PERSONALITY PROCESSES AND INDIVIDUAL DIFFERENCES

It Feels Like Yesterday: Self-Esteem, Valence of Personal Past Experiences, and Judgments of Subjective Distance

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Supporting predictions from temporal self-appraisal theory, participants in 3 studies reported feeling farther from former selves and experiences with unfavorable implications for their current self-view than from equally distant selves and experiences with flattering implications. This distancing bias occurred when assignment to negative and positive pasts was random, for both achievement and social outcomes and for single episodes as well as longer term experiences. Consistent with a motivational interpretation, the distancing bias was stronger among high than low self-esteem participants and occurred for personal but not for acquaintances' past events. Frequency of rehearsal and ease of recall of past episodes also predicted feelings of distance, but these variables did not account for the Self-Esteem × Valence interaction on subjective distancing of personal events.

People often promote their associations with successful individuals and downplay their connections to unsuccessful persons (Cialdini, 1989; Cialdini et al., 1976; Cialdini & Richardson, 1980; Snyder, Lassegard, & Ford, 1986). For example, spectators may report a victory by their favorite sports team as "we won" and a defeat as "they lost" (Cialdini et al., 1976). The purpose of these distancing tactics seems clear: People seek to bask in reflected glory and avoid reflected failure. Researchers suggest that the underlying motivation for the behavior is either impression management (Cialdini, 1989; Cialdini et al., 1976; Snyder et al., 1986) or the desire to maintain and enhance self-regard (Tesser, 1988).

In the current research, we focus on a private, intraindividual distancing phenomenon. Participants confidentially reported their subjective distance from former selves and past outcomes. We proposed that individuals would feel farther from personal failures than from successes, even when the actual temporal distance (i.e., calendar or clock time) was the same. The theory of temporal

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self-appraisal (Ross & Wilson, 2000; Wilson & Ross, 2001) provides the rationale for the studies. In this theory, people's former selves are regarded as analogous to other individuals, and variables affecting social comparison are considered pertinent to temporal comparisons (although the impact of these factors can be quite different in the two domains; Wilson & Ross, 2001). A variable of particular relevance to both social comparison research (Tesser, 1980, 1988; Tesser & Campbell, 1983; Tesser & Paulhus, 1983) and the present studies is the closeness of a comparison target. In the current context, we use the term closeness to refer to people's subjective impression of the temporal distance between the present and the past. This sense of nearness is often related to the passage of time: People typically feel closer to episodes that happened yesterday than to events that occurred a year earlier. As William James (1890/1950) and many other psychologists (e.g., Block, 1989; N. R. Brown, Rips, & Shevell, 1985; D. L. Schacter, 1996; S. Schachter & Gross, 1968) have noted, however, the experience of time is influenced by factors other than actual duration. Consequently, temporal self-appraisal theory treats time as a psychological variable: Past episodes and associated selves can feel close or remote, almost regardless of their actual proximity. Although a man may be fully aware that he graduated from university 25 years earlier, that time of his life may feel like yesterday to him. In contrast, the real yesterday can sometimes feel distant.

On the premise that individuals in western culture are motivated to think highly of themselves (Baumeister, 1998; Higgins, 1996; Sedikides, 1993; Taylor & Brown, 1988), temporal self-appraisal theory suggests that people tend to react to their past selves and outcomes in a manner that makes them feel good about themselves now. It is hypothesized that people can maintain high levels of self-regard by enhancing earlier selves that feel close and disparaging past selves that feel distant (Wilson & Ross, 2001). Because

individuals can continue to experience pride from recent achievements and discomfort from recent failures, they should be motivated to think favorably of former selves that feel subjectively close. As subjective temporal distance increases, the accomplishments of an earlier self are less likely to benefit the current self; similarly, former faults are less apt to tarnish the present self. There is an implicit statute of limitations for many (although not all; see Wilson & Ross, 2001) past successes and failings: With time, their power to honor or discredit the perpetrator diminishes as more recent outcomes take precedence. According to temporal self-appraisal theory, individuals may actually benefit psychologically from exaggerating the inadequacies of subjectively distant former selves. These inferior selves can serve as downward comparisons that help people to appreciate their present accomplishments (Albert, 1977; Wills, 1981, 1987; Wilson & Ross, 2000, 2001). Not all distant selves can stand as relevant comparisons, however. The theory posits latitudes of temporal appraisal that include the set of former selves deemed pertinent to the current self for purposes of comparison. Individuals should not be able to boost their self-regard by derogating nonrelevant earlier selves. For example, most adults are unlikely to derive satisfaction from comparing their current achievements with outcomes attained by their 10-year-old self.

Temporal self-appraisal theory predicts that people should evaluate past selves that feel close more favorably than past selves that feel distant when actual temporal distance is held constant. Recent research that experimentally manipulated the subjective distance of past selves provides support for this hypothesis (Wilson & Ross, 2001). For example, participants were induced to feel that the beginning of their present academic term was either relatively close or relatively distant. They then retrospectively evaluated themselves at the start of the term. Individuals in the subjectively distant condition were more disapproving of their earlier self. Additional research shows that people's current self-evaluations are more influenced by outcomes that feel recent rather than distant, even when actual temporal distance is held constant (Wilson, 2000).

In the research reported by Wilson and Ross (2001) and Wilson (2000), subjective distance was an independent variable. However, temporal self-appraisal theory also includes subjective distance as a dependent variable, and that is the focus of the present studies. People should be motivated to regard past experiences (and associated former selves) that could have unfavorable implications for their current self-appraisals as farther away than experiences that could have flattering implications. Thus, a student who has performed poorly on an exam should subsequently feel more distant from the test than would a person who did well. From the perspective of temporal self-appraisal theory, such disparities in judgments of subjective time reflect the motivation to maintain favorable self-regard. Individuals can attribute a subjectively distant failure to an inferior, former self (e.g., the "old me") and dissociate their current self from blame. In contrast, people can continue to claim credit for former accomplishments by feeling close to such episodes. Subjectively recent accomplishments belong to the present self almost as much as to an earlier self.

Although these differences in feelings of distance could include divergent estimates of actual time, this need not be the case. Temporal self-appraisal theory makes predictions about subjective distance, not judgments of calendar time. Both failing and suc-

cessful students may be fully aware that they wrote an exam 2 weeks previously, but their experience of subjective distance may differ. The exam may feel more remote to unsuccessful students, who can thereby separate themselves from their failure. Subjective time estimates are an additional tool that individuals can use in their efforts to minimize the consequences of past negative events (Taylor, 1991).

