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# The Future Is Now: Prospective Temporal Self-Appraisals Among Defensive Pessimists and Optimists

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*Three studies found that prospective temporal self-appraisals can be part of defensive pessimists' strategy; they felt closer to equally distant negative than positive futures. In Study 1, defensive pessimists felt closer to future failures and reported more negative affect than those considering success. In Study 2, when manipulated negative futures were close, defensive pessimists felt bad and performed well; results suggested that viewing negative futures as close may be part of their natural strategy. Study 3 found that prospective self-appraisals influenced performances through felt preparation. Optimists did not use prospective self-appraisals (Study 1) and their performances were unaffected by manipulated temporal distance (Studies 2 and 3). Discussion centers on prospective self-appraisals and multiple strategies of defensive pessimists.*

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**Keywords:** *defensive pessimism; temporal self-appraisal; future predictions; time*

People use various strategies to enhance positive self-views (for reviews, see Schlenker & Weigold, 1992). Many of these involve comparisons with other people. A person can compare with worse-off others (Wood, 1989), affiliate with attractive others (Berschied & Reis, 1998), or associate with successful others (Cialdini et al., 1976). Alternative strategies do not reference other people but instead involve comparisons with the self over time. Temporal self-appraisal theory (Ross & Wilson, 2002; Wilson & Ross, 2001) proposes that past events with negative implications for self-views feel subjectively farther away than equally distant past events with positive implications. By appraising the past so that bad events seem far

away and good events seem close, people can feel positively about themselves in the present.

Our research had four novel and unique objectives by testing whether for defensive pessimists temporal self-appraisals can (a) occur prospectively, (b) involve feeling closer to negative outcomes, (c) influence performances, and (d) differ from optimists. These ideas are based on findings that defensive pessimists think the worst will transpire in the future and that they differ from optimists in using other prospective strategies (Norem & Cantor, 1986a; Sanna, 1996; Showers, 1992; see Norem, 2001, for a review). We report three studies testing these possibilities using multiple contexts, manipulations, and measures.

## PROSPECTIVE STRATEGIES OF DEFENSIVE PESSIMISTS AND OPTIMISTS

Defensive pessimists benefit from adopting a negative future outlook (Norem & Cantor, 1986a; Norem &

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Illingworth, 1993; Sanna, 1996; Showers, 1992; see Norem, 2001, for a review). They acknowledge a history of success in situations, such as academic or social settings, but nonetheless enter those situations “expecting the worst” (Showers, 1992, p. 474). Their pessimism is strategic because it serves at least two goals: (a) a self-protective goal of bracing in case of eventual failure and (b) a motivational goal of increasing preparation to enhance the possibility of doing well (Sanna, 2000; Showers & Ruben, 1990).

Even though they have done well in the past, defensive pessimists experience high anxiety and negative affect as they anticipate the future (Norem & Illingworth, 2004; Sanna, 1998). By focusing on worst-case scenarios of all that might go wrong, defensive pessimists manage their emotions; thinking about the prospect of bad outcomes helps defensive pessimists prepare to prevent those outcomes from materializing (Norem & Cantor, 1986a; Sanna, 1996; Showers, 1992). Their negative expectations thus make bad outcomes less likely. Other studies have similarly shown positive benefits of negative thinking (Norem & Chang, 2002).

Strategic optimists (Norem & Illingworth, 2004) differ from defensive pessimists in that they do not use prospective strategies (Norem & Cantor, 1986b; Sanna, 2000). Optimists set high expectations, do not experience high anxiety, and avoid thinking through future outcomes (Norem & Cantor, 1986a; Sanna, 1996; Showers, 1992). Defensive pessimists and optimists effectively use their preferred strategies and perform equally well (Norem, 2001). But when strategies are unavailable, or are not possible, they suffer. For example, defensive pessimists can be disrupted when distracted from thinking about the future, when thinking about positive futures, or when put into good moods; because optimists prefer not to think about the future, they can be disrupted when asked to do so, whereas distracting them from thinking about the future can sometimes facilitate performances (Sanna, 1998; Spencer & Norem, 1996).

#### PROSPECTIVE TEMPORAL SELF-APPRAISALS

Our hypothesis was that prospective temporal self-appraisals may be another and as yet unidentified strategy in defensive pessimists’ arsenal. Thus far, temporal self-appraisal theory has focused on only past outcomes and events, and on only negative events feeling farther away than positive events (Ross & Wilson, 2003). People can (a) enhance past selves that already feel close and disparage past selves that feel far (Wilson & Ross, 2001) or (b) regard unfavorable past selves as farther away than favorable past selves (Ross & Wilson, 2002). By appraising the past in these ways, either route can lead to feeling good about the present.

Subjective feelings of distance are at issue, not actual calendar or clock time. For example, failing and succeeding athletes can be aware of events precisely 1 month prior, but poor outcomes nonetheless feel more remote (Ross & Wilson, 2002). The underlying motive is high self-regard (Cialdini, 1989; Tesser, 1988) due to the fact that this retrospective temporal distance bias occurs because past selves function analogously to other persons. For example, people frequently associate with successful others, such as reporting sports victories as “we won” and dissociating from defeats with “they lost” (Cialdini et al., 1976; Snyder, Lassegard, & Ford, 1986). People can similarly associate or dissociate themselves from past selves.

We provide the first test of whether people can differ in prospective self-appraisals. On one level, this has been the subject of speculation. People might feel farther away from future events with potential negative than positive implications (see Ross & Wilson, 2002; Sanna & Chang, 2003). This would be a simple and direct transposition of what is known about retrospective self-appraisals and may be true under some circumstances. However, on another level, we here examine an alternative and perhaps even more intriguing possibility that moves beyond this seemingly straightforward presumption. We test another unique twist and provide the first evidence that certain people—defensive pessimists—may actually feel subjectively closer to negative than positive future outcomes.

#### OVERVIEW OF THE RESEARCH

Thinking about failures helps defensive pessimists and is part of their strategy, whereas thinking about successes hinders them and is not part of their strategy (Norem & Illingworth, 1993; Sanna, 1996; Showers, 1992). By extension, we predicted that when future failures seem close, this should be particularly helpful to defensive pessimists, whereas when future successes seem close, this should be particularly hurtful. Defensive pessimists may use closeness to negative futures to motivate themselves to perform well and/or to proactively protect themselves in case of failure. Close successes are counter to their strategy because thinking about successes is not part of what they normally do. Prospective self-appraisals may not be used by optimists because research indicates that they may not use (many) other prospective strategies.

We conducted three studies testing these ideas. In Study 1, the main purpose was to test whether defensive pessimists and optimists differ in prospective self-appraisals. The two strategy groups considered possible future failure or success on a real-life course exam. They rated subjective temporal distance to future outcomes and also rated their affect. We predicted that defensive

pessimists would view future failures but not successes as close and that close failures would be associated with negative affect. Thus, we hoped to provide initial evidence for our hypotheses and to demonstrate effects when looking ahead to real-life events.

