; McConnell, 2011). This accessible subset of self-knowledge has many labels (e.g., working self-concept, phenomenal self), but we use the term active self to convey that we are referring to those elements of one’s self-conceptions that are currently active in memory (Wheeler, DeMarree, & Petty, 2007).

The Active-Self Account of prime-to-behavior effects (DeMarree, Wheeler, & Petty, 2005; Wheeler et al., 2007; Wheeler, DeMarree, & Petty, 2014) argues that subtle influences like primes can affect judgment and behavior by altering accessible self-concept content (i.e., the “active self”). For example, primed traits and stereotypes can influence implicit and explicit measures of people’s traits, attitudes, and identities (DeMarree et al., 2005; Dijksterhuis et al., 1998; Kawakami, Dovidio, & Dijksterhuis, 2003; Wyer, Neilens, Perfect, & Mazzoni, 2011). Consistent with the Active-Self Account, the patterns of change in the active self-concept mirror, and in some studies mediate, changes in people’s behavior that result from primed concepts (e.g., DeMarree et al., 2005; Dijksterhuis et al., 1998; Wyer et al., 2011).

Mechanisms of Influence

The Active-Self Account posits two ways in which primed concepts can influence the active self. One mechanism, biased activation, involves activating a prime-biased subset of a person’s chronically available self-content. For example, under conditions that foster assimilation (see Wheeler et al., 2007), people’s prime-congruent self-views will increase in accessibility, and consequently, be more likely to influence self-reports and behavior (see also Mussweiler, 2003). The second mechanism, expansion, occurs when activated contents are temporarily confused with or included in one’s self-views, which can then also increase their influence on judgment and behavior. That is, this account argues that activated concepts can be misattributed to one’s own self-views (see also Jones, Fazio, & Olson, 2009; Loersch & Payne, 2011). These two mechanisms can reinforce each other (e.g., initial biased activation of some prime-congruent content can facilitate confusion of additional prime-activated content with one’s self-conceptions).

We base our predictions on the expansion mechanism. Expansion is facilitated by factors that increase the likelihood that the self, rather than some other stimulus (including the prime), will be seen as the target to which the prime-activated content should be attributed. For example, if the self is focal in attention (e.g., DeMarree & Loersch, 2009) and the prime is not (e.g., Strack, Schwarz, Bless, Kubler, & Wänke, 1993), people will be more likely to attribute the primed concept as being about the self rather than another relevant judgmental target (for reviews, see Jones et al., 2009; Loersch & Payne, 2011; Wheeler et al., 2007). Because incongruities in one’s self-views can make the boundaries of the self less clear, they make it more difficult to determine which accessible contents are due to the self and which are not, thereby facilitating misattribution processes (Wheeler et al., 2007; see also Loersch & Payne, 2011). Consistent with this prediction, initial research suggests that people with less clearly defined self-views (e.g., high in uncertainty or ambivalence) are more susceptible to priming and conditioning manipulations (DeMarree, Morrison, Wheeler, & Petty, 2011; Morrison, Johnson, & Wheeler, 2012). New to the present article, we propose that actual–desired self-discrepancies will also facilitate these effects.

Role of Motivational Processes

Subtle change inductions, like primes, can sometimes lead people to act in undesired ways. For example, primed stereotypes can increase aggressive responses or decrease test
performance (e.g., Bargh, Chen, & Burrows, 1996; Wheeler, Jarvis, & Petty, 2001), changes in behavior that likely run counter to people’s desired selves. Subtle change inductions can affect behavior in undesired ways because they fly below the radar. When one is unaware of an influence, it is difficult to counteract it. Because we use subtle change inductions in the present research, larger self-discrepancies could be associated with larger shifts in people’s active self-conceptions regardless of whether the source of influence is consistent or inconsistent with the desired self. By using subtle change inductions, we reduce the potential for people to see the relevance of the situation to their discrepancies and to respond to the situation in ways that might that facilitate change in the desired direction (cf. Clark, Wegener, & Fabrigar, 2008; Higgins, 1997). As a result, larger self-discrepancies could predict greater self-concept shifts following a subtle change induction regardless of the induction’s consistency with desired selves, an idea we explore in this article.

Relevance of Discrepancies

Notably, self-discrepancies can vary in their relevance to any given change induction. When discrepancies are relevant to a change induction (e.g., forgetfulness discrepancies and an elderly stereotype prime), it is straightforward to predict that larger discrepancies should facilitate expansion-based misattribution processes. But what about when a given self-discrepancy (e.g., a self-discrepancy regarding honesty) is irrelevant to a change induction (e.g., an elderly stereotype prime)? Under these circumstances, it might still be possible for self-discrepancies to predict change. Any self-discrepancy, particularly if it is temporarily or chronically accessible, can make the self–nonself distinction unclear, and consequently might still lead people to misattribute prime-activated contents to the self. As noted earlier, misattribution accounts, like the expansion mechanism, predict that factors that increase the confusability of the true source of the accessible content with a potential target should facilitate expansion/misattribution processes (Jones et al., 2009; Loersch & Payne, 2011; Wheeler et al., 2007). Thus, self-discrepancies on prime-irrelevant dimensions could still predict changes in people’s active self-concepts in response to primes. This idea is explored in the present studies.

Current Predictions

We predicted that people’s active self-views would be more susceptible to conditioning and priming as the magnitude of their self-discrepancies increased. We tested our predictions across three studies. Study 1 examined whether actual–desired self-esteem discrepancies would moderate the effects of a self-evaluative conditioning procedure on self-esteem. Study 2 examined whether self-discrepancies on traits both related and unrelated to the elderly stereotype would moderate the effects of an elderly stereotype prime on stereotype-consistent attitudes. Study 3 examined whether actual–desired self-discrepancies on participant-identified dimensions would moderate the effects of a frugality prime on purchase decisions for the self or another social target. We probed possible boundary conditions by exploring whether self-discrepancies would predict change when the change induction was generally inconsistent with participants’ desired selves (as with the elderly stereotype) or was unrelated to the discrepant dimensions.