In the current research, we studied people's assessments of the subjective closeness of past selves and episodes differing in valence while controlling actual temporal distance. Also, we examined the relation of individual differences in self-esteem to judgments of subjective distance. According to temporal self-appraisal theory, people adjust the subjective distance of past outcomes to maintain favorable self-views. Previous research indicates that individuals with high self-esteem (HSEs) are generally more adept at deflecting threats to positive self-regard than are persons with lower self-esteem (LSEs; Baumeister, 1998; Blaine & Crocker, 1993; Mussweiler, Gabriel, & Bodenhausen, 2000). HSEs are more likely than LSEs to take greater personal responsibility for success than for failure (Blaine & Crocker, 1993) and to dwell on their strengths rather than their weaknesses following failure (J. D. Brown & Smart, 1991; Dodgson & Wood, 1998; Steele, Spencer, & Lynch, 1993). HSEs are more apt than LSEs to recall positive memories when in a negative mood (Smith & Petty, 1995), a propensity that may help alleviate depressed affect. Mussweiler et al. (2000) reported findings that are particularly relevant to the current research. HSEs were more inclined to ward off the threat posed by an unfavorable social comparison by dissociating themselves from the comparison individual. Along the same lines, we propose that HSEs should be more likely than LSEs to subjectively distance themselves from former selves and outcomes that could have negative implications for their present self-worth. As well, HSEs should feel closer than should LSEs to earlier selves and outcomes with positive implications for their current self-regard. HSEs can thereby preserve their favorable self-regard by separating their current self from earlier failings while continuing to take credit for equally distant former accomplishments.

Overview of the Present Studies

We conducted three studies to examine the relation of feelings of subjective distance to outcome and self-esteem while controlling for actual temporal distance. In Study 1, participants reported how distant they felt from socially successful or unsuccessful past selves. In Study 2, participants indicated the subjective distance of a university course in which they performed relatively well or poorly. In Study 2, we also investigated whether frequency of thinking about the course mediated the impact of course outcome on subjective distance judgments. In Study 3, participants reported the subjective distance of a flattering or embarrassing incident that occurred to either themselves or their acquaintances. We assume that a tendency to feel more removed from unfavorable than favorable episodes is motivated by a desire to maintain positive self-regard. If so, this bias should be evident in participants' reports of the subjective distance of their own but not of their acquaintances' past outcomes. In this third study, we also examined the possible contribution of ease of recall of past episodes to subjective time estimates. To extend the generality of the findings,

we varied the measures of subjective distance and self-esteem across studies.

Study 1

In Study 1, university students described their degree of social success during their last term in high school and then reported how distant they felt from that high school self. Participants also completed a measure of self-esteem. We tested the prediction that participants would feel farther away from socially unsuccessful past selves than from socially successful past selves and that HSEs would be more likely than LSEs to display this pattern of distancing.

Method

Participants. Five hundred fifty-seven students in an introductory psychology course participated in return for partial course credit. Of those, 544 students completed all of the relevant measures. The 4 oldest participants (mean age =41.00 years) were excluded as outliers because their actual (much longer) distance from high school had a disproportionate influence on the relation between subjective and actual time. The final sample included 306 women and 234 men (mean age =19.60, range =17-30 years).

Procedure. Participants received a package of questionnaires in class and returned it completed several days later. As well as the pertinent items, the booklet contained a number of personality measures and demographic questions inserted by other researchers and unrelated to the current study. Participants completed Rosenberg's (1965) measure of self-esteem several pages before they answered the social success items. They evaluated their social success during their final year of high school on 7-point scales with endpoints labeled popular/unpopular, socially skilled/not socially skilled, accepted/rejected, cool/uncool, a lot of friends/few friends, friendly/unfriendly, sociable/unsociable, lonely/not lonely, and well-liked/disliked. Next, participants indicated the subjective distance of their high school self by placing marks on two 190-mm lines. The endpoints of the first line were labeled feel very close to my past self and feel very distant from my past self. The endpoints of the second line were labeled my past self feels very near and my past self feels very far away. Finally, participants reported when they had finished their last term of high school.

Results

Preliminary analyses revealed no effects for gender in this or subsequent studies. The analyses are reported collapsed across this factor. Participants' responses were averaged across the nine items assessing social success (Cronbach's $\alpha=.85$) and the two items assessing the subjective distance of the former self (Cronbach's $\alpha=.93$). A positive correlation between self-esteem and participants' reports of past social success indicated that social success increased with self-esteem, r(538)=.33, p<.001.

Next, we examined people's reports of actual distance in months since their last term of high school. A regression analysis with actual distance as the criterion variable and self-esteem, social success, and their interaction as predictors revealed that reports of social skill decreased, $\beta = -.35$, t(337) = 8.09, p < .001, and self-esteem increased, $\beta = .12$, t(337) = 2.76, p < .01, as calendar time since high school increased. It is important to note, however, that the Social Success \times Self-Esteem interaction was not significant, $\beta = -.04$, t(336) < 1. Because differences in real time may influence reports of subjective distance, we controlled for time in months in the first step of all regression analyses on subjective

distance in this and subsequent studies. We therefore investigated the psychological impact of factors such as outcome valence and self-esteem after the effect of calendar time had been partialed out.

To examine the predicted interaction between self-esteem and social success on assessments of distance, we conducted a multiple regression analysis with subjective distance as the criterion variable. All predictor variables were centered (the mean for that variable is subtracted from each score to yield a mean score of zero), as recommended by Aiken and West (1991). Standardized betas for each step of the regression analysis are reported in Table 1. In Step 1 of the analysis, we entered the number of months since participants' last term of high school. It is not surprising that participants reported feeling more subjectively distant from their high school self as the number of months since high school increased. At Step 2 of the analysis, we simultaneously entered participants' self-esteem scores and their evaluations of their former social skills. Feelings of closeness to the high school self increased with self-esteem. In addition, we obtained the predicted relation between social success and subjective distance: Participants reported feeling farther from socially unsuccessful than from equally distant socially successful high school selves. To evaluate the prediction that HSEs should be especially likely to show greater distancing of unsuccessful former selves, we entered the Social Success \times Self-Esteem interaction term at Step 3. The interaction was statistically significant.

To examine the interaction more closely, we conducted additional regression analyses using rescaled values for self-esteem, as outlined in Aiken and West (1991). The zero value for the scale was set at one standard deviation above and below the mean for HSEs and LSEs, respectively. For HSEs, subjective distance increased as the social success of the past self decreased, $\beta = -.21$, t(535) = 3.47, p < .001. A similar trend for LSEs was nonsignificant, $\beta = -.07$, t(535) = 1.19, p < .24 (see Figure 1). As predicted, therefore, HSEs were especially likely to judge successful past selves to be closer than unsuccessful past selves.

It is conceivable that LSEs are less likely to shift their subjective distance estimates because their judgments are more closely wedded to calendar time than are the estimates of HSEs. To examine this possibility, we calculated the correlations between subjective distance and calendar time for HSEs and LSEs separately (on the basis of a median split on the self-esteem variable). HSEs' and LSEs' subjective time estimates were similarly correlated with actual time, r(285) = .22, p < .001, and r(258) = .27, p < .001, respectively.

Table 1
Regressing Subjective Distance From Last Term of High School
Onto Past Social Success and Self-Esteem (Study 1)

Predictor	β	t
Step 1		
No. months since target period	.24	5.77***
Step 2		
Self-esteem	15	3.54***
Past social success	13	2.83**
Step 3		
Past Social Success × Self-Esteem	08	2.03*

Note. df = 538 at Step 1, 536 at Step 2, and 535 at Step 3. * p < .05. ** p < .01. *** p < .001.

