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Possible Selves and Self-Doubt: A Poverty of Desired Possibility

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Abstract

Three studies tested whether self-doubt stems more from the absence of a strong desired self or the presence of a strong undesired self. Across studies, participants completed individual difference measures and then imagined a desired, neutral, or undesired possible self and completed strength measures for the imagined possible self. As predicted, compared to low self-doubt participants, high self-doubt participants reported less confidence in imagined desired selves and were slower to respond to desired self-consistent terms; however, they did not differ on explicit (confidence) or implicit (response speed) strength measures for imagined neutral or undesired selves. Moreover, the weaker desired selves imagined by high self-doubt participants predicted lower performance (compared to low self-doubt participants) on a final achievement test. Finally, the interactive effect of self-doubt and imagery on performance held after controlling for self-esteem and self-concept clarity but, consistent with predictions, was mediated by strength of the possible self.

Keywords

self-doubt, possible selves, mental strength, self-regulation, performance

There are very few certainties left in modern life (e.g., Carroll, 2010). People experience rapid and unexpected changes in their personal (e.g., divorce, relocation) and professional lives (layoffs, mass baby boomer retirements). Moreover, such dramatic changes unfolding in one's individual life are compounded by the dizzying array of changes occurring at the broader level of modern culture (terrorism, political and religious conflict, the ideological divide on health care reform) and commerce (recessions, instability in world market; Schwarz, 2010). This greater certainty of change may ultimately translate into greater *uncertainty* in self as people struggle to maintain a stable identity in an increasingly unstable world. Ironically, then, self-uncertainty, or doubt, may be one of the few certainties left in modern life.

In one arena of modern life—judgments of self-competence (ability) in achievement domains—self-doubt is defined as the experience of general uncertainty about one's competence coupled with an intense preoccupation over prospective failure and negative evaluation (Jones & Berglas, 1978). Evidence suggests that self-doubt—like other psychological variables—can be a momentary state or chronic individual difference (Oleson, Poehlmann, Yost, Lynch, & Arkin, 2000). Although most people doubt their ability at times, some people experience chronic self-doubt. When self-doubt becomes chronic, evidence also suggests that people may develop different protective strategies for coping with it. For example, self-handicapping is the strategy of claiming or even

creating performance obstacles that provide a handy situational excuse for prospective failure; overachievement is the strategy of increasing performance effort to heroic levels to avoid prospective failure. Despite their dramatic phenotypic difference, prior work implicates both as self-protective strategies for coping with the undesired prospect of failure stemming from the same genotypic experience of chronic self-doubt (Jones & Berglas, 1978; Oleson et al., 2000; Rhodewalt & Tragakis, 2002).

Although promising, the foregoing work still leaves several important questions unanswered, including the nature of the “possible self” concept associated with self-doubt (vs. confidence) in one's own competence. In particular, this question seems to beg for empirical answers given prior claims that possible selves are the “carriers” of *self-confidence over doubt about one's competence* in daily life (Markus, Cross, & Wurf, 1990). One possibility—implied (but never tested) by the usual conceptualization of self-doubt—is that self-doubt stems primarily from the presence of a strong undesired self of prospective failure in awareness. There is a second possibility,

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however—that self-doubt stems instead from the absence of a strong desired self (with prospective success that can sustain ongoing feelings of self-confidence and competence by effectively organizing, energizing, and guiding goal-directed action). The present research tested these competing possibilities to provide the empirical answers to this important, yet neglected, question concerning the link between chronic self-doubt and possible selves.

Possible Selves as Carriers of Self-Confidence in One's Competence

Possible selves are mental representations of one's hopes and fears (Markus & Nurius, 1986). Desired selves are an adaptive subset of possible selves that represent realistic opportunities that are desired and attainable rather than wild fantasies that are desired but virtually impossible to attain (Carroll, Shepperd, & Arkin, 2009; Carroll, Sweeny, & Shepperd, 2006; Markus et al., 1990). Desired selves serve two important self-regulatory functions—they provide (a) powerful incentives that guide the pursuit and acquisition of future opportunities and (b) certain standards against which to evaluate the present self (Markus & Ruvolo, 1989). Relevant to the present work, self-regulation theorists cast desired selves as “carriers” of *self-confidence* (vs. *doubt*) in one's competence in achievement domains (Markus et al., 1990). In fact, evidence suggests that strong desired selves can create *actual* competence by carrying (self) *perceived* competence in sustained self-confidence (vs. *doubt*) in the validity of one's current and prospective ability (efficacy) to achieve important future goals (Lang & Lang, 2010; Markus et al., 1990; Ruvolo & Markus, 1992).

