Self and Identity

The Context-Sensitive Future Self: Possible Selves Motivate in Context, Not Otherwise

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The Context-Sensitive Future Self: Possible Selves Motivate in Context, Not Otherwise

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Imagining one's possible future self can motivate action but whether motivational power resides more in positive or more in negative future identities is not clear. We predicted that motivational power resides not in these positive or negative future identities but in the fit between context and future self. We varied fit in four experiments by having students read about college as a success-likely or failure-likely context and then write about their desired or undesired possible future identities. Which aspect of the future self was motivating depended on context. Motivation was higher in success-likely contexts if desired rather than undesired possible futures came to mind and was higher in failure-likely contexts if undesired rather than desired possible futures come to mind.

Keywords: Possible self; Motivation; Identity-based motivation; Fit.

People often struggle with motivation. On the one hand, they may imagine a future they would like to attain in which all their papers are written, their career plans are well in hand, they are physically fit, and they have wonderful family relationships. At the same time, they may fail to focus motivational attention on any of these possible future identities. Why might that be? One possibility is that positive future identities are motivating only when brought to mind, implying that interventions that increase salience of positive future identities will increase motivation and hence action. However, reviews of the literature suggest that while salience matters, it does not reliably increase motivation or change action (see Oyserman & James, 2008, 2011).

A number of theoretical formulations suggest that the missing piece to get from salience to motivation is relevance; a possible identity needs to seem relevant to the

situation at hand to influence motivation. Relevance can be primed in a number of ways. These include decreasing real or perceived temporal distance between current and future self (Ersner-Hershfield, Wimmer, & Knutson, 2009; Nurra & Oyserman, 2014; Pronin & Ross, 2006; Strahan & Wilson, 2006; Wakslak, Nussbaum, Liberman, & Trope, 2008) or linking a possible identity to strategies for attainment (Oyserman, Bybee, Terry, & Hart-Johnson, 2004) or to agentic journey metaphors (Landau, Oyserman, Keefer, & Smith, 2014). In the current studies, we address an as yet unstudied aspect of psychological relevance, whether a salient possible identity seems relevant to (fits) the affordances and constraints of the immediate situation.

By focusing on fit, we address inconsistent findings in the possible future selves literature as to whether making a positive future identity salient is more motivating than making a negative future identity salient or the reverse. We predict that this inconsistency is rooted in neglect of the interplay between context and accessible identity. To address this gap, in the current studies we build on situated theories of motivation including situated cognition (e.g., Smith & Semin, 2004), value from fit (Higgins, 2000), and identity-based motivation (IBM) theories (Oyserman, in press) to predict that the motivational power of the future self is context sensitive.

Situated cognition theories move beyond early theorizing about what was termed person–environment fit. Lack of fit was predicted to be stressing and undermining because contextual opportunities were irrelevant or not a good match to a person's typical style of action. Person–environment fit was a cornerstone of early theorizing on motivation (Jahoda, 1961; Lewin, 1935, 1951; Pervin, 1968) and continues to be of interest to personality (Roberts & Robins, 2004) and organizational (Talbot & Billsberry, 2011) psychology. The idea that *typical* style matters is also expressed in value from fit theory, which predicts that people find value in doing things in a way that fits their self-regulatory focus (Higgins, 2005).

Yet, typical style is not the whole story. Situated cognition theories predict that how people think depends on their situation in the moment (for early formulation, see Brown, Collins, & Duguid, 1989; for more recent formulations, see Aydede & Robbins, 2009). IBM theory predicts that contexts influence which identities come to mind, the implications of these identities for action, and how experienced difficulty is likely to be interpreted (Oyserman, 2007). Experienced difficulty can be interpreted as implying that the task is important and worth the effort or impossible and not worth one's time (Oyserman, Bybee, & Terry, 2006). Within this framework, success-likely contexts do not necessarily increase motivation, nor do failure-likely contexts necessarily undermine it (Smith, James, Varnum, & Oyserman, 2014). Instead, the motivational power of an accessible future possible identity is context sensitive, dependent on the fit between context and accessible future identity.

In the current studies, we focus on a particular kind of fit, the fit between whether a context is experienced as success-likely or failure-likely and one's desired or undesired future self. While both contexts and selves are multidimensional, we focus on this particular aspect of fit while holding constant content by focusing on the college context and one's future self during the college years. College can easily be considered either a failure-likely or a success-likely context. Colleges differ objectively in graduation rates, debt burdens, likelihood of post-college employment, salary, and other markers of success and failure. Colleges also differ in how they are experienced and students may differ over time in whether they see college as success- or failure-likely. For example, the college context can be failure-likely for a student attending a college in which most students do not graduate on time or fail in other ways (e.g., failing to get into desired majors, relevant internships, graduate school, or appropriate jobs after graduation). Separate from objective

failure rates, a college context can also feel more or less "failure-likely" at any moment in time, depending on characteristics of the person (e.g., chronic optimism or pessimism) and of the specific situation (e.g., reading about the high unemployment of recent graduates). The reverse is also true. A college context can also be experienced as success-likely either chronically (e.g., most students do graduate on time) or due to situational cues (e.g., reading about the high post-graduate success of most graduates).