In Studies 2 and 3, we tested reactions of defensive pessimists and optimists to manipulated temporal distance on a laboratory anagram task. The two studies were important for another reason. We examined whether prospective self-appraisals could be linked to actual performances, offering the first test of this possibility. With temporal distance manipulated, we predicted that defensive pessimists would perform well when future failures were close and poorly when future successes were close. Close failures should be particularly helpful to defensive pessimists, being most consistent with their strategy, whereas close successes should be particularly hurtful, being most inconsistent with their strategy. This augmented Study 1, where defensive pessimists viewed future failures but not successes as close.

In Study 3, we measured expectations, preparation, and construal level to examine some potentially relevant process variables. Defensive pessimists' strategy involves setting low expectations (Norem & Cantor, 1986b; Sanna, 1996; Showers, 1992). This suggests possible links between failures seeming close and more likely. Low expectations facilitate defensive pessimists' preparation (Norem, 2001). Thus, close failures, likely failures, or both may help them feel prepared. In addition, temporal construal (Trope & Liberman, 2003) theory suggests that distant futures are abstract and focus on desirability of goals, whereas close futures are concrete and focus on feasibility of goals (Sagrastano, Trope, & Liberman, 2002). Defensive pessimists and optimists might differentially construe the future; for example, optimists might construe the future abstractly in terms of desirability and what they want to happen, whereas defensive pessimists might construe the future concretely in terms of feasibility and planning.

Optimists might react to manipulated distance in at least two ways. On one hand, they are sometimes hindered when thinking about either future failures or successes (Norem & Illingworth, 1993). On the other hand, optimists are sometimes unaffected by a future focus (Newby-Clark, Ross, Buehler, Koehler, & Griffin, 2000; Showers, 1992). Optimists thus might perform poorly when considering positive or negative futures, or they might simply discount those futures (Newby-Clark et al., 2000), remaining relatively unaffected.

#### STUDY 1: PROSPECTIVE DISTANCE

We tested whether defensive pessimists feel closer to negative than positive futures. Defensive pessimists and optimists were classified by the Defensive Pessimism

Questionnaire (DPQ) (Norem & Cantor, 1986a; Norem & Illingworth, 2004). They rated subjective distance of possible future failure or success on an exam and their affect. The design was a 2 (strategy: defensive pessimist, optimist)  $\times$  2 (outcome: failure, success) between-participants factorial. We predicted that defensive pessimists would view failures as closer than successes on an equally distant future exam. Optimists might not differ in prospective self-appraisals.

#### Method

##### PARTICIPANTS

Participants were 72 psychology students recruited on the basis of DPQ scores. About equal numbers of women and men were in each strategy group, and they were about equally distributed among conditions.

##### DPQ

The DPQ assesses defensive pessimism and optimism (Norem & Cantor, 1986a; Norem & Illingworth, 2004). Four items represent defensively pessimistic (e.g., "I generally go into academic situations with low expectations, even though I know things usually turn out alright") and four items represent optimistic (e.g., "I generally go into academic situations with positive expectations about how I will do") strategies. Items were rated from 1 (*not at all true of me*) to 9 (*very true of me*). Optimism items were reverse coded and added with defensive pessimism items (Norem, 2001; Norem & Illingworth, 2004). The DPQ has strong predictive and discriminative validity (for a review, see Norem, 2001).

We gave the DPQ to 355 students as part of a mass screening. Participants were selected from the upper (defensive pessimist,  $M = 63.55$ ) and lower (optimist,  $M = 20.32$ ) thirds of the distribution and were similar to the population from which the samples were drawn (defensive pessimist,  $M = 60.10$ ; optimist,  $M = 24.26$ ). Participants also scored highly (7 or more on a 9-point scale,  $M = 7.83$ ,  $SD = 0.71$ ) on an item assessing past success ("I have generally done well in academic situations in the past"; see Norem, 2001). Thirty-seven defensive pessimists (failure,  $n = 19$ ; success,  $n = 18$ ) and 35 (failure,  $n = 18$ ; success,  $n = 17$ ) optimists participated. Prior research has found that participant sex is unrelated to defensive pessimism, and it also did not influence results in any study reported in this article, so we do not discuss it.

##### PROCEDURE

Participants were tested as a group in a large classroom. They were told that the study involved pilot-testing procedures for future research. The experimenter who tested participants was unaware of their strategy.

## FUTURE OUTCOMES

Participants read that researchers were interested in people's thoughts about future exams. The session was conducted 20 days before the first introductory psychology exam. Participants were asked to consider possible future failure (failure condition) or success (success condition) by reading the following:

People can imagine either future successes or failures. When thinking about your upcoming first exam in this class, we would like you to please think carefully about the possibility of future failure [success]. That is, think about the possibility of receiving a D or an F [an A or a B] grade. Please take 5 minutes to vividly imagine this future failure [success] as if it was actually happening to you.

Manipulation checks and prospective distance measures were counterbalanced.

## MANIPULATION CHECKS

Participants evaluated the valence of possible future exam outcomes on two 9-point scales (1 = *unsuccessful*, 9 = *successful*; 1 = *very poor*, 9 = *very good*). Using an open-ended format, they also indicated when the exam would take place.

## PROSPECTIVE TEMPORAL DISTANCE

The prospective distance measure was adapted from research on retrospective distance (Ross & Wilson, 2002; Sanna, Chang, & Carter, 2004). Participants read,

Future events can sometimes feel close or far away, irrespective of how long into the future they actually will occur. With the future failure [success] on your first introductory psychology exam in mind, please indicate how close or far away that outcome feels to you.

They responded on two 9-point scales (1 = *feels very close*, 9 = *feels very far away*; 1 = *feels like now*, 9 = *feels very distant*).

## AFFECT

Participants rated how a series of positive and negative adjectives reflected their feelings when thinking about the exam outcome. Positive ones were *happy*, *satisfied*, *pleased*, *delighted*, and *good*; negative ones were *gloomy*, *depressed*, *anxious*, *nervous*, and *bad* (Sanna, 1999). They were rated on 9-point scales (1 = *not at all*, 9 = *very much*).

## Results and Discussion

Data were analyzed using 2 (strategy)  $\times$  2 (outcome) analyses of variance (ANOVAs) with contrasts (Rosenthal, Rosnow, & Rubin, 2000) to compare means.

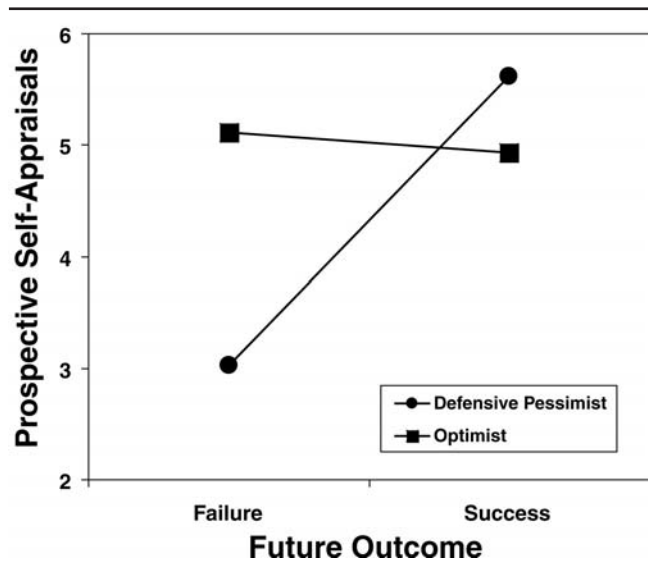


Figure 1 Mean prospective temporal self-appraisal ratings by strategy and future outcome for Study 1.

