

HOW DO PEOPLE'S PERCEPTIONS OF THEIR FORMER SELVES AFFECT THEIR  
CURRENT SELF-APPRAISALS?

by

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## Abstract

People's evaluations of their personal pasts can influence how they regard themselves in the present. Because people are motivated to maintain currently favourable self-regard, they often subtly alter their perceptions of the past in ways that flatter current self. I have collaborated in the development of temporal self-appraisal (TSA) theory (Ross & Wilson, 1999; Wilson & Ross, in press), which delineates some of the factors determining how past self-assessments influence current self-regard. People may alter their appraisals of past selves, their psychological distance from those selves, or the personal importance of various dimensions in ways that benefit their present self-regard. The current studies extend past research on this theory by examining how people's assessments of past selves, distance, and importance affect their present self-regard. TSA theory suggests that attributes of recent selves are experienced as "belonging to" current identity, whereas attributes of distant selves are seen as distinct from current self. I predicted that superior past selves that are experienced as recent should have a more favourable impact on current self than will superior past selves that feel distant. Conversely, inferior former selves that are experienced as recent will have a more unfavourable impact on current self than will former failings that feel distant. In addition, I predicted that people's evaluations of their past selves will have a greater impact on their current self-regard for attributes that they regard as personally important and relevant to their self-esteem. In Study 1, I selected people who reported high and low former social success and manipulated their perceptions of temporal distance from former selves. As expected, participants who reported unfavourable former selves rated their current social success more favourably when the past was regarded as distant instead of close. Temporal distance did not affect those with positive past selves. Study 2 replicated the unfavourable past selves conditions of the first study and added a manipulation of importance. People who were induced to see social success as important rated current selves more favourably when the past was seen as distant; conversely, those who were induced to see social success as insignificant were not affected by distance. In Studies 3 and 4, I examined the domain of

academic performance, which is typically important to most university students. In the third study I selected people who reported a superior past academic self (grades were better in high school than they were currently). I also used a different approach to altering their experience of past selves, instead of temporal distance. Based on James (1890/1950), I reasoned that people would incorporate past selves into current identity when they re-experienced the original emotions felt by their former selves. I altered participants' emotional focus by either asking them to revisit past emotions or focus on current ones. As predicted, participants who reported a decline in grades were more currently satisfied after empathizing with their prior superior performance than after focusing on current emotions. Study 4 replicated this effect for participants with superior past selves. In this study, I also examined students who reported inferior past academic selves (grades had improved since high school). Individuals with inferior past selves reported lower current self-appraisals when they revisited their high school emotions. These findings are discussed in terms of their implications for TSA theory and for other research examining the influence of the past on the present.

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## Introduction

People's recollections of their personal histories influence how they understand themselves in the present. The elastic nature of memory, however, makes the link between present identity and past experience even more malleable than people often realize. Not only does the past affect the present, but people's current beliefs and motivations may also affect how they recall their past (e.g., Ross, 1989; Ross & Wilson, 1999). In an effort to delineate factors influencing people's perceptions of themselves through time, I have collaborated on the development of a theory of temporal self-appraisal (Ross & Wilson, 1999; Wilson & Ross, in press). Based on the premise that people are motivated to maintain positive self-regard, Ross and I suggest that people may alter their appraisals of past selves, their psychological distance from those former selves, or the personal importance of various dimensions, in ways that benefit their present self-regard. The purpose of the current studies is to extend past research on this theory by examining how people's views of their past selves affect their present self-regard. Before outlining the goals and hypotheses of the current research, I will review temporal self-appraisal (TSA) theory and relevant past research.

### Temporal Self-Appraisal Theory

Psychological research suggests that people generally maintain positive views of themselves. At least in Western culture, people tend to be quite impressed with their current traits and abilities, typically rating themselves as superior to a majority of their peers (Baumeister, 1998; Taylor & Brown, 1988). People are also, on average, remarkably satisfied with their lives. Self-reported life satisfaction tends to be quite high, almost regardless of external circumstances (Brickman, Coates & Janoff-Bulman, 1978; Diener & Diener, 1996). For example, Cairns and Cairns (1994) found that elderly, widowed, impoverished, inner-city dwelling African-American women reported an average life satisfaction rating of over 9 on a 10 point scale. How can people be so pleased with themselves and so content with life when objectively it may seem unreasonable? Although people are inclined to harbour some positive illusions about themselves (Taylor & Brown, 1988), they rarely live in fantasy worlds.

Reviewing evidence in support of motivated reasoning, Kunda (1990) concluded that people will come to believe what they want to believe -- but only to the extent that the evidence permits.

Temporal self-appraisal theory begins with the premise that people are motivated to think well of themselves. However, we suggest that people don't just pluck this view out of thin air. They search for evidence that supports their desired impression of themselves (Kunda, 1990). People may use a variety of strategies to achieve their goal -- they may selectively compare themselves to others who are worse off than they are (Wills, 1981), self-handicap in the face of possible failure (e.g., Berglas & Jones, 1978), and stereotype harsh evaluators to discount their criticisms (Sinclair & Kunda, 1999). In addition to these esteem-maintaining strategies, we suggest that people frequently look to their past to gather information about how they are doing in the present. The ephemeral nature of the past may make it particularly useful in people's quest to feel good about themselves. People may be unable to idealize the present if they are confronted with evidence to the contrary (Gilbert, Giesler & Morris, 1995; McFarland & Alvaro, in press). However, they can almost always selectively recall and reconstruct evidence from the past that makes them feel good about their current selves. For example, people sometimes selectively attend to flattering past information about themselves (e.g. Santioso, Kunda & Fong, 1990) to promote favourable self-views. People may use past accomplishments as evidence supporting their preferred current self-appraisals.

However, my previous research suggests that people are often considerably less enamoured with their past than with their present selves. In one study, we investigated the self-descriptions of people interviewed in popular magazines, and found that individuals were frequently more critical of former than of current selves (Wilson & Ross, 2000). For example, Mary Tyler Moore at age 60 -- though not at the objective peak of her career -- described herself as better now than in the past, "Of all the lives that I have lived, I would have to say that this one is my favorite. I am proud that I have developed into a kinder person

than I ever thought I would be" (Gerosa, 1997, p.83). The shift in temporal self-assessment is intriguing, because today becomes yesterday. Presumably people who now deprecate former selves would have thought better of them at the time. Likewise, today's feats might seem less glorious in retrospect.

If people wish to maintain a positive current self-view, why would they criticize their former selves? In temporal self-appraisal theory, we suggest that people will evaluate the past in ways that maintain or enhance current self regard. Sometimes, people will benefit from praising the past. However, TSA theory suggests that individuals will frequently benefit more from criticizing rather than from extolling their former selves. Just as a downward social comparison -- comparing to an inferior other person -- can help people to feel good about themselves (Wills, 1981; Wood, 1989; Wood & Taylor, 1991), a downward temporal comparison -- comparing to a supposedly inferior past self -- may cause people to be impressed with their new, improved current selves (Albert, 1977, Greenwald, 1980, Wilson & Ross, in press). People may be inclined to retrospectively derogate aspects of their past selves when they wish to see evidence of change (e.g. Heatherton & Nichols, 1994b). In addition to providing a favourable comparison for current self, downward temporal comparisons can create the illusion that one is on an upward trajectory, which tends to maximize people's current satisfaction or happiness (Frijda, 1988; Pardo, 1968; Smith, Diener & Wedell, 1989).

What psychological factors influence people's evaluations of past selves? Although past research has examined some of the cognitive determinants of people's appraisals of former selves (e.g. culturally-based theories of change, McFarland, Ross & Giltrow, 1992; Ross, 1989), less is known about the motivational determinants of assessments of earlier selves (McFarland & Alvaro, in press; Wilson & Ross, 2000; in press). In contrast, there has been considerable research on the motivational determinants of social comparisons that can serve to inform the current theorizing about temporal comparisons.

Of particular relevance to TSA theory, Tesser and his colleagues (Tesser, 1988; Tesser & Campbell, 1982; Tesser & Paulhus, 1983) identified two moderators of the impact of social comparisons with superior others: an individual's closeness to the comparison other (e.g. friend versus stranger) and the importance of the dimension being assessed (see Major, Testa & Bylsma, 1991, for an extension of this theory to comparisons with inferior others). Comparisons with close others have a greater impact on the self than do comparisons with strangers. Attribute importance determines the direction of that impact: when a dimension is not personally valued, people can bask in the reflected glory of a close other's successes. In contrast, people will be deflated when a close friend or family member outperforms them on a personally important dimension. Like Tesser's model of social comparison, TSA theory identifies closeness and importance as two determinants of the impact of comparisons with former selves.

Tesser and his associates also suggested that people use several psychological strategies to maintain their self-esteem in the face of threatening comparisons. They may increase their distance from the successful individual, reduce the importance of the comparison dimension, or derogate the quality of the other person's achievement (Tesser, 1988). Similarly, TSA theory proposes that people can maintain their favorable views of current selves by changing their perception of their closeness to past selves, shifting the importance of the attributes under evaluation, and altering their evaluations of former selves. However, in TSA theory, the definition of these each of these factors and their predicted impact differ substantially from Tesser's. Next, I will define the proposed TSA variables and outline the hypothesized inter-relation among them.

#### Retrospective Appraisals of Former Selves

According to temporal self-appraisal theory, people will alter their assessments of past selves to maintain or enhance current self-regard.<sup>1</sup> We focus on the shifts in self-appraisal that are

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<sup>1</sup> In TSA theory, we note that people may be inclined to maintain or enhance their self-views. TSA theory assumed that typically, people seek to maintain their already favourable self-views. People are only expected to self-enhance when their current self-views are unfavourable (e.g., under threat).

not genuine. Over time, people sometimes really do change and improve on some attributes (e.g. Heatherton & Nichols, 1994a). In addition, people hold culturally-shared theories about how they should have developed on certain dimensions as they age (Ross, 1989). Appraisals of former selves are likely to be affected by both actual change and implicit theories of change. TSA theory focuses on motivated alterations in people's retrospective evaluations over and above the effects of real and theory-driven change. According to the theory, the direction and degree to which past self-assessments shift (praising versus deprecating past self) will depend on one's perceived closeness to a past self and the personal importance of the attribute.

### The Experience of Former Selves

TSA theory predicts that past selves will be evaluated in ways that serve to maintain or enhance current self-regard. We reasoned that some past selves will be experienced as part of current identity -- the earlier actions and attributes of those selves will be directly incorporated into current self-view. However, other past selves are no longer experienced as part of current identity -- looking back at these former selves may be akin to regarding another person. The attributes of those past selves will not be included in current self-appraisals. In TSA theory, we have generally operationalized these differential experiences of former selves in terms of perceived temporal distance. Typically, former selves experienced as recent are incorporated into current identity, whereas past selves experienced as distant are no longer included in current self-view. Although temporal distance is not the only determinant of how a former self is experienced, I will focus initially on this factor.

### Perceived Temporal Distance

In TSA theory, we propose that perceived temporal distance is a key determinant of whether people experience their past selves as part of, or separate from, their current identity. By perceived temporal distance, we mean the psychological experience of closeness between former and current selves. Psychologically, temporal distance acts as a cue which determines the implications of a former self's actions and outcomes for current self-appraisals. People are



more likely to include information about recent than distant selves in their current identity (e.g. Schwarz & Bless, 1992).

According to TSA theory, people take credit for the successes and blame for the failures of recent former selves because recent selves still “belong to” current identity. In contrast, the outcomes of distant former selves are less likely to directly affect individuals' assessments of themselves. Although distant selves no longer directly inform current self-views, they may serve another informational purpose. They may act as standards of comparison against which current self is evaluated (e.g. Albert, 1977; Schwarz & Bless, 1992; Tversky & Griffin, 1991). Social comparisons with inferior others can be enhancing and comparisons with superior others can be threatening. Similarly, temporal comparisons with distant, inferior past selves may be enhancing, and temporal comparisons with distant superior past selves may be threatening to people's current self view. However, note that not all distant selves will have these predicted effects: for distant shortcomings to be enhancing, an individual must believe that current self is at least somewhat better than the former self. When people do not perceive any improvement, a distant shortcoming will serve to highlight their continued mediocrity. Likewise, people will not find a distant accomplishment threatening unless they perceive some decline in their current standing. For those who are confident that their current achievements are still as good or better than their earlier accomplishments, a distant successful self will simply emphasize their continued superiority. However, for individuals who feel that they are doing more poorly now than in the past, distant successes may highlight decline and make the present pale in comparison. Because people tend to think highly of their current traits and (at least young adults) are unlikely to perceive decline on many attributes (Baumeister, 1998; Taylor & Brown, 1988; Wilson & Ross, in press), it may be more likely for people to be boosted by distant negatives than to be threatened by distant positives.

Because recent and distant past selves can have contrasting effects on current self-appraisals, distance will affect how people evaluate their earlier selves. Because recent

former selves have direct implications for current self, people will be inclined to regard those past selves through the same rose-coloured glasses that they use to view current self. Thus, people will tend to praise their recent past selves and minimize their failings. Conversely, people have less reason to compliment a distant past self because current self can no longer take credit for its accomplishments. However, one may be able to maintain or enhance current self-regard by criticizing a distant past self and using it as a downward temporal comparison.

TSA theory suggests that the influence of temporal distance will depend on the psychological experience of distance. This experience of temporal distance will be affected by the actual passage of time -- yesterday's self will feel closer than a self from last month or last year. However, the subjective experience of temporal distance can be affected by a variety of psychological factors as well. Sometimes, a long past episode is experienced as though it were yesterday -- while another chronologically equivalent event might feel like a lifetime ago. For example, de Botton (1995) contrasted the actual chronology of events with their experience:

"It was hard to remember whether the holiday in Wales had taken place before or after Grandma's operation, but learning to make biscuits certainly happened much before changing schools, so why did the former seem as clear as if it had occurred yesterday and the latter gave off the dim light of the sun on a December day?" (de Botton, 1995, p.19).

Psychologists have identified a number of factors that determine the experience of temporal distance. The more detailed one's memory of an episode, the more recent it seems (Brown, Ripps & Shevell, 1985). For example, assassination attempts were made on the then-U.S. president Reagan and Pope John Paul II around the same time period (March versus May 1981, respectively). Finding that their participants had significantly more detailed knowledge about Reagan's shooting than the Pope's, Brown et al. predicted that the Reagan episode would be recalled as more recent. Participants asked to report the dates of the two

events judged Reagan's assassination attempt to be two months more recent than it was and the Pope's shooting to be 3 months more distant than it was (Brown et. al., 1985). People may use the accessibility of detailed information as a cue for judging the recency of an event because the details of recent events are typically more accessible than those of distant ones (Schacter, 1996). However, detail may be independently affected by the distinctiveness and emotional intensity of the episode, by the frequency of recall, and by the retrieval cues that are salient at the time of recall (Schacter, 1996). For example, a unique occurrence such as visiting an exotic location will be recalled in greater detail than a particular instance of visiting the grocery store, because the latter is routine and unlikely to have any emotional impact. In addition, people may frequently think of or tell others about the exotic vacation, whereas reminiscing about the grocery trip is unlikely. Finally, the vacation may become more accessible when certain cues are present -- for example, eating Thai food may bring to mind details of a trip to Thailand.