Desired selves carry self-confidence to create actual competence over time in three distinct, yet interrelated, ways. Specifically, they organize, energize, and direct activity around the pursuit and ultimate acquisition of viable future goals (Markus & Ruvolo, 1989). Desired selves *organize* activity by biasing information processing toward goal-consistent stimuli and away from goal-inconsistent or irrelevant stimuli. Desired selves *energize* activity via the recruitment of anticipated positive affect associated with the desired goal state. Finally, desired selves *direct* activity at the behavioral level via the recruitment of enactive and sensory cues at intermediate stages of goal pursuit and fulfillment (Ruvolo & Markus, 1992). Through the combination of these effects, desired selves become generative as well as dynamic over time by spawning more task-specific images complete with concrete plans, intentions, and scripts (e.g., “me photocopying articles at the library, ordering transcripts, taking the GRE, sending off applications, etc.”) that mentally bridge the gap between the present and desired future (Markus & Ruvolo, 1989). Ultimately, desired selves become strong enough with increasing elaboration to sustain self-confidence over doubt as they transform from vague hopes into concrete mental roadmaps that specify—down to the finest drop of detail—every step one can and will take to go past the present

to one's desired future self (Markus et al., 1990; Oyserman, Bybee, Terry, & Hart-Johnson, 2004).

Empirical Yardsticks of Possible Self-Strength

Before testing the link between self-doubt and possible self-strength, we must first define the concept of “strength.” Whether implicit or explicit, strength measures always predict two strength-related consequences: (a) *durability* (more stable and resistant over time) and (b) *impact* (more likely to predict future behavior) of mental representations over time (DeMarree, Petty, & Briñol, 2007a, 2007b; Petty & Krosnick, 1995). Indeed, possible selves scoring higher on implicit and explicit measures of strength are ultimately more durable and impactful in predicting future behavior (Briñol & Petty, 2003; Briñol, Petty, & Wheeler, 2006; DeMarree et al., 2007a, 2007b; Fazio & Zanna, 1978a, 1978b; Higgins, Shah, & Friedman, 1997; Koehler, 1991; 1994; Norman & Aron, 2003; Rucker & Petty, 2006; Swann & Pelham, 2002). As far as implicit measures, prior work shows that the automatic accessibility indices of speed (latency) and number (rate) of positive (vs. negative) response endorsements (“possible” vs. “not possible” for me) to possible self-consistent terms provide valid implicit strength measures. Possible selves scoring higher (compared to lower) on these automatic accessibility indices (e.g., shorter latency and higher rate of positive response endorsements) are ultimately more (vs. less) durable and impactful in predicting future behavior consistent with the possible self (DeMarree et al., 2007a, 2007b; Norman & Aron, 2003; also see Cross & Markus, 1994). As far as explicit measures, prior work shows that confidence ratings provide valid explicit measures of possible self-strength. Specifically, possible selves rated higher (compared to lower) on subjective confidence (certainty) are ultimately more (vs. less) durable and impactful in predicting possible self-consistent behavior several days and even weeks later (Anderson, 1983; Anderson & Godfrey, 1987; DeMarree et al., 2007a, 2007b; Fazio & Zanna, 1978a, 1978b; Gregory, Burroughs, & Ainslie, 1985; Koehler, 1991; Rucker & Petty, 2004; Sherman, Cialdini, Schwartzman, & Reynolds, 1985). Drawing from this past work, we used a combination of explicit (confidence ratings) and implicit (latency and rate of positive response endorsements) measures of possible self-strength.

Empirical Overview and Predictions

This investigation examined the links among chronic self-doubt, strength of possible selves, and behavioral performance in achievement contexts. We derived several hypotheses to test the claim that chronic self-doubt stems more from the absence of a strong desired self than the presence of a strong undesired self. Hypotheses 1 and 2 predicted that high self-doubt (HSD) participants compared to low self-doubt (LSD) participants would rate their desired versus undesired or neutral possible selves lower in confidence (Hypothesis 1) and would also be slower to respond to desired versus undesired or neutral

self-consistent terms (Hypothesis 2). Hypothesis 3 predicted that the relatively lower strength of desired selves imagined by HSD participants would translate into relatively lower objective performance by HSD compared to LSD participants (who could imagine a strong desired self to guide self-regulatory performance) on a final achievement test. Hypothesis 4 predicted that the differences in possible self-strength (confidence) would mediate the interactive effect of self-doubt and imagery on final performance outcomes.