## MANIPULATION CHECKS

The two outcome valence questions were correlated,  $r(70) = .85$ ,  $p < .01$ , and averaged. There was an outcome main effect,  $F(1, 68) = 42.49$ ,  $p < .01$ ,  $\eta^2 = .38$ . Participants viewed outcomes as worse in the failure ( $M = 4.10$ ,  $SD = 2.28$ ) than success ( $M = 7.60$ ,  $SD = 2.27$ ) conditions. There were no other effects,  $F_s(1, 68) < 1.0$ , *ns*. These findings, along with the prompt asking participants to think about identical failures and successes (see Method), makes it unlikely that defensive pessimists versus optimists were imagining something different. All participants correctly indicated when their exam would take place. Thus, our outcome manipulation was effective and participants clearly knew the time of their exam.

## DEPENDENT MEASURES

*Prospective temporal distance.* The two prospective distance measures were correlated,  $r(70) = .83$ ,  $p < .01$ , and averaged. There was a marginal outcome main effect,  $F(1, 68) = 3.21$ ,  $p < .08$ ,  $\eta^2 = .04$ , qualified by a Strategy  $\times$  Outcome interaction,  $F(1, 68) = 4.25$ ,  $p < .05$ ,  $\eta^2 = .06$  (see Figure 1). As predicted, defensive pessimists felt closer to future failures ( $M = 3.03$ ,  $SD = 2.79$ ) than successes ( $M = 5.62$ ,  $SD = 2.83$ ),  $t(68) = 2.76$ ,  $p < .01$ ,  $\eta^2 = .09$ . Optimists did not differ in subjective distance from future failures ( $M = 5.11$ ,  $SD = 2.92$ ) versus successes ( $M = 4.93$ ,  $SD = 2.85$ ),  $t(68) = 0.19$ , *ns*. There was no strategy effect,  $F(1, 68) < 1.08$ , *ns*.

*Affect.* Negative adjectives were reverse coded and averaged with positive adjectives ( $\alpha = .72$ ). There was an outcome main effect,  $F(1, 68) = 11.64$ ,  $p < .01$ ,  $\eta^2 = .15$ , and a marginal interaction,  $F(1, 68) = 3.41$ ,  $p = .07$ ,  $\eta^2 = .05$ .<sup>1</sup> Defensive pessimists felt worse when thinking about

future failures ( $M = 3.54$ ,  $SD = 2.91$ ) than successes ( $M = 7.80$ ,  $SD = 3.23$ ),  $t(68) = 3.80$ ,  $p < .01$ ,  $\eta^2 = .18$ . The affect of optimists did not differ when thinking about future failures ( $M = 4.82$ ,  $SD = 3.81$ ) versus successes ( $M = 6.00$ ,  $SD = 3.67$ ),  $t(68) = 1.02$ , *ns*. There was no strategy effect,  $F(1, 68) < 1.0$ , *ns*.

#### ACTUAL EXAM PERFORMANCE

Not surprising given their selection on the basis of high past success, defensive pessimists ( $M = 88.11$ , B+, on a 100-point scale) and optimists ( $M = 87.00$ , B+) performed equally well; their grades did not differ,  $F(1, 68) < 1.0$ , *ns*, and were high relative to the class (class  $M = 76$ , C). Thus, results were not due to any eventual exam score differences (see Norem, 2001, for similar findings).

In sum, defensive pessimists felt closer to negative than positive futures. Optimists did not differ in prospective self-appraisals. This adds to prior research (Ross & Wilson, 2003) by providing evidence of (a) prospective self-appraisals, (b) feeling closer to negative futures, and (c) differences among defensive pessimists and optimists. That close negative futures and affect are related for defensive pessimists was indicated by an association between these variables,  $r(35) = .46$ ,  $p < .01$ ; optimists did not exhibit this association,  $r(33) = .11$ , *ns* ( $z = 1.57$ ,  $p = .058$ , one-tailed, for the difference between correlations).<sup>2</sup> Defensive pessimists and optimists rated the valence of outcomes equivalently (see Manipulation Checks), but only the former group viewed failures as closer, and this was related to affect. This occurred even though all participants were fully aware of the exact time of the exam 3 weeks hence.

#### STUDY 2: DISTANCE AND PERFORMANCE

Study 1 demonstrated that defensive pessimists can differ from optimists in prospective self-appraisals. In Study 2, we measured reactions of the two strategy groups to manipulated temporal distance. We used a framing and timeline manipulation that influences people's subjective distance while holding actual time constant (Trope & Liberman, 2003; Wilson & Ross, 2003). Study 2 is important for another reason. We tested whether prospective self-appraisals are related to actual performances, providing the first test of this possibility.

The design was a 2 (strategy: defensive pessimist, optimist)  $\times$  2 (outcome: failure, success)  $\times$  2 (distance: close, far) factorial, with two nonfactorial controls. All conditions were between-participants. In the nonfactorial conditions, we did not manipulate distance or outcome, enabling comparisons with defensive pessimism research in which these were not manipulated. The two conditions also allowed defensive pessimists and optimists to use their own naturally occurring strategies unencumbered by experimental manipulations.

Thinking about failures helps defensive pessimists, whereas thinking about successes hinders defensive pessimists (Norem & Illingworth, 1993; Sanna, 1996). We thus predicted that when failures seem close this should be particularly helpful to defensive pessimists, whereas when successes seem close this should be particularly hurtful to defensive pessimists. In other words, close failures would be most consistent with their natural strategy; close successes would be most inconsistent with their natural strategy. Further supporting this idea, Study 1 found that defensive pessimists viewed future failures but not successes as close. Prior research gives little basis for making predictions about far failures and successes. One possibility is that far successes will not interfere with defensive pessimists' natural strategy, allowing them to imagine negative outcomes and perform well. Far failures may have less motivational impact than close failures. Because self-appraisals of optimists did not differ between outcomes in Study 1, we anticipated that manipulated distance likewise may not influence them in Study 2.

#### Method

##### PARTICIPANTS

Participants were 130 psychology students from the upper (defensive pessimist,  $M = 65.78$ ) and lower (optimist,  $M = 17.23$ ) thirds of the DPQ distribution; they were similar to the population of 622 from which samples were drawn (defensive pessimist,  $M = 59.44$ ; optimist,  $M = 21.18$ ). Sixty-five defensive pessimists and 65 optimists, with about equal proportions of women and men, were randomly assigned to condition such that each had equal numbers.

##### PROCEDURE

Participants arrived at the laboratory and were tested individually. They signed up for a study that purportedly would last 2 hours (they knew they would get one credit for each hour or portion thereof). They were told the study involved pilot-testing tasks for future research. Participants completed the prospective distance manipulation check and affect measures after prospective temporal distance and future outcomes were manipulated. They then performed an anagram task.