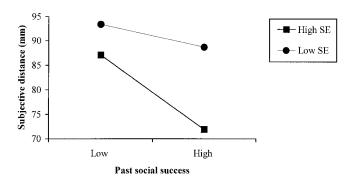


Figure 1. Interaction of self-esteem (SE) and past social success on subjective distance from high school (Study 1). Low social success and low SE are defined as at least one standard deviation below the mean; high social success and high SE are defined as at least one standard deviation above the mean. Higher numbers indicate greater subjective distance.

Discussion

Participants felt closer to socially successful than to socially unsuccessful high school selves. This relation between past social success and subjective distance was evident among HSEs and nonsignificant among LSEs. As well, HSEs perceived themselves to be more socially successful in high school and to be closer to their high school self than did LSEs. This tendency of HSEs to claim greater social success in high school may limit the generalizability of the results. Within the levels of social success that LSEs reported, distancing was not significantly related to the success of past selves. Within the levels of social success that HSEs reported, distancing was associated with the achievements of past selves. We cannot be certain that the obtained pattern of distancing is due to self-esteem level; perhaps it is associated with the differential levels of social success reported, on average, by HSEs and LSEs. To eliminate this concern in Study 2, we targeted outcomes that should be unrelated to self-esteem.

The finding that evaluations of past social success were inversely related to actual distance from high school is intriguing. It is conceivable that people's standards change with time (Higgins & Lurie, 1983) such that people become increasingly critical of their earlier behavior. Alternatively, perhaps students are motivated to criticize more remote high school selves (Wilson & Ross, 2001), or students who are somewhat older than the class average in university were actually rather unpopular in high school. It is less likely that people systematically shifted their actual graduation date, because students presumably know when they finished high school. Regardless of the reason for this relation between calendar time and perceived social success, the effects of subjective distance existed beyond the influence of calendar time. In Study 2, we obtained reports of calendar time before we randomly assigned participants to an outcome condition. This procedure should reduce the probability of a relation between outcome and calendar time.

Study 2

A great deal of past research reveals virtually no link between self-esteem and academic grades (Dawes, 1994; Hansford &

Hattie, 1982). In Study 2, we examined the relation between students' self-esteem and their estimates of the subjective distance of university courses in which they performed relatively well or poorly. Participants were randomly assigned to remember the course in which they received either their best or their worst grade in the previous semester. Random assignment to grade condition guarantees that participants who report positive and negative past outcomes do not differ in some other, unknown way that might affect the results. After reporting their grade in the target course, participants indicated how distant the course felt to them and how often they had thought about the course since it ended.

This thought-frequency measure allows us to examine whether differential rehearsal might mediate the interaction of outcome and self-esteem on subjective distance. Past research indicates that HSEs are less likely to dwell on negative outcomes than are LSEs and more inclined to focus on happier matters (J. D. Brown & Smart, 1991; Dodgson & Wood, 1998). If such differential rehearsal occurs, it could have implications for people's subjective time estimates. Rehearsal increases ease of recall (Betz & Skowronski, 1997; D. L. Schacter, 1996; Thompson, 1982; Thompson, Skowronski, Larsen, & Betz, 1996), and people use ease of recall as a basis for estimating the dates of world events (e.g., the attempted assassination of President Reagan) that occurred during their lifetime (N. R. Brown et al., 1985). When people rely on the (often correct) heuristic that memory for events tends to degrade over time, they judge episodes that they recall readily to be more recent than ones they recall with greater difficulty (N. R. Brown et al., 1985). However, if ease of recall is influenced by factors other than the passage of time (e.g., differential rehearsal), then it can systematically bias dating judgments.

Although the dating of specific, important personal events seems to be reasonably accurate and unbiased (Betz & Skowronski, 1997; Thompson et al., 1996), it is nonetheless conceivable that feelings of subjective time are affected by differential rehearsal. Suppose HSEs think more frequently about courses in which they performed well and are consequently better able to recall details about those courses. This differential rehearsal might cause HSEs to feel closer to courses in which they received high grades, even though those courses are no more recent in calendar time. Similarly, LSEs' feelings of subjective distance may be affected by the degree to which LSEs think about courses in which they performed well or poorly.

Temporal self-appraisal theory posits that feelings of subjective time are influenced directly by a person's context, focus, and motives (Ross & Wilson, 2000; Wilson, 2000; Wilson & Ross, 2001). The theory does not require that the effects of these variables on subjective distance be mediated by rehearsal over time. As past research on dating assigns a major role to rehearsal and recall, however, it is important to investigate their contribution to reports of subjective time.

Note that we used a different measure of subjective distance than in Study 1. Participants were asked how distant they felt from a specific course rather than from a past self. We expected that students would report feeling farther away from a course when they received mediocre rather than good grades and that this discrepancy in subjective distance would be greater for HSEs.

Method

Participants. Three hundred fifty-seven students (112 men and 244 women, 1 unspecified) in an introductory psychology course received partial course credit for their participation (mean age = 19.50, range = 17–47 years). One hundred seventy-three students were randomly assigned to the best grade condition, and 184 were assigned to the worst grade condition.

Procedure. Participants received a booklet of questionnaires in class and returned it completed several days later. The items relevant to the current study were contained in an academic questionnaire. The booklet included a number of personality measures and demographic questions inserted by other researchers that were unrelated to the current study. The booklet also contained Rosenberg's (1965) Self-Esteem Scale. This scale was placed 13 pages before the academic questionnaire in 193 of the completed booklets and 13 pages after this questionnaire in the remaining 164 completed booklets.

The academic questionnaire contained five items. Participants first reported the dates of their last school term. They were then randomly assigned to record either the best or the worst final grade that they received last term (grade condition). Next, they reported the subjective distance of the course in which they received that grade (best or worst). They responded on a 10-point scale with endpoints labeled *feels like yesterday* (1) and *feels far away* (10). They then estimated how frequently they had thought about the target course since it ended. They were informed that their thoughts about the course could include thinking about exams, assignments, or any other aspect of the course. They responded on a 7-point scale ranging from *almost never* (1) to *almost all of the time* (7). Finally, they reported their satisfaction with their grade on a 10-point scale with the end points labeled *very satisfied* (1) and *not at all satisfied* (10).

Results

Preliminary analyses. As expected, there was no relation between self-esteem and grade reported in either the best, r(171) = .06, or the worst, r(182) = 0.00, course conditions. Overall, participants were more satisfied with their best (M = 3.91) than with their worst (M = 6.30) grades, F(1,351) = 55.53, $p < 001.^2$ There were no significant main effects for order (Self-Esteem Scale preceded or followed the dependent variables) or level of self-esteem on satisfaction. Controlling for satisfaction levels did not qualify any of the following results. A regression analysis with reports of the actual distance (in months) from participants' last school term as the criterion variable and self-esteem, outcome, and their interaction as predictors revealed no significant effects (all ts < 1).

Subjective distance. In the initial regression analysis, subjective distance from the course served as the criterion variable. All continuous predictor variables were centered. To assess any effects due to the order of placement of the self-esteem and academic questionnaires, we included order as a predictor as well as its interactions with all other predictors. Number of months since the course was completed was entered in Step 1. Grade condition (best vs. worst grade), self-esteem, and order (self-esteem measure completed before or after academic questionnaire) were then entered simultaneously in Step 2; their two-way product terms were entered in Step 3, and the three-way interaction was entered in Step 4. The only interaction that we expected to reach significance was the Self-Esteem × Grade Condition interaction.