Just as contexts can be success-likely or failure-likely, aspects of the current and future self can differ in their positivity and negativity (Carver & Scheier, 1982; Markus & Nurius, 1986). Self-regulatory focus theory (Higgins, 1987) focuses on positive identities, describing them as either ideal selves one wants to be or ought selves one feels obligated to be. However, control theory (Carver & Scheier, 1982) speaks more broadly about desired positive and undesired negative future or possible selves, as do Markus and Nurius (1986).[1] At first glance, there seems to be theoretical consensus that having both desired *and* undesired possible identities in the same domain ('balanced' future identities) should matter by boosting goal persistence (e.g., Carver & Scheier, 2001; Oyserman, 2007; Oyserman & Markus, 1990; Strahan & Wilson, 2006). People can provide descriptions of both their desired and undesired possible future identities (Dalley & Buunk, 2011; Norman & Aron, 2003). They care about making progress toward attaining desired and avoiding undesired possible future identities (Vignoles, Manzi, Regalia, Jemmolo, & Scabini, 2008). Field studies provide support for the notion that having and describing both improves motivation. Having balanced future identities predicts less subsequent delinquent involvement (Oyserman & Markus, 1990; Oyserman & Saltz, 1993), better grades, and more regular school attendance up to two years after initial assessment (Oyserman et al., 2004; Oyserman, Terry, & Bybee, 2002). Inducing children to have more balanced future identities through school-based intervention improves their school effort, grades, and attendance up to two years after the initial intervention (Oyserman et al., 2002, 2006).

However, some conceptualizations predict positive effects *only* for desired positive future identities (e.g., Markus & Nurius, 1986; Ogilvie, 1987; Penland, Masten, Zelhart, Fournet, & Callahan, 2000). Supporting evidence in these studies is correlational and so the possibility that third variables (e.g., threat sensitivity) could cue people to focus chronically on their undesired future identities and also lead to less well-being cannot be ruled out. Yet, studies often examine only the consequences of positive future identities, perhaps because undesired (negative) future identities are assumed to be detrimental to well-being. Positive associations are found for academic outcomes (Anderman, Anderman, & Griesinger, 1999), plans (Oettingen, Pak, & Schnetter, 2001), physical symptoms (King, 2001), and optimism for the future (Gonzales, Burgess, & Mobilio, 2001; Meevissen, Peters, & Alberts, 2011; Peters, Flink, Boersma, & Linton, 2010; Sheldon & Lyubomirsky, 2006). On the other hand, positive possible identities do not always produce positive action. Women were more likely to choose an unhealthy snack (Dalley & Buunk, 2011) after considering their positive future identities. Considering their positive future identities undermines students' goal-relevant choices (unless at the same time current obstacles to attaining their future self are considered; Oettingen et al., 2001). Because the relative motivational effect of undesired (negative) future identities is not included, these studies do not address the relative motivating power of positive and negative future identities.

The field studies we described earlier do naturalistically assess the motivational consequences of having both positive and negative future identities but they cannot address the question of the relative effectiveness of each. Manipulating the momentary accessibility of desired (positive) and undesired (negative) aspects of the future self and assessing effects on motivation can test relative effectiveness. Studies using this method

yield inconsistent results: One study reports enhanced motivation when positive rather than negative future identities are accessible, with students working harder on cognitive tasks when randomly assigned to imagine their 'best' rather than their 'worst' future self (Ruvolo & Markus, 1992). Subsequent experiments did not replicate this result. Two report enhanced motivation when either positive or negative possible future identities are accessible (compared to control) (Murru & Martin Ginis, 2010; Ouellette, Hessling, Gibbons, Reis-Bergan, & Gerrard, 2005). In these studies, students exercise more at four-week follow-up if randomly assigned to consider either their positive (healthy) or their negative (unhealthy) future identities compared to control. Two other studies report enhanced motivation when randomly assigned to consider their negative (unhealthy) future identities rather than their positive (healthy) future identities. Those in the negative future identities condition planned to diet more, chose a healthy snack (Dalley & Buunk, 2011), planned to exercise more, and followed through on exercise plans (Hoyle & Sherrill, 2006).

Thus, across studies, future identities matter but *how* they matter varies: Sometimes positive possible identities are more motivating, at other times they are equally or less motivating than negative ones. To make sense of these inconsistent results, we turn to IBM theory (Oyserman, 2007, 2009). IBM theory predicts that people prefer to act in identity-congruent ways but that the effect of identity can be difficult to see because context shapes what an identity means, which strategies feel congruent with it, and how difficulties along the way are interpreted (Oyserman, 2007, 2009; Oyserman & Destin, 2010; Oyserman, Novin, Smith, Elmore, & Nurra, 2014). How experienced difficulties are interpreted can increase or decrease task engagement (motivation) depending on whether a motivating or demotivating lay theory about what experienced difficulty means comes to mind (Oyserman, in press; Oyserman et al., 2014). A series of studies demonstrates that people hold both kinds of lay theories; they both believe that if the task feels difficult it must be important for me and that if the task is difficult it must be impossible for me (Oyserman et al., 2014). Moreover, extent of endorsement of one lay theory is not correlated with extent of endorsement of the other and each explains unique variance in relevant constructs such as academic self-efficacy and grade point average (Oyserman et al., 2014). Both can be primed and accessible interpretation of difficulty influences task engagement (Smith & Oyserman, 2014) and performance (Oyserman et al., 2014).