##### PROSPECTIVE TEMPORAL DISTANCE AND FUTURE OUTCOME

Participants were told that researchers were interested in how people think about future tasks. They read that one task would be randomly selected as the target task. The task of main interest (unbeknownst to participants) was the anagram task, which they were told would be last during the final 15 min of the session. Other tasks included (a) memory task, (b) lie detection task, and (c)

reaction time task (Gilovich, Kerr, & Medvec, 1993; Sanna, 1999).

Prospective distance from the anagram task was manipulated by framing and a timeline (Trope & Liberman, 2003; Wilson & Ross, 2003). Participants in the close condition read that they should “think about your future anagram performance, which is only a short time away.” A 6-in. timeline was included, labeled beginning of the semester to end of study session. Participants in the far condition thought about anagram performance, “which is still a long time away.” Endpoints were labeled *beginning of study session* to *end of study session*. Participants indicated the start of the anagram task by placing a mark on the timeline (Wilson & Ross, 2003).

Future outcomes were manipulated by asking participants in the failure condition to consider the possibility of doing very poorly (“scoring in the lower 25th percentile”) and those in the success condition doing very well (“scoring in the upper 25th percentile”) on the anagram task. They were asked to vividly imagine the outcomes actually happening to them with instructions adapted from Study 1. Participants in the two nonfactorial control conditions did not receive either prospective distance or future outcome manipulations.

#### MANIPULATION CHECK

Adapted from Study 1, participants read, “Future events can sometimes feel close or far away, irrespective of how long into the future they actually will occur.” Participants rated subjective distance of failure and success on the anagrams on two 9-point bipolar scales (4 = *failure feels very close*, 0 = *failure feels neither close nor far*, -4 = *failure feels very far*; 4 = *success feels very close*, 0 = *success feels neither close nor far*, -4 = *success feels very far*). While adding generality to our measures, the scales also were constructed so that even participants in the nonfactorial controls could answer them; this allowed comparisons with the naturally occurring strategies of defensive pessimists and optimists.

#### AFFECT

Participants rated feelings about the anagram task on adjectives identical to Study 1.

#### ANAGRAM TASK

As the cover story indicated, participants thought there would be several tasks. The experimenter went to get the first task, purportedly the memory task. However, the experimenter shuffled around papers, leafed through files, and “realized” the “other experimenter” had not gotten all tasks ready. In fact, participants were told that only the anagram task was set so there would be a “slight change of plans.” Although they were scheduled

last, participants were told that they could instead do the anagrams first while the other tasks were readied.

This procedure allowed a strong test of our hypotheses. Temporal self-appraisal theory proposes that subjective distance can produce effects beyond actual distance (Ross & Wilson, 2003). If so, our manipulation of prospective distance should influence anagram performance irrespective of when the task was actually performed. We simply had participants work on the anagrams first so we could measure performance without the potential complications or distractions of intervening tasks (which might allow other self-strategies to intrude).

The anagrams were described as an important index of ability and aptitude. Participants read that anagrams were scrambled word problems and solving them meant unscrambling letters to form actual words. For example, participants read, “YHAPP” is an anagram and its solution is “HAPPY.” It was emphasized that all anagrams had only one correct solution. If they could not solve an anagram, participants were to move to the next one and come back to unsolved ones later. Participants could work on items in any order. All participants worked on 20 anagrams selected from Gilhooly and Johnson (1978). The items were of intermediate difficulty, with solution scores (the number out of 45 people who correctly solved the item) between 17 and 26 (Gilhooly & Johnson, 1978). Items were numbered and presented together on a single page. Participants were allowed 9 min to work on the 20 anagrams (Sanna, 1996, 1998).

After the anagrams, all participants were told that the experiment was actually over. They were debriefed and received two credits as they had been promised, even though the experiment did not last 2 hours.

#### Results and Discussion

We conducted  $2 \times 2 \times 2$  ANOVAs on the factorial portion of the data, with nonfactorial control comparisons made using the Dunnett procedure (Winer, Brown, & Michels, 1991).

#### MANIPULATION CHECK

The two prospective distance measures were correlated,  $r(128) = -.81$ ,  $p < .01$ ; the success item was reverse-coded and averaged with the failure item, positive numbers indicating closer failures. There was an Outcome  $\times$  Distance interaction,  $F(1, 96) = 74.20$ ,  $p < .01$ ,  $\eta^2 = .43$ , and no other significant effects,  $F_s(1, 96) < 1.24$ , *ns*. This indicated that the prospective distance and outcome manipulations worked equally well for both strategy groups; that is, irrespective of strategy (or other effects), failures were closer in the close ( $M = 2.82$ ,  $SD = 3.28$ ) than far ( $M = -2.60$ ,  $SD = 3.10$ ) conditions,  $t(96) = 4.34$ ,  $p < .01$ ,  $\eta^2 = .04$ ; successes were closer in the close ( $M = -2.56$ ,

$SD = 3.29$ ) than far ( $M = 2.89, SD = 3.23$ ) conditions,  $t(96) = 4.36, p < .01, \eta^2 = .04$ .<sup>3</sup>

We did not manipulate prospective distance or future outcome in the nonfactorial control conditions but we measured each participant's natural strategy. Defensive pessimists in the control condition ( $M = 2.71, SD = 3.04$ ) viewed failures as closer than those in the far-failure and close-success conditions, Dunnett  $t(60) > 3.61, ps < .05, \eta^2s > .06$ ; they did not differ from the close-failure and far-success conditions. This is consistent with the idea that viewing future failures as close is part of defensive pessimists' strategy. Optimists in the control condition ( $M = -0.58, SD = 3.10$ ) differed from all other optimist groups, Dunnett  $t(60) > 2.02, ps < .05, \eta^2s > .03$ . Thus, although our manipulations also worked for optimists, this latter finding is consistent with the idea that prospective self-appraisals may not be part of their natural strategy.

#### DEPENDENT MEASURES

**Anagram performance.** We used the number of anagram items answered correctly to measure performance (see Figure 2). There were Outcome  $\times$  Distance,  $F(1, 96) = 6.65, p < .05, \eta^2 = .06$ , and three-way,  $F(1, 96) = 11.38, p < .01, \eta^2 = .11$ , interactions. There were no other significant effects,  $F(1, 96) < 1.16, ns$ .

As predicted, defensive pessimists performed better when failures were close ( $M = 14.73, SD = 4.10$ ) than far ( $M = 9.33, SD = 3.92$ ),  $t(96) = 3.27, p < .01, \eta^2 = .10$ ; they also performed worse when successes were close ( $M = 8.60, SD = 4.05$ ) than far ( $M = 13.02, SD = 4.63$ ),  $t(96) = 2.67, p < .01, \eta^2 = .07$ . The performances of optimists did not differ on the basis of failures being close ( $M = 11.02, SD = 4.11$ ) or far ( $M = 12.05, SD = 4.00$ ) or successes being close ( $M = 12.23, SD = 4.55$ ) or far ( $M = 11.95, SD = 4.23$ ),  $t(96) < 0.63, ns$ .