Standardized betas are reported in Table 2. The closer the course actually was (in months), the more recent it felt. Also, as predicted, participants felt farther away from the course in which they re-

Table 2
Regressing Subjective Distance From Course and Frequency of
Rehearsal Onto Grade Condition, Order, and Self-Esteem
(Study 2)

		Subjective distance		Frequency of rehearsal	
Predictor	β	t	β	t	
Step 1					
No. months ago	.194	3.74***	085	1.61	
Step 2					
Grade condition	190	3.66***	.189	3.62***	
Self-esteem	.064	1.26	152	2.96***	
Order	121	2.34*	059	1.13	
Step 3					
Grade Condition × Self- Esteem	136	1.98*	032	0.47	
Grade Condition × Order	.040	0.50	020	0.24	
Order × Self-Esteem	098	1.30	088	1.15	
Step 4					
Grade Condition × Self- Esteem × Order	.011	0.12	044	0.46	

Note. df = 355 at Step 1, 352 at Step 2, 349 at Step 3, and 348 at Step 4. * p < .05. *** p < .001.

ceived their worst grade when we controlled for the actual passage of time. Unexpectedly, participants reported feeling closer to their target course when they had completed the Self-Esteem Scale after the academic questionnaire, as opposed to before. It is important to note that order did not interact significantly with any other variable, and the only significant interaction was that of Grade Condition \times Self-Esteem.

To examine the significant Grade Condition \times Self-Esteem interaction more closely, we conducted separate regression analyses for HSEs and LSEs using rescaled values for self-esteem (with the zero value for the scale at one standard deviation above and below the mean). See Figure 2 for the pattern of results. The results are very similar, conceptually, to those obtained in Study 1. HSEs (one standard deviation above the mean) felt more distant from courses in which they received their worst rather than their best grades, $\beta = -.31$, t(352) = 3.57, p < .001. LSEs (one standard deviation below the mean) exhibited no significant relation between grade and subjective distance, $\beta = -.07$, t(352) = 0.83.

Relation of subjective distance to calendar time. We examined the correlations between subjective distance and calendar time for HSEs and LSEs separately (on the basis of a median split on self-esteem). As in Study 1, HSEs' and LSEs' subjective time estimates were similarly correlated with actual time, r(184) = .19, p < .008, and r(171) = .18, p < .002, respectively.

Frequency of recall. As expected, the more often participants reported thinking about the target course, the more recent it seemed in both the worst, r(182) = -.39, p < .001, and the best,

¹ The University of Waterloo has many co-op students who alternate work and school terms. The previous academic term would have been farther away for students who had just finished a work term.

 $^{^{2}\,\}mathrm{The}$ degrees of freedom are reduced because 3 people did not respond to the satisfaction question.

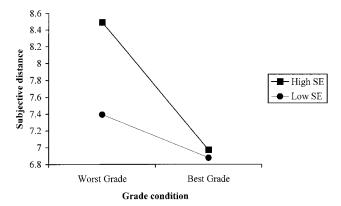


Figure 2. Grade Condition \times Self-Esteem (SE) interaction on subjective distance (Study 2). Low SE is defined as at least one standard deviation below the mean; high SE is defined as at least one standard deviation above the mean. Higher numbers indicate greater subjective distance.

r(170) = -.21, p < .005, grade conditions (when we controlled for actual passage of time). A regression analysis with frequency of rehearsal as the criterion variable (see Table 2) revealed that grade condition and self-esteem both significantly predicted frequency of rehearsal but that the Grade Condition \times Self-Esteem interaction was nonsignificant. Participants reported thinking more about courses in which they received their best grades. Also, the higher their self-esteem, the less participants thought about courses in which they received either their best or their worst grades. The nonsignificant Grade Condition \times Self-Esteem interaction indicates that the relation between grade condition and frequency of thought was not moderated by self-esteem. The absence of an interaction also suggests that the Grade Condition \times Self-Esteem interaction on subjective distance judgments was not mediated by differential rehearsal.

Discussion

The distancing findings conceptually replicate those obtained in Study 1. Participants felt farther away from a negative (the course in which they received their worst grade) than from a positive (the course in which they received their best grade) experience. Also, the subjective distance estimates of HSEs were influenced by the valence of the experience, whereas those of LSEs were not. In Study 1, participants' reports of their high school popularity were related to their self-esteem. In Study 2, grades were unrelated to level of self-esteem, eliminating the possibility that differences in outcome rather than self-esteem were responsible for the subjective distance effects. In addition, participants in Study 2 were randomly assigned to focus on the course from the previous semester in which they received either their best or their worst grade. If HSEs who were asked to consider their worst course had instead been assigned to think about their best course, they would presumably have felt quite differently about the temporal distance of a course from the very same term. Note also that participants reported the actual date of their last academic term shortly before they indicated their subjective distance estimates. Although actual time was presumably salient and did not differ by condition, participants' reports of subjective distance still reflected the predicted effects. The findings attest to the malleability of subjective distance judgments.

The results on the rehearsal measure suggest a potentially important link between thinking about an episode after its occurrence and feelings of temporal distance. We were primarily interested, however, in whether differential rehearsal accounts for the significant interaction between self-esteem and grade condition on feelings of temporal distance. Relative to LSEs, do HSEs feel subjectively closer to good than to bad grades because they reminisce more frequently about their earlier successes? This does not appear to be the case. Although LSEs reported thinking more about either course than did HSEs, the relation of outcome to rehearsal was similar. Both HSEs and LSEs reported thinking more about courses in which they performed well.

Study 3

According to temporal self-appraisal theory, people adjust the subjective distance of past outcomes to maintain favorable self-views. HSEs should be particularly likely to dissociate themselves from earlier disappointments by perceiving them as remote and to maintain ownership of achievements by regarding them as recent. Although generally consistent with this proposition, the first two studies do not establish that HSEs' feelings of subjective distance are influenced by a desire to maintain self-regard. Perhaps HSEs would feel closer to positive than to negative events, regardless of the implications of the episodes for their current self-worth. If so, they should evidence a similar pattern of responding when reporting the subjective distance of events occurring to other people rather than to themselves. Such a pattern would argue against a motivational interpretation.

In Study 3, participants reported how close they felt to flattering or embarrassing past episodes. The target events happened either to the participants or to their acquaintances. If the bias in subjective distance is motivated by concerns for self-enhancement, it should occur for personal incidents but not for acquaintances' past events. Participants are presumably less motivated to distance the embarrassments suffered by acquaintances, as these episodes should not threaten respondents' self-regard. The acquaintance condition also provided a baseline for assessing the direction of the distancing bias. Relative to judgments about the subjective distance of other people's outcomes, do HSEs regard negative personal outcomes as more distant, positive personal outcomes as more recent, or both? Temporal self-appraisal theory predicts both effects: Positive outcomes should feel more recent and negative outcomes more distant when they have implications for individuals' own self-regard. Because personally threatening negative events may exacerbate people's desire to self-enhance, however, the effects may potentially be stronger for unfavorable outcomes. Negative events typically engender greater attributional and cognitive activity than do positive events (Taylor, 1991).