The Current Studies

We predicted that motivation is an emergent feature of fit between accessible future self and context, not a main effect of either, and tested this prediction in four experiments. In each, we randomly assigned participants to one of four conditions using a 2 (context: success-likely, failure-likely) by 2 (future self: positive, negative) between-subjects design. The design allowed us to separately manipulate whether positive or negative images of the college context and one's future self during the college years were accessible. We operationalized motivation as perceived likelihood of engaging in extra academic behaviors (Study 1), planning more hours for regular weekly studying (Study 2), planning to begin final exam preparation (Study 3), and interpretation of experienced difficulty with schoolwork (Study 4).

The context manipulation was a reading task; the future self manipulation was a writing task. We content-coded what students wrote to rule out the possible alternative explanation that effects were due to change in salience of school-focused possible identities and strategies. We used two analytic techniques to do so: Analyses of covariance to control for number of school-focused responses, and mediation analysis to test if effects of fit on

motivation are due to number of school-focused responses. These analyses show that effects are not due to increased salience of school-focused possible identities and strategies (content coding and analyses are available in the online supplemental materials). All studies were run at the University of Michigan in subject pool. Each study took place during a separate semester. Sample size was determined by our subject pool allocation. At the end of each study, participants were thanked and debriefed.

Study 1

Undergraduates were welcomed to the University of Michigan and randomly assigned to condition. We operationalized motivation as participants' likelihood of engaging in extra academic behaviors, predicting that participants would be more likely to engage in these behaviors if accessible possible identity and context fit.

Sample and Procedure

Undergraduates ($N = 213$, 58% first-year students, 71% White, 43% male) participated in the "College Years" study online (programmed in UM.Lessons) and were randomly assigned to conditions. In the success-likely context condition, students were told that their enrollment represented "the first step in a progression toward continued academic success, that the University contains many avenues for potential success," and that after graduation "equally promising trends" were likely. In the failure-likely condition, students were told that at Michigan students "encounter a number of natural difficulties" and that after graduation "declining trends" were found with earnings and graduate school attainments falling below their expectations.

After manipulating context, we manipulated future self. In the desired (undesired) future condition, students were told, "Each of us has some image or picture of ourselves in the future, including positive (negative) visions of the self we want to become (avoid). Think about your college years. How do you picture yourself? What do you want (not want) to be and do?"

After the manipulations, students reported on the likelihood ($1 = $ *very unlikely* to $7 = $ *very likely*) of four academic behaviors (Find a quiet place to study without distraction; Seek extra help, such as by getting a tutor; Study in groups; Do extra things to make sure you get a good grade; $M = 4.40$, SD $= 1.22$, $\alpha = .63$) embedded in four filler social activities (e.g. Join an organization that will help you meet people and make friends; Host or help plan a party or social event) and reported gender, year in school, and race/ethnicity.

Results and Discussion

As predicted, context, $F(1, 209) = .28$, $p = .599$, and future self, $F(1, 209) = .77$, $p = .38$, did not influence motivation alone but their interaction did, $F(1, 209) = 4.86$, $p = .029$, $d = .31$. Means and standard errors are presented in Figure 1 and in the online supplemental materials. We tested simple effects, the effects of the future self when context feels (1) success-likely or (2) failure-likely, and the effects of context when (1) a positive future self is accessible or (2) a negative one is accessible. The top row of each panel of Table 1 presents each effect size. Study 1 provides initial evidence of the context-sensitive power of salient possible identities on motivation. As can be seen, an accessible positive future self was motivating in the success-likely context condition and an accessible negative future self was motivating in the failure-likely context condition. The strongest effects are for negative future identity in the failure-likely ($M = 4.56$, SE $= .16$) versus success-likely ($M = 4.10$, SE $= .16$) condition, $F(1, 100) = 4.11$, $p = .045$, $d = .41$, and for success-likely college context in the positive ($M = 4.62$, SE $= .15$)

FIGURE 1 The context-sensitive effect of possible future identities on planned academic behaviors (Study 1). *Note*: Values that share superscripts represent simple effects where $^1p = .045$, $^2p = .017$.

versus the negative possible identity ($M = 4.10$, SE $= .15$) condition, $F(1, 100) = 5.85$, $p = .017$, $d = .48$.

Study 2

Undergraduates were welcomed to the University of Michigan and randomly assigned to condition using the Study 1 procedure. We operationalized motivation as participants' estimates of how many hours they would devote to academics and stu+dying that week.