Comparisons with controls further elucidated strategies; the two groups did not differ within the control condition. Defensive pessimists in the control condition ( $M = 13.25, SD = 3.95$ ) performed better than those in the far-failure and close-success conditions, Dunnett  $t(60) > 2.53, ps < .05, \eta^2s > .04$ , although they performed the same as those in the close-failure and far-success conditions. The performances of optimists in the control condition ( $M = 13.41, SD = 4.02$ ) did not differ from any other optimist group, Dunnett  $t(60) < 1.45, ns$ .

**Affect.** Adjectives were coded as in Study 1 ( $\alpha = .79$ ). There was a marginal strategy effect,  $F(1, 96) = 3.46, p < .10, \eta^2 = .03$ , Outcome  $\times$  Distance,  $F(1, 96) = 7.48, p < .01, \eta^2 = .07$ , and three-way,  $F(1, 96) = 4.77, p < .05, \eta^2 = .05$ , interactions. There were no other significant effects,  $F(1, 96) < 1.0, ns$ .

Defensive pessimists felt worse when failures were close ( $M = 3.42, SD = 3.22$ ) than far ( $M = 6.61, SD = 3.15$ ),

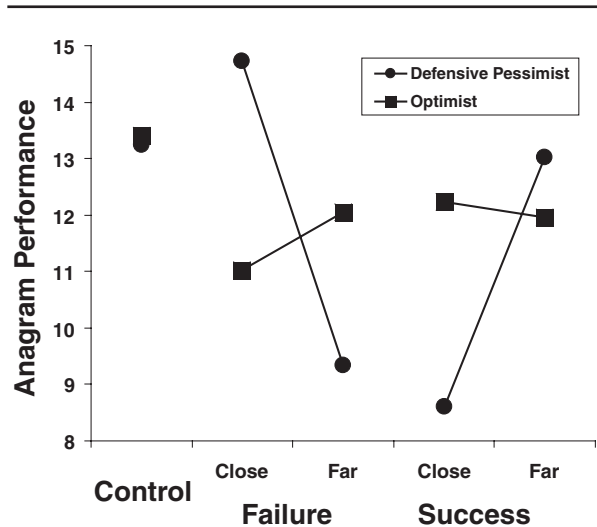


Figure 2 Mean anagram items answered correctly by strategy, future outcome, and manipulated distance for Study 2.

$t(96) = 2.55, p < .05, \eta^2 = .03$ ; they also felt worse when successes were far ( $M = 3.90, SD = 3.15$ ) than close ( $M = 6.79, SD = 3.18$ ),  $t(96) = 2.31, p < .05, \eta^2 = .02$ . Optimists felt good no matter what; they did not differ when considering failures as close ( $M = 6.10, SD = 3.09$ ) versus far ( $M = 6.45, SD = 3.62$ ) or successes as close ( $M = 6.55, SD = 3.09$ ) versus far ( $M = 6.22, SD = 3.17$ ),  $t(96) < 0.63, ns$ .

Defensive pessimists in the control condition ( $M = 3.49, SD = 3.06$ ) felt worse than those in the far-failure and close-success conditions, Dunnett  $t(60) > 2.51, ps < .05, \eta^2s > .04$ , although they felt as bad as those in the close-failure and far-success conditions. Optimists in the control condition ( $M = 6.32, SD = 3.48$ ) felt as good as (did not differ from) all other optimists groups, Dunnett  $t(60) < 0.17, ns$ .

#### REGRESSION ANALYSES

Regression analyses were conducted to explore the role of prospective distance (manipulation check) on performance (anagram items answered correctly) beyond affect (affect measure). This was done because affect is known to be related to the strategy of defensive pessimists but not optimists (Norem, 2001).

For defensive pessimists, consistent with prior research (Sanna, 1998), negative affect was related to improved performances,  $\beta = -.37, F(1, 63) = 10.17, p < .01, R^2 = .14$ . Of importance, a hierarchical regression entering prospective distance after affect revealed that prospective distance accounted for distinct variability,  $\beta = .32, \Delta F(1, 62) = 8.26, p < .01, \Delta R^2 = .10$ . This is consistent with the idea that prospective distance contributes uniquely to performance beyond one variable—affect—known to be related to defensive pessimists' strategy.

For optimists, neither affect nor prospective distance exhibited significant relationships with performances,  $\beta_s < .06$ ,  $F_s(1, 63) < 1.0$ , *ns*.

In sum, Study 2 manipulated prospective distance and is the first to link temporal self-appraisals of any kind to performance. Prospective self-appraisals appear to (a) be consistent with natural strategy of defensive pessimists but not optimists according to the manipulation check, (b) influence the performances of defensive pessimists but not optimists, and (c) exhibit a relation with performance beyond affect for defensive pessimists. Defensive pessimists performed well when negative futures were close and poorly when positive futures were close.<sup>4</sup>

#### STUDY 3: ROLE OF SELF-APPRAISALS

Study 2 manipulated perceived distance and assessed reactions of defensive pessimists and optimists. In so doing, participants were told that the anagram task would be performed last, but it was actually performed first. This eliminated intervening tasks between manipulations and performances but resulted in the task occurring unexpectedly early. Although this was identical for both strategy groups, this might have influenced performances in unknown ways (e.g., defensive pessimists might be more affected by surprises). Study 3 eliminated this possibility: Participants always were told the anagrams would be first, so nothing unexpected happened.

This procedure had an added benefit of reversing the procedures of Study 2; that is, in Study 2, the anagram task was to be distal (relatively speaking at the end of the session), but in Study 3, the anagram task was to be proximal (first). If subjective distance can be varied when the task is both proximal (Study 3) and distal (Study 2), this not only eliminates surprise as a possible confound but also provides even stronger evidence for the strength of our manipulations and for our hypotheses.

In Study 3, we also measured other variables that were potentially relevant to our ideas: expectations, preparation, and construal. Defensive pessimists set low expectations (Norem & Cantor, 1986b; Sanna, 1996; Showers, 1992). This suggests a possible link between failures seeming close and more likely for defensive pessimists. Setting low expectations also facilitates defensive pessimists' preparation (Norem, 2001). Thus, close failures, likely failures, or both may help them feel prepared. Temporal construal (Trope & Liberman, 2003) theory also suggests that distant futures are abstract and focus on desirability of goals, whereas close futures are concrete and focus on feasibility of goals (Sagrastano et al., 2002). Although this alone cannot explain interactions with strategy found in Studies 1 and 2, defensive pessimists and optimists may differently construe the future. For example, optimists might construe the future

abstractly, in terms of desirability and what they want to happen, whereas defensive pessimists may construe the future concretely, in terms of feasibility and planning.

#### Method

##### PARTICIPANTS

Participants were 80 psychology students from the upper (defensive pessimist,  $M = 63.09$ ) and lower (optimist,  $M = 18.71$ ) thirds of the DPQ distribution and were similar to the population of 376 from which the samples were drawn (defensive pessimist,  $M = 61.53$ ; optimist,  $M = 22.84$ ). Forty defensive pessimists and 40 optimists, with about equal proportions of women and men, were randomly assigned to condition so that each had equal numbers.

