Alicke, M., & Sedikides, C. (2009). Self-enhancement and self-protection: What they are and what they do. *European Review of Social Psychology* 20, 1-48.

## Self-Enhancement and Self-Protection:

What They Are and What They Do

Mark D. Alicke

Ohio University

**Constantine Sedikides** 

University of Southampton

#### Abstract

We define self-enhancement and self-protection as interests that individuals have in advancing one or more self-domains or defending against negative self-views. We review ways in which people pursue self-enhancement and self-protection, discuss the role of these motivational constructs in scientific explanations, argue for their importance in maintaining psychological and physical well-being, and consider the conditions in which they are likely to operate. At various points, we address the perennial "cognitionmotivation" debate. We argue that, despite the conceptual and practical difficulties that attend this distinction, the pervasiveness of the self-enhancement and self-protection motives makes it impossible and imprudent to ignore them in explaining self-related findings and theories.

# Self-Enhancement and Self-Protection:

#### What They Are and What They Do

People pursue pleasurable experiences and avoid unpleasant ones. This tenet comes in many flavours, including the law of effect, unconditioned reinforcement, the pleasure principle, biological readiness, minimization-mobilization, and minmax decision strategies. Whichever terminology one prefers, it is psychology's most fundamental and immutable behavioural law that people seek to maximize their positive experiences and minimize their negative ones.

This hedonism principle lies at the heart of motivational psychology. Throughout its history, culminating in the behavioural psychology that ruled the roost in the 1950s, psychologists have theorized about the conditions that instigate, maintain and energize behaviour. Motivational constructs are intervening variables (Reeve, 1997) designed to account for the fact that, with the same stimulus conditions, even animals low on the (increasingly controversial) phylogenetic scale can behave differently. The issue of response variability in the face of identical environmental conditions reaches its apex in accounting for the behaviour of humans, which is driven by diverse motives such as the needs for achievement (Atkinson & Raynor, 1974), social approval (Marlowe & Crowne, 1961), and stimulation (Sales, 1971).

The focus of this article is on a particular brand of motivated behaviour, namely, the tendency for people to exaggerate their virtues and to minimize their shortcomings, as well as to construe or remember events in a way that places their attributes in the most favourable light that is credible to oneself and others (Alicke & Govorun, 2005; Sedikides & Gregg, 2003, 2008). We refer to these motives as self-enhancement and self-protection. Although many non-motivational factors contribute to the tendency to view oneself more positively, or less negatively, than objective circumstances warrant, we concentrate on the purposive strategies that people pursue to explain or remember their decisions, actions, and characteristics in a way that maintains or advances their desired

self-views.

Despite the ubiquity of the self-enhancement and self-protection constructs, these terms have been treated loosely in the literature. Although demonstrations of selfenhancement and self-protection abound, it is unclear what the various behaviours and judgements that reflect these motives have in common, what they aim to accomplish, how and when they are deployed, and how they influence identity, psychological or physical health, as well as social relations. In this article, we define self-enhancement and self-protection as interests that people have in advancing one or more self-components or defending themselves against negative self-views. We explore the ways in which people pursue self-enhancement and self-protection, discuss the role of these motivational constructs in scientific explanations, argue for their importance, and consider their scope and functionality. At various points, we weigh in on the perennial "cognition-motivation" debate. We argue that, despite the practical difficulties that attend this distinction and notwithstanding some of the unfortunate ways in which it has been construed, the prevalence and importance of motivational phenomena makes it impossible and imprudent to legislate the distinction out of existence and to underestimate the role of self-enhancement and self-protection.

We begin with a short introduction to the emergence of self-enhancement and self-protection themes in social psychology. We then describe self-enhancement and selfprotection as instrumental in maintaining, promoting, or safeguarding pivotal interests, and consider the relation between these interests and the ways in which they are regulated. We next discuss the relation between self-enhancement and self-protection, and examine their standing as scientific constructs. We conclude by considering the relevance of self-enhancement and self-protection to psychological theories.