Other factors may also influence judgments of temporal distance. A point in time will feel further away if people can recall a large number of events that occurred in the interim (Block, 1989, James, 1890/1950). For example, William James (1890/1950, p. 624) observed that "a week of travel and sight-seeing may [seem] more like three weeks in the memory: and a month of sickness hardly yields more memories than a day." Although, paradoxically, time will be experienced as passing more slowly during an uneventful time than a busy one, in retrospect the more eventful period<sup>2</sup> will feel longer than the empty one (James, 1890/1950). Recalling interim events that signify change or transition (e.g. a marriage, divorce, or graduation) may also increase perceptions of temporal distance (James, 1890/1950). For example, students who experienced a personal transition between high school and university (moving away from home) judge high school as more distant when the transition is made

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<sup>2</sup> Although it appears that in general, eventful periods pass more quickly than uneventful ones, Flaherty (1991) noted an exception: protracted duration is often reported for abnormally eventful (and usually emotional) events. For example, people reported exciting or traumatic events (the last few seconds of an important sporting event, witnessing an accident) as occurring almost in "slow motion," or feeling much longer than their actual duration.

salient (Wilson & Ross, 1998). In sum, a variety of factors can affect people's judgments of temporal distance, aside from the actual passage of time. This non-exhaustive review of the psychological determinants of temporal distance highlights the malleability of these perceptions, which is an important assumption in TSA theory.<sup>3</sup>

James' (1890/1950) analysis of the experience of former selves is also relevant to temporal appraisals. He suggested that when a person remembers a former self and feels the same emotions that he or she felt at the time, that self is experienced as part of current self. It follows, then, that the attributes of that past self would also be included in current self. If an individual looks back on another earlier self and does not re-experience its emotions, then the former self will be regarded as distinct from current self (e.g., if an adult looks back with amusement on what had been a terrifying childhood experience). As a result, the attributes and outcomes of former self should no longer directly influence current self-appraisals. James suggests that past selves whose experiences do not elicit their original emotions can be likened to other people -- they are experienced as entities separate from self. Although James (1890/1950) did not include this notion of same and different selves in his own treatment of subjective temporal distance, the predictions implied in his conception of past selves are theoretically equivalent to the predictions made in TSA concerning a person's perceived temporal distance from past self.

Finally, temporal distance may be influenced by cues that provide information about whether or not a past point in time should be regarded as remote. For example, in past research (Wilson & Ross, in press), we altered apparent temporal distance by varying the verbal description of an earlier point in time (two months ago). For some people, the point in time was described as recent, whereas others were asked to think "way back" to the identical

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<sup>3</sup> In addition to the factors reported here, researchers have suggested that personality variables (e.g., dominance, manic personality), various psychopathologies, and the effects of drugs and hypnosis can all affect feelings of temporal experience (e.g., Wallace & Rabin, 1960). These factors are less relevant to the current discussion and will not be discussed further.

point in time. When the earlier point in time was described as recent, people assessed their past selves more favourably than when the same time period was described as distant.

### Personal Importance

In TSA theory, it is proposed that perceived temporal distance will determine the direction of impact that a past self will have on current self-appraisals. Recent selves directly affect current self -- and thus are more likely to be enhanced. Conversely, a distant past self no longer carries direct implications for current self and may instead act as a standard of comparison. Distant selves, then, may be criticized relative to current self. Whereas distance is proposed to determine the direction of impact of a past self, the personal importance of an attribute is expected to determine the intensity of its impact.

In TSA theory, the definition of attribute importance emphasizes the esteem-relevance of the attribute. This emphasis is similar to Crocker and Lawrence's (1999) suggestion that self-esteem is contingent on an individual's successes or failures in some domains but not others. We propose that people care more about enhancing their self-regard on personally important attributes because they have greater implications for overall self-worth. Like Crocker and Lawrence, we distinguish between societally-valued attributes and those that people personally care about. For example, academic success may be recognized as a societally-valued, thus important domain. However, people will vary in terms of how important the domain is to them. Although societal values may influence personal significance, the latter should have greater implications for self-regard.

We propose that people will be more motivated to engage in the predicted pattern of temporal self-appraisals for attributes that are currently personally important to them. Varying the importance or significance of an attribute has been used by other researchers as a means of distinguishing motivated processes from purely cognitive ones (e.g., Kunda, 1987; Miller, 1976). If a process can be fully explained by cognitive factors alone, then people's responses should not be affected by how much they care about the outcome. In contrast, motivational processes should be more evident when people are highly invested in the

outcome. Following this reasoning, TSA theory proposes that people should be more likely to flatter recent, and deprecate distant former selves on personally valued attributes. Presumably, unimportant attributes have fewer implications for current self-regard. Thus individuals would be less motivated to adjust the past to maintain a favourable current self-view on these dimensions. Wilson and Ross (in press) obtained support for these predictions.

#### A Relevant Theoretical Perspective

The predictions made by TSA theory regarding the impact of former selves can be related to Schwarz and Bless' (1992) inclusion/exclusion judgment model. Schwarz and Bless propose that both chronically and temporarily accessible information will influence people's online attitude judgments. Although the model focuses on attitude judgments (including life satisfaction), it could easily be extended to self-judgments. People use a variety of cues to decide whether information should be included in, or excluded from a judgment. For example, people may determine that recent life events should be included in judgments of life satisfaction, whereas remote life events should be excluded. If information is seen as relevant and thus included, it has a direct impact on the judgment (an assimilation effect). However, if the information is judged to be irrelevant and thus excluded, it has an indirect effect on the judgment (a contrast effect). Schwarz and Bless identified two types of contrast effects: irrelevant information can either be entirely removed from a judgment, or can be used as a standard of comparison against which to make a judgment. Whereas Schwarz and Bless' inclusion/exclusion model proposes purely cognitive mechanisms for these judgments, TSA theory includes both motivational and cognitive elements. Although the two approaches would make overlapping predictions about the effects of temporal distance of past selves on current appraisals, Schwarz and Bless would not predict that their proposed assimilation/contrast effects would be stronger for important than for unimportant attributes.

More important, TSA theory does not simply propose that certain perceptions of past selves will affect current self-appraisals. It also suggests that people can subtly modify their views of past attributes, their judgments of distance, and their assessments of importance.

Thus, TSA theory goes beyond the Schwarz and Bless (1992) model by suggesting that people's motivation to view the self in a positive light will influence what they include and what they exclude from current self-judgments.

#### Altering Personal Importance

I have presented theory and evidence suggesting that temporal distance and attribute importance systematically influence people's retrospective assessments of their past selves. However, TSA theory predicts that people may also maintain or enhance self-regard by altering their perceptions of attribute importance and temporal distance. Most of the TSA theory predictions concerning importance are not new -- we expect that people will devalue or decrease the importance of domains that they are weak in, and attach greater personal significance to their strengths. By perceiving their current strengths as more personally important than their weaknesses, people can capitalize on the psychological benefits of accomplishments while minimizing the threats associated with failure (Baumeister, 1998; James, 1890/1950; Pelham, 1991; Tesser, 1988). In addition, TSA theory emphasizes that these assessments of personal importance may shift over time, as people perceive improvements or decrements on certain attributes. For example, as a woman ages, she may place less importance on physical attractiveness and more value on wisdom or family. By doing so, she can ensure that the dimensions on which she continues to perceive improvement are those that have the greatest impact on her overall self-worth.

#### Altering Perceived Temporal Distance

Our predictions regarding distance are more novel than those concerning importance. We propose that people can alter their perceptions of temporal distance from past selves and events to preserve self-regard. If recent achievements belong almost as much to current as to former self and reflect directly on current self-evaluations, then people should be motivated to perceive past glories as recent and past blunders as distant. By viewing former accomplishments as recent and by distancing earlier failings, people can continue to take credit for their past positive actions, and avoid blame for earlier negative outcomes. By

distancing former selves associated with negative outcomes, people may both protect themselves from the unfavourable implications of their past actions, and derive some benefit from them. Current successes may seem all the more impressive compared to past failures, or in spite of former difficulties.

We have obtained evidence that people do indeed have different perceptions of the temporal distance of positive and negative past events, independent of actual time. In one study, we asked students to think of past successes or failings (e.g., having been popular or unpopular in high school; doing well or poorly on an exam). Participants were asked to indicate how recent or distant those selves or episodes currently felt to them. Controlling for actual time, we found that students reported that positive former selves and events felt more recent than did negative ones (Ross & Wilson, 2000).

Although on average, people appear to be motivated to distance negative events<sup>4</sup> and past selves more than positive ones, their tendency to do so is influenced by their current self-esteem. In past research on self-esteem, investigators have often found that people with higher self-esteem tend to engage in more effective strategies to maintain or enhance positive self-regard (Blaine & Crocker, 1993; Crocker & Lawrence, 1999; Taylor & Brown, 1988). We proposed that the tendency to distance negative events more than positive events serves to maintain positive self-regard. Thus, we expected that the tendency to distance negative events more than positive ones would be stronger for people with higher self-esteem. We found this predicted pattern of results for participants with good and bad grades, romantic breakups, and past social successes or failures (Ross & Wilson, 2000). Therefore, participants with lower self-esteem may be less likely to avoid blame for former shortcomings and less likely to take credit for earlier successes. As a consequence, a review of their past actions may serve to corroborate their low self-esteem.

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<sup>4</sup> Whenever past events are discussed in the context of TSA, we refer to events that have some implication for current self-appraisal. For example, a negative past event such as failing an exam will have implications for academic self-regard, whereas a negative event such as a car accident may or may not have personal appraisal implications (depending on one's assessment of responsibility, etc). Predictions about the distancing of events only apply to those that carry self-evaluation implications.



## Current Research

By specifying how people can maintain current self-regard by altering past self-appraisals, importance, and perceived distance, TSA theory also suggests how people may view the past in ways that are more or less favourable to the current self. The predictions of TSA theory are based on the assumption that alterations of past self-evaluations, perceptions of distance, and assessments of importance are motivated by the desire to maintain or enhance current self-regard. To this end people criticize distant selves and praise recent selves, especially on important attributes, and they distance unfavourable past outcomes more than favourable outcomes. Although all of these alterations are assumed to be in the service of current self, research on this theory has not yet explicitly tested the impact of these factors on individuals' current self-appraisals.

The primary goal of the current research is to test the assumption of TSA theory that people's alterations of their past selves have the presumed influence on current self-appraisals. Whereas in past research we have allowed participants to alter their evaluations of former selves or their assessments of distance (Ross & Wilson, 2000; Wilson & Ross, in press), in the current research I hold these variables constant and examine their effects on participants' current self-appraisals. Recall that, in past research, we have found that people distance negative events more than positive ones, and criticize distant selves more than recent ones (Ross & Wilson, 2000; Wilson & Ross, in press). If there is validity to the assumption that alterations to the past are motivated by the desire for a favourable self-view, then superior past selves should yield more favourable current self-views when recent than when distant; and inferior past selves should produce less negative current self-appraisals when distant than when close. In the current research, I plan to constrain participants' views of past selves, their psychological distance, and their importance. By doing so, I will be able to investigate the effect of these factors on participants' self-appraisals.

## Hypotheses

These hypotheses, derived from TSA theory, will test the theoretical assumption that people are motivated to maintain a favourable self-view by altering their perceptions of the past. If this assumption is correct, positive past selves that are experienced as recent should have a more favourable impact on current self than will former glories that feel distant. However, this will only be the case when people perceive some decline on the attribute. If people think highly of their current standing -- as they often do (Baumeister, 1998) -- then recent accomplishments will simply confirm their current self-view, and distant successes can be regarded as evidence of continued success through time. A recent success will only boost a self-view that needs boosting; a distant achievement will only be threatening if it is perceived as an indication of decline. Conversely, past shortcomings that are experienced as recent will have a more unfavourable impact on current self than will former failings that feel distant. Again, though, this will only be true for people who feel that they are better than they were in the past -- as they often do (Wilson & Ross, in press). If people think poorly of their current standing and feel that they have not improved, then recent failings will simply confirm their negative self-view and distant failings may be regarded as evidence of continued difficulties.

Finally, the TSA perspective suggests that people's recollections of their past selves will likely have a greater impact on their current self-regard for attributes that they regard as personally important and relevant to their self-esteem. Because important attributes have more implications for self-regard, both boosts and threats should have a greater impact in these valued domains than they would on unimportant attributes (Crocker & Lawrence, 1999). Therefore, recent positive and distant negative selves will result in more favourable current self-views than will distant positive and recent negative past selves, especially for personally important attributes. For less important dimensions, this predicted effect should be attenuated or eliminated.

## Overview of Studies

Across four studies, I selected people with either favourable or unfavourable former selves. To increase generalizability, I examined different self-appraisal dimensions and used two different approaches to altering participants' experience of closeness or continuity with their past selves.

In Studies 1 and 2, I manipulated perceptions of temporal distance from former selves by altering the representation of spatial distance between two points on a time line. In Study 1, I selected people who provided high and low ratings of their degree of social success in high school,<sup>5</sup> then induced perceptions of recency or distance. After altering perceptions of temporal distance, I assessed participants' current and future self-appraisals of social success. For participants who reported unfavourable former selves, I predicted that participants' self-ratings would be affected by the distance condition. Those who were induced to feel close to past failings would feel worse about their current attributes than those who were induced to feel distant. For participants who reported favourable pasts, I expected that temporal distance would have a minimal effect. As long as those participants were confident that their current standing remained high, they would not be influenced by whether former glories felt close or distant.

Study 2 was designed to replicate the unfavourable past selves conditions in Study 1, and to introduce a manipulation of importance. I experimentally altered people's perceptions of the importance of social success to examine the prediction that the effect of distance would be stronger for important attributes than for attributes of little significance.

In Studies 3 and 4, I examined the domain of academic performance, which is typically important to most university students. This domain also has a fairly unique developmental trajectory. On most attributes, young adults typically perceive improvement

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<sup>5</sup> For simplicity, I will describe the past point in time as "high school," though in the questionnaire, it was described as "high school/OAC" (whichever was their final year of education prior to university). Participants from Ontario would have completed grade 13 (OAC) while other participants may have completed up to grade 12 (high school).

over time (Wilson & Ross, in press). In contrast, a majority of the first year undergraduate students surveyed at the University of Waterloo perceive some decline in grades from high school to university (Wilson & Ross, 1999). I chose this dimension to test the TSA theory predictions regarding superior past selves. When people perceive decline on an attribute, they should rate their current self more favourably when former successes are experienced as part of current identity than when they are experienced as distinct.

In the third study I selected people who reported a decline in their academic performance from their final year of high school to university. I also used a different approach to altering their experience of past selves. Based on James' (1890/1950). I reasoned that people would feel more similar to past selves when they re-experience the original emotions felt by their former selves. I attempted to alter participants' experience of former self as similar to or distinct from current self by altering emotion focus. People in one condition were asked to "emotionally revisit" some high school memories; other students were either asked to focus only on current emotions, or not given any emotion instructions (Control). Students then rated their past, present and expected future academic performance. I predicted that participants who reported a decline in grades would be more currently satisfied after empathizing with their prior superior performance because past successes would be experienced as part of the current self. Study 4 was designed to replicate this effect on participants who reported a decline in grades, as well as for those who reported that their grades had improved since high school. I expected that individuals with inferior past academic selves would report lower current self-appraisals when they revisited their high school emotions.

### Preliminary Study: Development of a Temporal Distance Manipulation

In past research, I have examined temporal distance predictions by asking about different points in real time (e.g. weeks vs. months ago vs. years ago) (Wilson & Ross, 1999). Using this approach, it is difficult to separate the effects of psychological distance from real time -- perhaps greater actual change is associated with longer distances. I have also altered *apparent* temporal distance while keeping real time constant, by changing the way an identical point in time is described (Wilson & Ross, in press). Participants were randomly assigned to read one of two descriptions: "think of a recent time, the beginning of the term," or "think way back to the beginning of the term." As predicted, participants reported greater change when they were in the "apparent distant" condition. However, there were reasons not to use this manipulation again in the present studies. First, there may be constraints on the time span for which a description of either recent or long ago would both be believable. For example, it may be less plausible to refer to a time in high school as "recent" without eliciting disagreement from at least some university students. It would be preferable to develop a manipulation with fewer limitations. Second, because the verbal description manipulation consists of just a few words, it is possible that participants who skimmed the instructions quickly would miss the verbal description. This would increase the error variance and weaken the overall effect. There was no sure way to ascertain that all participants noticed the description of distance. Thus, it would also be useful to develop a manipulation that required some response from participants, to ensure that it is attended to and to allow the researcher to check that participants complied with instructions.