Sample and Procedure

Undergraduates ($N = 159$; 67% first-year students, 68% White, 46% male) participated in an online "College Experience" study programmed in UM.Lessons. Procedure and analysis plan were identical to Study 1. Participants reported the number of hours they planned to devote to eight common activities during the coming week. Four academic items (Studying alone in your room; Going to class; Reading outside of assigned work; Studying alone somewhere besides your room; $M = 40.87$, SD $= 15.39$)[2] were embedded in four filler items (e.g., Watching TV or playing videogames; Hanging out with friends). Gender, year in school, and race/ethnicity information were then obtained. We categorized future identity responses as in Study 1. Coding and results can be found in online supplemental materials.

Results and Discussion

As predicted, context, $F(1, 155) = 1.17$, $p = .281$, and future self, $F(1, 155) = 2.74$, $p = .100$, did not influence motivation alone but their interaction did, $F(1, 155) = 5.73$,

TABLE 1 The Context-Sensitive Power of the Future Self: Simple Effects and Effect Sizes (*d*)

Study	Dependent variable	Simple effect	Effect size
Context feels success-likely: Effect of accessible positive vs. negative possible future identities			
1	Academic behaviors	$F(1,100) = 5.84, p = .017$	.48
2	Hours of studying	$F(1,78) = .36, p = .553$	.13
3	Starting studying	$F(1,57) = .73, p = .398$	.22
4	Difficulty means schoolwork is "for me"	$F(1,60) = 2.87, p = .095$	.42
4	Difficulty means schoolwork is "not for me"	$F(1,60) = .10, p = .756$	.08
Context feels failure-likely: Effect of accessible positive vs. negative possible future identities			
1	Academic behaviors	$F(1,109) = .76, p = .384$	.17
2	Hours of studying	$F(1,77) = 6.62, p = .012$	.59
3	Starting studying	$F(1,58) = 4.25, p = .044$	.54
4	Difficulty means schoolwork is "for me"	$F(1,63) = 2.35, p = .131$	.38
4	Difficulty means schoolwork is "not for me"	$F(1,63) = .51, p = .478$	.18
Positive possible identities are accessible: Effect of context feeling success-likely vs. failure-likely			
1	Academic behaviors	$F(1,109) = 1.31, p = .254$	.22
2	Hours of studying	$F(1,82) = .88, p = .352$	.21
3	Starting studying	$F(1,53) = 5.70, p = .021$	.66
4	Difficulty means schoolwork is "for me"	$F(1,61) = 5.02, p = .029$	.56
4	Difficulty means schoolwork is "not for me"	$F(1,61) = 1.36, p = .248$	.30
Negative possible identities are accessible: Effect of context feeling success-likely vs. failure-likely			
1	Academic behaviors	$F(1,100) = 4.11, p = .045$	.41
2	Hours of studying	$F(1,73) = 5.98, p = .017$	.56
3	Starting studying	$F(1,62) = .61, p = .437$	.20
4	Difficulty means schoolwork is "for me"	$F(1,62) = 1.02, p = .317$	.25
4	Difficulty means schoolwork is "not for me"	$F(1,62) = 1.87, p = .180$	.34

$p = .018$, $d = .38$. Means and standard errors are presented in Figure 2. We tested simple effects as in Study 1. The second row of each panel of Table 1 presents each effect size. As in Study 1, fit mattered. The strongest effects are for negative future identity in the failure-likely ($M = 47.24$, SE $= 2.46$) versus success-likely ($M = 38.90$, SE $= 2.36$) condition, $F(1, 73) = 5.98$, $p = .017$, $d = .56$, and for failure-likely college context in the negative ($M = 47.24$, SE $= 2.79$) versus the positive possible identity ($M = 37.52$, SE $= 2.55$) condition, $F(1, 77) = 6.62$, $p = .012$, $d = .59$.

Study 3

Students were welcomed to the University of Michigan and randomly assigned to condition as before, except that we simplified our priming materials and operationalized motivation as how soon during the semester a student would start studying for finals.