Our sample sizes reflect the norms of the time in which they were conducted, with larger samples collected in more recent years to increase the precision of parameter estimates. For Study 1 (conducted in 2006), the target sample size was 30 per experimental condition (15 per “cell”). For Study 2 (conducted in 2015 at the request of reviewers of this manuscript), the target sample size was >100 per condition (i.e., >50 per “cell”). For Study 3 (conducted in 2013), the target sample size was 50 per condition (i.e., 25 per “cell”). Although we did not conduct a formal power analysis prior to conducting these studies, a post hoc power analysis indicated that our overall power for the interaction term in the meta-analysis reported after the individual studies was .965.

Study 1

As an initial test of our predictions, Study 1 examined whether actual–desired self-esteem discrepancies predict susceptibility to a self-esteem conditioning procedure.

Method

Participants. Seventy Stanford University students and staff members, all native English speakers, participated in this study in exchange for US$7. Ten participants were omitted because they did not complete the self-discrepancy survey described below, and five participants in the manipulated high self-esteem condition were omitted because they suspected that the conditioning task might have influenced their self-ratings. In addition, one statistical outlier in the regression analysis (studentized deleted residual = −3.11, p < .001) was excluded. The data from the remaining 54 participants (24 women, 30 men) were retained in the final sample.

Procedure and materials. Participants completed the experiment in groups in a room with six divided computer workstations. Each participant was randomly assigned to either the high self-esteem (n = 28) or control (n = 26) condition.

The experimenter informed participants that the purpose of the study was to explore the relationship between personality and language usage. First, participants completed several personality questionnaires, which were meant to enhance the credibility of the cover story. Next, participants completed the evaluative conditioning procedure, followed by the state self-esteem scale (SSES; Heatherton & Polivy, 1991). Finally, they
were probed for suspicion and partially debriefed. All participants were fully debriefed a week after the experiment, when they sent in their responses to the self-discrepancy survey.

**Evaluative conditioning procedure.** The evaluative conditioning procedure was embedded within a lexical decision task (DeMarree et al., 2011; adapted from Dijksterhuis, 2004, Experiment 1). First, a string of Xs appeared on the screen for 500 ms, followed by a subliminal prime for 17 ms. Then, a target word or nonword appeared on the screen until the participant indicated whether or not it was a real word. The intertrial interval was 1,000 ms.

In both conditions, the task began with six practice trials containing neutral target words. For the critical trials, each target word was preceded by I, me, or myself (randomized across trials), and each nonword by a single X, as a subliminal prime. All target words in the high self-esteem condition (e.g., nice, smart, healthy) were positive in valence, whereas all target words in the control condition (e.g., chair, bike, rectangle) were neutral in valence. The nonwords (e.g., pluwrwry, optipe, lomper) were identical across conditions. There were 15 different target words and 15 different nonwords in both conditions, and each of them appeared twice. Thus, the conditioning procedure consisted of 66 trials in total.

**State self-esteem measure.** Upon completion of the evaluative conditioning procedure, participants completed the 20-item SSES (Heatherton & Polivy, 1991). Participants responded to a series of statements that assessed the extent to which they currently felt good about themselves on a 5-point scale anchored at not at all and extremely. The SSES items load onto three distinct factors: performance (e.g., “I feel confident about my abilities”), social (e.g., “I am worried about what other people think of me”), and appearance (e.g., “I feel unattractive”), which Heatherton and Polivy (1991) note may vary in their relevance to any particular context. Because our conditioning procedure included several words relevant to both the performance and social subscales, but only one word related to the appearance subscale, we averaged the performance and social subscales to create a measure of state self-esteem (see also DeMarree et al., 2011).

**Self-discrepancy survey.** To avoid any influence of our manipulation on our measure of self-discrepancy, we emailed participants approximately 1 week after the experiment and asked them to complete a brief follow-up survey. In this survey, which was based on Higgins’ (1989) Selves Questionnaire, participants indicated the extent to which having high self-esteem characterizes the type of person that they actually are (M = 4.72, SD = 1.44), would like to be, and think they should or ought to be. All three responses were made on a scale from 1 (not at all) to 7 (extremely).

Because participants’ ideal and ought self-esteem scores were highly correlated (r = .62, p < .001), we averaged them to form a “desired” self-esteem index (M = 5.48, SD = 1.05; see also DeMarree & Rios, 2014; DeMarree et al., 2014). We computed a self-discrepancy score for each participant by taking the absolute value of the difference between responses to the actual self-esteem question and the “desired” self-esteem index (M = 1.30, SD = 1.03).

We also created a self-discrepancy direction variable, which indicated whether participants’ actual self-esteem scores exceeded (1, n = 12), were equal to (0, n = 9), or were less than (−1, n = 34) the average of their ideal and ought self-esteem scores. We initially did this to test our idea that the extent, rather than direction, of self-discrepancy is responsible for the predicted effect. Neither self-discrepancy magnitude nor direction was affected by the experimental manipulation (ps > .78) and the distribution of discrepancy direction did not differ by condition (p > .79). Because of the relatively small number of people with higher desired than actual self-esteem, we were unable to examine moderation by discrepancy direction, but later in the article, we meta-analyze across studies to test direction as a potential moderator of these effects.

**Results and Discussion**

The results of this study were analyzed using multiple regression (Aiken & West, 1991). Participants’ self-discrepancy scores were mean-centered, and the condition variable was dummy-coded so that 0 = control and 1 = high self-esteem. The state self-esteem (performance and social) scores were then regressed onto condition and self-discrepancy in the first block of the analysis and the Condition × Self-Discrepancy interaction was added in the second block. Following the suggestion of Cohen and Cohen (1983), main effects were interpreted in the first block of the model, whereas the two-way interaction was interpreted in the second block.