In summary, in this preliminary study I developed a manipulation of perceived temporal distance that could then be used in the subsequent research. Instead of manipulating distance by altering the verbal representation of a time period (Wilson & Ross, in press), I altered its spatial representation. I expected that the spatial distance between two points in time should also have an impact on participants' psychological experience of temporal distance. I attempted to alter perceived temporal distance by asking participants to complete

one of two versions of a time line. A time line was constructed so that the relevant point in time (last year of high school) either appeared to be spatially very close to the present day, or spatially removed from today. If a time period is spatially close, it may be experienced as psychologically closer than if it is spatially more distant.

### Method

#### Participants

Students were approached on campus and asked if they would be willing to participate in a short questionnaire study that would take them less than 10 minutes to complete. Forty-five students (33 female, 10 male, 2 unidentified) participated. Participants completed a one-page questionnaire and were offered their choice of an individually wrapped candy or a pen in appreciation for their participation.

#### Procedure

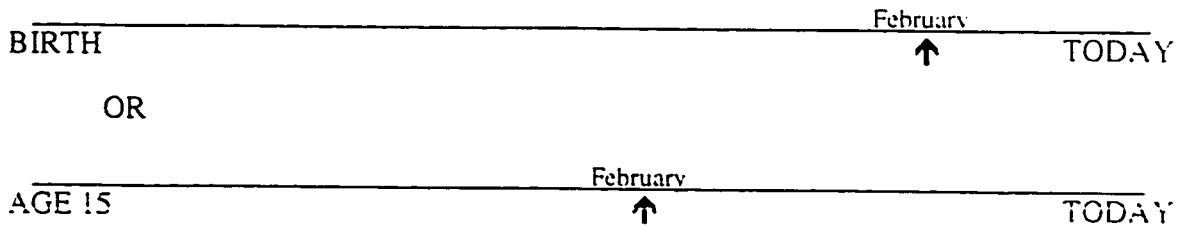
Participants were randomly assigned to one of two versions of the questionnaire. In the Recent condition, participants were given a 156 mm time line with the end points labeled BIRTH and TODAY, and asked to place important life events on the line. In the Distant condition, participants were given a time line of the same length with the end points labeled AGE 15 and TODAY. They were given the following instructions:

We are interested in people's visual representation of important events in their life.

Below, you will find a particular portion of a time line. Please complete the time line however you deem appropriate, filling in any events that you consider to be important in your life. Put a mark on the scale and briefly label each event that you decide to put on the time line.

After completing the time line, participants were asked to add two more points to the line. They were asked to place a mark on TODAY and add their current age, and to place a mark about halfway through their final year of high school (around February), and label it "February." As is illustrated below, the structure of the two time lines will lead to the past

point in time (February of final year in high school) being placed spatially closer to today in the Recent condition (Birth to Today) than in the Distant condition (Age 15 to Today).



After completing the manipulation, participants completed two items designed to measure perceived temporal distance. Participants were asked to indicate, by placing a mark on a 156 mm line, how they currently feel about their past self of February of their last year in high school. The endpoints of the two items were "feel very close to/very distant from my past self," and "my past self feels very near/very far away." Finally, they were asked to indicate the actual number of months that had passed since February of their last term of high school.

Because the dependent measures were presented in a format similar to the time line (i.e., placing a mark on a 156 mm line), response-consistency or anchoring effects could be plausible alternative accounts of the expected results. To reduce their likelihood, I placed the labels of the measures of perceived temporal distance at the opposite ends to their corresponding time line response. Thus, whereas a mark closer to the right side of the time line indicates spatial recency; a mark closer to the left of the manipulation check measure indicates psychological recency.

### Results

First, the manipulation of spatial distance was assessed by measuring, in millimeters, the distance from the mark labeled "February" to the endpoint "TODAY." The two points should be spatially closer in the Recent than the Distant condition. Participants placed "February" of their last year in high school closer to "TODAY" in the Recent condition, adjusted  $M = 29.73$

mm, than in the Distant condition, adjusted  $M = 66.65$  mm,  $F(1, 42) = 27.68$ ,  $p < .001$ , with actual time in months since high school controlled for. The manipulation was effective at altering spatial representations of distance to past self.

Participants responses to the two items measuring perceived psychological distance were measured in millimeters and combined (Cronbach's  $\alpha = .96$ ). Higher numbers indicate greater felt distance. As predicted, participants in the Recent condition reported feeling significantly closer to their past self in high school ( $M = 66.16$  mm) than did those in the distant condition, ( $M = 93.50$  mm),  $F(1, 43) = 5.68$ ,  $p < .022$ . Results were not altered if actual time in months was entered as a covariate. The measure of temporal distance was not significantly related to actual time in months since the target period,  $r(45) = .224$ ,  $p < .14$ .

Finally, I examined the relation between spatial distance (the distance in millimeters between the high school and Today on the time line) and temporal distance,  $r(45) = .376$ ,  $p < .011$ . Shorter spatial distances between "February" of high school and "TODAY" were associated with greater perceived closeness to high school self. In an ANCOVA, I examined the effect of Distance condition on psychological distance after including spatial distance as a covariate. The effect of Distance was reduced to non-significance,  $F(1, 42) = .93$ ,  $p < .34$ .<sup>6</sup> Thus, it appears that the spatial manipulation does account for the systematic difference between conditions in the experience of psychological distance to high school.

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<sup>6</sup> An ANCOVA was conducted instead of a conventional mediation analysis because not all conditions needed to establish mediation were met (Baron & Kenny, 1986). The mediator (spatial distance) was not significantly related to the dependent variable (temporal distance) after the independent variable (Distance condition) was controlled.



## Study 1

According to TSA theory, perceptions of temporal distance from a past self should influence how past selves affect current self-appraisals.

At the beginning of the school term, students in Introductory Psychology were asked to rate their level of social success during their last year of high school. I then selected people who indicated either that their past social success was very high or very low (top and bottom 15% of scores). These students were recruited and reminded of their evaluations.

Feelings of closeness to past self were varied by randomly assigning participants to complete one of the two versions of the time line procedure developed in the preliminary study. Current self-appraisals were then obtained. Because I selected such extreme groups, I expected a main effect of Past Self on current self-ratings – those who recalled a highly successful past may be generally more positive about their current selves, regardless of condition. I also predicted that Distance condition (Recent vs. Distant) would moderate the effect of unfavourable former selves on current self-appraisals. Participants who were induced to feel distant from their high school social difficulties should rate themselves as currently more socially successful than those who were induced to feel close. Feeling close to their former shortcomings should threaten current self-regard, because recent failures would continue to reflect on current self. In contrast, former negative attributes that are experienced as distant should no longer taint the current self. Instead, participants may even benefit from distant negative attributes: in comparison to that inferior past self, they may feel especially proud of their current standing.

For participants with very positive past selves, temporal distance is less likely to have a significant effect. If people are secure in their continued success on a given attribute, it should not matter to them whether a favourable past is close or distant. Thinking of former successes as close will simply confirm their self-view; whereas viewing high school successes as distant should not be threatening -- participants presumably have more recent successes in the domain as well.

Participants were asked to rate their current selves on the same social success measure they completed in mass testing. Participants were also asked to indicate their current percentile ranking on social success, their satisfaction with their social success, and their expectations for future social success. I expected that the predicted pattern of results would be revealed for each of these measures. Importance ratings for the social success dimensions were also obtained. TSA theory would predict that individuals will reduce the personal significance of their weaknesses and emphasize the importance of their strengths. Thus, I expected that participants with more favourable current self-appraisals should deem social success more currently important. However, I suspect that social success will not be unimportant in any condition.

### Method

#### Participants

Participants were 109 (46 male, 63 female) Psychology 101 students (M age = 19.5 years) who completed the past (high school) social success measure in mass testing and fell into the top or bottom 15% of self-ratings. Participants received either one experimental credit or \$8.00 for participating.

#### Procedure

Mass testing measure. As part of a larger "mass testing" package of questionnaires, students completed a 9-item questionnaire asking them to indicate what they had been like during their final year of high school (they were asked to focus on themselves about halfway through the year, in approximately February). Participants circled the number from 1 to 7 that best reflected what they were like in that year of high school on semantic-differential items with the following endpoints: popular/unpopular, socially skilled/not socially skilled, accepted/rejected, "cool"/"uncool," a lot of friends/few friends, friendly/unfriendly, sociable/unsociable, lonely/not lonely, well-liked/disliked.

Main study. Between two and ten weeks after the mass testing session, participants came to the lab to complete the main study. Participants were told that researchers were

interested in the relation between life events and their personal characteristics at different points in time in their lives. Students who either reported High or Low past social success (top and bottom 15%) were randomly assigned to Distance condition (Recent, Distant), which was altered by means of a time line. In summary, the procedure was as follows: 1) participants listed 10 events to be placed on a time line, 2) they were reminded of their past level of social success, 3) they completed the actual time line with the previously-listed events, and 4) they completed the self-appraisal dependent measures.

Participants were first asked to list ten important events that came to mind when they thought of a specified period of time (either from Age 4 to Today or from Age 16 to Today). In the Recent condition, I used "Age 4" instead of "Birth" because it allowed a long time span but was more consistent with instructions to think about "a period in their life" (rather than their entire life to date). In the Distant condition, I used Age 16 as the endpoint instead of Age 15 (preliminary study). This minor adjustment was made in the hope of further increasing the difference between the two distance conditions. I asked participants to list events before they were reminded of their social success so that the salience of this past attribute would not influence the events they nominated. However, I only wanted to alter spatial distance after past social success was made salient, because this manipulation was intended to moderate the effect of participants' past standing on their current self-views.<sup>7</sup>

After listing events, participants were reminded of their self-reported mass testing scores. These scores were provided to ensure accessibility of past selves, and to ensure that participants did not revise their perceptions of former selves during the study session. They were provided with a sheet containing their actual responses to each social success item in mass testing, as well as their score averaged across all 9 items (e.g. 3.6 on a 7 point scale).

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<sup>7</sup> The effectiveness of the manipulation was established in the preliminary study, where Distance condition affected both spatial and psychological distance reported by participants. Manipulation check items measuring psychological distance were also included in this and subsequent studies, but were always placed toward the end of the questionnaire to avoid causing suspicion about the purpose of the time line. Because results on these measures are questionable due to placement and non-essential to the interpretation of the research, they are presented in Appendix A rather than in the main text.

with higher numbers indicating greater social success). Next, participants received their percentile ranking compared to the other approximately 780 students who completed the questionnaire.

After participants' High vs. Low high school social success was made salient to them, they were presented with one of the versions of the time line. They were asked to refer to the 10 events they had listed previously, and to add them to the 156 mm time line. Thus, with the exception that participants generated the events slightly earlier in the session, the spatial manipulation of temporal distance was accomplished in the same way as the preliminary study. As in the preliminary study, students were asked to place "February" of their last term of high school on the line, as well as to write their current age on Today. Students also indicated the number of months that had passed since halfway through their final year of high school.

Dependent measures. Participants were then asked to evaluate their current selves on the same 9-item social success measure used in mass testing, and to estimate their current percentile ranking. Participants then rated their satisfaction with their current social success (1 = extremely dissatisfied to 7 = extremely satisfied), as well as how socially successful they expected to be, two years hence, on the same 9-item social success measure. Participants also indicated their current mood on the PANAS (Watson, Clark & Tellegen, 1988), by indicating the extent to which they felt the following positive and negative emotions (1 = not at all to 5 = extremely): interested, irritable, angry, distressed, alert, attentive, excited, pleased, proud, upset, nervous, jittery, hopeful, relieved, happy, alone, relaxed, ashamed, hostile, sad, worried, enthusiastic, confident, and content. Finally, participants rated the personal importance of each social success attribute on an 11-point scale (-5 very unimportant to 5 very important).

On the final page of the questionnaire, participants were asked to recall a recent, positive social experience and to describe what happened and how they felt. This page was included to boost participants' views of their social success, in case they had been temporarily

induced to feel badly about their social standing. Everyone was able to recall and describe a recent pleasant event.

Finally, the purpose of the experiment was explained to participants and they were informed about the possible negative impact that the time line may have had on their self-view. They were told that only they could judge whether or not their high school selves were relevant to their current standing, thus encouraged to re-adjust their self-views in light of the new information if they were uncomfortable with how they felt.

### Results

In this and all subsequent studies, analyses were conducted with gender as a factor. No significant main effects or interactions were found for gender, so it will not be discussed further.

#### Manipulation check – Time line distance

If the time line manipulation was effective, participants should situate their last term of high school closer to Today on the time line beginning at Age 4 (Recent condition) than on the time line beginning at Age 16 (Distant condition). I measured the distance in millimeters from the last term of high school to today. A 2 (Past Self: High vs. Low social success) X 2 (Distance condition: Recent vs. Distant) between-participants ANCOVA, controlling for actual time in months, revealed a Distance condition main effect,  $F(1, 103) = 65.51, p < .001$ . The last term of high school was marked as closer to Today in the Recent (adjusted  $M = 28.43$  mm) than in the Distant condition (adjusted  $M = 66.41$  mm).

#### Past self-ratings

Participants were selected on the basis of their high or low self-reported high school social success, measured during an earlier pre-testing session. A 2 (Past Self: High vs. Low social success) X 2 (Distance condition: Recent vs. Distant) between-participants ANOVA was conducted on past self-ratings. Because people were pre-selected out of the top and bottom 15 % of scores, a main effect for Past Self was obviously obtained,  $F(1, 105) = 1685.37, p < .0001, M's = 3.63, 6.77$  for Low and High social success, respectively). The Distance main

effect and Past Self X Distance interaction were not significant,  $F_s < 1$ , indicating successful random assignment to Distance condition.

### Current self-ratings

For each of the self-appraisal dependent measures (current social success, future social success, current percentile, and current satisfaction with social success), a  $2$  (Past Self: High vs. Low social success) X  $2$  (Distance condition: Recent vs. Distant) between-participants ANOVA was conducted. Because I expected Distance condition to affect those with unfavourable selves but not those with favourable selves, a Past Self X Distance interaction was predicted. Analyses revealed the expected Past Self main effect on each measure,  $F_s > 32.69$ ,  $p_s < .001$ , indicating that High social success participants rated their current and future selves more favourably than Lows. Main effects for Distance were also obtained,  $F_s > 3.29$ ,  $p_s < .07$ . However, the expected interactions did not reach significance for current social success, future social success, and current satisfaction with social success,  $F_s < 1.29$ ,  $p > .26$ , and only attained marginal significance for current percentile ranking,  $F(1, 101) = 3.06$ ,  $p < .08$ . Because I made specific predictions about the differential effects of distance on people with positive and negative former selves, I conducted the planned contrasts to test these predictions despite the non-significant interactions.

Low past social success. I predicted that for participants who reported Low social success in high school, those in the Distant condition should feel better about their current and future social success than those in the Recent condition. Means for subsequent analyses are presented in Table 1. An ANOVA revealed that as predicted, participants in the Distant condition currently felt more socially successful than those in the Recent condition,  $F(1, 105) = 5.28$ ,  $p < .02$ . The same pattern was present for expected future social success,  $F(1, 105) = 3.69$ ,  $p < .054$ .

This pattern was replicated using participants' estimates of their current percentile rankings,  $F(1, 101) = 10.59$ ,  $p < .002$ .<sup>8</sup> Participants in the Distant condition, who had ranked

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<sup>8</sup> Three people who did not complete this single item measure were excluded from this analysis.

themselves in the 15th percentile or lower in high school reported that they now ranked in about the 56th percentile. Those in the Recent condition also reported improvement, but saw themselves as still below average, around the 35th percentile. Finally, participants in the Distant condition also reported being more satisfied with their current social success,  $F(1, 105) = 5.62, p < .02$ .