Sample and Procedure

Undergraduates participated online in a study programmed in UM.Lessons ($N = 145$, 78% first-year students, 72% White, 27% male). The dependent variable was somewhat complicated and the 23 students who failed to follow instructions were dropped from analyses, yielding a final sample of $n = 122$. On the first screen, participants in the success-likely (failure-likely) context condition read, "After acceptance into the University of Michigan, the college years tend to be smooth (rocky) going. Students mostly find that they can (cannot) get to where they hoped to get. That is, UM students mostly can (cannot) attain the grades, major, and experiences they need, making them likely to find success and
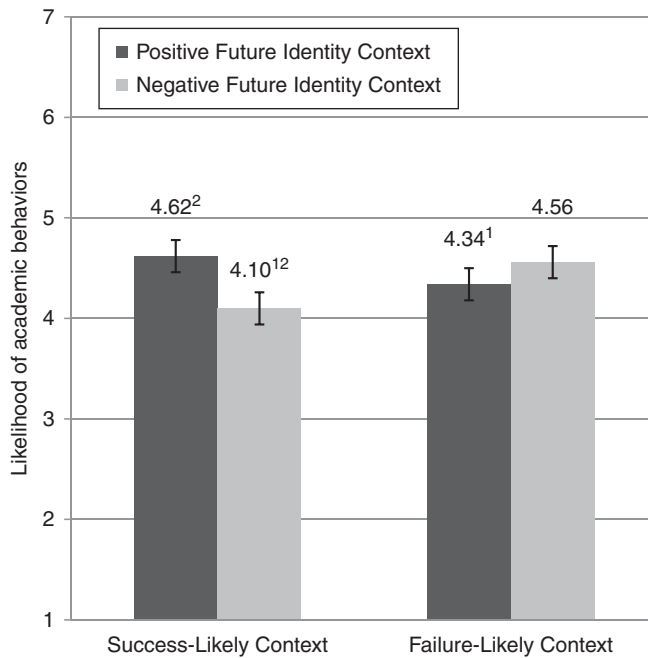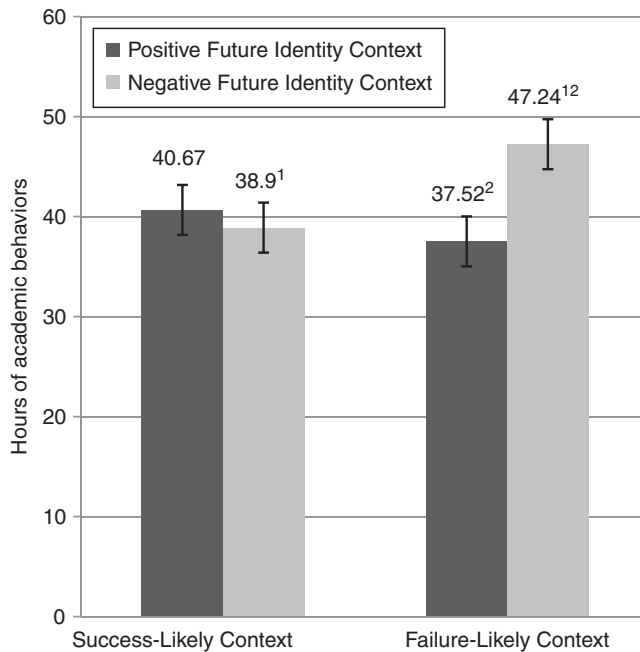
FIGURE 2   The context-sensitive effect of possible future identities on planned study hours (Study 2). *Note*: Values that share superscripts represent simple effects where [1]$p = .017$, [2]$p = .012$.

satisfaction (obstacles and disappointment) in the next phase of life." On the second screen, participants in the positive (negative) future self condition read, "Take a minute to think about your own college years. In the space below, describe who YOU WANT (DO NOT WANT) TO BECOME during college and YOUR STRATEGIES (what you will do) to attain (avoid) this possible self."

Next, students were instructed as follows, "In the space below, draw a horizontal line using hyphens (-) starting with the first day of this academic term and ending with grades being posted. Then mark an X on the line where you will start studying for finals or preparing final papers." We measured total line length (denominator) and length after the mark (numerator) to calculate the percentage of the semester that remained once studying would begin. Larger percentages reflect starting to study earlier in the semester (with more of the semester remaining). We looked for extreme outliers, finding three with responses more than 2.5 SD from the mean. The pattern of effects is the same whether these participants are included or excluded from analyses. For parsimony, they are excluded in the reported analyses.

Results and Discussion

As predicted, neither context, $F(1, 115) = .79$, $p = .377$, nor future self, $F(1, 115) = .78$, $p = .279$, alone mattered but the interaction between them did, $F(1,115) = 4.29, p = .041$, $d = .39$. Means and standard errors are presented in Figure 3; simple effect sizes are presented in the third row of each panel of Table 1. As before, an accessible positive future self was motivating in the success-likely context condition and an accessible negative future self was motivating in the failure-likely context condition. Strongest effects are for positive future identity in the success-likely ($M = 24.73$, SE $= 1.99$) versus failure-likely
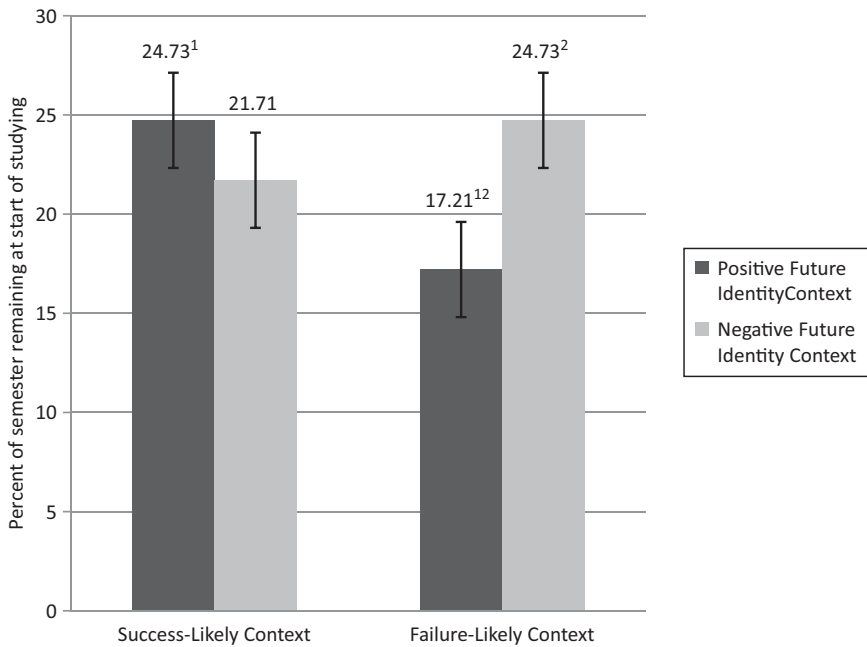
FIGURE 3 The context-sensitive effect of possible future identities on beginning to study for finals (Study 3). *Note*: Values that share superscripts represent simple effects where [1]$p = .021$, [2]$p = .044$.