##### PROCEDURE

Procedures basically followed Study 2, with the noted exceptions. The other tasks (memory, lie detection, reaction time) were explained but participants always were told that the anagram task would be first, about 15 to 20 min hence. Participants also knew that the study session would last 1 hour. Participants completed the prospective distance, expected outcome, construal level, and preparation measures after prospective temporal distance and future outcomes were manipulated. They then performed the anagram task.

##### PROSPECTIVE TEMPORAL DISTANCE AND FUTURE OUTCOME

Framing and timelines were identical to Study 2, but endpoints were changed slightly. In the close condition, endpoints were beginning of the semester to beginning of the anagram task. In the far condition, they were beginning of study session to beginning of the anagram task. Participants indicated "now" by placing a mark on the timeline. The main reason for this change was that the anagram task was first. However, this variation also added generality to our manipulations by focusing participants on future distance by having them think about now in relation to the task (instead of the start of the task as in Study 2). Either method can be used to manipulate subjective distance (Wilson & Ross, 2003). Future outcomes were manipulated as in Study 2.

##### MANIPULATION CHECKS AND DEPENDENT MEASURES

Several potentially relevant process measures were included in Study 3.

*Prospective temporal distance.* The subjective distance measures were identical to Study 2, except they did not use bipolar scales. Similar to Study 1, participants rated the subjective distance of failure and success on two 9-point scales (1 = *failure feels very close*, 9 = *failure feels very far away*; 1 = *success feels very close*, 9 = *success feels very far away*).

**TABLE 1: Measures by Strategy, Outcome, and Manipulated Distance for Study 3**

Strategy and Measures	Failure				Success			
	Close		Far		Close		Far	
	M	SD	M	SD	M	SD	M	SD
Defensive pessimist								
Prospective distance	6.43	1.77	4.90	2.13	5.65	1.95	6.51	1.71
Expected failure	6.35	2.13	5.40	1.55	5.15	2.02	6.00	2.14
Construal level	5.90	1.96	4.45	2.17	6.10	2.18	4.95	2.37
Preparation	6.10	1.92	4.85	1.74	4.91	1.72	6.20	1.33
Anagram performance	13.50	3.89	9.00	4.02	8.30	3.23	12.10	3.78
Optimist								
Prospective distance	5.62	1.77	4.50	1.84	4.42	1.83	6.30	1.82
Expected failure	5.70	2.66	5.35	2.14	3.90	2.06	3.85	2.29
Construal level	5.58	2.06	4.50	2.27	5.80	1.81	5.04	1.94
Preparation	5.10	1.92	5.65	2.35	5.50	2.08	5.10	2.02
Anagram performance	10.80	3.73	11.20	3.55	11.10	3.78	11.30	3.94

*Expected outcome.* Participants answered two items assessing expectations for the future anagram task (Sanna, 1996). They were asked to indicate the extent to which they expected to do well and the extent to which they thought performing poorly was likely, both rated on 9-point scales (1 = *not at all*, 9 = *very much*).

*Construal level.* Two items measured temporal construal level and were based on prior theorizing (Sagrignano et al., 2002; Trope & Liberman, 2003). Participants were asked to consider the anagram task and rate the extent to which their thoughts focused on aspects that were abstract versus concrete (1 = *abstract*, 9 = *concrete*) and the extent to which their thoughts and goals focused on desirability versus feasibility of possible outcomes (1 = *desirability*, 9 = *feasibility*).

*Preparation.* Two questions asked participants to rate the extent to which they felt prepared and the extent to which they felt ready to perform the anagram task (Sanna, 1997), both on 9-point scales (1 = *not at all*, 9 = *very much*).

**ANAGRAM TASK**

The anagram task was identical to Study 2.

**Results and Discussion**

Data were analyzed using ANOVAs and regressions.

**ANOVAs**

We conducted 2 × 2 × 2 ANOVAs with contrasts to compare means. We report only significant results in the text, but we also report all means and standard deviations by conditions in Table 1 for interested readers.

*Prospective temporal distance.* The two subjective distance measures were correlated,  $r(78) = -.76, p < .01$ ; the success item was reverse-coded and averaged with the failure item, positive numbers indicating closer failures. There was a significant Outcome × Distance interaction,

$F(1, 72) = 10.51, p < .01, \eta^2 = .12$ . As in Study 2, failures tended to be closer in the close ( $M = 6.03, SD = 1.77$ ) than far ( $M = 4.70, SD = 1.98$ ) conditions,  $t(72) = 1.76, p < .09, \eta^2 = .04$ ; successes were closer in the close ( $M = 4.78, SD = 1.89$ ) than far ( $M = 6.41, SD = 1.76$ ) conditions,  $t(72) = 1.97, p < .05, \eta^2 = .03$ .<sup>5</sup> There were no other significant effects: strategy main effect,  $F(1, 72) = 2.42, p > .12, \eta^2 = .03$ ; all others,  $F_s(1, 72) < 1.0, ns$ .

*Expected failure.* The two expectation items were correlated,  $r(78) = -.84, p < .01$ ; the success item was reverse-coded and averaged with the failure item, positive numbers indicating likely failures. Not surprising given prior research (Norem, 2001), defensive pessimists ( $M = 5.72, SD = 1.96$ ) expected failures more than optimists ( $M = 4.70, SD = 2.37$ ),  $F(1, 72) = 4.53, p < .05, \eta^2 = .06$ . Not surprising and in line with our manipulations, participants viewed failures as more likely when imagining failures ( $M = 5.70, SD = 2.12$ ) than successes ( $M = 4.72, SD = 2.74$ ),  $F(1, 72) = 4.09, p < .05, \eta^2 = .05$ . There were no other significant effects,  $F_s(1, 72) < 1.95, ps > .16, \eta^2_s < .03$ .

*Construal level.* The two temporal construal items were correlated,  $r(78) = .70, p < .01$ , and averaged. Higher numbers indicated lower-level construals. There was a distance main effect,  $F(1, 72) = 5.70, p < .05, \eta^2 = .07$ . As predicted by temporal construal-level theory (Trope & Liberman, 2003), participants' thoughts focused more on lower-level (concrete, feasibility) construals in the close ( $M = 5.82, SD = 1.94$ ) than far ( $M = 4.70, SD = 2.12$ ) conditions. However, there were no other differences,  $F_s(1, 72) < 1.0, ns$ .

*Preparation.* The two preparation questions were correlated,  $r(78) = .85, p < .01$ , and averaged. Higher numbers indicated greater preparation. There was a three-way interaction,  $F(1, 72) = 5.87, p < .05, \eta^2 = .07$ . Defensive pessimists felt more prepared when failures were close than far,  $t(72) = 1.98, p < .05, \eta^2 = .05$ , but tended to

feel less prepared when successes were close than far,  $t(72) = 1.75, p < .09, \eta^2 = .04$ . Optimists did not differ in felt preparation on the basis of whether failures or successes were close or far. There were no other differences,  $F_s(1, 72) < 1.0, ns$ .