The only significant effects to emerge were a negative main effect of self-discrepancy on state self-esteem (β = −.32, b = −.20, SE = .08, 95% CI = [−.36, −.04]), t(51) = −2.44, p < .02 (see also DeMarree & Rios, 2014), and the predicted two-way Condition × Self-Discrepancy interaction (β = .37, b = .32, SE = .16, 95% CI = [.01, .64]), t(50) = 2.06, p < .05 (see Figure 1). Decomposition of this interaction indicated that among individuals with larger self-discrepancies (i.e., +1 SD), state self-esteem was marginally higher in the manipulated high self-esteem condition than in the control condition (β = .33, b = .42, SE = .23, 95% CI = [−.04, .88]), t(50) = 1.82, p = .07. Among individuals with smaller self-discrepancies (i.e., −1 SD), state self-esteem did not differ by condition (β = −.20, b = −.25, SE = .23, 95% CI = [−.72, .21]), t(48) = −1.09, p = .28.

Study 1 thus provides initial evidence that incoherence of the self-evaluation, in the form of self-discrepancies, can moderate the effect of a self-esteem conditioning procedure on people’s state (i.e., “active”) self-esteem. Specifically,
individuals whose actual and desired levels of self-esteem were more incongruent tended to exhibit higher state self-esteem after being exposed to first-person pronouns paired with positive (vs. neutral) words. Individuals whose actual and desired levels of self-esteem were more congruent, on the other hand, did not demonstrate such an effect. This is the first evidence we are aware of that the mere presence of an actual–desired discrepancy increases susceptibility to a subtle change induction.

Study 2

In Study 1, we demonstrated that individuals with actual–desired self-discrepancies were more susceptible to one subtle change induction (self-esteem conditioning). However, this change induction was congruent with most participants’ desired self-views. Study 2 examined whether the effect would extend to a different change induction and to changes in active self-views that were directionally inconsistent with most participants’ desired self-concepts.

In this study, we primed college students with the elderly stereotype by asking them to unscramble sentences that contained either stereotype-related or stereotype-unrelated words (Bargh et al., 1996). Building on previous work that found social group primes can lead to assimilative changes in attitudes (Kawakami et al., 2003), we examined the impact of the elderly versus control prime on traditional attitudes congruent with the stereotype of the elderly. We predicted that the effects of the prime would be stronger as the magnitude of self-discrepancies increased. For exploratory purposes, in the present study, we also included measures of self-discrepancies that were both related to and unrelated to the primed concept.

Method

Participants. Two hundred fifty-one Mechanical Turk workers participated in this study. The study took approximately 10 to 15 min, and upon completion, participants were paid US$0.50. Two participants were dropped from the analysis: one who did not complete the scrambled-sentences task described below and one whose Cook’s D score (.076) was 10 SD above the sample mean and more than twice as high as the next-highest score, which rendered him or her a statistical outlier in the regression analysis. The data from the remaining 249 participants (121 women, 128 men; $M_{age} = 33.57, SD = 10.05$) were retained in the final analysis. Each participant was randomly assigned to one of two experimental conditions: elderly prime ($n = 128$) or neutral ($n = 121$).

Procedure and materials. This experiment was described as a study on how a person’s attitudes toward social issues relate to their perceptions of both themselves and others. Participants first completed the self-discrepancy survey, followed by the priming manipulation and the attitude items (i.e., the dependent measure). At the end of the experiment, participants completed suspicion probes and were debriefed.

Discrepancy survey. The discrepancy survey was similar to that of Study 1, except that instead of two separate ideal and ought-self items, participants completed a single desired self-item for each trait. We asked participants to indicate on a scale from 1 (not at all) to 7 (extremely) the extent to which each of four traits—traditional, conservative, stubborn, and forgetful—characterized their actual and desired selves (i.e., “To what extent does the trait X characterize the type of person that you actually are/would like to be?”). These traits were selected because of their relevance to the elderly stereotype and their use in previous research that examined the effects of activating this stereotype (Bargh et al., 1996; Levy, 1996). To explore the role of the relevance of the discrepant dimensions to the susceptibility to change, the stereotype-relevant traits were interspersed with six other, stereotype-irrelevant traits (calm, creative, funny, motivated, musical, and shy).

We computed stereotype-relevant discrepancies by taking the averages of the four actual scores ($M = 3.66, SD = .99$)
and the four desired scores ($M = 2.69, SD = .91$). Then, we calculated the discrepancy between actual and desired scores as in Study 1 ($M = 1.00, SD = .65$). We also created a discrepancy direction variable ($1 =$ actual exceeds desired, $n = 227; 0 =$ actual is equal to desired, $n = 22; −1 =$ actual is less than desired, $n = 0$). Because no participants wanted to possess characteristics that were more stereotypic of the elderly, we could not examine discrepancy direction in this study.

**Priming manipulation.** The priming manipulation consisted of a scrambled-sentences task used in previous research (Bargh et al., 1996). Specifically, participants were given 30 sets of five words and were instructed to rearrange four of the words to form a complete sentence. In the elderly prime condition, 15 of the sets contained a word stereotypical of the elderly (e.g., “sunlight makes temperature wrinkle raisins would become sunlight makes raisins wrinkle”). In the neutral condition, all of the sets contained stereotype-irrelevant words (e.g., “sweet makes clock sugar cookies would become sugar makes cookies sweet”).

**Traditional attitudes.** After the priming manipulation, participants responded to four statements adapted from previous research (Kawakami et al., 2003) for which higher levels of agreement reflected more traditional and thus elderly congruent attitudes (“I think Social Security should be maintained”; “Young people wear inappropriate clothing”; “There is too much violence in the media”; “Pop music has no technical merit anymore; it’s just noise”). To minimize suspicion, these statements were interspersed with several others that were irrelevant to the elderly stereotype (e.g., “I prefer dogs to cats”).