($M = 17.21$, SE $= 2.44$) condition, $F(1, 53) = 5.70$, $p = .021$, $d = .66$, and for failure-likely college context in the negative ($M = 24.73$, SE $= 2.21$) versus the positive possible identity ($M = 17.21$, SE $= 2.90$) condition, $F(1, 58) = 4.25$, $p = .044$, $d = .54$.

Study 4

Students were welcomed to the University of Michigan and randomly assigned to condition using the same procedure and analysis plan as before, except that we simplified our priming materials and operationalized motivation as higher scores on a difficulty means that schoolwork is 'for me' scale and lower scores on a difficulty means that schoolwork is 'not for me' scale.

Sample and Procedure

Undergraduates ($N = 127$; 57% first-year students, 63% White, 29.1% male) were invited to the lab and randomized to condition. The study was a single page with the manipulation on the front and the two 6-item lay theory scales ($1 = $ *strongly disagree* to $7 = $ *strongly agree*) on the back. Students read: "The college years can be difficult but success is likely (and failure-prone). (Most) Students find that it is possible (impossible) to attain what they had hoped for and (they often are not able to) get the grades, attain the major, or get the experience they need to easily move to the next phase of life. Take a minute to think about your own desired (feared) possible future self at the end of your college years. Consider your desired (feared) possible self and what you are doing now to become (avoid becoming) like this positive desired (negative feared) possible self." Then students rated their agreement–disagreement with the lay theory scales. Mean response to the difficulty

implies that schoolwork is 'For Me' scale ($\alpha = .89$) did not correlate, $r = -.05$, $p = .556$, with mean response to the difficulty implies that schoolwork is 'Not For Me' scale ($\alpha = .83$) and each was analyzed separately. Items and scale means and standard deviations are presented in online supplemental materials.

Results and Discussion

We examined effects of fit on both lay theories. First, we considered the 'For Me' results. As predicted, neither context, $F(1, 123) = .71$, $p = .401$, nor future self, $F(1, 123) = .04$, $p = .850$, alone matter but their interaction did, $F(1, 123) = 5.23$, $p = .024$, $d = .41$. Possible selves were motivating when they fit with the context as shown in Figure 4 and the fourth row of each panel of Table 1. The strongest effects are for positive future identity in the success-likely ($M = 4.55$, SE $= .18$) versus failure-likely ($M = 3.99$, SE $= .18$) condition, $F(1, 61) = 5.02$, $p = .029$, $d = .56$, and for success-likely college context in the positive ($M = 4.55$, SE $= .18$) versus the negative possible identity ($M = 4.11$, SE $= .18$) condition, $F(1, 60) = 2.87$, $p = .095$, $d = .42$. Next we considered the 'Not For Me' results (main effects of context, $F(1, 123) = 3.19$, $p = .076$, future self, $F(1, 123) = .51$, $p = .477$); though the interaction between context and future self was not significant, $F(1, 123) = .06$, $p = .801$, $d = .04$, the pattern of means matched the fit hypothesis as shown in Figure 4 and the fifth row of Table 1.
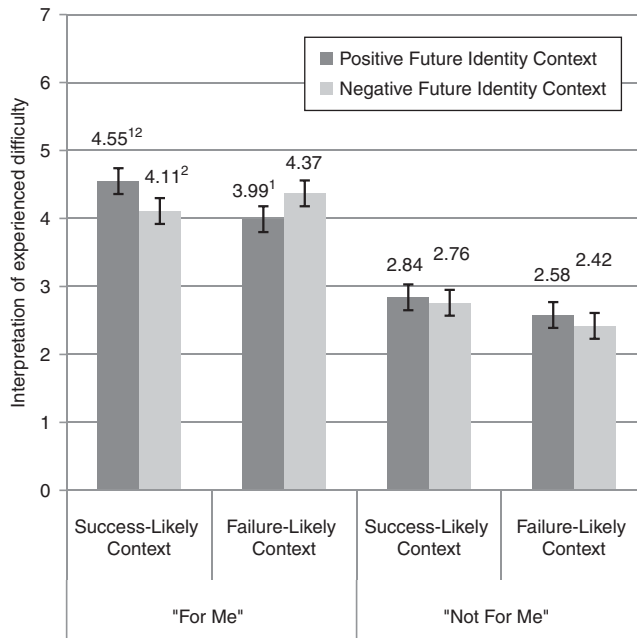
FIGURE 4 The context-sensitive effect of possible future identities on interpreting experienced difficulty with school as implying that schoolwork is "For Me" or "Not For Me" (Study 4). *Note*: Values that share superscripts represent simple effects where [1]$p = .029$, [2]$p = .095$. Higher scores represent higher endorsement that experienced difficulty with schoolwork implies that schoolwork is "for me" (left-hand panels) or that experienced difficulty with schoolwork implies that schoolwork is "not for me" (right-hand panels).