Using the same general procedure, three studies tested these hypotheses. The general procedure consisted of a preliminary phase followed by a primary experimental phase. Participants completed chronic measures of self-doubt as well as related personality variables (self-concept clarity and self-esteem) shown to predict self-strength outcomes (DeMarree, Petty, & Strunk, 2010). Next, participants were randomly assigned to one of three conditions of a self-relevant imagery exercise (Ruvolo & Markus, 1992) and then completed explicit strength ratings for the imagined possible self. Across studies, this yielded a 3 (possible self image: desired vs. neutral vs. undesired) \times 2 (self-doubt: HSD vs. LSD) between-subjects factorial design. Even though the general procedure and design was the same across studies (preliminary and primary experimental phase), the last two studies included minor additions in a secondary experimental phase (Phase 2) to test additional predictions. In Study 2, participants completed a computerized self-description task in Phase 2 that provided implicit strength measures to corroborate the findings on explicit strength measures. In Study 3, participants completed a performance task (vs. the self-descriptive task) in Phase 2 to test the final prediction that differences in strength of desired selves imagined by HSD and LSD participants would translate into differences in objective performance outcomes.

Study 1

Method

Study 1 tested the prediction that HSD participants compared to LSD participants would rate their desired (vs. undesired or neutral) possible selves lower in confidence (Hypothesis 1). In exchange for course credit, 60 psychology students (43 females) participated. Participants first completed the chronic self-doubt measure (Oleson et al., 2000) as well as the related measures of self-concept clarity (Campbell, Trapnell, Heine, Katz, LaVelle, & Lehman, 1996) and self-esteem (Rosenberg, 1965).¹ Next, they were randomly assigned to one of three conditions of Ruvolo and Markus's (1992) self-relevant imagery exercise in which they imagined a desired, neutral, or undesired career possible self. To maximize the conditions required for self-relevant imagery, the instructions asked participants to take 3 minutes to try to imagine exactly what they would look like and feel like and exactly what their lives would be like in the image they saw of themselves in their future career (Ruvolo & Markus, 1992). Finally, participants completed the explicit strength

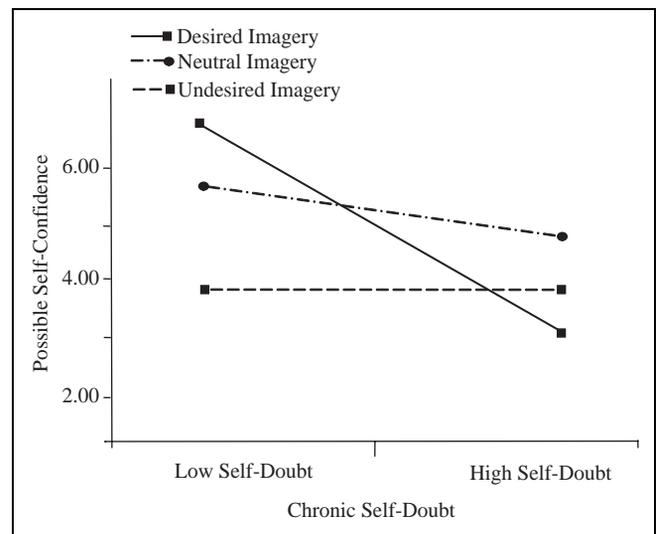


Figure 1. Study 1: Possible self-confidence as a function of possible self-imagery and chronic self-doubt

measure of possible self-confidence by rating how certain they were that the imagined possible self would come true (anchored on a 5-point scale ranging from 1 = *not at all* to 5 = *extremely*).

Results

As predicted, the results of an ANCOVA analysis showed significant main and interactive effects of self-doubt and imagery on possible self-confidence (controlling for the interactive and main effects of the self-concept clarity and self-esteem covariates with imagery condition following Yzerbyt, Muller, & Judd, 2004), all $F_s > 2.95$, all $p_s < .05$, all $d_s > 1.20$ (see Figure 1).² Moreover, secondary regression analyses showed that HSD compared to LSD participants reported lower confidence *only* in imagined desired selves ($B = -1.45$, $SE = 0.48$), $t = 3.00$, $p < .01$, but did not differ in confidence ratings for imagined neutral ($B = -1.26$, $SE = 0.61$) or undesired ($B = 0.09$, $SE = 0.54$) selves, both $t_s < 2.00$, both $p_s > .07$.