**Anagram performance.** Numbers of correctly answered anagram items were used to measure performance. The pattern was identical to Study 2. There were Outcome  $\times$  Distance,  $F(1, 72) = 5.82, p < .05, \eta^2 = .07$ , and three-way,  $F(1, 72) = 6.41, p < .05, \eta^2 = .08$ , interactions. As expected, defensive pessimists performed better when failures were close than far,  $t(72) = 2.69, p < .05, \eta^2 = .09$ , but worse when successes were close than far,  $t(72) = 2.27, p < .05, \eta^2 = .07$ . The performances of optimists did not differ on the basis of failures or successes being close or far. There were no other significant effects,  $F_s(1, 72) < 1.0, ns$ .

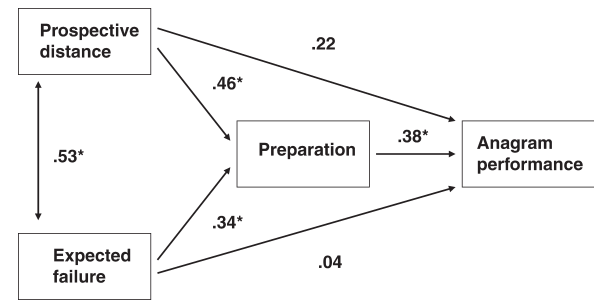
#### REGRESSIONS/PATH ANALYSES

Regressions were conducted to explore possible mediational relations among our variables. To do this, we followed procedures outlined by Kenny, Kashy, and Bolger (1998). Because our predictions differed for defensive pessimists and optimists, we carried this out separately for each strategy group.

**Defensive pessimists.** The first requirement for mediation is demonstrating relations between predictors and criterion. We did this by first using each variable alone as a predictor of anagram performance. As in Study 2, prospective distance was related to performance for defensive pessimists,  $\beta = .49, p < .01$ . Consistent with prior research (Norem, 2001), expected failure also was related to performance for defensive pessimists,  $\beta = .37, p < .02$ , but level of temporal construal was unrelated to performance for defensive pessimists,  $\beta = -.09, ns$ . Thus, both prospective distance and expected failure were related to performance for defensive pessimists. We then entered these two variables simultaneously in a model predicting the performance of defensive pessimists: prospective distance was significant,  $\beta = .43, p = .02$ , but expected failure was no longer significant,  $\beta = .11, ns$ .

Second, we tested whether preparation could mediate these relations. Preparation was chosen because of its known importance to defensive pessimists' strategy (Norem & Cantor, 1986a; Norem & Illingworth, 1993; Sanna, 1996). Satisfying the second requirement for mediation, preparation was related to both prospective distance,  $\beta = .46, p < .01$ , and expected failure,  $\beta = .34, p < .05$ , for defensive pessimists.

Finally, we regressed anagram performance on the mediator (preparation) and predictors (prospective distance, expected failure) for defensive pessimists; the model is depicted in Figure 3.<sup>6</sup> Preparation was significantly related to performance,  $\beta = .38, p < .05$ , consistent



**Figure 3** Path model for defensive pessimists relating prospective distance, likely outcome, and preparation to anagram performance.

\* $p < .05$ .

with its plausible mediational role and satisfying the third requirement for mediation. When preparation was entered, paths from prospective distance,  $\beta = .22, p = .16$ , and expected failure,  $\beta = .04, ns$ , to performance became nonsignificant. A Sobel (1982) test further indicated that the relationship between prospective distance and anagram performance was significantly reduced with preparation included as a mediator, Sobel  $z = 1.98, p < .05$ ; no test was conducted for expected failure because its relationship with anagram performance was nonsignificant when prospective distance was simultaneously entered as a predictor in the model.

**Optimists.** We conducted identical analyses for optimists. As in Study 2, prospective distance was unrelated to performance for optimists,  $\beta = -.05, ns$ . Temporal construal level also was unrelated to performance,  $\beta = .21, p = .17$ . However, expected failure was related to performance for optimists,  $\beta = -.34, p < .03$ . Expected failure thus predicted performances for optimists but prospective distance and temporal construal level did not.

We also explored whether preparation was related to expectations or performances of optimists. Preparation was not related to either one: expected failures,  $\beta = -.23, p = .15$ , performances,  $\beta = .16, ns$ . For optimists, there thus appeared to be only a direct link between their expectations and anagram performance, but there was no evidence for the role of other measured variables.

In sum, we varied subjective distance in Study 3 when participants thought the anagram task was proximal instead of distal (Study 2). This not only makes surprise an unlikely confound but also provides stronger evidence for our hypotheses. Of importance, regressions indicated that felt preparation may mediate the link from prospective self-appraisals to performance for defensive pessimists, and this occurred beyond expectations for failure. Optimists exhibited only a direct link from expectations to performance, and prospective self-appraisals were unrelated to performance. Temporal

construal ideas were supported by a main effect (close vs. far) in an ANOVA, but construal level was unrelated to performance for either strategy group.

#### GENERAL DISCUSSION

Three studies provided converging evidence for our hypothesis that prospective temporal self-appraisals can be part of defensive pessimists' strategy. Failures felt closer when considering future exam performances (Study 1) and performances were high when close future failures were manipulated (Studies 2 and 3). Optimists' self-appraisals did not differ when considering future exams (Study 1) and their performances were unaffected when temporal distance was manipulated (Studies 2 and 3). In Study 3, felt preparation also mediated the link from prospective self-appraisals to performance for defensive pessimists. These results were obtained across multiple contexts, manipulations, and measures.

#### *PROSPECTIVE SELF-APPRAISALS AND DEFENSIVE PESSIMISM*

Our studies are unique in suggesting that considering close negative futures is yet another—previously unidentified—tactic in defensive pessimists' arsenal. Temporal self-appraisal theory had focused on only past outcomes and on only how negative pasts are viewed as farther away than equally distant positive pasts (for a review, see Ross & Wilson, 2003). On a general level, our studies are thus the first of any kind to provide evidence for prospective temporal self-appraisals (i.e., perceiving future failures or successes as being close or far away). Thus, adding to what is known about retrospective self-appraisals, people can similarly associate or dissociate from possible future selves. By appraising bad futures as close and good futures as far away, defensive pessimists in particular can feel negatively in the present, resulting in increased preparatory motivation and high performance.

Ross and Wilson (2002) speculated that "future episodes that are likely to threaten one's self-regard (e.g., an examination on which one expects to perform poorly) may feel farther away than do equally distant events that are likely to enhance self-regard" (p. 802; see also Sanna & Chang, 2003). This might be true. However, on a specific level, our research moves beyond this straightforward presumption by providing another unique twist and the first evidence that certain people—defensive pessimists—feel subjectively closer to negative than positive future outcomes. Moreover, self-appraisals also were linked to actual performances (Studies 2 and 3), offering the first evidence for this possibility.

Although feeling prospectively closer to failures and feeling retrospectively farther from failures (Ross & Wilson, 2002; Wilson & Ross, 2001) might first appear

inconsistent, we suggest that they reflect common processes. Both can be self-serving, albeit in different ways. People can maintain high self-regard by viewing negative pasts as far away (Haddock, 2004; Ross & Wilson, 2003; Sanna et al., 2004). Defensive pessimists might produce high self-regard by motivating themselves to prepare and/or by proactively protecting themselves from possible failure. Study 3 indicated that felt preparation can mediate relations between self-appraisals and performance, and Studies 1 and 2 indicated that close failures are associated with increased negative affect, consistent with ideas about both preparative and self-protective motives.