High past social success. For participants who reported high levels of past social success, Distance condition did not significantly influence current or future self-ratings on the 9-item measure, nor the percentile rankings,  $F's < 1$  (Table 1). Participants in both distance conditions felt quite successful in their current social lives. Distance condition also did not significantly affect satisfaction with current social success,  $F(1, 105) = 1.66, p < .20$ .

Mood. A composite was created for positive mood (Cronbach's  $\alpha = .89$ ) and another for negative mood, (Cronbach's  $\alpha = .85$ ). Overall mood was calculated by subtracting the degree of negative mood from positive mood. Higher numbers indicate greater overall positive mood. A 2 (Past Self: High vs. Low social success) X 2 (Distance condition: Recent vs. Distant) between-participants ANOVA was conducted on the overall mood composite. A significant main effect for Past Self,  $F(1, 105) = 10.15, p < .002$ , indicated that participants who reported High past social success were in a better mood than those who reported Low past success ( $M's = 1.74, 1.13$  respectively). No other effects were significant,  $F's < 1.48, p's > .22$ .

Importance. A composite was created for participants' ratings of the personal importance of each social success item (Cronbach's  $\alpha = .88$ ). Higher numbers indicate greater overall personal importance. A 2 (Past Self: High vs. Low social success) X 2 (Distance condition: Recent vs. Distant) between-participants ANOVA was conducted, revealing a significant main effect for Past Self,  $F(1, 105) = 12.10, p < .001$ . Students who reported favourable past selves judged social success to be more currently important than those who reported unfavourable former selves ( $M's = 3.18, 2.20$  respectively). The Distance

main effect did not approach significance,  $F < 1$ , nor did the interaction,  $F(1, 105) = 1.97$ ,  $p < .16$ .

As expected, current self-appraisals of social success were correlated with importance,  $r(109) = .422$ ,  $p < .001$ . Those who thought they were currently more successful valued the attribute more. The main effect of Past Self on importance is probably an indirect reflection of the fact that those with higher current self-appraisals judge social success to be more significant.

Table 1

Self-ratings by Distance Condition and Past Social Success

	High past social success		Low past social success	
	Recent (Age 4 to Today)	Distant (Age 16 to Today)	Recent (Age 4 to Today)	Distant (Age 16 to Today)
Current social success	6.11 <sub>a</sub> (0.67)	6.25 <sub>a</sub> (0.74)	4.76 <sub>b</sub> (0.74)	5.26 <sub>c</sub> (1.00)
Percentile	78.84 <sub>a</sub> (16.73)	83.54 <sub>a</sub> (16.64)	35.82 <sub>b</sub> (24.11)	55.73 <sub>c</sub> (28.61)
Satisfaction with social success	5.89 <sub>a</sub> (1.13)	6.28 <sub>a</sub> (.843)	4.54 <sub>b</sub> (1.30)	5.23 <sub>c</sub> (1.04)
Future social success	6.39 <sub>a</sub> (0.46)	6.51 <sub>a</sub> (0.43)	5.24 <sub>b</sub> (0.85)	5.58 <sub>c</sub> (0.76)
Mood (positive minus negative)	1.59 <sub>a</sub> (0.96)	1.89 <sub>a</sub> (0.86)	1.04 <sub>b</sub> (1.19)	1.21 <sub>b</sub> (1.00)
Importance	3.31 <sub>a</sub> (0.90)	3.04 <sub>a</sub> (1.67)	1.94 <sub>b</sub> (1.55)	2.45 <sub>b</sub> (1.63)

Note: Different subscripts within a row indicate the significant differences reported in planned comparisons. Standard deviations in parentheses.



### High and low importance ratings

According to TSA theory, temporal distance should have a greater impact on important than on unimportant attributes. I conducted an exploratory analysis of the data in the current study to examine this prediction. Because overall importance levels differed for those with low and high social success, analyses were conducted separately for each group.

Low social success. Importance ratings were grouped into High and Low Importance on the basis of a median split. A 2 (Distance condition: Recent vs. Distant) X 2 (Importance: High vs. Low importance) ANOVA revealed a main effect of Distance,  $F(1, 52) = 4.59, p < .04$ , a main effect of Importance,  $F(1, 52) = 5.16, p < .03$ , and a Distance X Importance interaction,  $F(1, 52) = 8.07, p < .006$ . Among participants who claimed not to value social success, Distance had no effect on self-appraisals,  $F < 1$ , ( $M$ 's = 4.82 Recent, 4.67 Distant). Among those who considered social success to be currently important, participants in the Distant condition reported significantly higher self-ratings ( $M = 5.77$ ) than did those in the Recent condition ( $M = 4.69$ ),  $F(1, 52) = 12.3, p < .002$ .

High social success. No significant main effects or interactions with Importance were obtained for participants with high social success, all  $F$ 's  $< 1$ .

### Discussion

Participants with socially unsuccessful high school selves rated themselves more favourably in the present when they were induced to feel distant from their high school failings than when they were induced to feel close to their unfavourable past self. It appears that in the Recent condition, high school weaknesses were still experienced as, at least in part, "belonging" to the current self. In contrast, participants in the Distant condition reported quite a dramatic transformation – they are no longer the "ugly duckling" they once were, and those past flaws no longer threaten current self-appraisals.

Consistent with expectations, participants with highly favourable past selves appear to be more immune to the distance manipulation in this study. It is likely that distance from past glories does little to affect current self-regard unless people perceive that they have declined.

Because most people think highly of themselves on most attributes (e.g., Baumeister, 1998; Taylor & Brown, 1988) and young adults rarely perceive decline (Wilson & Ross, in press), I had no reason to suspect that people in the positive past group would be concerned about their current standing on social success. In the current study, those who reported High past social success still rated themselves, on average, around the 80th percentile, thus presumably they continue to be quite pleased with their social success.

In this study, participants were selected on the basis of their self-reported former social success, which admittedly may not reflect reality. However, I suggest that people's self-reports reflect their beliefs about their past selves. Even if these beliefs differ from reality, they can have a psychological impact on people's current self-regard. In addition, even if there is some type of systematic bias in past self-reports, it does not pose interpretative difficulties for the study. Participants were randomly assigned to Distance condition; thus, differences between Distance conditions cannot be attributed to a self-report bias.

Social success was selected as an attribute that was likely to be relatively important to university students. Importance ratings were also obtained, but only after current self-appraisals were measured. Thus, importance may partly reflect participants' experimentally-altered self-appraisals, rather than indicating original level of attribute importance. However, even for participants with the lowest self-appraisals (the Low social success/Recent condition), importance ratings were still well above the midpoint of zero ( $M = 1.94$ ) on a scale ranging from  $-5$  to  $+5$ . Thus, it is reasonable to assume that social success is sufficiently valued to impact most participants' self-regard. In addition, consistent with TSA's predictions for importance, exploratory analyses revealed that the effect of the Distance manipulation was strongest for participants with Low past social success and who currently valued this attribute. Those who did not care about social success were not significantly affected by the Distance manipulation. Of course, this finding is correlational and the direction of the effect is questionable. The second study was designed to test

experimentally examine the effects of Distance and Importance for people with unfavourable former selves.

## Study 2

Temporal self-appraisal theory suggests people's evaluations of the past are partly motivated by the desire to maintain self-regard. If personally important attributes have a greater impact on overall self-worth, people should be more affected by both successes and failures in these important domains. In TSA theory, it is proposed that the effect of moderating variables should be stronger for participants who value an attribute than for those who do not. Thus, I predict that for participants who consider social success to be a highly important attribute, temporal distance will significantly moderate the effect of the past on present self. For participants who care little about social success, the effect of temporal distance will be attenuated or eliminated. This prediction also differentiates TSA theory from Schwarz and Bless' (1992) purely cognitive inclusion/exclusion model.

In Study 2, I selected only participants with self-reported negative past selves (again on a measure of social success included in mass testing). I expanded the range of low scores to include all scores below the 50<sup>th</sup> percentile because I hoped to be able to generalize the effects beyond those participants with extremely negative past selves. These participants were randomly assigned to a Recent or Distant time line condition, and to an Important or Unimportant condition. Importance was altered by presenting participants with one of two versions of a bogus psychology report. One article reported that social success was an important predictor of academic and career success; the other article reported that these outcomes were unaffected by social success. Past research has demonstrated that participants' beliefs about an attribute's importance or desirability can be successfully influenced using similar methodologies (e.g. Santioso, Kunda & Fong, 1990). I hypothesized that participants would feel more socially successful now when their prior failings seem distant rather than close. I expected that this effect would be stronger when participants regarded social success as an important predictor of academic and career success.

## Method

### Participants

Participants were 66 (36 female, 30 male) Psychology 101 students (M age = 20.3 years), who completed the past (high school) social success measure in mass testing and whose mean scores fell below the 50th percentile. Participants received either one experimental credit or \$8.00 for participating.

### Procedure

Participants with unfavourable past selves were randomly assigned to one of two Distance conditions (Recent vs. Distant) and to one of two Importance conditions (Important vs. Unimportant). Using the same procedure as in Study 1, participants first listed 10 life events to be later added to the time line. Next, they were reminded of their self-reported social success in high school. They were provided with their actual self-ratings, their average score, and their percentile ranking compared to others in their class.

Participants were told that the researcher was interested in linking her study of social success to past research in the area. They were asked to read the abstract of a psychology article which summarized the results of a past study on social success. In the Important condition, participants read that HIGH SOCIAL students (who reported being outgoing, extroverted, and popular) were more academically successful and were quicker to find employment in higher paying jobs than LOW SOCIAL students. In the Unimportant condition, participants read that HIGH and LOW SOCIAL students did not differ on any of these indicators.

After reading one version of the bogus abstract (Appendix B), participants were told that although the article provided statistical information about social success, it did not explain why it was so (important/ unimportant). Participants were asked to take a few minutes to list all of the reasons why social success was either important or unimportant for determining school and career success. This section was included in order to reinforce the manipulation of importance. Participants generated their own arguments to explain the

findings that they had been presented. At the end of the explanation task, participants were asked to indicate their own opinion about how important it was to be outgoing, extroverted, and popular in order to be successful academically and in one's career (0 = not important at all to 10 = very important).

Next, participants completed a questionnaire including the same self-appraisal measures used in Study 1. They first completed one version of the time line by adding the events they had listed previously. They then rated their current social success, estimated percentile ranking, satisfaction with social success, current mood, and expected future social success.

On the final page of the questionnaire, participants were asked to recall a recent, positive social experience and to describe what happened and how they felt. This page was included to boost participants' views of their social success, in case they had been temporarily induced to feeling badly about their social standing. Everyone was able to recall and describe a recent pleasant event. Finally, the purpose of the experiment was explained to participants and they were told about the possible negative impact that the time line may have had on their self-view. In addition, participants were informed about the importance manipulation. It was explained that the article they read was bogus. They were shown a copy of the contrasting article to emphasize the fact that the information should be disregarded.

## Results

### Manipulation checks

Time line distance. If the time line manipulation was effective, participants should situate their last term of high school closer to Today on the time line beginning at Age 4 (Recent) than on the time line beginning at Age 16 (Distant). I measured the distance in millimeters from the last term of high school to today. The last term of high school was marked as closer to Today on the Recent time line (adjusted  $M = 23.65$  mm) than in the Distant condition (adjusted  $M = 66.29$  mm),  $F(1, 58) = 75.95$ ,  $p < .001$ , controlling for actual months since high school.

Importance. Participants' evaluation of the importance of social success was assessed. A 2 (Importance: Important vs. Unimportant) X 2 (Distance condition: Recent vs. Distant) between-participants ANOVA indicated that participants in the Important condition judged social success to be more valuable than those in the Unimportant condition,  $M$ 's = 6.72, 5.06 respectively,  $F(1, 62) = 10.19, p < .002$ . No other effects were significant.

#### Past self-ratings

Participants were pre-selected on the basis of their low self-reported high school social success obtained in an earlier session. A 2 (Importance: Important vs. Unimportant) X 2 (Distance condition: Recent vs. Distant) between-participants ANOVA was conducted on self-reported past social success. None of the effects were significant, all  $F$ 's < 1,  $M = 4.65$ , indicating successful random assignment to Distance and Importance conditions.

#### Current self-ratings

I predicted that psychological distance would moderate the effect of past attributes on current self-appraisals more strongly for participants who were induced to think of social success as important. All participants reported fairly low past social success. For those who considered social success to be important, participants who completed the Distant time line should feel better about their current (and future) social success than those who completed the Recent version of the time line. This effect should be weakened or eliminated for those in the Unimportant condition. The means are reported in Table 2.

A 2 (Importance: Important vs. Unimportant) X 2 (Distance condition: Recent vs. Distant) between-participants ANOVA was conducted on each of the self-rating dependent measures. Main effects of Distance were significant or marginal in all analyses,  $F$ 's > 2.90,  $p$ 's < .09, indicating that overall, participants in the Distant condition felt better about their current selves than did those in the Recent condition. Main effects for Importance were non-significant,  $F$ 's < 1 for current and future self ratings and for satisfaction with social success, and marginal for current percentile rankings,  $F(1, 62) = 3.31, p < .08$ . The interaction between Distance and Importance did not reach significance for current or future self-ratings

or for percentile rankings,  $F_s < 1.07$ ,  $p_s > .31$ , but was significant for current satisfaction with social success,  $F(1, 62) = 4.67$ ,  $p < .04$ . The predicted interactions were ordinal and potentially hard to detect. The same pattern of means was expected in both importance conditions, but with a greater effect for Distance in the Important condition. I next examined the predicted Distance effects by conducting planned contrasts on the self-ratings of participants in the Important and in the Unimportant condition separately.

Important Condition. For participants who were induced to see social success as important, temporal distance significantly moderated the effect of a negative past on evaluations of the present self. Participants in the Distant condition evaluated themselves significantly more favourably than those in the Recent condition on current appraisals of social success,  $F(1, 62) = 5.75$ ,  $p < .018$  and satisfaction with social success,  $F(1, 62) = 11.36$ ,  $p < .002$ . The same effect approached significance for the percentile ranking of current social success,  $F(1, 62) = 2.70$ ,  $p < .10$ , and for future expectations of social success,  $F(1, 62) = 2.87$ ,  $p < .09$ . Finally, participants in the Distant condition were in a better mood than those in the Recent condition,  $F(1, 62) = 6.77$ ,  $p < .015$ .

Unimportant Condition. For participants who were induced to see social success as unimportant, temporal distance did not significantly moderate the effect of negative past on present self. The distance effect did not approach significance for any of the measures of current or future appraisal:  $F(1, 62) = 1.20$ ,  $p < .28$  for current social success,  $F < 1$  for satisfaction with social success and percentile rankings,  $F(1, 28) = 1.54$ ,  $p < .22$  for future social success, and  $F < 1$  for mood.



Table 2

Self-ratings by Distance Condition and Importance Condition

	Important		Unimportant	
	Recent (Age 4 to Today)	Distant (Age 16 to Today)	Recent (Age 4 to Today)	Distant (Age 16 to Today)
Current social success	5.24 <sub>a</sub> (0.76)	5.88 <sub>b</sub> (0.79)	5.30 <sub>c</sub> (0.70)	5.57 <sub>c</sub> (0.73)
Percentile	51.10 <sub>a*</sub> (13.98)	64.27 <sub>b*</sub> (26.73)	45.17 <sub>c</sub> (24.06)	50.47 <sub>c</sub> (20.71)
Satisfaction with social success	4.73 <sub>a</sub> (1.28)	6.00 <sub>b</sub> (1.00)	5.44 <sub>c</sub> (0.86)	5.61 <sub>c</sub> (0.98)
Future social success	5.70 <sub>a*</sub> (0.57)	6.10 <sub>b*</sub> (0.67)	5.64 <sub>c</sub> (0.62)	5.91 <sub>c</sub> (0.74)
Mood (positive minus negative)	1.11 <sub>a</sub> (0.89)	1.85 <sub>b</sub> (0.64)	1.49 <sub>c</sub> (0.89)	1.64 <sub>c</sub> (0.77)

Note: Different subscripts within a row indicate significant differences reported in planned comparisons. Asterisks next to subscripts indicate marginal differences. Standard deviations in parentheses.