In the previous study, we asked participants how often they had thought about the target course to examine whether differential rehearsal mediated the impact of outcome on subjective distance. Although the measure of rehearsal yielded some meaningful findings, it did not mediate the Grade Condition \times Self-Esteem interaction on subjective distance. It is conceivable that the retrospective measure of rehearsal was insufficiently sensitive to detect the mediating effect of rehearsal on the subjective distance judgments

of individuals varying in self-esteem. People are unlikely to be able to accurately report their frequency of thought over a period of several months. In Study 3, we asked participants to indicate their current ease of recall rather than their frequency of rehearsal. Because rehearsal contributes to memory quality (Betz & Skowronski, 1997; D. L. Schacter, 1996; Thompson, 1982; Thompson et al., 1996), we investigate the same basic question but focus on the phenomenological outcome of rehearsal instead of the process itself. Individuals may be able to report their current ease of recall with greater precision than their frequency of thought over months.

Consistent with the results of the previous studies, we expected participants to report that positive personal events felt closer than did negative ones when we controlled for actual reported distance. We examined whether this same bias would be evident for events occurring to acquaintances and whether ease of recall mediated the subjective distance judgments of HSE and LSE participants.

Method

Participants. Students in a university lounge were approached individually and invited to complete a questionnaire in exchange for a candy or a pen. One hundred nineteen students agreed to participate. Of those, 2 could not recall a requested event, 2 did not follow instructions, and 8 failed to complete some or all of the main measures. These eliminated questionnaires were equally distributed across experimental conditions. The final sample consisted of 107 participants (61 women, 46 men; mean age = 20.80, range = 18–26).

Procedure. All participants wrote briefly about an incident that had occurred since the end of high school. They were randomly assigned to an agent (self vs. acquaintance) and event valence condition (proud vs. embarrassing). In the self conditions, participants were asked to write about an incident that made them feel either "quite proud (e.g., a special achievement or kind act)" or "quite embarrassed (e.g., you said or did something foolish)." The instructions and measures were identical in the acquaintance conditions, except that participants were asked to write about an occasion on which they observed an acquaintance do something that made the acquaintance feel either quite proud or quite embarrassed. Participants were informed that their responses were anonymous and confidential. The experimenter was unaware of participants' experimental conditions, which were determined by the version of the questionnaire that they completed.

The Single-Item Self-Esteem Scale (SISE), adapted from Robins, Hendin, and Trzesniewski (2001), was included to assess self-esteem. Participants responded to the statement "I have high self-esteem" on an 11-point scale ($1 = not \ very \ true \ of \ me$, $11 = very \ true \ of \ me$). The SISE was presented at the beginning of the questionnaire for about half of the participants and following the major dependent variables for the remaining respondents.

After describing the incident, participants reported on an 11-point scale the degree to which they (or their acquaintance) felt either proud (in the proud condition) or embarrassed (in the embarrassed condition). They then completed the main dependent variable, their feelings of the subjective temporal distance of the target incident. Participants were told, "Past experiences may feel quite close or far away, regardless of how long ago they actually occurred. Think about the incident you described above. Place a mark through the lines below at the points that best indicate how far away the incident feels to you." Participants responded on two 190-mm lines with endpoints labeled *feels very close/feels very distant* and *feels very near/feels very far away*.

Next, participants assessed the difficulty of remembering the target incident, the importance of the event at the time of its occurrence, and its importance now, all on 11-point scales. In both the self and the acquaintance conditions, participants were asked to evaluate the personal importance of the events to themselves. Participants in the acquaintance condi-

tions were then asked to indicate their relationship to the person in the incident (options provided: virtual stranger, acquaintance, friend, close friend, romantic partner, and relative), their liking for him or her, and how close they felt to him or her. The latter two assessments were reported on 11-point scales. Participants were also asked to indicate when they had graduated from high school (month, year) and when the target incident happened (month, year) as well as their age, sex, and year in university.

After the data were collected, three coders who were unaware of self–other condition and the experimental hypotheses independently rated the event descriptions on 11-point scales for the degree of pride or embarrassment the incidents would engender (Cronbach's $\alpha > .97$). On the suggestion of a reviewer, we had an additional two independent coders assess the events for likely duration of impact. They evaluated the period of impact (from *less than 1 day* to *more than 1 year*) and the likelihood that the event was still having an effect (from *not at all* to *very likely*) on 11-point scales (Cronbach's $\alpha = .96$).

Results

Manipulation checks. Participants reported the appropriate emotions of pride in the proud conditions as well as embarrassment in the embarrassed conditions. A regression analysis on proud events revealed that agent (self vs. acquaintance), selfesteem score, and their interaction term failed to significantly predict ratings of pride, ts(51) < 1.49, ps > .14. Participants rated their own incidents and the episodes that they ascribed to acquaintances as comparable on this measure (Ms = 9.11 and 9.55, respectively). Similarly, ratings of embarrassing events did not depend on agent, self-esteem, or their interaction; ts(46) < 1.44, ps > .15 (Ms = 6.73 for self, 7.64 for acquaintance). Independent coders' mean ratings also revealed no significant differences in ratings of pride or embarrassment for events that happened to participants versus their acquaintance (ps > .2). As well, participants' level of self-esteem did not qualify the coders' ratings of pride and embarrassment (ts < 1).

Regression analyses with actual distance as the criterion variable revealed that the number of months since the events did not differ significantly by agent (self vs. acquaintance) or self-esteem (ts < 1.32, ps > .19) but did differ by valence (proud vs. embarrassing), t(103) = 2.02, p < .046. Participants reported that embarrassing events occurred more recently than proud events (9.16 vs. 13.26 months). None of the interactions involving valence, agent, and self-esteem approached significance on the measure of actual distance (ts < 1.5, ps > .13).

Subjective distance. Preliminary analyses revealed no significant main effects or interactions due to the counterbalanced order of presentation (self-esteem item presented at the beginning or end of the questionnaire). Participants' responses to the two subjective distance scales were averaged for purposes of analysis (Cronbach's $\alpha=.97$). We predicted a two-way interaction between agent and event valence. We expected that, when we controlled for actual number of months since the episodes, participants would

 $^{^3}$ The original scale presented by Robins et al. (2001) included only five response alternatives. In pretesting this measure, we obtained little variance, with most participants endorsing extremely positive alternatives. We found that an 11-point scale produced greater variance. Self-esteem reports ranged from 2 to 11 (M=7.89, SD=1.78). A median split indicated that the LSEs reported a mean self-esteem level of 6.84 (SD=1.39), whereas HSEs reported a mean self-esteem level of 9.56 (SD=0.76).

feel farther from personally embarrassing events than from events of which they were proud. We did not expect the valence of the episodes to affect the subjective distance of acquaintances' events. In addition, we predicted a three-way interaction (Agent \times Valence \times Self-Esteem), revealing a significant Self-Esteem \times Event Valence interaction in the self but not the acquaintance conditions. This triple interaction should show that the effect of valence was greater for HSEs than LSEs only for personal events.