Study 2

Method

Study 2 attempted to extend the Study 1 findings by providing convergent support for the hypothesized link between self-doubt and desired self-strength on implicit (Hypothesis 2) as well as explicit (Hypothesis 1) strength measures. In exchange for course credit, 141 psychology students (82 females) participated. As in Study 1, participants first completed the preliminary measures and then, in Phase 1, imagined a desired, neutral, or undesired career possible self and completed the explicit strength measure (confidence) for the imagined career possible self. Unlike Study 1, however, participants then proceeded in Phase 2 to engage in Ruvolo

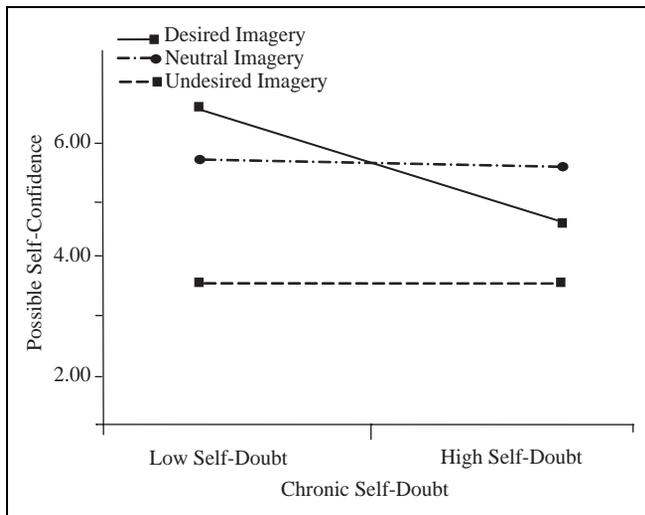


Figure 2. Study 2: Possible self-confidence as a function of possible self-imagery and chronic self-doubt

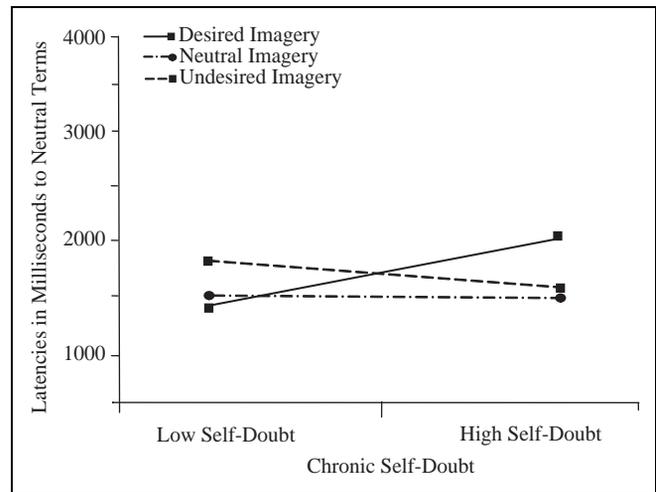


Figure 4. Study 2: Response latencies (in milliseconds) to neutral possible self-terms as a function of possible self-imagery and chronic self-doubt

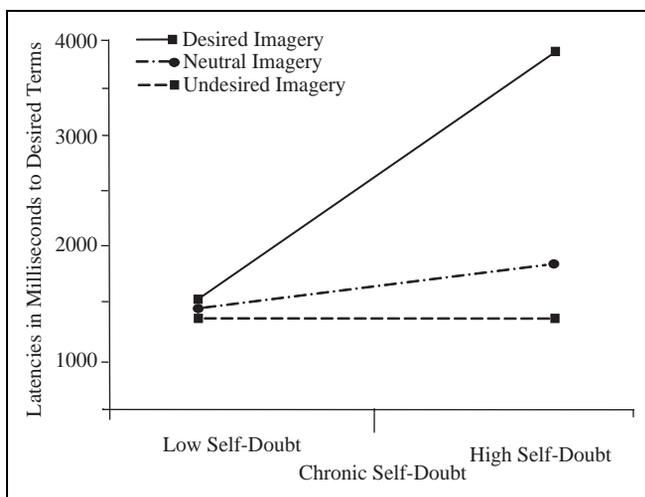


Figure 3. Study 2: Response latencies (in milliseconds) to desired possible self-terms as a function of possible self-imagery and chronic self-doubt