Discussion

The results of Study 2 provide some support for predictions regarding the effects of temporal distance and importance. Participants in the Important condition revealed the predicted effect of Distance, replicating Study 1. People felt more socially successful when they were induced to feel far from their former shortcomings than when they were induced to feel close. For participants in the Unimportant condition, distance did not significantly moderate the impact of negative past selves on current self-appraisals, although means tended in the same

direction. This suggests that, as expected, the impact of temporal distance is magnified when an attribute is valued. However, because the Distance X Importance interactions did not reach significance for most of the self-rating items (with the exception of satisfaction with social success), conclusions remain tenuous.

In summary, Studies 1 and 2 demonstrated that people's earlier shortcomings can affect their current self-appraisals, especially for important attributes. Past failings that were experienced as recent continued to taint current standing, resulting in less favourable self-appraisals. Conversely, distant faults no longer threatened current standing. Instead, distant former flaws may have provided participants with an inferior (downward) temporal comparison that serves to make current self appear even more impressive. However, although it is clear that regarding past shortcomings as distant results in a more favourable current self-appraisals than regarding former flaws as recent, it cannot be determined from these studies whether distancing past flaws can actually have a positive impact (by providing a downward temporal comparison) or whether distancing simply makes these failings less harmful to current self-appraisals. Unfortunately, it is unclear whether there would be an appropriate control group that could answer this question. If participants were reminded of a negative past self but then not exposed to a distance manipulation, TSA theory would predict that participants would be motivated to distance the former failing. Thus, comparing self-ratings in the Distant and Control groups would not necessarily address the question of whether distancing former selves benefits current self-ratings relative to not distancing. In another potential Control, participants' self-ratings could be obtained without reminding them of the past. If people were not reminded of a past self at all, then the comparison would amount to testing an accessible past self against a less accessible one, rather than disentangling the question of distance. It may be that the precise impact of a distant former self cannot be determined using the current experimental approach.

### Study 3

Study 3 was designed to extend the findings of the first two studies. First, rather than using a temporal distance manipulation, I sought to alter people's experience of their past selves in another way. Second, I targeted a dimension on which people perceive decline, to enable a test of predictions regarding favourable past selves.

According to TSA theory, temporal distance is significant because, psychologically, former selves experienced as close or recent continue to "belong to" current self. In contrast, people feel less identified with distant selves. It is the psychological experience of former selves that underlies the impact of temporal distance.

Following this reasoning, then, it should be possible to influence the experience of past selves by means other than a direct manipulation of temporal distance. Besides temporal distance, what makes people feel that the attributes of one former self still "belong to them" whereas the attributes of another past self do not? William James addressed this question more than a century ago. According to James, (1890/1950), the current self consists of everything that evokes a "self-feeling." A "self-feeling" is, in the most straightforward sense, the way a person feels about his or her own experiences -- for example, a person may feel joy when succeeding, dejection after failure, and pain when abused. The self, then, consists of everything -- including family members, pets, possessions, and former selves -- that evokes such a "self-feeling." A woman may experience as much pain at the discovery that her child (or dog, or favorite painting) has suffered some abuse as she would if she had suffered it herself. These other entities would then be part of her "self." Likewise, a man might still shudder and turn red at the thought of a past embarrassment -- that former self continues to be experienced as part of his current self. However, if he "looks back and laughs" about an earlier humiliation, it is an indication that the "self-feeling" has dissipated -- that past self no longer belongs to the current self.

In summary, James (1890/1950) made the important point that people experience a sense of personal identity over time: "I am the same self that I was yesterday" (p. 332).

However, he suggests this sense of identity has more to do with “feeling” than with “fact” (p. 332). Once the feeling dissipates, the experience of unity between present and past self may disappear as well.

Following James, I propose that the emotions experienced about a past event may often determine its current applicability to self. If people experience the same emotions that they did at the time of a past episode, it will be experienced as part of “the same self” of today. Consequently, its positive and negative outcomes will reflect directly upon – or be “incorporated” in – the current self. If people do not re-experience the emotions of a former self, then they will not identify with that self and its outcomes should not reflect on current self-appraisals.<sup>9</sup>

In TSA theory, perceived temporal distance is one psychological factor that should affect whether and how the experiences of a past self are deemed to be relevant to the current self. In the current formulation, feelings of temporal distance and experience of former emotions are seen as two means to the same end (experience of former selves as part of, or separate from, current identity). They are expected to affect the experience of past self in theoretically equivalent ways, although they may be independent of each other.

In the third study, I developed a manipulation that was intended to capture James' (1890/1950) description of “self-feeling,” by reminding people of high school events and manipulating their emotional focus. Participants were either instructed to focus on the emotions they felt at the time (Recalled emotions condition) or the emotions they feel now (Current emotions condition). In addition to capturing James' notion of self-feeling, this manipulation may directly mirror real-life experiences of remembering past selves. For example, ruminations or reminiscences about past events sometimes evoke the emotions associated with those episodes. If ruminating or reminiscing about past events evokes a “self-

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<sup>9</sup> When I describe the re-experience of the “same” former emotions, I do not wish to imply that people are necessarily accurately recalling the emotions they felt at the time. People probably make judgments about whether their current emotions parallel their earlier ones. For example, if a person feels sad when recalling a funeral, she may infer that she is recalling her original emotions. Whether she is accurate or not, the judgment of “same emotions” should be sufficient to affect her experience of former self.

feeling," these past events may be experienced as reflecting on the current self. This linkage of the past to the present could account for some of the negative effects of ruminating about traumatic events (e.g., Holman & Silver, 1998; Nolen-Hoeksema & Morrow, 1991), as well as some of the possible benefits of reminiscing about former glories (e.g., Butler, 1980; Watt & Wong, 1990).

The experimental approach used in Study 3 is similar to one used by Strack, Schwarz, and Gschneidinger (1985). They, too, were interested in determining the impact of the past on current self (in particular, on current life satisfaction). They predicted that recent events would be judged as pertinent to current self and thus produce assimilation effects. Good events would increase life satisfaction and bad events would decrease it. However, distant events would be judged as irrelevant and produce contrast effects instead. Good and bad distant past events would act as standards of comparison against which to judge current satisfaction. When contrast occurs, distant positive events would produce lower current satisfaction than would distant negative events. However, they also hypothesized that in some cases, even distant events would elicit an emotional reaction, and that in these cases, the elicited mood would produce assimilation effects. For example, a positive past event might elicit a positive mood. Even though the former positive event is not judged as pertinent to current satisfaction, the mood produced by its memory will be experienced as information relevant to current life satisfaction. Strack et al. varied whether distant memories affected mood by manipulating the vividness with which distant memories were recalled. They demonstrated that those who experienced emotions generated by vivid memories showed assimilation effects; conversely, those who did not experience an altered mood showed contrast effects.

Note that the procedure and predictions offered by Strack, Schwarz, and Gschneidinger (1985) resemble those in the current Study 3. However, I propose a different process. Whereas Strack et al. (1985) would argue that the effect of distant events on current self operate through mood, I argue that people feel more like the "same self" when the past

event elicits the original emotions. Strack et al. did not suggest that distant selves are judged as any more pertinent to current satisfaction when they elicit emotion. Instead, they propose that mood affects satisfaction directly. In contrast, I expect that the emotion elicited won't necessarily affect current self directly, but rather it will provide information about the pertinence of earlier events for current self-appraisals. If people feel the same emotions that they did at the time of the episode, they should experience that past self as part of their current identity. As a result, individuals will evaluate the self of today more favourably after recalling former positive outcomes than after recalling negative outcomes.

In Study 3, I asked participants to recall high school events that would be likely to evoke both positive and negative emotions. This procedure allows me to test James' formulation against that of Strack, Schwarz and Gschneidinger (1985). By eliciting mixed emotions (positive and negative) to create empathy with past self, I ensure that mood cannot exert a single, congruent effect on current self-appraisals. However, if "self-feeling" causes people to include earlier events in their current self, then the valence of the emotion itself should be irrelevant. I will assess whether the effects of the past on the present are elicited through mood in two ways. First, participants will be asked to list the emotions they experience, and these will be coded for valence. I predict no difference in the valence of emotions between the Recalled and Current emotions conditions. Second, I will measure mood after the manipulation of emotion focus. I expect that mood will not differ by condition. If neither mood nor emotion listings differ for participants who focus on Current and Recalled emotions, then the model suggested by Strack et al.'s cannot provide a plausible alternative account of the predicted effects.

Because the first two studies established an effect of unfavourable but not of favourable past selves on current self-appraisals, Study 3 was also designed to investigate a case where favourable past selves should be expected to impact current self. According to TSA theory, positive former selves should have little impact when people are satisfied with their current standing on the attribute. Close past accomplishments will have little impact on

an already-favourable self-view; distant achievements will not be threatening if people believe that they have continued to succeed. However, TSA theory suggests that former achievements will have a greater influence when people are dissatisfied with their current standing -- for example, if a person perceived decline on an attribute.

In past research, we have found that young adults rarely perceive decline over time (Wilson & Ross, in press). One exception to this rule is undergraduates' self-perceptions of academic performance. Approximately 90% of the students canvassed in Introductory Psychology reported that their grades were higher in their final year of high school than they were in their current year of university (predominantly first year) (Wilson & Ross, 1999). Thus, in Study 3, I examined the influence of superior past grades on current perceptions of academic performance. I expected that when students were induced to re-experience their high school emotions, their former self would be included in current self. Superior high school grades were expected to boost students' assessments of current academic performance in this condition. In contrast, focusing on current emotions instead of past feelings may emphasize the difference between current and high school selves. In this condition, I predict that better past grades will not boost current self-appraisals, and instead may act as a standard of comparison against which current, lower grades appear even less impressive. Finally, participants in a control condition were briefly reminded of the same high school events but given no emotion-focus instructions. I expected that the self-ratings of control participants would fall between the two experimental conditions.

In addition to rating their current subjective performance, participants rated their expected future performance in their final undergraduate year, and their performance in high school. I expected a similar pattern of ratings for current and future selves. In addition, in this study I obtained a subjective rating of past performance after the emotion focus manipulation. This differs from prior studies, where participants were selected on their initial past self-ratings, but were not asked to re-evaluate their past selves after the manipulation. In the current study, participants were selected on the more objective measure of high school

grades. Thus, a separate subjective assessment of former grades might also be influenced by the manipulation. Specifically, I expected that both past and present self-ratings for participants in the Recalled emotions condition may be revised to reflect greater similarity between selves. Conversely, in the Current emotions condition, both past and present emotions may be adjusted in a way that reflects a greater overall discrepancy between past and present self.

It was assumed that academic performance would be generally quite important to university students. Importance was not experimentally altered in this study because I had some concerns about the ethics of devaluing grades, even temporarily.

## Method

### Participants

Participants were 77 Introductory Psychology students. Eighty-seven percent of students were in their first year of university, M age = 19.4 years. Participants received one experimental credit for participating.

### Procedure

Participants were recruited to participate in two short, unrelated studies. The experiment reported here was always the second study of the session, and the conditions of the reported study were counterbalanced with the conditions in the study that took place earlier in the session. Analyses revealed that participants' condition in the first study had no impact on their responses in the second study. The first study in each session will not be discussed further, except in one context. Participants were asked to report their mood in the first and the second studies. Analysis of mood will thus control for participants reports of their moods approximately 20 minutes earlier in the session.

Participants were told that the researchers were interested in people's memories and assessments of themselves at different points in time in their lives. They were randomly assigned to one of three Emotion Focus conditions. In the Recalled emotions condition,



participants were instructed to think back to their final year of high school and try to vividly put themselves back in that setting, trying to re-experience how they felt at the time. They were asked to think of two specific events: 1) studying for and writing final exams, and 2) receiving final grades, and to focus on and list only the feelings that they experienced at that time. Memories regarding exams and grades were expected to elicit negative emotions (e.g., stress, fatigue, disappointment) as well as positive ones (e.g., pride, confidence). I expected that by re-experiencing past emotions, participants would experience that past self as "part of" their current self.

In the Current emotions condition, participants were asked to think of the same two events, but to focus on how they felt about those memories now, from their current perspective, and how those emotions differed from how they felt at the time. They were asked to think about and list, for each of the two specific memories, "the feelings that they experienced now, not how they felt at the time." The third condition was a Control condition. Participants were asked to recall the same two high school memories as in the experimental conditions, but were not instructed to focus on emotion and not asked to write anything down.

After the manipulation, participants completed an adapted PANAS mood measure consisting of 13 positive and 11 negative items (Watson, Clark & Tellegen, 1988). Participants had completed an identical measure as part of the prior study. To alleviate any suspicion that may have arisen when participants encountered the same measure in two consecutive studies, participants were forewarned that they would see some measures repeated. It was explained that they would be asked to complete a standard measure assessing their feelings in each study. They were asked to simply complete each measure as they were feeling at that moment, without worrying about their previous responses.

Self-ratings. Next, participants completed the self-rating dependent measures. They were asked to rate themselves as students now on three attributes presented on a 7-point semantic-differential scales. These items measured their assessment of their current

performance as students (very poor student/very good student, very dissatisfied/very satisfied with grades, very incompetent/very competent). These items were intended to be fairly vague, allowing room for subjective interpretation. After rating their current selves, participants were asked to look ahead to their final undergraduate year and rate themselves on the same items as they expected to be at that point in time. Finally, they were asked to assess their standing on the same items in the past, during their final year of high school.<sup>10</sup>

Emotion coding. Participants in the two experimental conditions listed the emotions they experienced as part of the manipulation of emotion focus. A research assistant (who was blind to condition and hypotheses) coded these lists of emotions for valence.<sup>11</sup> The positive category included general pleasant feelings (e.g., happy, pleased) as well as positive achievement-related emotions (e.g., proud, surprised at my success). The negative category included general negative feelings (e.g., sad, lonely, stressed) and negative achievement-related words (e.g., disappointed, felt I could have done better). A second, independent rater coded the entire sample and inter-rater reliability was high for positive emotions ( $r(52) = .90$ ,  $p < .001$ ) and for negative emotions ( $r(52) = .91$ ,  $p < .001$ ). In addition, the number of statements written by each participant was assessed so that the overall amount written could be controlled for in the relevant analyses.

## Results

### Self-ratings

I examined participants' ratings of themselves as students in the present, in the future, and in high school. The three subjective performance items were aggregated for each time period (Cronbach's  $\alpha = .83$  for present, .84 for future, .74 for past). In order to test the prediction that participants in the Recalled emotions condition would show less discrepancy between past,

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<sup>10</sup> After subjective ratings, I also obtained participants' self-reported actual high school grades (final term) and expected overall grade in the current term. Although these grades could not be checked for accuracy, they were used to ensure that students reported higher grades in high school than they did currently. Actual grades were not affected by Emotion Focus condition,  $F(2, 74) = 1.7$ ,  $p < .19$ .

<sup>11</sup> Some participants listed emotions and related thoughts (e.g., "disappointed, I realized I should have worked harder"). Thoughts of this type were also coded for valence and included in the emotion listing.

current, and future grades than would the Current emotions condition. I conducted a 3 (Time: Past vs. Present vs. Future) X 3 (Emotion Focus condition: Recalled emotions vs. Current emotions vs. Control) Mixed ANOVA on participants' self-ratings.<sup>12</sup> A significant main effect of Time,  $F(1.8, 133) = 93.65, p < .001$ , ( $M$ 's = 5.95 past, 4.27 present, 5.60 future), was qualified by a significant Time X Emotion Focus condition interaction,  $F(3.6, 133) = 3.85, p < .007$ .<sup>13</sup> Means can be found in Table 3.