A Brief History of Self-Enhancement and Self-Protection Motives in Social Psychology The Emergence

Motivational constructs hearken back to social psychology's inception, beginning

with Triplett's (1897) groundbreaking study, which demonstrated the motivational advantages of riding bicycles in the presence of other people as opposed to solitary time trials. Although the importance of self-enhancement and self-protection motives was widely recognized—by William James (1890), for example, in his discussion of "selfseeking" which promoted vanity and pride, and later by Gordon Allport's (1937) in his view of ego-protection as "nature's eldest law"—the empirical study of these motives awaited a greater emphasis on theory development in social psychology.

The impetus for such theory was provided by Kurt Lewin and his students at the Massachusetts Institute of Technology following the Second World War. Lewin's field theory (1935, 1936), from which many prominent social-psychological research programs derived, was avowedly dynamic in nature. Lewin's example was the forerunner of influential motivational formulations such as Festinger's cognitive dissonance theory (1957) and Heider's (1958) balance theory. In the late 1950s, the needs to maintain cognitive consistency or balance were the foundation for the central motivational theories in social psychology.

By the late 1960s, dynamic motivational explanations, primarily in the guise of cognitive dissonance theory, were so ingrained in social psychology that they were virtually unchallenged. Cognitive dissonance theory assumed that post-decisional attitude change reduced the cognitive tension that attitude-discrepant behaviour evoked. The first volley in what came to be known as the "cognition-motivation" debate was fired by Bem (1967) in his self-perception reinterpretation of cognitive dissonance phenomena. Bem argued that people evaluate their internal states (e.g., beliefs, attitudes, traits, intentions) by reviewing their behaviour and the reinforcement conditions that control their actions. When the incentives for behaviour are insufficient to explain it, people assume that it must have issued from a positive attitude or intention. Thus, when a participant in a cognitive dissonance experiment performs a behaviour for a paltry reward, the participant assumes that he or she endorses the behaviour. No motivational assumptions about the

need to reduce cognitive tension are required.

After almost four decades of relevant research, it is fair to assert that the motivational assumptions of cognitive dissonance theory have been vindicated (Aronson, 1992; Cooper, 2007; Elliot & Devine, 1994). For its part, self-perception theory (Bem, 1972) became an integral component of the burgeoning attributional movement of the 1960s and 1970s. Bem's non-motivational perspective was consistent with earlier and later formulations which modeled social perception on a "person as scientist" metaphor (Heider, 1958; Kelley, 1967). The aptness of this metaphor was soon questioned, however, when initial tests of Kelley's attributional model by McArthur (1972) showed that people deviated substantially from the model's normative expectations, especially in their neglect of consensus information. More importantly, the dozens of studies that Weiner's (1972) attributional analysis of achievement motivation inspired revealed a tendency for actors to attribute their successful outcomes to internal factors such as ability and effort, and their unsuccessful outcomes to external factors such as bad luck and task difficulty. Despite thorny conceptual problems (e.g., ability, effort, task difficulty, and luck are neither independent nor easily classified as "internal" or "external"), as well as mixed empirical findings (Zuckerman, 1979), this research program, referred to as "attributional egotism" or the "self-serving bias," became the first major installment of self-enhancement/self-protection theories in social psychology. The Counterpoint

But no sooner was attributional egotism introduced than it was subjected to a fullfrontal assault by Miller and Ross (1975). These authors proposed various nonmotivational explanations for the self-serving bias, the most compelling being that people expect success more frequently than failure and make internal attributions for expected outcomes. Although this view was immediately challenged (Weary Bradley, 1978; Weary, 1979), and the weight of the subsequent evidence strongly supported a motivational interpretation of the self-serving bias (Campbell & Sedikides, 1999; Mezulis, Abramson, Hyde, & Hankin, 2004; Roese & Olson, 2007; Sedikides, Campbell, Elliot, & Reeder, 2002), expectancies provide an alternative to several self-enhancement and self-protection phenomena. We will return to the role of expectancies in self-enhancement and self-protection motives in subsequent sections.