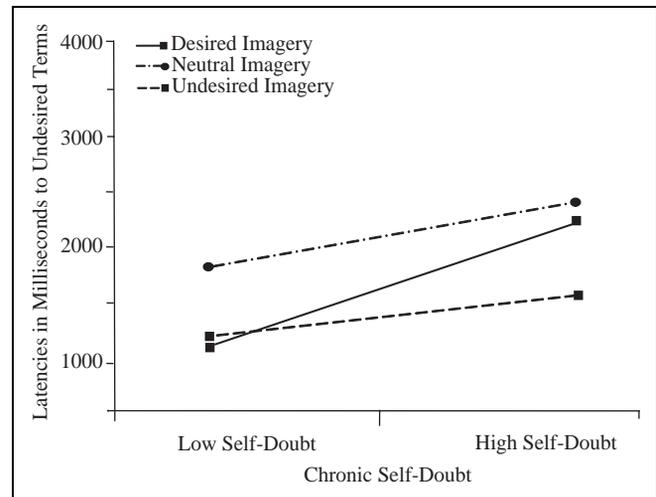


Figure 5. Study 2: Response latencies (in milliseconds) to undesired possible self-terms as a function of possible self-imagery and chronic self-doubt

and Markus’s (1992) computerized self-description task that provides an implicit accessibility measure of strength. In this task, participants press one of two keys labeled “Possible for Me” (positive endorsement) or “Not Possible for Me” (negative endorsement) in response to a series of descriptive terms consistent with desired, neutral, or undesired career possible selves. This task recorded the latency (speed in milliseconds) and rate (number) of response endorsements of desired, neutral, or undesired possible self-descriptors. To reduce skew typical of reaction time data, we used standard procedures for *screening* (adjusting outliers to cutoff values ± 2.5 SDs from the mean of an RT (Reaction Time) trial across participants or a participant across RT trials) and *normalizing* (log transforming) raw latency scores to compute the final accessibility measure (Fazio, 1990; Ratcliffe, 1993; Robinson, 2007).

Results

As predicted, the results showed a significant main and interactive effects of self-doubt and imagery exercise on possible self-confidence (controlling for interactive and main effects of both covariates with imagery condition), all F s > 3.19, all p s < .05, all d s > 0.58 (Figure 2). As in Study 1, regression analyses showed that HSD (compared to LSD) participants reported lower confidence in imagined desired selves ($B = -0.70$, $SE = 0.26$), $t(44) = -2.65$, $p < .05$, but did not differ in ratings for neutral ($B = 0.05$, $SE = 0.19$) or undesired selves ($B = -0.12$, $SE = 0.24$), both t s < -0.54 , both p s > .50.

Consistent with the explicit measure, the results also showed the predicted main and interactive effects of self-doubt and imagery on the *implicit* strength indices (latency and rate) of responses to desired self-descriptive (consistent) terms

(controlling for interactive and main effects of both covariates with imagery condition), all $F_s > 3.01$, all $p_s < .05$, all $d_s > 0.53$, but not neutral or undesired self-descriptive terms, all $F_s < 1.73$, all $p_s > .20$, all $d_s < 0.40$ (see Figures 3–5 for adjusted RT means). Moreover, the regression analyses showed that HSD (compared to LSD) participants were slower to respond to desired self-descriptors after imagining a desired ($B = 0.35$, $SE = 0.10$), $t = 3.21$, $p < .01$, but not a neutral ($B = 0.12$, $SE = 0.08$) or undesired ($B = 0.08$, $SE = 0.05$) self, both $t_s > 0.35$, both $p_s < .50$, career possible self. By contrast, there were no differences in response latencies for undesired or neutral self-descriptors, all $t_s < 1.89$, $p > .07$. Also, as predicted, HSD (69%) compared to LSD (93%) participants showed a lower rate of positive (“possible for me”) response endorsements to desired self-descriptors after imagining a desired career self, $t(46) = 2.35$, $p < .05$, $d > 0.44$. But they did not differ in the rate of positive endorsements to desired self-descriptors after imagining a neutral (75% vs. 84%) or undesired (63% vs. 73%) self, both $t_s < 1.54$, both $p_s > .10$, both $d_s < 0.35$. Finally, HSD and LSD participants did not differ in their rate of positive response endorsements to undesired or neutral self-descriptors in any condition of career possible self-imagery, all $t_s < 1.45$, all $p_s > .10$, all $d_s < 0.30$.