A sample of 49 Mechanical Turk workers (27 men, 22 women, $M_{age} = 34.0, SD = 11.5$) rated the extent to which each of the four stereotype-relevant items in the attitudes survey reflected traditional values (1 = not at all, 7 = extremely), which maps closely onto the social conservatism dependent measure that Kawakami et al. (2003) used. All four traditionalism items were rated significantly above the scale midpoint of 4, one-sample $t$s(48) > 2.28, $p$s < .03, thus validating our decision to use these items as the dependent measure in the actual study.

**Results and Discussion**

Prior to analysis, we mean-centered participants’ stereotype discrepancy scores and dummy-coded the condition variable (0 = neutral, 1 = elderly prime). Then, we submitted traditional attitudes to a Condition (neutral vs. elderly prime) × Discrepancy (continuous variable) regression. As in Study 1, the main effects were interpreted in the first step of the analysis, and the two-way interaction term was interpreted in the second step.

We predicted that participants with high stereotype discrepancies would report more traditional attitudes in the elderly prime condition than in the neutral condition, but participants with low stereotype discrepancies would show a reduced or no effect. Consistent with this hypothesis, the two-way Condition × Discrepancy interaction was significant ($β = .20, b = .38, SE = .17, 95% CI = [.04, .73]), $t$(245) = 2.21, $p < .03$; see Figure 2). Notably, this was specific to prime-related attitudes, as the interaction was not present when we reran the analysis with our filler (nontraditional attitudes) items as the dependent measure ($β = .09, b = .15, SE = .15, 95% CI = [.−.14, .44]), $t$(245) = 1.02, $p = .31$. Decomposition of the interaction on prime-related attitudes at one standard deviation above and below the mean discrepancy score revealed that participants with large discrepancies marginally assimilated to the prime ($β = .14, b = .26, SE = .16, 95% CI = [.05, .57]), $t$(245) = 1.66, $p = .098$, whereas participants with small discrepancies showed a nonsignificant tendency to contrast away from the prime ($β = −.13, b = −.24, SE = .16, 95% CI = [.−.55, .08]), $t$(245) = −1.48, $p = .14$.

The main effect of prime did not reach significance ($β = .01, b = .02, SE = .11, 95% CI = [.−.21, .24]), $t$(246) = .15, $p = .88$, but there was an overall effect of discrepancy, such that participants reported more traditional attitudes as discrepancies (i.e., due to wanting to be less “elderly”) increased ($β = .19, b = .27, SE = .09, 95% CI = [.09, .44]), $t$(246) = 3.03, $p < .005$. This is likely an indication that those who wanted to be

**Figure 2.** Stereotype-congruent attitudes, broken down by condition (elderly vs. neutral prime) and stereotype-related discrepancy (± 1SD).
less traditional were currently relatively more traditional than those with smaller discrepancies.

We also conducted two sets of exploratory analyses. Of the four actual–desired traits, two (traditional and conservative) were directly related and two (stubborn and forgetful) were unrelated to the traditionalism dependent measure. When we created separate composites for discrepancies between these traits, the pattern and significance of the interactions were nearly identical for the related ($p = .12$) and unrelated discrepancies ($p = .10$). We also tested whether the priming condition would interact with completely stereotype-irrelevant discrepancies (i.e., the composite of shy, motivated, calm, creative, musical, and funny) to predict traditionalism. This interaction was also significant ($p = .03$), and simple slopes analyses revealed marginal assimilation among participants with high discrepancies ($p = .09$) and a trend toward contrast among participants with low discrepancies ($p = .14$).

This study offers additional evidence that actual–desired self-discrepancies predict shifts in people’s active self-conceptions in response to subtle change inductions. However, Study 1 examined change on self-esteem in a direction that was generally congruent with desires, whereas Study 2 examined changes in an aspect of the self-concept in a direction that was generally incongruent with desires (i.e., traditional attitudes in a relatively young sample, $M_{age} = 33$). Furthermore, in this study, actual–desired discrepancies were assessed before rather than after the experimental induction, suggesting the effects are robust to this experimental variation. Finally, this study found that discrepancies on multiple dimensions—both related and unrelated to the change induction—moderated the effects of the stereotype prime. Study 3 builds on this finding and we discuss its implications in the “General Discussion” section.

Study 3

Study 3 had three goals. First, we sought to examine participant-provided self-discrepancies (participants’ self-generated ideal and ought attributes) rather than experimenter-provided ones to examine whether naturally salient self-discrepancies produce the same effects even if these discrepancies are not necessarily relevant to the primed traits. Second, we investigated whether the moderating role of self-discrepancies was specific to responses relevant to the self (rather than about another social target). Third, we extended the effects to a new prime (frugality vs. control) and dependent measure (product choice).

So far, we have provided evidence that as self-discrepancies increased, people’s susceptibility to a subtle change induction also increased, and that this occurred whether or not the change induction was consistent with participants’ desired selves and whether or not the self-discrepancy was related to the subtle change attempt. In the first two studies, participants responded to questions about their actual and desired selves on experimenter-provided self-attributes, and from these responses, discrepancies were computed. In our third study, participants selected their own self-standards and reported their discrepancies on these dimensions. Self-identified discrepancies may be more likely to have psychological impact than experimenter-provided ones, as those that come to mind spontaneously may be more self-defining, more chronically accessible (Higgins, King, & Mavin, 1982), or more personally important (Krosnick, 1989). Because self-generated discrepancies will not necessarily match any given induction, the motivational relevance of the change induction should be low. However, self-generated discrepancies will likely be on personally meaningful dimensions, so the magnitude of these discrepancies should represent important structural (in)congruities in the self-concept. Consequently, discrepancies on these traits might be particularly powerful predictors of the extent to which self-boundaries might be ambiguous, facilitating expansion processes (Wheeler et al., 2007).