Motivational constructs were briefly submerged with the ascendance of social cognition as the dominant perspective in social psychology in the late 1970s. The initial wave of social cognition research emphasized person memory. Many of the early studies in this area were based on associative network models and computer metaphors, and made no reference to goal-directed behaviour of any sort, whether motivational or non-motivational (Sedikides, Campbell, Reeder, Elliot, & Gregg, 2002). Given the prevalence of motivational assumptions and explanations throughout social psychology's history, it was only a matter of time until motivational processes insinuated their way back into the fold. Social cognition researchers began to distinguish between "cold" and "hot" cognitive processes, the latter referring to thoughts and judgements that were influenced by "affect." Interestingly, and perhaps ironically, the interplay between affective and cognitive responses has been one of the most researched topics in the whole social cognition enterprise (Forgas, 2001, 2006; Sedikides, 1995).

### A Resolution

Miller and Ross's (1975) landmark analysis of the self-serving bias, including their non-motivational interpretations of these effects, ignited a wave of attempts to reestablish motivational explanations on a more solid footing. As we noted above, these efforts were largely successful, but only after extensive evidence was amassed and considerable controversy had ensued. Frustration with distinguishing between motivational and non-motivational explanations led to questioning whether it was even possible to make this distinction effectively (Tetlock & Levi, 1982).

Insightful and influential articles on lay epistemology (Kruglanski, 1989) and on the interplay between motivational biases and cognitive processes (Kunda, 1990; Pyszczynski & Greenberg, 1987), showed how motivational and non-motivational processes could coexist in explaining various psychological phenomena and helped to overcome the tendency to treat cognitive and motivational processes as mutually exclusive. These articles elucidated motivated biases of various types by describing the cognitive processes by which they exerted their influence, and made clear that complete explanations of social behaviour required both of these elements.

In short, self-enhancement and self-protection motives are so fundamental to the way researchers view identity and social relations that it was, and is, virtually impossible to dispense with explanations that incorporate these motives. In fact, such explanations have waxed rather than waned since the days of the self-serving bias controversies. Although the caricatures that once prevailed of people as either coldly rational information processors or self-aggrandizing fools have been laid to rest, conceptual confusion about the meaning of self-enhancement and self-protection motives, and their proper sphere of explanation, abounds. Our goal is to provide a framework for these motives that will help to elucidate their meaning and highlight areas in which further empirical clarification is needed.

# Self-Enhancement and Self-Protection in Regulating Interests Primary and Secondary Control

We preface our analysis of self-enhancement and self-protection with reference to the distinction between primary and secondary control (Rothbaum, Weisz, & Snyder, 1982). Primary control refers to changing an objective state of affairs by taking effective or instrumental action, whereas secondary control substitutes psychological mechanisms that control events by altering how one perceives or interprets them. Self-enhancement and self-protection are straightforward and non-controversial when considered from the standpoint of primary control. In this capacity, self-enhancement entails instrumental action designed to promote oneself and one's prospects, whereas successful selfprotective measures obviate falling below one's standards. It is with regard to secondary control that issues become more exciting and contentious. When people cannot promote themselves objectively, they have recourse to construal mechanisms such as reinterpreting the meaning of social or task feedback, misremembering or reconstructing events in a self-serving way, and making excuses for poor behaviour or performance. Primary and secondary control efforts are often related, such as when a person relies on the amount of effort he has exerted toward a goal (primary control) as a means to exaggerate how close he has come to accomplishing it (secondary control). We concentrate in this article primarily on such secondary control processes, although we contrast secondary with primary control at various junctures. *Psychological Needs as Interests* 

Our analysis of self-enhancement and self-protection relies on the concept of interests as they have been discussed in jurisprudence (Feinberg, 1984) and social and political philosophy (Nozick, 1974; Rawls, 1971). Whereas the law is perforce concerned with ways in which interests can be harmed, we extend the analysis of interests to include benefits (i.e., ways in which interests can be advanced) as well as harms (i.e., ways in which interests can be regressed or thwarted). We focus exclusively on psychological interests to explicate the varieties and complexities of self-enhancement and self-protection strivings.