We conducted a multiple regression analysis with subjective distance as the criterion variable. Continuous predictors were centered. Standardized betas for each step of the regression analysis are reported in Table 3. A significant effect of number of months at Step 1 of the analysis indicated that participants felt more distant from the incident as the number of months increased. The agent, valence, and self-esteem main effects were entered simultaneously at Step 2. Only the effect of valence was significant: Participants felt closer to proud than to embarrassing events. A significant Valence × Agent interaction entered at Step 3 revealed that the effect for valence was significant only for personal events. Participants viewed their own proud events as closer than their embarrassing events, $\beta = .41$, t(48) = 3.04, p < .004, but did not make the same distinction for their acquaintances' events, $\beta = .07$, t(51) = 0.52, ns. Also, we examined whether participants were particularly inclined to distance negative events, feel close to positive events, or both by using ratings of acquaintances' events as a baseline. Participants regarded events that made them proud as slightly but nonsignificantly closer than events that engendered pride in their acquaintances, $\beta = .19$, t(51) = 1.42, p < .16. A larger discrepancy was obtained for embarrassing episodes, which felt significantly more remote when they occurred to the participants rather than to the acquaintances, $\beta = -.27$, t(46) = 2.05, p < .05.

The Valence \times Self-Esteem interaction indicated that HSEs felt closer to proud than to embarrassing events, $\beta = .81$, t(98) = 4.51, p < .001, whereas LSEs felt equidistant from the two types of events, $\beta = .18$, t(98) = 1.10, p < .27. The two-way interactions are qualified, however, by the predicted triple interaction (Agent \times

Table 3
Regressing Subjective Distance From Event and Ease of Recall
Onto Valence Condition, Agent, and Self-Esteem (Study 3)

	Subjective distance		Ease of recall	
Predictor	β	t	β	t
Step 1				
No. months ago	.201	2.10*	109	1.13
Step 2				
Âgent	083	0.87	.014	0.13
Valence	.233	2.43*	.165	1.66
Self-esteem	.081	0.85	.030	0.30
Step 3				
Valence × Agent	403	2.55*	408	2.52*
Valence × Self-Esteem	.243	1.93†	.342	2.66**
Agent × Self-Esteem	.103	0.87	.073	0.60
Step 4				
$Agent \times Valence \times Self-Esteem$	300	1.94††	032	0.20

Note. df=105 at Step 1, 102 at Step 2, 99 at Step 3, and 98 at Step 4. † p=.057. †† p=.055. ** p<.05. ** p<.01.

Table 4

Mean Subjective Distance Ratings by Agent, Valence, and Self-Esteem (Study 3)

	Self		Acquaintance		
Level of self-esteem	Proud	Embarrassing	Proud	Embarrassing	
High	49.01	114.92	81.80	82.20	
Low	76.27	87.01	60.00	70.89	

Note. High and low self-esteem were defined as being at least one standard deviation above and below the mean, respectively.

Valence \times Self-Esteem) entered at Step 4 of the analysis (see Table 4 for means). We first examined the triple interaction by conducting separate regression analyses for participants' and acquaintances' events. For acquaintances' events, only number of months since the incident predicted subjective distance, $\beta = .43$, t(53) = 3.01, p < .004. The more recently the event occurred, the closer it felt. For personal events, the valence main effect and the Valence \times Self-Esteem interaction were significant, $\beta = .41$, t(48) = 3.04, p < .004, and $\beta = .49$, t(47) = 2.81, p < .007, respectively. As predicted, HSEs (assessed at one standard deviation above the mean) felt closer to proud than to embarrassing personal events, $\beta = .75$, t(47) = 4.30, p < .001. LSEs (assessed at one standard deviation below the mean) felt equidistant from the two types of personal episodes, $\beta = .12$, t(47) = 0.72, p < .47.

A second, theoretically meaningful way to consider the triple interaction is to ask whether LSEs and HSEs responded differently to personal events than to episodes that happened to their acquaintances. LSEs did not. For LSEs only (assessed at one standard deviation below the mean), the main effects of agent and valence and the Agent \times Valence interaction failed to approach significance, ts(98) < 1.10, ts(98) > .27. For HSEs only (assessed at one standard deviation above the mean), a main effect of valence, ts(98) = 4.51, ts(98) = 4.51, ts(98) = 3.20, and tended to feel farther from embarrassing events that occurred to them rather than to their acquaintances, ts(98) = 3.20, ts(98) = 3.20, and tended to feel farther from embarrassing events that occurred to them rather than to their acquaintances, ts(98) = 3.20, ts(98) = 3.20, ts(98) = 3.20, and tended to feel farther from embarrassing events that occurred to them rather than to their acquaintances, ts(98) = 3.20, ts(98) = 3.20, ts(98) = 3.20, ts(98) = 3.20, and tended to feel farther from embarrassing events that occurred to them rather than to their acquaintances, ts(98) = 3.20, ts(98) = 3.20,

Subsequent analyses revealed that liking for, closeness to, and the type of relationship participants had with their acquaintances qualified none of the subjective distance effects. Also, all of the obtained effects remain statistically significant when the actual number of months since the episodes is not controlled for in the regression analyses.

Relation between subjective distance and calendar time. We examined the correlations between subjective distance and calendar time separately for HSEs and LSEs (on the basis of a median split on self-esteem) and for participants' own and their acquaintances' events. Unlike in Studies 1 and 2, for self events, neither HSEs' nor LSEs' subjective time estimates were significantly correlated with actual time, r(23) = .01, p < .97, and r(29) = 0.00, p < .99, respectively. For events occurring to acquaintances, the subjective time estimates of both HSEs and LSEs were strongly correlated with actual time, r(22) = .64, p < .001, and r(33) = .36, p < .05, respectively.

Ease of recall. Controlling for actual time in months, we found that ease of recall was significantly related to subjective distance in the self conditions, r(49) = .58, p < .001. Participants reported that their own hard-to-recall events felt more distant than their more memorable events. The relation was in the same direction but nonsignificant in the acquaintance conditions, r(52) = .22, p > .11. A regression analysis paralleling that for subjective distance was conducted on the ease of recall measure. Standardized betas are presented in Table 3. A significant Valence × Agent interaction revealed that, for personal events, participants recalled proud episodes more easily than embarrassing ones, $\beta = .43$, t(47) = 3.17, p < .003. Participants recalled their acquaintances' proud and embarrassing outcomes equally well, $\beta = -.06$, t(51) < 1, ns. Also, participants reported that their own proud events were easier to recall than were their acquaintances' proud events, $\beta = .32$, t(52) = 2.38, p < .021. A nonsignificant trend in the opposite direction occurred for embarrassing events, β = -.20, t(47) = 1.48, p < .15.

A significant Valence \times Self-Esteem interaction revealed that HSEs (evaluated at one standard deviation above the mean) more readily remembered proud than embarrassing events, regardless of agent, $\beta = .68$, t(98) = 3.64, p < .001. LSEs (evaluated at one standard deviation below the mean) recalled proud and embarrassing events equally well, regardless of agent, $\beta = .15$, t(98) < 1. Unlike the measure of subjective distance, the triple interaction did not attain statistical significance.