Studies 1 and 2 Summary

As predicted, the results of Study 2 converged with those of Study 1 to show that HSD (compared to LSD) participants reported lower confidence only when imagining a desired self but not when imagining a neutral or undesired self. Study 2 went further to corroborate the pattern of results on explicit measures to implicit measures of possible self strength showing that HSD (compared to LSD) participants were slower and less likely to endorse desired self-consistent terms as “possible for me” even though they did not differ in latency or rate of responses to undesired or neutral self-terms. Taken together, the results of Studies 1 and 2 support our proposal that the experience of chronic self-doubt stems more from the absence of strong desired self than the presence of a strong undesired self (as proposed by prior models of self-doubt).

Study 3

Method

Study 3 tested whether the subjective differences in desired self-strength made any *objective* difference in the actual performance outcomes achieved by HSD compared to LSD participants. Given the convergence of findings from Studies 1 and 2 across implicit and explicit measures, we replaced the self-descriptive task (Study 2) with a performance task in Phase 2 to test the prediction that the subjectively weaker desired selves imagined by HSD participants would translate into objectively weaker performance by HSD compared to LSD participants on a final achievement test. In exchange for course credit, 86 students (54 females) participated. Given that we used the same general procedure used in Studies 1 and 2, we limit our focus

to the one unique aspect of Study 3 method—the performance task. At the outset of Phase 2, participants learned that they would take a newly developed “Career Potential Test” (CPT) in the final phase as part of an ongoing effort to establish local testing norms among students at their university. To boost task motivation, participants also learned that prior research showed that CPT scores were predictive of later career success (e.g., starting salary, promotion, organizational rank) in an initial sample of students tested at their university. Drawing from prior work (Cross & Markus, 1994), we told participants, “College students could be expected to have the background and skills needed to answer the test questions.” Participants were given 20 minutes to complete the CPT, which was, in reality, merely a subset of 10 questions (6 analytic, 2 verbal, 2 quantitative) modeled after a practice test for the Graduate Record Examinations (Graduate Record Examinations Board, 1990).

Results

As predicted, the results showed significant main and interactive effects of self-doubt and imagery exercises on confidence ratings and final test scores (controlling for interactive and main effects of both covariates with imagery condition), all $F_s > 4.11$, $p < .01$, all $d_s > 1.00$ (Figures 6–7). As before, regression analyses showed that HSD (compared to LSD) participants reported lower confidence in imagined desired selves ($B = -1.87$, $SE = 0.44$), $t(25) = -4.29$, $p < .01$, but did not differ on confidence for imagined neutral ($B = 0.01$, $SE = 0.26$) or undesired selves ($B = -0.20$, $SE = 0.32$), both $t_s < -0.62$, both $p_s > .50$. As predicted, the differences in subjective confidence carried over to objective performance as HSD (compared to LSD) participants scored lower on the achievement test only after imagining a desired self ($B = -0.26$, $SE = 0.05$), $t(25) = -4.40$, $p < .01$, but not a neutral ($B = -0.03$, $SE = 0.05$) or undesired self ($B = -0.03$, $SE = 0.03$), both $t_s < -0.83$, both $p_s > .40$.

To test for mediation, we regressed achievement test scores on the self-doubt by imagery interactive effect and possible self-confidence (mediator; controlling for covariate main and interactive effects). Consistent with full mediation, the effect of possible self-confidence remained significant ($B = 0.04$, $SE = 0.01$; $t = 2.40$, $p < .01$) whereas the interactive effect dropped to nonsignificance ($B = -0.05$, $SE = 0.04$; $t = 1.33$, $p = .20$). The results of a Sobel test confirmed that the differences in possible self-confidence (strength) fully mediated the total interactive effect (self-doubt and imagery) on final achievement test scores, Sobel $z = -2.24$, $SE = 0.01$, $p < .01$ (Figure 8).³

General Discussion

Contrary to past conceptions of self-doubt (Jones & Berglas, 1978), the findings across three studies support our unique conceptual proposal that the chronic experience of self-doubt stems more from the absence of a strong desired self than the presence of a strong undesired self in awareness (Oleson et al., 2000). Moreover, the present work provides an empirical