Although we have argued that self-discrepancies open oneself up to self-change, it is possible that self-discrepancies leave all of a person’s prime-relevant judgments (e.g., judgments of other people) susceptible to such malleability, and not only those that are related to the self. In a recent article, for example, doubts about one’s own level of academic competence (a potential indicator of self-discrepancies on this dimension) predicted the accessibility of the competence dimension and the degree to which it was used in judging others (Hardy, Govorun, Schneller, Fazio, & Arkin, 2015). We argue that self-discrepancies represent a structural incongruence in the self-representation, and as such, it is the malleability of the active self that should be most predicted by discrepancy magnitude. To test this possibility, in Study 3, we used self-discrepancies to predict the impact of a prime (frugality) on judgments related to the self or to another social target for which the prime was presumably equally applicable. We expected discrepancies to predict self-related judgments better than judgments of another target.

Finally, in the present study, we sought to go beyond measures of active self-conceptions to examine a potential consequence of these subtle influences on the self—people’s choices. Recall that the Active-Self Account explicitly predicts that because of the role that self-conceptions have in directing behavior, shifts in people’s behavior will typically mirror the changes in people’s active self-views (Wheeler et al., 2007). Therefore, in the present research, we examined people’s preferences for frugal relative to lavish purchase decisions as a function of a frugality (vs. control) prime. The paradigm we used was adapted from previous work that examined the effects of primed concepts on consumer decisions (Chartrand, Huber, Shiv, & Tanner, 2008).

Method

Participants. Two hundred Mechanical Turk workers participated in exchange for US$0.75. Of these, 180 participants completed all surveys and provided us with permission to
use their data. Participants’ responses to a funneled debriefing indicated that many participants suspected that there was some relationship between the tasks, although none came close to guessing the current predictions, so we included these participants’ data in the analyses reported below.

Procedure and materials. Participants were first introduced to the study as a survey of personality and purchasing preferences. After providing informed consent, participants completed the self-discrepancy measure. They then completed a brief delay task, a measure of global versus local processing (Gasper, 2004), before completing either the frugal or the neutral prime induction. Then participants indicated purchasing preferences for either themselves or for another person. Finally, participants completed a suspicion probe and were debriefed. Thus, the overall design was a 2 (Prime: Frugal vs. Neutral) × 2 (Target: Self vs. Other) × Self-Discrepancy (continuous) between participants design.

Self-discrepancy measure. In this study, participants completed Higgins’ (1989) original Selves Questionnaire to report self-discrepancies. In this version of the measure, after “ideal” and “ought” selves were defined, participants provided three ideal self-attributes (i.e., attributes one hopes or aspires to have) and three ought self-attributes (i.e., attributes one feels obligated or duty-bound to have). For each of these attributes, participants subsequently indicated the extent to which they wanted to possess the attribute with items tailored to the specific dimension (i.e., ideal or ought) and the extent to which they actually possessed the attribute, both on 4-point scales (1 = slightly, 4 = extremely). Self-discrepancies were calculated by subtracting the actual-self ratings from their corresponding ideal (ought) ratings and summing these differences. This created two indices, an actual-ideal discrepancy index and an actual-ought discrepancy index (Higgins, 1989), with higher values indicating larger self-discrepancies. We should note that the structure of this measure, with participant-provided desired selves, produces discrepancies in which desired selves nearly always exceed actual selves, and as such, we were unable to examine direction of discrepancy as a moderator of our effects. However, in the following, we explore a different way to examine the consistency of the change induction with people’s desired self-views.

Priming induction. The prime induction in this study was based on the notion that people associate personality characteristics (Aaker, 1997) and goals (Fitzsimons, Charttrand, & Fitzsimons, 2008) with consumer brands. To select brands for the priming task, 33 pilot participants rated a series of 22 store logos on a 7-point scale (1 = Completely Expensive, Costly, and Lavish, 7 = Completely Thrifty, Economical, and Frugal). Based on this pilot testing, we selected two sets of five logos to serve as primes that represented brands that were perceived to be either relatively frugal (e.g., Dollar Tree, Big Lots!), \( M_{\text{frugality}} = 6.33, SD = .43 \) or relatively neutral (e.g., JC Penny, Kohls, \( M_{\text{frugality}} = 3.77, SD = .53 \)).

In the prime task, adapted from previous research (Chartrand et al., 2008; Fitzsimons et al., 2008), participants viewed brand logos one at a time and indicated (a) to what extent they liked the logo, (b) what they might change about the logo, and (c) how much of an impact the logo had on whether they would shop at the company represented by each logo.

Purchase decisions. Participants were randomly assigned to make self-relevant or other-relevant judgments related to frugality. As a measure of participants’ self-relevant judgments, they were asked to report their own purchasing preferences for nine pairs of products across a diverse set of product categories (e.g., clothing, food, appliances). For each pair of options, participants indicated their preferences on a 7-point Likert-type scale anchored by strong preferences for each option (1 = Strong preference for Option A, 4 = Indifferent, 7 = Strong preference for Option B). This measure was modeled after frugality measures used in previous research (Chartrand et al., 2008).

The product pairs used were identified via pretesting as relatively likely purchase decisions (i.e., ones on which pilot participants indicated at least a 50% chance that they would face), each of which pitted a relatively more frugal choice (e.g., two boxes of Great Value brand mac-n-cheese for US$2 against a relatively less frugal choice (e.g., two boxes of Kraft brand mac-n-cheese for US$4). Pilot test participants indicated which of the options was the more frugal option on a 7-point scale. For example, participants received a scale for which 1 indicated that Sharpie pens were more frugal and 7 indicated that Bic pens were more frugal. We selected those option pairs that produced a clear pattern, with one clearly viewed as more frugal, as evidenced by a significant difference from the scale midpoint. However, as noted below, a validity check in the actual study revealed that one of the intended frugal options was not perceived to be more frugal by the participants in our study, so this item was dropped from analysis.