We also investigated whether ease of recall potentially mediated the Valence \times Self-Esteem interaction on subjective distance for participants' own events alone (Baron & Kenny, 1986). Although the first requirement for mediation was met—that valence and self-esteem interact to produce an effect on ease of recall, F(1, 47) = 5.27, p < .026—the requirement that the interaction term be correlated with the mediator was not met (r = .16, p > .13). Therefore, ease of recall was not tested as a mediator of subjective distance.

Importance of episodes. Finally, participants evaluated the personal importance of the episodes to them, both at the time of their occurrence and currently. The analysis (with time entered as a repeated measures factor) revealed that participants' own events were more important than were events that happened to the acquaintance, F(1, 97) = 16.77, p < .001 (Ms = 6.66 vs. 4.81), that proud events were more important than embarrassing ones, F(1,97) = 43.03, p < .001 (Ms = 7.23 vs. 4.25), and that episodes were more important at the time of their occurrence than now, F(1,97) = 76.11, p < .001 (Ms = 6.91 vs. 4.57). These main effects were qualified by a significant Agent × Valence × Time interaction, F(1, 97) = 9.11, p < .003. For participants' own events, the decline in importance over time was significantly less precipitous for proud than for embarrassing episodes, F(1, 48) = 8.22, p <.006 ($M_{\rm difs} = 1.72$ vs. 4.21). For events that occurred to acquaintances, the decline in importance was marginally greater for proud than for embarrassing events, F(1, 52) = 2.90, p < .094 $(M_{\rm difs} = 2.09 \text{ vs. } 1.32)$. Level of self-esteem was unrelated to participants' judgments of the importance of the episodes.

It is conceivable that proud events were rated as more important because they had a longer impact. The two scales on which independent raters assessed duration of impact were aggregated for purposes of analysis. Proud events were indeed rated as having a longer impact than were embarrassing events (standardized Ms = 0.66 and -0.71, respectively), F(1, 98) = 109.21, p < .001, but controlling for coders' ratings of impact duration did not alter the findings on the importance measure.

Finally, when actual temporal distance was controlled, the decline in the level of importance over time was significantly related to subjective distance for personal events, r(48) = -.40, p < .004, but not for acquaintances' events, r(52) = -.17, p < .23. Participants reported feeling farther away from personal events that declined more in importance.

Discussion

The distancing findings conceptually replicate those obtained in the earlier studies. Although participants indicated that the embarrassing events actually occurred more recently than the proud events, they reported feeling farther from personally embarrassing episodes when calendar time was controlled. Consistent with a self-enhancement interpretation, the valence of the events only influenced participants' estimates of the subjective distance of personal episodes. This effect of event valence on the subjective distance of personal events was evident among HSEs and nonsignificant among LSEs.

Temporal self-appraisal theory predicts that people maintain positive self-regard by subjectively moving favorable pasts forward and unfavorable pasts backward in time. The acquaintance condition provided a baseline for assessing the direction of the subjective distancing effect. When we ignore level of self-esteem, we find that participants in general felt farther from their own than from their acquaintances' embarrassing episodes. A parallel tendency for participants to feel closer to their proud events was nonsignificant. These results suggest that people are particularly motivated to minimize the implications of past negative events (Taylor, 1991). When we focus on LSEs and HSEs, however, the picture changes somewhat. LSEs demonstrated no systematic inclination to differentiate the subjective distance of their own events from their acquaintances' events. In contrast, HSEs felt closer to their own than to their acquaintances' proud episodes and tended to feel more removed from their own than from their acquaintances' embarrassing events. Across the three studies, temporal selfappraisal theory is most strongly supported by the responses of participants with high self-esteem, individuals who are more likely to engage in self-enhancement processes (Baumeister, 1998; Blaine & Crocker, 1993; Mussweiler et al., 2000).

It is notable that the only predictor of the subjective distance of acquaintances' events was actual distance in months. Sensibly, participants reported that they felt farther away from others' experiences as actual distance increased. Moreover, the magnitude of the correlations between the subjective and actual distance of acquaintances' episodes is considerably stronger than the comparable correlations for personal events in any of the studies. Calendar time appears to be the primary determinant of judgments of the subjective distance of events that happened to other people. For personal episodes, however, we found that valence and self-esteem also contributed to people's subjective distance estimates.

In the first two studies, measures of the subjective distance of personal events were significantly, though only moderately, related to assessments of actual calendar time for both HSEs and LSEs. In Study 3, these same correlations were nonsignificant for personal events. The much larger sample sizes in the prior studies

may have provided greater power to detect relatively weak associations.

As in Study 2, a measure of recall yielded meaningful results but cannot fully account for the subjective distance findings. Participants reported feeling closer to events that they could easily recall, particularly when they personally experienced the episodes. For personal events only, participants also reported that proud episodes were easier to recall than were embarrassing ones. The parallel between the ease of recall and subjective distance findings does not extend to the self-esteem variable, however. HSEs reported that proud events that had happened to both themselves and their acquaintances were easier to recall than were embarrassing episodes.

Finally, participants' assessments of the importance of the episodes warrant comment. For participants' own episodes, the decline in importance with time was greater for embarrassing than for flattering incidents. This differential decline could reflect a self-enhancing tendency to deny the continuing importance of embarrassing episodes. Such a tendency would be consistent with Taylor's (1991) hypothesis that people often minimize the importance of past negative events. The differential decline in importance could also reflect reality, however. Independent coders judged flattering events to have a more enduring impact than embarrassing events. Also, if the differential decline in the importance of flattering and embarrassing episodes is prompted by self-enhancement motivation, it should be stronger among HSEs than LSEs. It was not. We conclude that the jury is still out regarding the basis of the differential decline in importance.

General Discussion

As predicted by temporal self-appraisal theory (Ross & Wilson, 2000; Wilson & Ross, 2001), participants in the current studies reported feeling closer to past selves and to experiences with favorable rather than undesirable implications for their current self-worth. In Study 1, university students who recalled being socially successful in their final year of high school felt closer to their high school self than did students who recalled less social success. In Study 2, participants felt closer to a university course in which they had performed relatively well than to a course in which they had performed poorly. In Study 3, participants felt closer to a personally flattering than to an embarrassing incident. Across the three studies, the bias in subjective distance occurred when participants' reports of the actual temporal distance of the earlier episodes were statistically controlled and when assignment to negative and positive pasts was random; the bias occurred for achievement and social outcomes and for single episodes as well as longer term experiences. The findings attest to the robustness of the bias in subjective distancing.

Previous research suggests that HSEs are particularly likely to engage in cognitive strategies that serve to maintain or enhance self-regard (Baumeister, 1998; Blaine & Crocker, 1993; Muss-weiler et al., 2000). HSEs in the current studies consistently reported that experiences with negative implications for their present self-regard were more subjectively distant than were episodes with favorable implications. Just as consistently, LSEs reported no significant difference in the subjective distance of positive and negative past episodes. Coupled with the effects of the agent (personal vs. acquaintances' outcomes) variation in Study 3,

the self-esteem results provide evidence that the motivation to maintain high levels of self-regard plays a role in the bias in subjective distancing.