Table 3

Academic Self-ratings in the Past (High School), Present, and Future by Emotion Focus Condition

	Emotion Focus		
	Recalled emotions	Current emotions	Control
Past (high school)	5.89 <sub>a</sub> (1.01)	6.21 <sub>a</sub> (0.67)	5.77 <sub>a</sub> (1.31)
Present	4.44 <sub>a*</sub> (1.22)	3.86 <sub>b*</sub> (1.35)	4.52 <sub>a*</sub> (1.40)
Future	5.86 <sub>a</sub> (0.97)	5.41 <sub>b</sub> (0.92)	5.52 <sub>ab</sub> (1.04)

Note: Different subscripts within a row indicate significant differences. Asterisks indicate marginally significant differences. Standard deviations in parentheses. Higher numbers indicate more favourable self-ratings.

<sup>12</sup> Actual distance (number of years since high school) was examined as a covariate in these analyses. The covariate was not significant,  $F(1, 73) = 1.19, p < .28$ ; thus, results are reported without the covariate. In all subsequent analyses, relevant analyses include actual time whenever this covariate is significant. When the covariate is non-significant, it is excluded from analyses.

<sup>13</sup> In this analysis the assumption of sphericity is violated (Mauchly's  $W = .883$ , Chi square (2,  $N = 77$ ) = 9.06,  $p < .011$ ). Results are reported using the Greenhouse-Geisser correction for lack of sphericity.

Posthoc analyses indicated that past scores did not differ across conditions,  $t$ 's < 1.5,  $p$ 's > .14. In addition, the Recalled emotions condition did not differ from the Control condition at any time period ( $t$ 's < 1.2). The Current emotions condition differed marginally from the Control in present self ratings only,  $t(74) = 1.78$ ,  $p < .079$ . Planned contrasts between the two experimental conditions revealed that participants in the Recalled emotions condition rated their current selves marginally more favourably than did those in the Current emotions condition,  $t(74) = 1.57$ ,  $p < .06$ ,<sup>14</sup> and rated their future selves significantly more favourably,  $t(74) = 1.65$ ,  $p < .05$ . Thus it appears that participants felt better about their current and future academic selves when they re-experienced past school-related emotions than they did when they focused only on present emotions.

Another way of characterizing these results is by examining the difference between self-ratings at various time periods. I predicted that participants' current self-ratings would be more similar to their high school self-ratings when they focused on Recalled emotions. A comparison of the two experimental conditions (Recalled emotions, Current emotions) revealed that past and present self-ratings differed to a greater degree in the Current emotions condition than in the Recalled emotions condition,  $t(74) = 2.50$ ,  $p < .008$ ,  $M$  difference = 2.35, 1.45 respectively. In addition, past and future self-ratings were significantly more similar in the Recalled emotion condition ( $M$  difference = .03) than in the Current emotion condition ( $M$  difference = .79),  $t(50) = 3.11$ ,  $p < .003$ . It appears that those who re-experienced past emotions expected to regain their former academic success in the future: conversely, those who focused on current emotions did not expected to re-attain their previous degree of success.

### Mood

I predicted that the mood of participants in the Recalled emotion condition would not differ from those in the Current emotion condition, because participants in both conditions would

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<sup>14</sup> Planned contrasts for which we had specific directional predictions are reported as one-tailed t-tests. When directional predictions were not specified (i.e. contrasts with control group), two-tailed tests are reported.

have been focusing on a variety of mixed emotions. Participants' scores for positive and negative mood were calculated separately (Cronbach's  $\alpha$ 's = .91, .90 respectively). Scores were compared across the three conditions, controlling for the prior measure of mood taken approximately 20 minutes earlier. None of the conditions differed on the negative mood items,  $F(2, 71) < 1$ , (adjusted  $M$ 's = 1.73, 1.81, 1.68 respectively for Recalled emotions, Current emotions, and Control), but did differ on the positive mood items,  $F(2, 71) = 3.86$ ,  $p < .03$ , (adjusted  $M$ 's = 2.75, 2.62, 3.01 respectively for Recalled emotions, Current emotions, and Control). Further inspection of positive affect revealed that, as predicted, positive moods in the Recalled emotions and Current emotions conditions did not differ from each other,  $t(71) < 1$ . However, participants in the two experimental conditions reported significantly less positive affect than those in the Control condition,  $t(71) = 2.32$ ,  $p < .05$ . Perhaps Control participants were in better moods because they were not asked to consider their mixed emotions regarding high school events. More importantly, however, participants who recalled high school emotions were not in better moods than those who focused on their current emotions.

### Emotion coding

I predicted that participants in both experimental conditions would report mixed emotions, and that the mean number of positive and negative emotions listed in the two conditions would not differ. Control condition participants did not list emotions thus are not included in these analyses. As expected, participants in the Recalled and Current emotions conditions did not differ in the number of positive ( $M$ 's = 3.31, 3.12) or negative emotions listed ( $M$ 's = 2.31, 1.92),  $F$ 's  $< 1$ .

### Discussion

Results from this study were consistent with predictions. Relying on William James' (1890/1950) reasoning about what is experienced as current self, I altered participants' emotion focus in an effort to manipulate whether or not high school outcomes were experienced as "part of" or as distinct from current self. Students who recalled their high

school emotions appeared to continue to take some credit for former successes, as indicated by more favourable current and future academic self-ratings. These students also appeared to feel more similar to their earlier, better academic selves, as indicated by the smaller discrepancy between past and present self-ratings. In addition, participants in the Recalled emotion condition expected to re-attain their past academic success in their future studies, as indicated by the nearly identical past and future self-appraisals. Conversely, those who were induced to focus on Current emotions felt the greatest discrepancy from high school selves. Although these students expected to show some improvement in the future, they were more pessimistic about attaining the level of their former glories. They predicted that their performance in their final year of university would still be inferior to their final term of high school. Self-ratings in the Control group fell between the two experimental conditions, and only differed from the Current emotions condition on current self-ratings. This may indicate that participants spontaneously empathized with, or felt close to, their superior high school selves in the Control condition, leading them to more closely resemble those in the Recalled emotions condition. However, because the Control group differed from the Current emotions condition only marginally and only on the present ratings, any interpretation is tenuous.

The manipulation of emotion focus appears to be another way to induce participants to experience a past self as either part of current self, with that past self's outcomes directly reflecting on current self-appraisals, or to experience a past self as distant or distinct, almost like another person. Another alternative account for the findings, that the manipulation operates through its impact on mood (Strack et al., 1985) was not supported. The two experimental conditions did not differ on mood ratings or on the valence of listed emotions, suggesting that those in the Recalled emotions condition did not rate themselves more highly simply because they were basking in the pleasant emotions associated with the "good old days."

In sum, this study tests the TSA theory proposal that past selves may be experienced as included in, or separate from, current self. In previous research (e.g. Wilson & Ross, in

press) and in Studies 1 and 2, the experience of past self was altered by varying perceptions of temporal distance. The current study extends the model by altering the experience of former selves using a different approach.

## Study 4

Study 4 was conducted to replicate the basic finding from Study 3. In addition, because this study was conducted on a much larger sample, I planned to test the emotion focus manipulation on the subset of students who reported that their grades had improved since high school, as well as on the majority who reported decline. This study was conducted on a large sample of Introductory psychology students. Students were given a booklet of questionnaires that they could complete and return for partial course credit. The booklet was a compilation of short questionnaires submitted by a number of researchers. Because questionnaire space was limited in this shared booklet, I reduced the number of questions in my study to include only the essential elements. I eliminated the measure of mood, and focused only on participants' current subjective self-ratings (excluding their ratings of former and future selves).

For participants who reported a decline in grades, I expected to replicate the findings in Study 3. Those who recall their high school emotions should feel more satisfied with their current performance than those who focus on current emotions. However, for the sub-sample of participants who report that their grades have improved since high school (based on previous surveys, expected to be approximately 10% of the overall participant sample; Wilson & Ross, 1999), I hypothesized that the manipulation would have the reverse effect on participants' current academic satisfaction. Those who were induced to recall past emotions would incorporate their inferior past performance into their current self, thereby lowering current self-ratings. Conversely, participants who focused on their current emotions only would no longer be tainted by their worse past grades. Instead, their earlier academic shortcomings might act as a standard of comparison for current grades instead, resulting in greater appreciation of their current successes.



## Method

### Participants

Participants were 805 Introductory Psychology students (252 male, 553 female, M age = 19.4 years). Eighty-six percent of participants were in their first year of university. Of the 805 participants, 752 completed the relevant questionnaire in its entirety. Those who left some responses blank were excluded from this sample. Of the 752 participants who completed all measures, 651 reported some decline in their grades (ranging from a 35% to 0.8% decrease). The remaining 101 students reported either stable (n = 33) or improving grades (n = 68, ranging from a 1% to a 25% increase). Consistent with expectations, the percentage of students experiencing some decline in grades from high school to university was 87%, whereas 4% stayed the same and 9% improved.

### Procedure

A one-page questionnaire was included in a larger questionnaire package to be distributed to introductory psychology students. The three Emotion Focus conditions (Recalled emotions, Current emotions, Control) were randomized prior to distribution. Because I was particularly interested in comparisons between the two experimental conditions, I included a larger proportion of questionnaires for these two versions than for the Control condition. I expected that it might be difficult to collect enough questionnaires from people who reported improvement to be able to perform analyses. By increasing the proportion of experimental condition booklets distributed, I increased the chances of obtaining at least enough people in those two conditions, by possibly sacrificing the control group for this subset of students. Thus, although the number of collected questionnaires for the two experimental conditions were roughly equal (n = 340 Recalled emotions and n = 310 Current emotions), considerably fewer Control questionnaires (n = 102) were collected.

As in Study 4, participants were instructed to recall several academic events from their final year of high school (studying for exams, writing exams, receiving grades). Participants in the Recalled emotions condition focused on the emotions they experienced at

the time of those high school events (they were provided with a space to list the emotions they felt). Participants in the Current emotions condition focused on the emotions they felt now, when remembering those high school events, not their emotions at the time. Participants in the Control condition were reminded briefly of the same events, but given no emotion instructions.

Self-ratings. Participants were asked to indicate their overall expected average grade during the current term, and their overall average grade in their final year of high school. These self-reported grades were used to determine whether participants perceived improvement, decline, or stability since high school. Finally, participants indicated on a 7 point scale the extent to which they were satisfied with their current academic performance (1= not at all satisfied to 7 = very satisfied). This item is very similar to one of the questions in the three-item composite used in Study 3 (satisfied with grades) and served as the major dependent measure in the current study. The satisfaction measure assessed participants' subjective appraisals of their current academic performance. Because of questionnaire space limitations, subjective assessments of past and future grades were not obtained, nor was participants' mood.

Emotion coding. As in Study 3, a research assistant coded participants' open-ended emotion-listings for positive and negative emotions. A second, independent rater coded 20% of the sample and inter-rater reliability was high for positive emotions ( $r(130) = .95, p < .001$ ) and for negative emotions ( $r(130) = .95, p < .001$ ). The overall number of statements provided by each participants was also determined.

## Results

### Replication of Study 1: Declining Grades

To replicate Study 3, only participants who reported that their high school grades were superior to their expected average grade in their current term were included in this initial

analysis ( $n = 651$ ).<sup>15</sup> A one-way ANCOVA with current satisfaction with performance as the dependent measure and Emotion Focus (Recalled emotions, Current emotions, Control) as the between-participants factor. Actual time, measured in number of years since high school, was included as a covariate. The ANCOVA revealed a significant effect of condition,  $F(2, 647) = 4.52, p < .011$  (see Table 4). As predicted, participants in the Recalled emotions condition were significantly more satisfied than those in either the Current emotions condition,  $t(648) = 2.60, p < .01$ , or in the Control condition,  $t(648) = 2.29, p < .022$ . The Current emotions condition did not differ from the Control,  $t < 1$ . Thus, the main finding from Study 3 was replicated. In this case, however, the Control condition was more similar to the Current emotions condition, whereas in Study 3 the Control was more similar to the Recalled emotions condition.

Table 4

Participants whose Grades Decreased Since High School: Current Satisfaction with Performance by Emotion Focus Condition

	Emotion Focus		
	Recalled emotions	Current emotions	Control
Satisfaction	3.69 <sub>a</sub>	3.31 <sub>b</sub>	3.22 <sub>b</sub>
	(1.75)	(1.72)	(1.71)

Note: Means are adjusted for covariate (years since high school). Different subscripts indicate significant differences. Standard deviations are in parentheses.

<sup>15</sup> Mean self-reported actual grade in the past was 83.9%, whereas mean actual current grade was significantly lower at 72.8%.  $F(1, 660) = 1661.47, p < .001$ . Self-reported actual grades did not differ by condition in the past or the present.

### Increasing Grades

Next, I examined participants who claimed improvement in their grades since high school. Of the participants who reported that their grades improved since high school ( $n = 68$ ), 30 participants completed the Distant version and 33 completed the Recent version of the questionnaire. Because of the smaller proportion of Control questionnaires distributed, the number of available questionnaires in this cell ( $n = 5$ ) was too low to include in analyses. Thus, the satisfaction ratings of students with improving grades were examined in a one-way ANOVA with Emotion Focus (Recalled emotions, Current emotions) as the between-participants factor. Number of years since high school did not contribute significantly as a covariate and was eliminated in the analyses. The ANOVA revealed a significant effect for Focus,  $F(1, 61) = 4.98, p < .029$  (Table 5).<sup>16</sup> As predicted, those who recalled the emotions of an inferior past self felt less satisfied with their current standing than did those who focused on their current emotions.<sup>17</sup>

Table 5

#### Participants whose Grades Increased Since High School: Current Satisfaction with Performance by Emotion Focus Condition

	Emotion Focus		
	Recalled emotions	Current emotions	Control
Satisfaction	4.06 <sub>a</sub>	5.00 <sub>b</sub>	--
	(1.39)	(1.89)	

Note: Different subscripts indicate significant differences. Standard deviations in parentheses.

<sup>16</sup> Levene's test of equality of error variances is significant indicating unequal variances. However, the obtained F value remains significant even when evaluated using Box's test, which uses the most conservative critical value of F at (1,  $n-1$ ) degrees of freedom. The obtained F ( $F(1, 61) = 4.98$ ) exceeds the critical F (1, 30) of 4.17 at the .05 level of significance.

<sup>17</sup> Mean self-reported actual grade in the past was 74.9%, whereas mean actual current grade was significantly higher at 80.3 %,  $F(1, 62) = 89.83, p < .001$ . Self-reported actual grades did not differ by condition in the past or the present.

### Stable grades

The 33 participants who reported identical averages now and in high school were examined separately. Participants who indicated stability in their grades were unaffected by the manipulation,  $F(1, 27) = .031$ , ns (Table 6). This effect is consistent with TSA theory: if past is identical to present, then the inclusion or exclusion of that past self should not affect current satisfaction. However, I am reluctant to make a strong claim about a null result on a small subsection of this sample.

Table 6

### Participants whose Grades Remained Stable Since High School: Current Satisfaction with Performance by Emotion Focus Condition

	Emotion Focus		
	Recalled emotions	Current emotions	Control
Satisfaction	4.13 <sub>a</sub> (1.59)	4.23 <sub>a</sub> (1.64)	--

Note: Different subscripts indicate significant differences. Standard deviations in parentheses.