#### *MULTIPLE PROCESSES AND DEFENSIVE PESSIMISM*

The focal finding in our research is that prospective self-appraisals can be one part of defensive pessimism. However, defensive pessimism is multifaceted and research suggests that several other variables also may be important (for a review, see Norem, 2001). For example, defensive pessimists use mental simulations (Sanna, 1996, 1998); thinking about better-than-expected futures helps them to prepare. This could be related to future failures seeming close; that is, feeling bad about the present because negative futures seem closer may produce negative affect and encourage defensive pessimists to simulate better outcomes.

The process may work as follows. Close negative futures produce negative affect. In support of this, in Study 1 close future failures increased negative affect for defensive pessimists. Negative affect may signal problems (Sanna, 1998; Schwarz, 2002), triggering increased preparation and performance. In support of this, in Study 2 negative affect was related to greater performance for defensive pessimists. In Study 3, the path model also suggested that negative self-appraisals, and expected failures (Norem & Cantor, 1986b), led to increased felt preparation and performance. Unfortunately, affect was not measured in Study 3. However, on the basis of all three studies, imagining close negative futures may increase negative affect, which in turn may lead to greater preparatory motivation. The particular strategies of preparation may involve quick mental simulations, such as rehearsal or psyching oneself up (Norem, 2001), resulting in increased felt preparation and improved performance. The fact that relatively little time elapsed between prospective distance manipulations and performance (Studies 2 & 3) suggests that whatever preparative strategies are involved are rapid and powerful.

We also tested whether temporal construal level (Trope & Liberman, 2003) could help explain our findings. Although support for temporal construal ideas was obtained in an ANOVA main effect (close vs. far) in

Study 3, construal level was unrelated to performances of either strategy group. Of course, it may be premature to eliminate construal level as a possibility because our results are limited by the measures and manipulations used. For example, it might be that differences in construal occurred in other ways; that is, instead of abstract versus concrete construals, defensive pessimists might have construed the task in terms of amount of time remaining. It is possible that subjectively close failures led defensive pessimists to conclude that they had little time remaining until the task and this increased their motivation. This would be consistent with research on the planning fallacy, the tendency to underestimate task completion times, in which similar “little time remaining” construals have been shown to increase people’s motivation (Sanna, Parks, Chang, & Carter, 2005).

In contrast, optimists might have their own strategies. Optimists may instead prefer to believe they have plenty of time to prepare; this may explain that optimists felt relatively distant from both successes and failures in Study 1. Optimists also may use strategies paralleling individual differences in retrospective self-appraisals. Ross and Wilson (2002) found that distancing from past failures occurred among high but not low self-esteem persons. Similar to high-self-esteem persons, retrospective self-appraisals might be part of optimists’ strategy; they retrospectively restore positive self-views in other ways, such as using self-serving attributions (Norem & Cantor, 1986a) and thinking about downward counterfactuals (Sanna, 2000). Thus, it is possible that optimists might be prone to distancing from past failures.

There was little basis for predicting effects of far successes and failures in Studies 2 and 3. Nonetheless, our findings may enlighten the processes underlying prospective self-appraisals. We hypothesized and found that imagining close successes hindered defensive pessimists, being inconsistent with their natural strategy. In contrast, far successes seemed to allow defensive pessimists to continue their normal strategies (i.e., the control and far success conditions did not differ from each other in Study 2). We also hypothesized and found that imagining close failures facilitated defensive pessimists, being consistent with their natural strategy. In contrast, imagining far failures were harmful. We can speculate that, consistent with Oettingen (1996), envisioning negative futures without close connections to the present may have produced disruptive ruminative thoughts; with far failures, defensive pessimists’ natural preparative strategies thus may have been hindered. Optimists appear to have simply discounted the value (Newby-Clark et al., 2000) of prospective self-appraisals; they felt distant from both outcomes (Study 1) and were unaffected by manipulated distance (Studies 2 and 3).

### Coda

We identified prospective temporal self-appraisals as another strategy used by defensive pessimists. To end, we consider the four novel and unique objectives outlined at the outset of this article and summarize with the following answers. For defensive pessimists, temporal self-appraisals (a) can occur prospectively, (b) can involve feeling closer to negative outcomes, (c) can influence performances, and (d) can differ from optimists. In sum, defensive pessimists feel subjectively closer to equally distant negative than positive future outcomes, and this can increase their negative affect, felt preparation, and performance. Optimists do not use this strategy. As such, each of these findings provides yet another important piece to the puzzle in fully understanding defensive pessimism. For defensive pessimists, in short, when it comes to thinking about the prospect of negative outcomes, it appears that the future is now.

### NOTES

1. Anxiety may be particularly significant to defensive pessimists (Norem & Cantor, 1986a). Analysis of the anxiety adjective alone produced an identical pattern of results, so only the mood index is reported because of its greater reliability.

2. A supplementary  $2 \times 2$  analysis of covariance was conducted on affect with prospective distance included as a covariate. Both the previous outcome main effect,  $F(1, 67) < 2.11$ , *ns*, and interaction,  $F(1, 67) < 1.0$ , *ns*, were reduced to nonsignificance, further supporting the idea that prospective distance may account for changes in affect.

3. Analyzing the failure and success items separately produced results for the success item, Outcome  $\times$  Distance interaction,  $F(1, 96) = 75.44$ ,  $p < .01$ ,  $\eta^2 = .52$ , that simply mirrored that for the failure item, Outcome  $\times$  Distance interaction,  $F(1, 96) = 72.97$ ,  $p < .01$ ,  $\eta^2 = .43$ .

4. Thinking about success in the future outcome manipulation of Study 1 also may seem counter to defensive pessimists’ strategy, yet it did not affect exam performance. However, precisely because we did not want to influence actual exams in that study, we included extensive debriefing. Among many things, we explained random assignment to conditions and discussed how people develop their own strategies of exam preparation and that they should continue to use those with which they feel comfortable. This debriefing undoubtedly eliminated any effects of our research on performances, as in fact it was designed to do.

5. Analyzing the failure and success items separately produced results for the success item, Outcome  $\times$  Distance interaction,  $F(1, 72) = 11.73$ ,  $p < .01$ ,  $\eta^2 = .14$ , that simply mirrored that for the failure item, Outcome  $\times$  Distance interaction,  $F(1, 72) = 9.29$ ,  $p < .01$ ,  $\eta^2 = .11$ .

6. Expected failure was kept in the model because it was a significant individual predictor of performance for defensive pessimists and because it predicted preparation. However, as described in the text, the relation between expected failure and performance was nonsignificant when prospective distance was simultaneously entered, so technically there is nothing to mediate. Of course, if we remove expected failure, evidence for the role of prospective self-appraisals becomes even stronger; that is, the model in Figure 3 tests the role of subjective distance and preparation in predicting performances over and above that of expected failure.

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