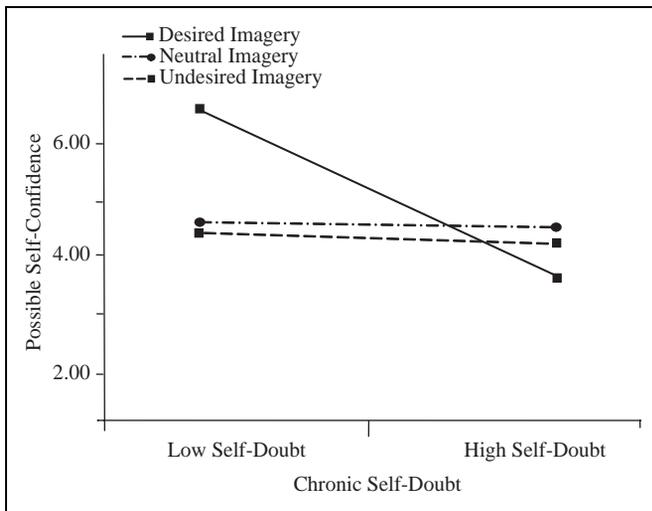


Figure 6. Study 3: Possible self-confidence as a function of possible self-imagery and chronic self-doubt

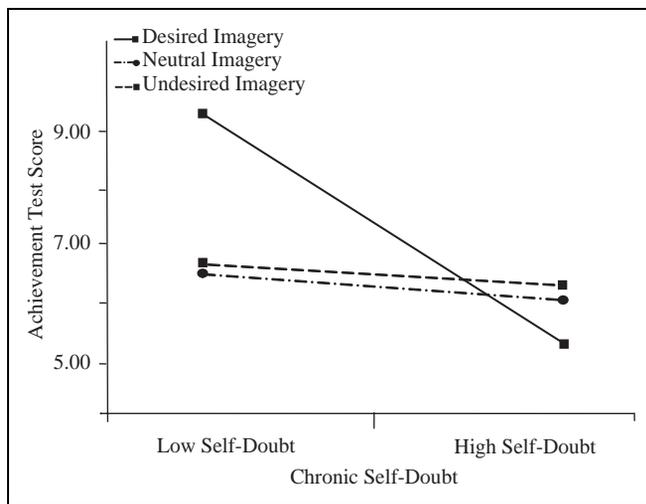


Figure 7. Study 3: Achievement test score (raw score/10) as a function of possible self-imagery and chronic self-doubt

answer to the bigger question of whether the subjective differences in desired (vs. undesired) self-strength imagined by people high in chronic self-doubt make any objective difference in terms of actual achievement outcomes. As predicted, Study 3 suggested that the *subjectively* weaker desired self imagined by HSD individuals ultimately translated into *objectively* weaker performance compared to LSD participants who could imagine a strong desired self to guide self-regulatory performance on the final achievement task. Thus, far from a mere figment of their poor imagination, their weaker desired self may carry the ultimate consequence of depriving those high in self-doubt of the rich regulatory fruits reaped by their counterparts low in chronic self-doubt who can readily imagine a strong desired self to effectively motivate and guide the ongoing pursuit and acquisition of individual achievement goals.

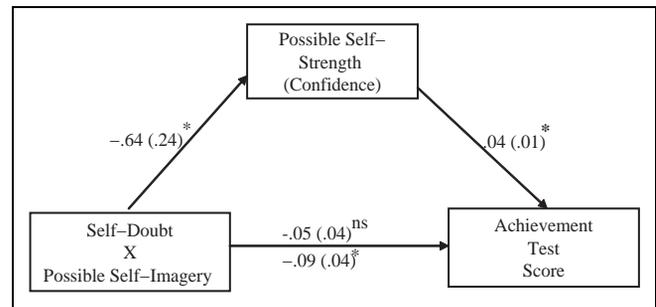


Figure 8. Mediation analyses
Numbers next to arrows are raw (unstandardized) regression coefficients and SEs for the hypothesized indirect and direct pathways (controlling for main and interactive covariate effects). Bold font offsets the residual direct effect (c') from the total effect (c). *p < .01.