### Emotion coding

I predicted that participants in both experimental conditions would report mixed emotions, and that the mean number of positive and negative emotions listed in the two conditions would not differ. Control condition participants did not list emotions thus cannot be included in these analyses. I examined participants who reported declining, stable, and increasing grades in separate analyses. For each of the three groups of participants, the mean number of positive emotions did not differ across Emotion Focus condition, all  $F$ 's < 1, nor did the number of negative emotions listed, all  $F$ 's < 1.96,  $p$ 's < .16.

## Discussion

Study 4 replicated the basic finding of Study 3 for people with superior past academic selves. Although actual past and present grades did not differ across experimental conditions, participants induced to focus on their high school emotions felt more satisfied with their current standing than those who focused on current emotions. Again, James' (1890/1950) notion of "self-feeling" appears to be a satisfactory explanation for these effects.

In addition, in this study I was able to examine the effect of the emotion focus manipulation on participants who reported inferior past selves. Participants who recalled high school emotions were less satisfied with current grades than those who focused on current emotions. Following James (1890/1950), I reasoned that when past emotions are elicited, past self is experienced as "part of" current self; thus negative outcomes associated with former selves continue to taint current self-views. Focusing on former emotions appears to have an impact that is psychologically equivalent to that of feeling close to a past self. In contrast, focusing on current rather than past emotions may emphasize the distinction between current and past selves. According to James (1890/1950), a person who looks back on a former self and no longer feels its emotions experiences that past self almost as another person. As a result, past shortcomings should not threaten current self. Instead, an inferior past self may act as a standard of comparison against which current self seems more impressive. The effect of the Current emotions instruction is theoretically equivalent to the impact of feeling distant from past self.

In summary, in the final two studies I obtained evidence supporting James (1890/1950) and extended TSA theory by adding another route by which the experience of former selves can be altered. Empathizing with a superior past self gave participants a boost when assessing their current (and future, Study 3) performance in school. This manipulation appears to allow participants to take credit for past successes, fortifying their currently shaky self-view. In contrast, participants who focused on current emotions may have felt that their superior former grades were no longer relevant to them.

James (1890/1950) suggested that people may not only experience "self-feelings" in regard to former selves – this feeling can be elicited by former selves, by close others, even by valued possessions. All of the entities that evoke "self-feeling" should be included in the self. An interesting implication of this notion that has not yet been explored is that TSA predictions should apply to any entity that evokes a "self-feeling." People may be motivated to maintain their self-regard by revising the past of a spouse, child, or even a favorite car if these entities are experienced as part of the self.

#### General Discussion

In general, the results of four studies offer support for the predictions of temporal self-appraisal theory. Our remembered past selves can indeed have an influence on our current self-regard and well-being. Whether former selves are experienced as part of current identity or not appears to determine the direction of their impact on current self. I identified two means of altering the experience of past selves: varying feelings of temporal distance from former selves and modifying the degree to which they evoke a "self-feeling" (James, 1890/1950). Although TSA theory has thus far focused primarily on the effects of temporal distance (Ross & Wilson, 1999, 2000; Wilson & Ross, in press), the parallel effects of the two manipulations suggest that they are both factors that affect the psychological experience of former self.

In addition, I obtained some evidence that the personal importance of an attribute influences the intensity of a former self's impact on current self-appraisal. People appeared to be more strongly affected by the Distance manipulation in personally important domains, although conclusions are tentative as the predicted Importance by Distance interactions were not obtained. Planned contrasts revealed that people with socially unsuccessful past selves rated their current selves more favourably in the Distant than the Recent condition, but only when people were induced to view the attribute as important. Those who didn't care about social success were not significantly affected by the distance manipulation.

The importance findings should also be highlighted because of their role in distinguishing TSA theory's motivational predictions from Schwarz and Bless' (1992) purely cognitive inclusion/exclusion model. Although Schwarz and Bless' model can account for the current findings regarding temporal distance, it does not provide a good account of the influence of personal importance on people's evaluations. It is argued that the Distance effect is stronger for important attributes because these valued dimensions have greater implications for current self-worth. However, note that in the current research, many of the other TSA predictions that are assumed to reflect people's desire to maintain self-regard are actually constrained. For example, participants who were induced to feel close to unfavourable past selves evaluated their current selves relatively unfavourably. Typically, perceptions of distance would not be constrained, so people would be inclined to distance these unfavourable selves, thereby reducing any negative impact they might have on current self. However, it appears that people's motivation to maintain self-regard remains active in these studies. Although some participants' self-appraisals may have been lowered by the manipulations, they appeared to compensate for any ill effects on subsequent measures. For example, people who evaluated themselves as less socially successful in the present subsequently reduced the personal importance of this attribute. Devaluing a negative attribute should reduce its threat to self-regard.

One limitation to the current research is that it has not allowed a direct assessment of the precise impact of former selves that are experienced as separate from current self. I can state that relative to the experience of closeness or unity with former self, distant favourable selves will have a less positive impact and distant unfavourable selves will have a less negative effect on current appraisals. However, I cannot determine whether the effect of distance (or experiencing former self as distinct) actually produces a positive effect by providing people with a standard of comparison against which their current self appears more impressive. Smith, Diener and Wedell (1989) offer an illustrative example of the potential



benefits of a comparison with an inferior former self, taken from Ackroyd's (1984) biography of T.S. Eliot:

"T.S. Eliot's first marriage was long and uncommonly miserable, but in the last decade of his life he remarried happily. He felt rejuvenated, and all the more so because of the 'contrast with the past' (Ackroyd, 1984, p. 326)" (Smith, Diener & Wedell, 1989, p. 317).

Would Eliot have been as happy in his second marriage if he has not suffered through the first? This cannot be determined, either from the anecdote or from the current studies. In Studies 1 and 2, a control group was not included because it was unclear whether there was any control that would have allowed me to make the desired comparison. Control groups were included in Studies 3 and 4 to examine the effect of emotion focus versus no focus, but were again not very informative for determining the direction of the impact, as they yielded inconsistent results. To adequately assess this question in future research, I suggest that the favourability of former selves and the experience of unity or distance should both be experimentally manipulated (rather than studying existing self-reported past selves). Such research could answer the following question: All else being equal, does a distant negative self have a more favourable impact than an equally distant neutral or positive self? Future research can also determine the conditions under which distant selves will be simply excluded from a judgment and when they will be contrasted.

In Studies 1 and 2, I altered participants' experience of their former selves by changing perceptions of temporal distance. Participants who felt close to their unfavourable former selves rated themselves more negatively in the present than did those who were induced to feel distant. I suggest that participants who felt close to a negative past self experienced its flaws as part of their current identity. In contrast, those who felt distant no longer experienced a former self's shortcoming as "belonging" to them. Consequently it did not have a detrimental impact on their current appraisals.

Although the notion of distance from former selves has been defined in a variety of ways in past literature, there is some converging evidence that people attempt to distance, “cut off,” or temporally “bracket” unfavourable past selves (e.g. Baumeister, Dori & Hastings, 1998; Baumeister, Stillwell & Wotman, 1990). For example, Baumeister and his colleagues have found that people who told stories about past transgressions or threats to self-esteem attempt to verbally distance those events by emphasizing that they are in the past and have no continuing consequences. People did not show the same tendency when they described being transgressed against or experiencing boosts to their self-esteem. In the latter case, continued implications of past events for current self were emphasized.

Psychological distance has also been implicated in descriptions of coping with traumatic past events (Collins, Taylor & Skokan, 1990; Lomranz, Shmotkin, Zechovoy & Rosenberg, 1985). People who reported feeling more remote from major past trauma or who use distancing as a coping mechanism tended to experience more current well-being. However, some events may be so impactful that they will be virtually impossible to distance. Lomranz et al. (1985) found that even forty years after the end of World War II, many Holocaust survivors reported that they could not specify a psychological endpoint to that episode of their life – it was still experienced as part of their current existence. Given the results of the current research and converging past findings, it appears that psychological distance may be one important determinant of the impact of past negative or traumatic events on current self-views and well-being. Although one common belief is that past traumatic events are destined to have a continued negative impact on current self (DeGree & Snyder, 1985), there also exists the opposing view that former difficulties are all but required to build character and to ensure a greater appreciation of current circumstances. This perspective is reflected in a recent focus on the positive outcomes (real or perceived) of traumatic events (e.g., Affleck & Tennen, 1996; McFarland & Alvaro, in press; Tedeschi & Calhoun, 1996). The factors proposed by TSA theory as determinants of the impact of former selves may help

to provide a framework for understanding earlier, sometimes conflicting, findings regarding the impact of negative past events.

Studies 3 and 4 provide support for the prediction that altering people's experience of "self-feeling" would affect the impact of past selves on current self. In these studies, I found that re-experiencing emotions associated with a better past academic self led people to be more satisfied with current grades than did focusing on current emotions; presumably because their former, better performance was incorporated into their current self-view. Conversely, those who recalled the emotions of inferior former academic selves were less satisfied with their current performance. Presumably these participants included those past failings in their current self-views.

The manipulation used in Studies 3 and 4 also have implications for how past events might affect present well-being. There are conflicting views about the effects of focusing on past negative or traumatic events. Some people may ruminate about a negative past event, focusing on past emotions and their implications. Ruminating about negative events is typically detrimental to well-being (e.g., Holman & Silver, 1998; Nolen-Hoeksema & Morrow, 1991). Potentially, the ruminative focus on former negative emotions causes the event to continue to be experienced as part of the current self, thereby causing it to have a continued, direct impact on current well-being. However, focusing on negative past events is not always harmful. Pennebaker (e.g., 1997a; 1997b) has argued that writing about traumatic events can be beneficial to physical and emotional well-being. TSA theory and the current findings might help to determine when it may be beneficial to think about a negative past and when it may be harmful. Experiencing a trauma as part of current identity -- either by seeing it as recent or by reliving the emotions -- would have a detrimental impact on current self; conversely, regarding a traumatic event as distant or separate from current self may reduce its threat, and perhaps allow individuals to construe current benefits from their past trials.

Just as negative past events can have varying impacts on current well-being, recollections of positive past episodes can also yield mixed effects. I suggest that reminiscing

about former glories will benefit current self-regard only if the past self is experienced as “belonging” to current identity, by feeling close to the former self or re-experiencing its emotions. If the former glories feel distant or separate from self, the present may pale in comparison. This distinction may characterize the difference between the typically pleasant experience of reminiscing, and the often more melancholy, bittersweet nature of nostalgia (i.e., longing for a past that can never be regained). The current findings may also shed some light on the mixed results obtained by researchers examining reminiscing or life review as therapeutic interventions for older adults. Theorists have suggested that reminiscing can be beneficial to older individuals (e.g. Butler, 1980), but empirical findings reveal mixed results. For some seniors, reminiscing produces benefits, for others it is ineffective, and for some it is even detrimental (Lewis, 1971; Watt & Wong, 1990). TSA theory may provide a useful conceptual framework within which to understand these results, and might suggest interventions that might help to determine the impact of reminiscence on current self.

## Appendix A

### Manipulation Check Measures

The Preliminary Study testing the validity of the temporal distance manipulation demonstrated that spatial distance had the predicted impact on psychological distance. Manipulation check items measuring temporal distance were also included in Studies 1 and 2, but were placed near the end of the questionnaire. Because of their placement, I was concerned that the effect of the spatial distance manipulation would either "wear off" or be influenced by other psychological variables (like valence of past self) by the time they were completed. However, if the manipulation check were to have been presented earlier, participants may have become more suspicious about the purpose of study and may have been more influenced by demand characteristics. Because of the evidence in the preliminary study that the spatial time line manipulation had the expected effect on perceived temporal distance, the concern about suspicion outweighed any concern that the manipulation check measures would not reveal the predicted effects if placed at the end of the questionnaire.

In Studies 3 and 4, I attempted to manipulate the experience of past self as either included in, or separate from, current self by varying the emotion focus -- participants either recalled the emotions they had experienced during a number of high school events, or they focused on their current emotions. According to James (1890/1950), if the emotions of a former self are re-experienced when recollecting an episode, that past self is experienced as still belonging to current self. If a former episode ceases to evoke the original emotions, the former self ceases to be included in current identity. For these studies, the appropriate manipulation check was not obvious. Perceived temporal distance may be affected by the manipulation, but I do not propose that it is the cause of this manipulation's effect. If temporal distance were found to differ by condition it would remain unclear as to whether it caused the effect or was simply correlated with the underlying cause (i.e., "experience of past self as part of, or separate from, current identity"). In addition, if temporal distance was not

found to differ by condition, it could indicate that it is unrelated to the manipulation or it could be due to its placement in the questionnaire.

## Study 1

### Method

#### Manipulation check

Participants completed the same two-item manipulation check for perceived distance used in the preliminary study. Participants were asked to indicate how they currently felt about their past self of February of their last year in high school. The endpoints of the two items were "feel very close to/ very distant from my past self", and "my past self feels very near/ very far away. " The only difference was that, due to a slightly different questionnaire format, the length of the line was 196 mm rather than 156 mm. Again, higher numbers in millimeters indicated greater distance. Finally, they were asked to indicate the actual number of months that had passed since February of their last term of high school.

### Results and Discussion

#### Manipulation check

The two items tapping felt closeness/distance from past self were measured in millimeters (higher numbers indicate greater distance) and combined (Cronbach's  $\alpha = .93$ ). I conducted a 2 (Past Self: High vs. Low social success) X 2 (Distance condition: Recent vs. Distant) between-participants ANOVA, controlling for actual time in months. The Distance main effect did not approach significance,  $F < 1$ . The only significant effect was the Past Self main effect,  $F(1, 103) = 14.80$ ,  $p < .001$ . Participants who reported very successful past selves felt significantly closer to their high school selves (adjusted  $M = 83.27$  mm) than those with high school social failings (adjusted  $M = 112.91$  mm).

The finding that perceived distance is greater for those with socially unsuccessful past selves than with successful ones is consistent with past research demonstrating that people distance unfavourable selves and events more than favourable ones (Ross & Wilson, 2000).

Thus, although the measure of temporal distance did not successfully distinguish Distance conditions, it did appear to measure psychologically meaningful variance.

#### Correlations with perceived temporal distance

I examined whether participants' individual perceptions of temporal distance related to their current self-views in the High and Low social success conditions (regardless of Distance condition). To explore this possibility, I examined the partial correlations (controlling for actual time in months) between temporal distance and current self-view, separately for those with High and Low past social success. Because higher numbers indicate greater felt distance, and higher numbers indicate a more positive self-view, I predicted that distance would be positively correlated with current self-ratings for those with negative past selves (greater distance associated with more favourable self-view). However, for those with positive past selves, the correlation should either be non-significant or reversed. A non-significant correlation would indicate that perceived distance did not matter to those with high social success. A negative correlation would indicate that participants who felt closer to their successful past selves reported more positive current self-views, whereas those who felt distant would report more negative current selves. It is plausible that, although Distance condition had no impact on those with High past social success, individual differences in distance perceptions would reveal the latter pattern -- that distance and self-views were negatively related.

Correlations between felt distance and current social success were negative for participants with High past social success, and positive for those with Low past social success (Table 7). Of course, interpretation of these results is problematic because one cannot determine the causal direction of the relationship. It may be that greater perceived distance causes differences in self-view. However, a potentially more plausible interpretation given the order of the questionnaire items is that self-view (and discrepancy from past self-view) determine current perceptions of temporal distance. This may also suggest why the distance measure did not distinguish the Distance conditions in this study.

Table 7

Partial Correlations Controlling Actual Time

Correlations with	High past social success	Low past social success
<u>Temporal distance</u>		
Current social success	-.311*	.451**
Future social success	-.241+	.386**
Percentile current social	-.354*	.266+
Satisfied with social	-.309*	.170

+ &lt; .10

\* &lt; .05

\*\* &lt; .01

## Study 2

Manipulation check

The two items tapping felt closeness/distance from past self were measured in millimeters (higher numbers indicate greater distance) and combined (Cronbach's  $\alpha = .93$ ). I conducted a 2 (Importance: Important vs. Unimportant) X 2 (Distance condition: Recent vs. Distant) between-participants ANOVA, controlling for actual time in months. The Distance main effect did not approach significance,  $F < 1$ , nor did the Importance main effect or interaction,  $F$ 's < 1.