Non–self-relevant judgments used the same approach as self-relevant judgments. Participants reported the preferences that they expected a student named Michael to have for the same options. Prior to indicating the purchasing preferences they expected Michael to have, participants read a short first-person vignette about Michael’s prior financial decisions which, based on pilot testing, were ambiguously frugal (e.g., “Every time I hear about the release date for a video game console, I begin saving extra money to buy the console as soon as it comes out.”). After participants completed the dependent measure, they were once again presented with each purchase decision and were asked to “indicate which option you feel is most frugal (i.e., most thrifty).” Participants selected one of the two options. This validity check indicated that one of the purchase decision choices (two individual entrees at a restaurant for US$8.99 each versus two individual entrees and an appetizer for US$20) did not have a clear frugal option in this sample, making it unclear how to code responses for this item (51.4% of participants saw the second option as more...
frugal), so it was dropped from analysis. The remaining eight decisions (intended frugal answers were selected as the more frugal option by at least 82% of these participants) were averaged to create an index of frugal choice (α = .59).

**Results**

**Primary analyses.** As with Study 1, analyses with actual-ideal and actual-ought discrepancy scores as well as a composite variable revealed parallel results, so we report the composite variable. We computed the mean of participants’ actual-ought and actual-ideal discrepancy scores ($r = .388, p < .001$) and mean-centered this average ($M = 3.69, SD = 1.86$). We then submitted number of frugal choices to a Self-Discrepancy (continuous) × Prime (frugal = 1 vs. control = 0) × Target (Michael = 1 vs. self = 0) hierarchical regression analysis.

This analysis revealed a main effect of target ($β = .161, b = .314, SE = .145, 95% CI = [.027, .600])$, $t(176) = 2.162, p = .032$, and a Prime × Target interaction ($β = -.249, b = -.580, SE = .290, 95% CI = [-1.151, -.008]), $t(173) = -2.001, p = .047$. Critically, the three-way interaction was also significant ($β = -.334, b = -.356, SE = .155, 95% CI = [-.663, -.049]), $t(172) = -2.288, p = .023$ (see Figure 3). The Prime × Target interaction was significant among people with relatively large discrepancies (+1 SD, $β = -.537, b = -1.249, SE = .409, 95% CI = [-2.057, -.441]), $t(172) = -3.052, p = .003$, but not among people with relatively small discrepancies (−1 SD, $β = .031, b = .073, SE = .404, 95% CI = [.724, .870]), $t(172) < 1, ns.$

Among the high-discrepancy participants (i.e., +1 SD), there was a main effect of prime on participants’ own purchasing preferences, with those in the frugal prime condition selecting more frugal options than in those in the neutral prime condition ($β = .480, b = .937, SE = .293, 95% CI = [.358, 1.515]), $t(172) = 3.195, p = .002$. However, the prime had no effect on high-discrepancy participants’ judgments of Michael’s choices ($β = -.160, b = -.312, SE = .286, 95% CI = [-.876, .251]), $t(172) = -1.094, p = .275$. Among low-discrepancy participants (i.e., −1 SD), there was no effect of prime on participants’ own purchasing preferences ($β = -.012, b = -.024, SE = .297, 95% CI = [-.610, .563]), $t(172) = -.080, ns$, or on participants’

![Figure 3](psp.sagepub.com)
judgments of Michael’s choices ($\beta = .025, b = .049, SE = .274, 95\% CI = [-.491, .589]), t(172) = .180, ns.

**Supplemental analyses.** Although discrepancies in this study should be unidirectional, as people should want to be *more* like their self-generated desired selves, people’s desired selves could still vary in their consistency with the primed construct. For example, one person might indicate that her desired self is “better at saving money” whereas another person might indicate that he wants to be able to “spend what he wants.” Two researchers, blind to condition and magnitude of discrepancy, coded each attribute listed on the extent to which it was consistent or inconsistent with frugality on a 5-point scale. Irrelevant desired self-attributes were coded as 0. Traits that were clearly congruent with frugality (e.g., saving money) were coded as +1, whereas those that were clearly incongruent with frugality (e.g., spend what I want) were coded as −1. Traits that could imply saving/spending money were coded as ±.5 (e.g., a responsible person would likely be good at saving money, so it was coded as ±.5). Coders had acceptable agreement (average correlation across attributes = .70), and their ratings were averaged to form an index of consistency with the prime ($M = .027, SD = .082$). Note that this relatively low standard deviation around a mean that is close to 0 indicates that self-generated discrepancies were not typically related to the primed dimension. Indeed, 45% of participants did not list any (of six) attributes that were even somewhat related to frugality.

As an exploratory test of the role of the prime’s consistency with desired selves on change in response to these primes, we submitted people’s purchase preferences to a Self-Discrepancy Magnitude × Consistency of Self-Discrepancy with Prime × Prime (frugal vs. control, dummy-coded) × Target (self vs. Michael, dummy-coded) hierarchical regression analysis. In this analysis, the critical three-way interaction between self-discrepancy magnitude, prime, and target (described above) was replicated ($p = .015$), and was not further moderated by consistency of the prime with people’s desired selves, $p = .840$.

We can also use this coding to explore the relevance of the dimensions of self-discrepancy to the activated concept, regardless of consistency. Specifically, by averaging the absolute value of each consistency coding item, we created an index of the extent to which each person’s discrepancies were relevant to the dimension of frugality ($M = .059, SD = .072$). When we conducted a regression parallel to the one just reported, replacing consistency with relevance, we reproduced the critical three-way interaction between self-discrepancy magnitude, prime, and target ($p = .027$), and did not find further moderation by the relevance of the prime with people’s desired selves ($p = .840$).