Psychological interests include security/love, social status, and popularity, as well as the possession of high skill levels and capacities (e.g., intelligence, athleticism, musicality). To say that people have interests is to assume that they will exert primary or secondary control to advance or protect them. A person with an interest in being popular, for example, will either work to increase her or his popularity (primary control) or engage in mental machinations such as misperceiving or misremembering events, or construing comparisons with other people, in a way that achieves the same goal (secondary control). We assume that people resort to secondary control when primary control efforts fail, when they lack confidence that such efforts will succeed, or when such efforts are too onerous to sustain.

Interests can be relatively specific (e.g., to perform well on a test) or general (e.g., to be a good student). Interests entail purely private concerns (e.g., to meet one's personal standards) as well as concerns with public perceptions. Interests also extend to close others and to ingroups, whose life circumstances or outcomes influence one's psychological or physical health. Finally, interests can be either positive or negative. The former include things that people wish to possess or attain (corresponding to approach motives), whereas the latter include things that people wish to circumvent or shun (corresponding to avoidance motives). The same interest can be cast in either a positive frame (e.g., a desire to be viewed as assertive) or a negative frame (e.g., a desire to avoid being seen as unassertive).

#### Hierarchical Network of Interests

Interests can be classified in terms of five levels. Each level from the bottom-up represents an increasing degree of abstraction or generality. Global self-esteem resides at the top of the hierarchy: All self-enhancement and self-protection processes are geared toward maintaining the most favourable conception of self and positive affect that reality constraints will comfortably allow.

The next highest level includes such interests as security/love, social status, power/effectance, and psychological or physical health. These are "ulterior" interests that virtually all people share to some degree. Thus, global self-esteem, and ulterior interests, are relevant to virtually all experiences that bear on the well-being of the self.

The mid level features such interests as to be popular, respected, affluent, possess high skill levels, and have successful relationships. These subordinate interests are activated in specific domains of experience. An interest in being popular is evoked, for example, in social situations, whereas an interest in financial gain is activated in situations that are relevant to wealth accumulation. The lower level entails event-specific interests. These subserve one or more superordinate interests and are aroused by individual events or experiences. Criticism from a friend, for example, is relevant to immediate interests such as to avoid a misunderstanding or to resolve a dispute. Explaining oneself to the friend may serve higher-order interests such as to maintain one's relationships and reputation, which in turn serves the ulterior interest of psychological health.

Interests comprise a hierarchical network. For example, a low-level interest (e.g., to perform well on a class presentation) might subserve higher-level interests (e.g., to impress a dating partner, to be competitive for a PhD application, to please one's parents). Figure 1 depicts a hypothetical network of interests. Interest networks are connected both horizontally and vertically. At the lowest level of the vertical hierarchy are specific behavioural events or outcomes such as receiving praise from a colleague, purchasing a new car, or obtaining a salary increase. These are the ordinary or everyday concerns about which people spend most of their time thinking and toward which they direct primary control efforts. In the example of Figure 1, the behavioural event is a person fired from his job.

The first level of abstraction in this example pertains to interests in self-views, only some of which are relevant to the event of being fired. The man's perception of himself as a good spouse and a successful stockbroker are both affected by the loss of his job, whereas his views of himself as a good parent and a competent guitar player are unaffected. At the next level, both his interest in maintaining successful relationships and in being financially secure are threatened. In this example, each of his ulterior interests (security, social status, effectance, and physical health) is influenced by the loss of his job.

Vertical and horizontal connections can be either facilitative or inhibitory. In the case of a facilitative connection, an event that serves one interest simultaneously benefits another, such as when the receipt of a prestigious award serves the interests of public recognition and financial gain. Facilitative connections among interests aid self-

enhancement by conferring benefits in multiple self-concept domains. Inhibitory connections, on the other hand, hinder self-enhancement, because the value conferred by satisfying one interest impedes the progress of a competing one. For example, receiving a desired promotion, which fulfills one's financial interests, might interfere with an interest in a harmonious family life.