Before proceeding, it is important to clarify that the critical finding here *is not* the presence of the positive effects of desired (vs. undesired or neutral) self-imagery among LSD participants. In fact, the positive effect of desired self-imagery on LSD participants (confidence and performance) is merely a replication of a standard finding repeatedly demonstrated in prior work (Cross & Markus, 1994; Oyserman, Bybee, & Terry, 2006; Ruvolo & Markus, 1992; Sherman, Skov, Hertz, & Stock, 1981). The critical finding that prior work *has not* demonstrated is the absence of this standard positive effect among people high in chronic self-doubt. Indeed, if anything, prior conceptualizations of self-doubt would have predicted that any differences would arise in the strength of the undesired self (of prospective failure) imagined by those high (compared to low) in self-doubt (Hermann, Leonardelli, & Arkin, 2002; Oleson et al., 2000). Thus, the conspicuous absence of the standard desired self-imagery effect among HSD participants is the critical finding of the present research in the same way that the conspicuous absence of the standard dissonance effect among self-affirmation participants was the critical finding of self-affirmation research. As was the case with self-affirmation research, the present research extends prior work by providing the best-fitting conceptual account of the novel empirical link between the strength of (desired) possible selves and chronic self-doubt.

Implications

The present findings suggest that the undesired prospect of failure emphasized in prior conceptualizations may be more of a superficial symptom rather than a defining quality of chronic self-doubt (that ultimately stems from the deeper inability of those high in chronic self-doubt to imagine a strong desired self of personal competency to achieve important goals). One intriguing implication of the present studies is that the weaker performance of people high (compared to low) in chronic self-doubt could be remedied by interventions that help them to elaborate a strong desired self like those already elaborated by their LSD counterparts. The elaboration of a strong desired self would provide them an ongoing source of

self-confidence (over doubt) by effectively motivating and guiding performance on important achievement tasks. Although self-views are extremely resistant to change under most conditions (Markus et al., 1990), recent work shows that people can be induced to embrace (or abandon) commitment to new desired self-goals in response to specified self-evaluative feedback (Carroll et al., 2009; Oettingen, Pak, & Schreiner, 2001). Drawing from these paradigms, future work could test whether helping people high in self-doubt to elaborate a strong desired self from their core (actual) competencies might give them the same performance benefits already enjoyed by those low in self-doubt who can readily imagine a strong desired self to enhance preparedness to pursue and seize viable opportunities for individual achievement.

Limitations and Future Directions

At this point, we urge caution before generalizing these findings beyond achievement settings. As noted earlier, the present work aimed to—first and foremost—demonstrate the link between chronic self-doubt and possible selves to extend prior work that has separately (vs. simultaneously) studied these two variables. Thus, before testing generality of the proposed link, we needed to first show that there *actually was* a link—any link—to generalize between possible selves and chronic self-doubt controlling all other extraneous factors, including life domain. Beyond enhancing experimental control, the focus on achievement settings enhances the direct significance of the present findings to prior findings by minimizing the empirical differences to the one unique prediction and finding of the present model that the absence of strong desired selves defines the experience (and subsequent consequences) of chronic self-doubt. Nonetheless, as with all experimental findings, the greater internal validity of *these* experimental findings comes at the cost of external validity to generalize to other settings and populations. Thus, future work can and should generalize these findings beyond competency beliefs in the arena of individual achievement to other important arenas of modern life, from personal relationships to faith and politics.

Summary Remarks

Although there are many ways we could close, we thought it only fitting to end our empirical story by returning to the opening question. At least in our (humble) view, the present work extends prior work by providing a clear empirical answer long overdue to the opening conceptual question—namely, that the experience and consequences of self-doubt stem more from the absence of a strong desired possible self than the presence of a strong undesired self.

Declaration of Conflicting Interests

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Notes

1. Given questions regarding their conceptual overlap and the ability to disentangle their unique effects, we estimated the actual empirical overlap among self-doubt and our covariates across studies. Consistent with the claim that they are related but unique variables, the average intercorrelations among self-doubt, self-concept clarity, and self-esteem were moderate but still below even the relaxed .50 standard across studies (Study 1 $r_s < .44$, Study 2 $r_s < .37$, Time 3 $r_s < .49$).
2. Figures 1 to 7 decompose the interaction ± 1 standard deviation from the mean of self-doubt, controlling for covariates (adjusted to sample mean of self-concept clarity and self-esteem).
3. Although partial mediation requires only a significant indirect effect, full mediation requires that the residual direct effect (c') is nonsignificant after removing from the total effect (c) the significant indirect effect ($c - c' \neq 0$) of the independent variable on the dependent variable through the mediator (M ; see Hayes, 2009, for further discussion).

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