Correlations with perceived temporal distance

I examined partial correlations between self-appraisals and perceived distance, controlling for actual time in months. Because all participants had negative pasts, greater distance should be associated with higher current and future self-ratings. Perceived distance was related to two



of the four self-rating measures:  $r(63) = .22$ ,  $p < .09$  for current self,  $r(63) = .13$ ,  $p < .31$  for future self,  $r(63) = .25$ ,  $p < .04$  for percentile ranking, and  $r(63) = .11$ ,  $p < .36$  for satisfaction with social success.

### Study 3

#### Method

##### Manipulation check

Immediately after the emotion focus manipulation, participants were asked to rate their experience of their high school memories on two 7-point scales with the following endpoints: vivid/dull, and fuzzy/clear. Although these items do not directly measure the manipulation of emotion, it was expected that they might distinguish the conditions if memories of high school emotions caused the memory itself to feel more detailed. In addition, a single-item measure of perceived distance was included after the dependent measures. This item read: "Sometimes, points in time in the past feel very far away, while other times they feel very close, almost like yesterday. How far away in the past does your final year of high school FEEL to you?" Participants responded on an 11-point scale (0 = almost like yesterday to 10 = very distant past).

#### Results and Discussion

##### Manipulation check

Neither of the memory rating items significantly distinguished between the Emotion Focus conditions,  $F$ 's  $< 1$ . People in the Recalled emotions, Current emotions, and Control conditions all reported high school memories that were equally vivid and clear.

The single-item measure of perceived distance from high school was examined across the three Emotion Focus conditions. No significant differences were found between conditions,  $F < 1$ . Thus, although the manipulation had the predicted effects on academic self-ratings, it did not affect temporal distance. This null result is difficult to interpret -- either the manipulation of emotion focus is unrelated to perceived distance (as a cause or correlate), or its effect was not captured by this measure.

## Study 4

### Method

#### Manipulation check

In Study 4, measures were presented immediately after the manipulation. Participants are asked to place a mark on a line indicating how similar/different and how close/distant they feel from their past selves. Note that the distance question is the same as one used in Studies 1 and 2; the similarity question was an attempt to capture the related construct of perceived similarity or identification with former self. A third item was included to measure the degree to which participants reported re-experiencing the same emotions that they had felt in high school. Participants were asked to indicate on a seven point scale (1 = I feel the same emotions now to 7 = I feel very different emotions now) how their current emotions correspond to their feelings at the time of the high school episodes.

### Results and Discussion

#### Manipulation check

Each of the three manipulation check items were analyzed separately for participants who reported declining grades and for those who reported an increase. For participants whose grades declined, none of the manipulation checks were significant,  $F$ 's < 1.97,  $p$ 's > .14 (Table 8). Also, no significant effects were obtained for participants who reported stable grades,  $F$ 's < 1. For participants who reported grade improvement. The closeness and similarity measures did not reveal significant effects,  $F$ 's < 1. There was a significant effect on the item asking whether participants felt the same or different emotions than they felt in high school,  $F(1, 61) = 4.47, p < .039$ . Unexpectedly, participants who focused on their current emotions reported feeling more of the same emotions that they did at the time in high school.

I also compared ratings of perceived closeness, similarity, and similar emotions for participants who reported improving, declining, or stable grades, collapsing across Emotion Focus condition. Both perceived closeness and similarity ratings differed across the three

groups of students,  $F(2, 742) = 3.73, p < .03$ , and  $F(2, 757) = 4.46, p < .02$  respectively. Ratings of similar emotions did not differ across the three groups,  $F(2, 746) = 1.68, p < .19$ . Post-hoc comparisons for perceived closeness indicated that participants whose grades improved felt significantly more distant from their past selves ( $M = 91.80$ ) than did those who reported declining grades ( $M = 80.18$ ).<sup>18</sup> Neither of these groups differed significantly from the group of students who reported stable grades ( $M = 87.41$ ). The same pattern emerged for perceived similarity. Those with improving grades felt more different from former selves ( $M = 95.40$ ) than did those with declining grades ( $M = 81.41$ ), and neither differed significantly from those with stable grades ( $M = 81.81$ ).<sup>19</sup>

This finding is similar to that in Study 1, where participants reported feeling closer to socially successful high school selves than to unsuccessful ones. Similarly, participants in Study 4 reported feeling closer to, and more similar to, their superior academic selves (when they had since declined) than inferior selves (those who had since improved). This finding is particularly interesting in light of the actual degree of grade change experienced by these two groups -- those who declined reported on average an 11.1 % drop in their grade, whereas those who improved reported on average a 5.4% increase. Yet, the group who changed less reported feeling more distant, and more different.

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<sup>18</sup> Posthoc comparisons were conducted using Fisher's LSD. Significant differences are all above the  $p < .05$  level.

<sup>19</sup> Participants who reported that their grades improved differed marginally ( $p < .09$ ) from those with stable grades on perceived similarity judgments.

Table 8

Ratings of Felt Closeness, Similarity, and Similar Emotions by Condition and Grade Change

Declining grades	Focus		
	Recalled emotions	Current emotions	Control
Close/distant	78.53 (35.94)	81.85 (34.50)	80.28 (39.23)
Similar/different	80.46 (38.62)	82.70 (36.87)	80.49 (38.95)
Same/different emotions	4.03 (1.81)	3.80 (1.87)	4.16 (1.81)
<u>Increasing grades</u>			
Close/distant	92.28 (35.06)	88.88 (36.82)	--
Similar/different	91.71 (35.49)	96.25 (39.12)	--
Same/different emotions	4.59 (1.67)	3.69 (1.69)	--
<u>Stable grades</u>			
Close/distant	87.93 (27.20)	88.50 (36.52)	--
Similar/different	82.40 (28.16)	78.36 (39.16)	--
Same/different emotions	4.53 (1.96)	3.92 (2.25)	--

Note: Higher numbers mean greater perceived distance, more difference from past self, and more emotions that were different from in high school. Standard deviations in parentheses.

### Correlations between manipulation check items and satisfaction

I examined the correlation between the manipulation check items and current satisfaction with academic performance. For participants who reported better grades in high school, feeling more of the same emotions, feeling closer, or feeling more similar to their superior past self was associated with higher current satisfaction, indicated by negative correlations (Table 9). Thus, although none of the measures distinguished between focus conditions, they do appear to be related to satisfaction at an individual difference level. However, for those who reported improving or stable grades, the manipulation check items were not related to current satisfaction. Note that although participants with improving grade reported, on average, feeling fewer of their high school emotions in the Recalled emotions condition than they did in the Current emotions condition, this finding does not appear to be related to those participants' current academic satisfaction.

Table 9

### Partial Correlations Controlling Actual Time

Correlations with current satisfaction	Measure		
	Perceived distance	Perceived similarity	Same/different emotions
<u>Declining grades</u>			
Declining grades (n = 634)	-.178***	-.181***	-.128**
Improving grades (n = 60)	-.110	-.028	.108
Stable grades (n = 24)	.177	.045	.100

\*\* < .01

\*\*\* < .001

### Correlations between manipulation check items

The manipulation check measures were also correlated with each other. Perceived distance from past self was highly correlated with perceived difference from past self -- correlations ranged from  $r = .614$  to  $.821$  across the groups of students with declining, stable, and improving grades. Participants felt closer to similar selves and more distant from different past selves. Feeling the same emotions as in high school was significantly correlated with feeling similar to past self, with correlations ranging from  $r = .31$  to  $.42$ . Finally, feeling the same emotions as in high school was significantly associated with feeling closer to past self for students with declining ( $r(634) = .37, p < .001$ ) and improving ( $r(60) = .27, p < .04$ ) grades except in the "stable grades" condition ( $r(25) = .25, p < .23$ ). Thus, as expected, all three constructs were related, although perceived distance and perceived difference appeared to be more closely related to each other than they were to the measure of same/different emotions.

### General Discussion

Across all four studies, I had little success in distinguishing experimental conditions by means of my manipulation check measures. In the first two studies, this null results was somewhat expected due to the decision to place the measures near the end of the questionnaire. Because the preliminary study demonstrated that the time line manipulation had a significant effect on temporal distance, the null findings of these studies are not a major concern. The perceived distance items do, however, appear to be measuring some psychologically meaningful variance. Favourable past selves were seen as closer than unfavourable past selves (Study 1); and individual differences in perceived distance were associated with current self-appraisals. Participants with unfavourable past selves felt better about their current standing when high school felt distant; those with favourable past selves rated their current selves more highly when high school felt recent.

In Studies 3 and 4, no consistent patterns emerged in the included manipulation check items. However, although several items were included because I predicted that they might

distinguish between Emotion Focus conditions, it is unclear whether any of the items directly assessed the proposed process. Drawing from James (1890/1950), I suggested that participants who were induced to re-experience the emotions they felt in high school would regard that former high school self as still "part of" current self; whereas those who focused on current emotions would not. Questions about memory quality, perceived distance, perceived similarity, and whether or not the same emotions were felt did not reliably distinguish between conditions. Although these items could be expected to be correlated with the experience I attempted to manipulate, they do not capture the "experience of self" per se. In addition, because the manipulation checks across all four studies yielded unreliable results, it seems premature to conclude that these constructs (especially perceived distance and difference) are completely unrelated to the manipulation of emotion focus. It may be that a relation was not detected because of problems with the measures and their placement.

Results for the item asking participants the extent to which they felt the same or different emotions were somewhat more puzzling. It would be expected that those asked to recall their past emotions would report feeling more of the same emotions than would those who focused on current emotions. However, the means actually trend in the opposite direction, though only significantly for participants who reported improvement. It is surprising that the predicted effect was not obtained on this measure, as it maps quite directly onto the manipulation. Potentially, those who focused on their current emotions found themselves currently re-experiencing their high school feelings, even though they were not told to do so. However, it seems unlikely that both groups re-experienced their high school emotions to equal degrees, given the reliable differences in current self-ratings. Perhaps people's standards for re-experiencing high school emotions differed in the two conditions. In other words, perhaps those who were expected to recall high school emotions had a more stringent standard for this experience, whereas those who were asked to focus on current emotions were more lax in their assessment of what counted for such a feeling. However, I have no way to test this speculation.

It is possible that the manipulation affected people's experience of former selves as either part of, or separate from, current self without actually affecting any of its correlates. Unfortunately, the included measures appear not to capture this experience. In future research, it will be important to determine the effect of the Emotion Focus manipulation more precisely, by developing measures that more directly assess the phenomenon in question. For example, asking participants to indicate their agreement with items such as "I am basically the same person that I was in high school" and "Looking back on my high school self feels like looking back at another person" might capture the experience of past self as included in, or separate from, current identity. Another measure that might be effective would be one adapted from Aron, Aron and Smollan (1992). They suggest that the attributes of close others (e.g., romantic partners, close friends, etc.) can get incorporated into the self-concept, and measure the inclusion of "other" in the self by presenting people with several pairs of circles. The pairs of circles overlap to different degrees -- from almost completely superimposed, to completely separate from one another. People are asked to choose the pair that best represents the self in relation to a specified other. Conceptually, these circles could also be used to represent the degree to which past self is incorporated into current self.

It is difficult to draw conclusions from the set of manipulation checks presented above. Although the manipulation checks failed to distinguish experimental conditions, results from the four main dependent measures of self-appraisal were consistent with predictions.



## Appendix B

### Study 2

#### Manipulation of Importance: Important Condition

In this study, we are interested in exploring people's level of social success at different times in their life. We are also interested in relating it to past research in the area. Please read the following journal article abstract, which outlines the main findings from a recent study on the relation between social style and academic and career success. On the next page, you will be asked to answer some questions about this research, and why you think they obtained the results that they report.

Record 1 of 1 in PsycINFO 1995-2000

AN: 1998-18730-001

DT: Journal-Article

TI: Predicting academic and career success: An investigation of the role of social style.

AU: Trent, -Alicia-A.; Klimoski, -Michael-J.

SO: Journal-of-Applied-Psychology. 1998 Feb; Vol 102(1): 3-11.

IS: 0021-9010

PY: 1998

AB: A 6-year longitudinal study investigated the relation between social style and other life successes. University of Michigan students (N = 1706) completed the SSPI (Social Style Personality Inventory) in their first and fourth years of their undergraduate program. The SSPI identifies individuals who tend to be outgoing, extraverted, and highly popular (HIGH SOCIAL) and those who tend to be quiet, introverted, and less popular (LOW SOCIAL). It was predicted that HIGH SOCIAL students would be more successful, academically and in their careers, than LOW SOCIAL students. Academic success (including dropout rate) was tracked through the four-year period. Success at work and at graduate/professional school was tracked on a randomly selected subset of the sample (N = 659). Consistent with predictions, self-reported social style predicted drop-out rate, final (4<sup>th</sup>) year academic GPA, and number of academic honors received (incl. scholarships, awards, and other distinctions), such that more outgoing, extraverted, and popular (HIGH SOCIAL) students were more academically successful across the three indicators. Among students who applied to graduate or professional schools (N = 174), HIGH SOCIAL students were more frequently accepted at one of their top three choices and received better grades within their first year of graduate studies, even after accounting for undergraduate GPA. Among students who entered the job market (N = 485), HIGH SOCIAL students obtained their first job an average of 1.78 months sooner, and their starting salary was, on average, \$2134/year higher than LOW SOCIAL students, after controlling for GPA. (26 ref) ((c) 1998 APA/PsycINFO, all rights reserved)

## Manipulation of Importance: Unimportant Condition

In this study, we are interested in exploring people's level of social success at different times in their life. We are also interested in relating it to past research in the area. Please read the following journal article abstract, which outlines the main findings from a recent study on the relation between social style and academic and career success. On the next page, you will be asked to answer some questions about this research, and why you think they obtained the results that they report.

Record 1 of 1 in PsycINFO 1995-2000

AN: 1998-19730-001

DT: Journal-Article

TI: Predicting academic and career success: An investigation of the role of social style.

AU: Trent, -Alicia-A.; Klimoski, -Michael-J.

SO: Journal-of-Applied-Psychology. 1998 Feb; Vol 102(1): 3-11.

IS: 0021-9010

PY: 1998

AB: A 6-year longitudinal study investigated the relation between social style and other life successes. University of Michigan students (N = 1706) completed the SSPI (Social Style Personality Inventory) in their first and fourth years of their undergraduate program. The SSPI identifies individuals who tend to be outgoing, extraverted, and highly popular (HIGH SOCIAL) and those who tend to be quiet, introverted, and less popular (LOW SOCIAL). It was predicted that HIGH SOCIAL students would be more successful, academically and in their careers, than LOW SOCIAL students. Academic success (including dropout rate) was tracked through the four-year period. Success at work and at graduate/professional school was tracked on a randomly selected subset of the sample (N = 659). Contrary to predictions, self-reported social style did not predict drop-out rate, final (4<sup>th</sup>) year academic GPA, or number of academic honors received (incl. scholarships, awards, and other distinctions), thus introverted, and unpopular (LOW SOCIAL) students and extraverted, popular students (HIGH SOCIAL) were equally academically successful across the three indicators. Among students who applied to graduate or professional schools (N = 174), LOW and HIGH SOCIAL students were accepted at one of their top three choices with equal frequency and their grades within their first year of graduate studies did not differ after accounting for undergraduate GPA. Among students who entered the job market (N = 485), LOW and HIGH SOCIAL students did not differ in the time it took to obtain their first job (an average of 2.78 months), and their starting salary was not predicted by social style. Authors conclude that social style appears to be unimportant in determining academic or career success. (26 ref) ((c) 1998 APA/PsycINFO, all rights reserved)

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