Meta-analytic Summary

Across studies we found the expected interaction and pattern of simple effects. Not all of these simple effects were significant but this may have been due to variability in measurement error, sample size, and other factors unrelated to our theory. We conducted a meta-analysis (Rosenthal, 1995) with Comprehensive Meta-Analysis 2.0 software to test the robustness of simple effects given a random effects model. Meta-analysis yields an overall effect giving more weight to larger samples since they have more reliable effect sizes (Hedges & Olkin, 1985; Johnson & Eagly, 2000; Lipsey & Wilson, 2001).[3] Our meta-analysis showed that each of the simple effects was significant implying that fit matters. Positive possible identities are more motivating than negative ones if, at the moment of judgment, context is perceived as success-likely ($p < .001$, $d = .35$). Negative possible identities are more motivating than positive ones if, at the moment of judgment, context is perceived as failure-likely ($p = .001$, $d = .34$). Success-likely contexts are more motivating than failure-likely ones if, at the moment of judgment, positive rather than negative possible identities come to mind ($p = .001$, $d = .33$). Failure-likely contexts are more motivating than success-likely ones if, at the moment of judgment, negative rather than positive possible identities come to mind ($p = .012$, $d = .24$).

General Discussion

In a series of experiments we demonstrate that the motivational power of the future self is sensitively attuned to context. Students asked to consider their possible future identities during the college years were significantly more motivated to work on their school goals and interpret difficulty as a signal to increase rather than withdraw effort from schoolwork if the way that they thought about their future self fits the way that they considered their immediate context. In contexts that feel failure-likely, considering one's negative possible future identities is significantly more motivationally powerful than considering one's positive possible future identities. In contexts that feel success-likely, the reverse is the case. Positive, desired possible identities are more motivating than negative, undesired ones in contexts that feel success-likely. Negative, undesired possible identities are more motivating than positive desired ones in contexts that feel failure-likely. Meta-analysis shows that each of the fit effects is significant.

We focused on motivational intent using IBM theory (Oyserman, 2009, in press; Oyserman & Destin, 2010) to predict that the fit between how the future self and the current context are considered improves motivation to act. Results support this prediction. We were able to rule out the alternative possibility that number of school-focused future identities and strategies were the source of these effects. IBM theory predicts that people take action in support of salient identities that are perceived as relevant to the current situation, sustaining action even after experiencing difficulty. The current studies documented increased motivation when relevance was experienced due to fit in valence (positive future identities and success-likely context, negative future identities and failure-likely context).

Implications for Research and Intervention

Our findings are congruent with and build on prior IBM (Oyserman et al., 2006) and value from fit (Higgins, 2005) research. Prior research has demonstrated that interpretation of experienced difficulty matters, shifting engagement and performance (Oyserman, in press; Smith & Oyserman, 2014; Oyserman et al., 2014), and that considering a prevention-

means to attain prevention goals is satisfying (Higgins, 2005). What the current studies show is that interpretation of experienced difficulty, intention to study, and intention to start studying sooner rather than later are all increased by imagining one's future self in a valenced way that is relevant to the immediate context. This finding that positive and negative future identities only motivate if they fit how context is experienced implies that focusing on the positive as a general strategy only works if contexts are success-likely. Given it is unlikely to be the case that one's life is lived only in success-likely or only in failure-likely contexts, this implies that to bolster motivation, interventions should not focus exclusively on building accessibility of either positive or negative possible identities but rather should bolster both.

This is an important implication because programs *do* typically focus only on one or the other. Consider, for example, the popular "Scared Straight" program in which youth tour adult jails to evoke their feared possible identities and convince them to stay out of trouble. Youth may be convinced while in the jail but this context is not chronically accessible and indeed these programs fail to find behavioral effects in spite of their popularity (for a meta-analysis of these "Scared Straight" programs, see Petrosino, Turpin-Petrosino, & Buehler, 2003). The same is the case for programs meant to bolster only positive possible identities. These programs typically emphasize positive possible identities and ignore negative ones or treat them as to-be-abandoned (Kaylor & Flores, 2007). Since contexts are unlikely to be uniformly success-likely, these approaches are unlikely to yield robust effects over time.