**Discussion**

Study 3 replicated the effects observed in our earlier studies, with several extensions. First, this study examined participant-provided self-discrepancies (participants’ own ideal and ought attributes) rather than experimenter-provided ones. Second, this study extended the effects to a consequence of shifts in people’s self-views—the choices they make. Specifically, this study found that a frugality prime had greater impact on people’s preferences for frugal (vs. lavish) purchase choices as actual–desired self-discrepancies increased. Third, this study showed that the moderating role of self-discrepancies was only obtained on self-related judgments, and not on the same judgments of another person (Michael).

**Meta-Analysis**

We have argued that actual–desired self-discrepancies predict change in response to subtle inductions, regardless of the direction of change. One limitation of these data is that the sample sizes were too small (e.g., Study 1) or the distribution of discrepancy direction too limited (e.g., Study 2) to powerfully examine whether discrepancy direction moderates the Change Induction × Discrepancy Magnitude interaction observed across studies. To explore whether direction of discrepancies moderated the primary effect observed across our studies, we conducted a meta-analysis, pooling the samples from all three studies as well as our original Study 2 (see online supplement). From Study 3, we only included those participants who made purchase decisions for the self. For each study, we standardized discrepancy magnitude and the dependent measure. In each study, discrepancy direction was bound by ±1, so this variable was left unchanged ($n = 84$ participants wanted to be more like the primed concept, $n = 302$ participants wanted to be less like the primed concept), and the change induction was dummy-coded, with 1 being the condition in which higher values on the dependent variable were expected.

Scores on the dependent variable were then submitted to a Change induction × Discrepancy Magnitude × Discrepancy Direction Hierarchical Regression, in which main effects, two-way interactions, and the three-way interaction were added in sequence. The only significant effect was the Change Induction × Discrepancy Magnitude interaction obtained in each of the individual studies ($\beta = .249, b = .345, SE = .092, 95\% CI = [\ast 1.64, .526]), t(461) = 3.751, p < .001$). This effect was not qualified by the three-way interaction with discrepancy direction ($\beta = -.050, b = -.088, SE = .136, 95\% CI = [-.355, .179]), t(460) = .646, ns$). Decomposing the Change Induction × Discrepancy Magnitude interaction, we found a significant assimilative effect of the change induction among people with large discrepancies ($+1 SD; \beta = .248, b = .494, SE = .144, 95\% CI = [.211, .776]), t(461) = 3.433, p = .001$, but not among those with small discrepancies ($-1 SD; \beta = -.099, b = -.196, SE = .137, 95\% CI = [-.466, .073]), t(461) = 1.432, p = .153$.

Although exploratory in nature, the results of this meta-analysis suggest that discrepancies predict changes in people’s active self-conceptions and behavior to a similar
degree whether a change induction is consistent or inconsistent with people's desired selves.

**General Discussion**

In this article, we examined the implications of actual–desired self-discrepancies for changes in people’s active self-views and the behaviors that are expected to result from them. Our perspective was that, in addition to their motivational properties, actual–desired self-discrepancies indicate incongruities in a person’s available self-knowledge. Furthermore, the Active-Self Account of prime-to-behavior effects (Wheeler et al., 2007, 2014) argues that incongruities in available self-knowledge can facilitate the processes by which subtle inductions, like evaluative conditioning and social primes, affect active self-concepts. Consequently, we predicted that increasing levels of actual–desired self-discrepancies would be related to the likelihood of changes in people’s active self-conceptions and behavior in response to subtle change inductions. Across three studies (plus one additional study in the online supplement), we found support for this prediction. Specifically, as the magnitude of self-discrepancies increased, so too did the effect of a conditioning procedure on state self-esteem, an elderly stereotype prime on stereotype-relevant beliefs, and a frugality prime on people’s purchase preferences. These effects were found whether the change induction was generally consistent (Study 1) or inconsistent (Study 2) with participants’ desired selves, and an exploratory meta-analysis suggested that the consistency of desired selves with the change induction did not moderate extent of change. This effect was specific to changes in self-relevant judgments (Study 3), and appeared to occur whether or not discrepant self-dimensions were directly relevant to the self-dimension targeted by the change induction (Studies 2 and 3). In the following sections, we discuss the implications and limitations of this work.

**Implications**

The current work adds to the evidence that actual–desired self-discrepancies can have consequences beyond guiding goal pursuit (DeMarree & Rios, 2014; DeMarree et al., 2014). That is, in addition to their motivational and affective properties, self-discrepancies represent a form of structural incongruity in one’s self-conceptions, and as such, can predict the malleability of people’s active self-views. Such changes in people’s active self-views could occur via misattribution processes—because an activated concept might be more easily confused with an ambiguously defined self-concept (Jones et al., 2009; Loersch & Payne, 2011; Wheeler et al., 2007).

The expansion process is facilitated by the extent to which the boundaries of one’s self-concept are less clearly delineated, as is postulated to be the case in the presence of structural incongruities, such as actual–desired self-discrepancies. Furthermore, because this mechanism allows for content that is not part of the self to be confused with the self, the presence of (actual or desired) prime-consistent self-content is not necessary for this mechanism to operate (although it can certainly facilitate the operation of this mechanism; see Wheeler et al., 2007). Consequently, this mechanism allows for discrepancies on prime-irrelevant dimensions to moderate changes in the active self-concept in response to a prime, and results from Studies 2 and 3 offer initial support for this idea. From this work, it is unclear what features of discrepant self-dimensions will determine the extent to which they will moderate subtle self-change. It seems most intuitive that discrepancies related to the change induction and discrepancies on personally important dimensions would have the greatest predictive utility. However, because we did not measure the extent to which the different dimensions included in Study 2 were personally important, we could not test this possibility.