There is no gold standard, however, for establishing unequivocally that phenomena reflect motivational rather than cognitive factors (Miller & Ross, 1975). If we can show that motivation seems to provide a better account of the effects of a variety of independent variables, then the argument is strengthened. The self-esteem and agent effects in the current studies provide an initial step in this direction. Subsequent research in which motivation is manipulated in other ways, for example by priming (e.g., Wilson & Ross, 2000), self-affirmation (e.g., Steele et al., 1993), or threat (e.g., McFarland & Alvaro, 2000), could provide additional evidence.

The current studies rely on participants' reports of the dates of the target episodes to control for the actual passage of time. Could these reports be biased in a manner that affects the subjective distance findings? To render this possibility highly unlikely, we chose episodes that should be easily dated in Studies 1 and 2. University students surely know when they graduated from high school (Study 1) and when they completed their immediately previous academic term (Study 2). Also, participants in Study 2 reported the dates of their last academic term before they were randomly assigned to best and worst grade conditions. It is conceivable that participants' estimates of the dates of the proud and embarrassing episodes in Study 3 were more susceptible to error. However, we obtained no difference between the dating of personal events and the dating of acquaintances' events. Moreover, participants reported that embarrassing events occurred somewhat more recently than did proud events for both themselves and their acquaintance. If this difference reflects a retrospective dating error rather than accurate reporting, it is a bias in the direction opposite to that occurring on subjective time estimates. There is thus no evidence in the current studies that participants' estimates of the actual dates of the target events contributed to the observed bias in subjective distance. Finally, past research indicates that people are quite accurate at dating past personal events (Betz & Skowronski, 1997; Thompson et al., 1996).

A key assumption of the temporal self-appraisal model is that distancing unfavorable past selves actually helps people to maintain self-regard. The findings from a series of recent experiments support this contention. Individuals were experimentally induced to feel close to or distant from successful and unsuccessful former selves (Wilson, 2000). The impact of the past on present self-views was moderated by perceived distance for both HSEs and LSEs. Participants reported more favorable current self-views when they were encouraged to feel far from former disappointments and close to former successes. These results indicate that the distancing patterns spontaneously demonstrated by HSEs in the current research serve to maintain positive self-regard. Wilson's findings imply that LSEs could benefit from using the same distancing strategies as HSEs, but the present data indicate that LSEs do not use these strategies of their own accord.

We examined rehearsal and memory quality as potential mediators of the distancing bias because these variables have been shown to affect the dating of natural events (e.g., N. R. Brown et al., 1985). We obtained reports of frequency of thinking about the target events in Study 2 and ease of recall in Study 3. It is conceivable that people (especially HSEs) are motivated to avoid

thinking about personally negative experiences and thereby remember them less clearly. As expected, participants reported feeling closer to episodes that they thought about frequently and recalled readily. Also, participants reported thinking more about and remembering more readily episodes that have positive (i.e., good grades, proud events) rather than negative (i.e., poorer grades, embarrassing events) implications for their self-regard. Although our finding that rehearsal and ease of recall were related to subjective distance is consistent with previous research on dating (e.g., N. R. Brown et al., 1985; Thompson et al., 1996), the current data suggest that these variables do not account for the relation of self-esteem to the subjective distancing of personal events. In Study 2, HSEs were no more likely than were LSEs to report thinking about courses in which they had excelled and no less likely to report ruminating about courses in which they had performed poorly. Nevertheless, HSEs felt more removed from the courses in which they had performed poorly. In Study 3, HSEs more readily remembered proud than embarrassing events, regardless of whether the episodes happened to themselves or to their acquaintance. In contrast, the valence of the episodes only significantly influenced HSEs' reports of the subjective distance of personal events.

Temporal self-appraisal theory does not specify any particular mediator of the distancing bias. It suggests instead that feelings of subjective temporal distance are sufficiently flexible that they can be shifted on-line in response to current motivational concerns. HSEs are motivated to dissociate themselves more from undesirable than from desirable past outcomes; their judgments of subjective distance help them to accomplish this goal. Research on assessments of interpersonal distance has yielded analogous findings (Mussweiler et al., 2000; Tesser, 1988).

In the present studies, we operationalized the closeness variable in terms of subjective temporal distance. Closeness may be evidenced by other variables that have received attention in the psychological literature. According to William James (1890/1950), people believe that their self has not changed when they reexperience their original emotions when thinking of past episodes. Conversely, they feel more like different people when their emotional reactions change—for example, if they are now amused when they consider their earlier fearful reactions to public speaking. It is conceivable that a feeling of temporal closeness is both a cause and an effect of a perception of emotional identity over time.

Closeness is also likely to be linked to other measures of association that have been studied in the context of interpersonal comparisons, such as similarity (Festinger, 1954; Wood, 1989) and inclusion of others in representations of the self (Aron, Aron, Tudor, & Nelson, 1991). Relative to subjectively distant selves, individuals are likely to regard subjectively close selves as more similar to their present self. As well, their representations of subjectively close and present selves may overlap. In contrast, people may represent subjectively distant and current selves as separate entities.

It is possible to extend our theorizing and predictions to future as well as to past selves. We hypothesize that people's thinking about the future parallels their thinking about the past. Directly relevant to the current research, 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. Furthermore,

this difference in temporal perspective should be evidenced more strongly by HSEs than by LSEs.

According to temporal self-appraisal theory, people's subjective distance estimates reflect, in part, their attempts to maintain or enhance their current self worth. This proposal might seem to imply that biases in subjective distance are greater when individuals perceive themselves as responsible (justifiably or not) for negative or positive outcomes. A social comparison analogy suggests that the effects are more general, however. For example, spectators seek to link themselves to winning sports teams and dissociate themselves from losing ones (e.g., Cialdini et al., 1976). These effects occur even though the spectators are unlikely to view themselves as responsible for either outcome. By the same token, individuals may strive to hold on to positive past events (by keeping them subjectively close) and discard negative past events (by rendering them subjectively distant) to the extent that these episodes affect their feelings about themselves. The significant factor may not be degree of control but simply whether the event raises or lowers a person's self worth, for whatever reason. It is conceivable, for example, that sports fans feel closer to the victories of their favorite teams than to the teams' equally distant defeats.

Finally, although we focus on relatively mundane past occurrences in the current studies, the findings may have implications for coping with more extreme life events. People sometimes respond to aversive events by perceiving personal improvement or growth after the event's occurrence (McFarland & Alvaro, 2000; Tedeschi & Calhoun, 1996). Perceptions of improvement may well be related to feelings of subjective distance from past events. It is interesting that researchers have identified distancing as a coping strategy (e.g., Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986; Valentiner, Foa, Riggs, & Gershuny, 1996); however, they use the term not to refer to temporal distance but rather to describe the propensity to avoid thinking about or to downplay a negative event. All of these tendencies (including subjective temporal distancing) are likely to be interrelated ways of coping with aversive life events. Therapeutic techniques directly targeted at increasing the subjective distance of a negative episode may help individuals to deemphasize the episode's current significance and put the experience behind them.

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