A diversified interest network aids in the pursuit of self-enhancement and selfprotection. People whose interests are grouped into a small number of categories have fewer options when events conspire to threaten their cherished self-views (Linville, 1985). For example, a person whose self-concept is predominantly based on an interest in material wealth might possess insufficient resources to combat an extreme financial setback. When interests are diversified, however, a setback in one category can be at least partially offset by emphasizing or altering a self-view in another. Thus, a person who experiences a severe financial setback may compensate by highlighting or elevating his perceptions of himself as a good husband and father.

The strength of associations among horizontally-oriented and vertically-oriented interests in the hierarchy can foster or impede self-enhancement and self-protection, depending on whether an experience is positive or negative and the associations are facilitative or inhibitory. When an event reflects favourably on a particular interest, facilitative vertical connections translate the event into positive, higher-level characteristics. For example, successfully learning to play a piece of music on the guitar may lead to feelings of musical competence, and then to more general conceptions of being a competent person. Inhibitory connections primarily serve self-protection functions; in particular, to avoid the spread of negative events throughout the self-system. However, when strong inhibitory connections are formed, they can have the unwanted effect of preventing the spread of positive experiences. For example, a person who habitually and assiduously avoids translating negative social feedback from peers into higher-level personality characteristics may become so practiced at inhibiting these behaviour-trait connections that she or he fails to do so for positive feedback.

Continuing the previous example for horizontal connections, the same feelings of musical competence may lead to feeling skilled at other artistic endeavours and thereby advance interests in those related areas. We refer to such facilitative connections as "horizontal spread." Again, inhibitory connections prevent the spread of positive experiences. People with highly compartmentalized self-systems (McConnell & Strain, 2007; Showers, 1992) may routinely confine their experiences to one interest area and therefore fail to experience the benefits of relating positive experiences to other interest categories.

When it comes to negative events, facilitative vertical and horizontal connections are detrimental. Failing an important exam may make a person feel bad at the material the course covers and then spill over into more general feelings of incompetence (vertical direction). Similarly, feeling incompetent in the material a course covers can lead to feelings of incompetence in other areas (horizontal direction). One of the main functions of self-protection processes is to prevent these negative consequences of vertical and horizontal connections in interest networks. As noted above, inhibitory connections are enlisted in this service such that a negative event in one interest area shuts down related areas to which the implications of the negative event might apply. For example, receiving negative feedback about one's loyalty from a friend could easily affect interests in related social categories such as trustworthiness or kindness (horizontal connections) as well as higher-level interests in being a popular or even a good person (vertical connections). Inhibitory connections are an important aspect of mental health in that they confine negative experiences to the interest categories to which they most directly pertain. *Interest Levels* 

As Figure 2 depicts, we conceive each subordinate interest to contain an *aspiration level*, which represents an individual's ideal level of functioning, a *perceived level*, which represents where the person believes that he or she currently stands with

respect to that interest, an *objective level*, which represents where the person actually stands, and a *tolerance level*, below which the person is motivated to engage primary or secondary control mechanisms to advance back toward the aspiration point.

Interests can be advanced, regressed, reversed, or maintained at their current level by specific events and outcomes (Alicke, LoSchiavo, Zerbst, & Zhang, 1997). For example, a person with an interest in viewing himself as a chess expert can have this interest advanced by winning a chess tournament (primary control). Alternatively, the same person might advance his interest by playing an inferior opponent and exaggerating the opponent's ability (secondary control). Examples of declining interests abound: in essence, any form of task or social feedback that threatens to move a perceived characteristic away from the aspiration point represents a regression in an interest level.