The current work has implications for self-regulation on any self-related evaluation, such as self-esteem or perceptions of personal abilities. When actual–desired discrepancies exist on these dimensions, people’s current evaluations may be more susceptible to change. This could sometimes increase and sometimes decrease the magnitude of discrepancies, depending on the direction of influence. If, in addition to the shift in people’s active self-views, the desired self is also accessible, it could affect people’s evaluation of their current standing with respect to their goals, increasing or decreasing goal-directed behavior and affect (Carver & Scheier, 1998). Of course, the motivational effects could be further determined by people’s interpretation of the discrepancy (e.g., as an indication of [lack of] commitment to or [lack of] progress toward the goal; Fishbach, Dhar, & Zhang, 2006).

The current studies also raise questions about when self-discrepancies would produce motivated self-change (or at least efforts directed toward such change) versus the nonmotivated effects shown here. We believe that, to the extent that the ability for a particular situation to resolve one’s discrepancies is apparent (e.g., with a blatant change induction), people might be more likely to engage in motivated change. In our studies, the subtle change inductions employed made this unlikely. When people do perceive that a stimulus can reduce a discrepancy, however, they may process it more thoroughly (Clark et al., 2008).

In other words, with more blatant change situations, people could exhibit a broader range of responses. As in the present work, the structural incongruity could result in a more malleable active self-view. However, if people saw the connection between their desired self-view and the likelihood that the situation would aid in producing that self-view, change in the desired direction might dominate. In addition, factors such as the extent to which a change opportunity is seen as controlling (eliciting reactance) could further moderate the likelihood and direction of change.

**Limitations**

Although our research makes contributions to understanding actual–desired self-discrepancies and subtle influences on the
self, this research is not without limitations. First, because we did not experimentally manipulate actual–desired self-discrepancies, we were unable to firmly establish the causal role of these discrepancies in moderating subtle change. Thus, it is possible that factors that covary with the presence of discrepancies, such as negative affect, subjective ambivalence, or regulatory abilities, are the key causal agents. The fact that actual–desired discrepancies predict change even in the opposite direction from participants’ desired selves (especially in Study 2) speaks against negative affect or subjective ambivalence as the causal agent to some extent, as such changes would increase, rather than decrease, these experiences (by increasing discrepancy magnitude). Nevertheless, future research could manipulate actual–desired self-discrepancies by providing feedback about the desirability of a particular self-view (e.g., whether high self-esteem leads to positive versus negative consequences; DeMarree & Rios, 2014), and test whether these manipulated discrepancies also produce self-change in response to situational inductions.

In addition, the specificity of these effects to personally relevant outcomes should be interpreted with caution. In Study 3, we found moderation of a priming effect on self-related purchase decisions but not on the judgments for another person (Michael). However, because the prime did not affect judgments of Michael, it is possible that there was no effect to be moderated, and that if there were, the same pattern of moderation by discrepancies would have been observed. This nonsignificant priming effect could be due to some procedural variation that limited the likelihood that the prime would be attributed to Michael (e.g., instructions that unintentionally focused attention to a different target, such as the self, reducing the misattribution of accessible content to Michael, cf. Loersch & Payne, 2011; Wheeler & DeMarree, 2009; Wheeler et al., 2014). As such, the specificity finding should be viewed as consistent with the specificity of the moderation pattern to the self, but the possibility that actual–desired discrepancies could moderate change on any available target should still be entertained.

Finally, the tests of potential boundary conditions, such as the relevance or congruence of change inductions with particular desired selves, should be interpreted with caution. These tests were relatively exploratory in nature, and in some cases rely on drawing conclusions from a null effect of a higher order interaction. Nonetheless, these data can serve as a starting point for more fully understanding the roles that self-structure, and self-discrepancies in particular, play in people’s responses to subtle situational factors.

Conclusion

The present studies provided evidence that actual–desired self-discrepancies predict the susceptibility of active self-concepts to subtle influences, regardless of whether these changes are congruent or incongruent with one’s desired self-conceptions. Our finding that a motivational variable, such as actual–desired discrepancies, can predict unintended changes has implications for the conditions under which self-change occurs, and suggests that ironically, sometimes such change is inconsistent with one’s desired self-concept. We hope this finding stimulates further research on the non-motivational consequences of motivation-relevant variables.

Author’s Note

Study 3 was a portion of the doctoral dissertation of J.A.R. under the supervision of D.A.R. Darcy passed away in September 2014. She is deeply missed, and will be remembered as a wonderful mentor and colleague. We are grateful for the role she played in this work.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Supplemental Material

The online supplemental material is available at http://pspb.sagepub.com/supplemental.

Notes

1. Consistent with the rationale outlined earlier regarding the specificity of the conditioning procedure to the different state self-esteem subscales (and with past work using the same conditioning procedure and dependent variables; DeMarree et al., 2011), regression analysis with appearance state self-esteem as the dependent measure failed to produce any significant results, other than a negative main effect of self-discrepancy (b = −.27, SE = .08, 95% CI = [−.42, −.12]), t(51) = −3.58, p < .01. When all three state self-esteem subscales (including appearance) were combined into a composite, the two-way Condition × Self-Discrepancy interaction was in the expected direction, but not significant (b = .20, SE = .14, 95% CI = [−.08, .47]), t(50) = 1.42, p = .16.

2. This study was conducted in response to editor and reviewer feedback to replace the original Study 2. See the online supplemental material for details about the original Study 2.

3. The global/local task was originally included to determine whether actual-ideal (actual-ought) discrepancies were associated with global (local) processing, based on the documented association between promotion and prevention focus and global and local processing, respectively (Forster & Higgins, 2005). This relationship was not obtained in this sample.

References