Though our studies took place on an elite college campus in which most students succeed, our results are likely to be generalizable implying that interventions should facilitate salience of both positive and negative possible selves whether they are run in affluent or resource-limited contexts. Just as affluent college campuses can be experienced as success- or failure-likely even among mainstream students at least sometimes, the same is true in high-poverty neighborhoods contexts. They can be experienced as success-likely if success in school and career feel both possible and congruent with other important identities such as racial-ethnic, social class, and gender identity (e.g., Oyserman et al., 2006). High neighborhood unemployment, poverty, and dropout rates can make them feel failure-likely.

Beyond application to intervention, our results also address inconsistencies across studies of the effects of salient possible selves (e.g., Hoyle & Sherrill, 2006; Ruvolo & Markus, 1992). Prior research neither assesses nor manipulates experienced context. Our results support a situated model in which both positive and negative possible future identities can have a beneficial influence on judgment, choice, and behavior in contexts that feel congruent rather than incongruent with the possible future identity.

Our model also yields a number of practical implications. First, advice on how to consider one's possible future self that makes sense from one perspective (e.g., within a positive, success-likely context) is unlikely to be effective when applied within a different standpoint (e.g., within a negative, failure-likely context). Second, failure to take action to attain a positive or to avoid a negative possible future identity may be due to mismatch with context that impedes motivational urgency rather than to deficits in the positive or negative possible identity per se. Third, since over time the sense one makes of one's context is likely to shift, having access to both positive and negative future identities is likely to be important.

Limitations and Future Directions

In a series of studies we manipulated whether a success-likely or a failure-likely interpretation of the college context was accessible at the moment of judgment. Of course,

in the real world outside the lab whether one's immediate context feels success-likely or failure-likely changes over time and across situations. That is, the same person might sometimes experience a particular context such as school as success-likely and other times experience it as failure-likely. He or she might also experience some contexts as success-likely (e.g., home) more often than others (e.g., school). We did not obtain individual difference measures because our focus was on demonstrating the contextual sensitivity of the future self. However, individual differences in, for example, optimism for the future might moderate effects either over time or in the moment (e.g., Norem & Chang, 2001). Future studies could examine the interface between fit and individual differences in sensitivity to context, for example, by priming independent versus interdependent self-construal (e.g., Mourey, Oyserman, & Yoon, 2013).

Our studies demonstrated the motivational effect of fit between context and future self in the form of valence. We did not examine alternative formulations of fit. One such formulation, considering strategies in ways that match with future self, has been examined within self-regulatory focus theory (Cesario, Corker, & Jelinek, 2013; Cesario, Higgins, & Scholer, 2008; Higgins, 2000, 2005). One way fit between context and future selves increases motivational intensity may be via fit effects on how experienced difficulty is interpreted. Fit may increase a productive interpretation of experienced difficulty by implying that attaining the positive possible identity or avoiding the negative one is a realistic possibility. The relationship between these two formulations of fit might also be a useful future focus of research. The formulations differ in whether fit focuses on strategies or context and on whether negative (feared) possible selves are taken into account. Within self-regulatory focus theory, both ideal and ought self are positive selves one wants or feels obligated to become (Higgins, Roney, Crowe, & Hymes, 1994). On the other hand, prevention focus involves avoiding failing and that may be an active ingredient in the motivation power of feared possible identities as well (Lockwood, Jordan, & Kunda, 2002).

In our studies, we manipulated context and future self separately to demonstrate the effect of fit. Of course, in the world outside the lab, the two may be related. The way one thinks about context may influence which aspects of the future self come to mind, and the way one thinks about the future self may influence how the context is understood. This would imply that people might differ in the extent that they experience fit. In each of our studies, we first manipulated context and then manipulated future self. It is possible that had we done the reverse (first manipulate future self and then manipulate context) the size of effects might have changed. That is, thinking about context first might have increased or decreased students' implicit belief in the likelihood of attaining their future identity, something that is likely to occur in the world outside the lab as well. That said, across four studies we show that the power of possible selves is context sensitive, depending on how situation is considered and also the context-sensitive power of situations, depending on how possible selves are considered.

Supplementary Material

Supplementary material is available via the 'Supplementary' tab on the article's online page (http://dx.doi.org/10.1080/15298868.2014.965733).

Notes

1. Though authors routinely refer to multiple selves, this can be a bit confusing; so, in the current paper, we refer to a current or future self when describing the self generally, but to

current or future identities when describing particular aspects of this current or future self such school- and career-focused possible identities (see Oyserman, Elmore, & Smith, 2012).

2. We did not observe any extreme outlier responses for the four academic items.

3. Effect size is readily understood, for example, to obtain the effect of the future self in success-likely contexts, weighted mean effects are the mean difference in motivation between the positive future self and the negative future self conditions divided by the pooled standard deviation (the g statistic) and weighted by the reciprocal of g's variance.

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