An example of an interest reversal is represented by a husband who, while advancing his interest in being a good parent, receives criticism from his wife. In this example, the husband experiences a reversal of an interest that had been advancing. Going in the opposite direction, a student whose interest in seeing herself as a good mathematician had been declining due to poor course performance may have this interest level reversed by a high math score on a national standardized examination. Interests can also change in their rate of acceleration toward or away from the aspiration point. However, if interests advance too slowly, or in a way that suggests that the aspiration level is unattainable, secondary control may be engaged even when primary control efforts are ostensibly successful. A student who falls behind his peers due to failure on several medical school exams may conclude that the medical profession is rather dull and tedious and thus not worth pursuing (e.g., the *sour grapes effect*; Kay, Jimenez, & Jost, 2002; Wilson, Wheatley, Kurtz, Dunn, & Gilbert, 2004).

The distance between the perceived level of a characteristic and the aspiration level, along with the centrality of the characteristic, determine the need for selfenhancement. In general, primary and secondary control are engaged more vigorously for characteristics that are farther from the aspiration point. The strength of such processes is increased for central (as opposed to peripheral) characteristics, that is, for characteristics on which people stake their self-esteem (Crocker & Wolfe, 2001).

The distance between the perceived level and the objective level defines the instability of self-conceptions. A moral hypocrite, for example, who proclaims exemplary behavioural standards but whose actual behaviour contradicts these proclamations, faces an uphill battle to maintain his illusions. Whereas discrepancies between perceived and aspired levels pose quandaries about how to attain one's goals, large discrepancies between perceived and objective levels threaten one's ability to test reality. Maintaining a desired belief in the face of objective disconfirmation taxes self-enhancement or self-protection efforts, perhaps because it impairs resources used for self-control (Vohs, Baumeister, & Ciarocco, 2005).

#### Self-Enhancement, Self-Protection, and Interest Networks

Within this framework of increasing and declining interests, self-enhancement can be viewed as a self-maintenance mechanism that strives to preserve one's perceived level of functioning or to move it closer to the aspiration level. This function can be achieved either through primary or secondary control processes. With all other things being equal, primary control is preferable to secondary control. The need for secondary control arises, however, when people cannot approximate their aspiration levels by primary control alone. Nevertheless, reasonable progress toward the aspiration level via primary control makes secondary control processes easier to engage and defend. A person who is actually becoming more considerate, for example, can exaggerate his or her standing on this trait more easily than one who is making no discernible progress toward the aspired level.

Secondary control includes construal and memory mechanisms that are designed to exaggerate the favourability of an event or characteristic, or to minimize its negativity. When these mechanisms fail, another possibility is to reduce the aspiration level so that a lower level of functioning on the characteristic becomes tolerable. The constructs in which people are chronically invested (i.e., in which they have important interests) typically represent compromises between their objective level of functioning and their aspirations. The primary way that self-enhancement maintains these superordinate interests is by defining self-constructs at an abstract level (Liberman, Trope, & Stephan, 2007). In this way, self-enhancement strivings are protected against objectively poor behavioural outcomes by the difficulty of contradicting abstract self-conceptions. Even if a student performs poorly in her university degree, her perception of herself as an "intelligent" person remains unaffected due to the absence of critical tests for the trait "intelligent." When behavioural adjustments occur, they represent relatively minor tweaks to the data such as according undue weight to positive outcomes that are non-diagnostic of intelligence and according too little weight to highly diagnostic information. Even lowering the aspiration level is often a subtle adjustment rather than blatant self-deception.

Self-enhancement is also served by factoring projected selves (Markus & Nurius, 1986) into self-definitional equations. In this way, people may reason that, while they do not presently exhibit much ambition, they will undoubtedly be prodigious in the future. Along these same lines, people harbour fantasies and aspirations that are hidden from others and that may also contribute to their elevated self-conceptions (Klinger, 1990; Oettingen, 1996; Sedikides, Rudich, Gregg, Kumashiro, & Rusbult, 2004). Finally, selecting situations that encourage success and discourage failure (e.g., the "hometown hero" who never ventures into more competitive waters), or selecting peers who provide predominantly positive feedback, are other common ways of satisfying superordinate or subordinate interests and furthering self-enhancement. In general, therefore, the work that self-enhancement does on experiential data is routine and undramatic. Furthermore, when interests are objectively advanced or maintained at an acceptable level, there is very little need to invoke secondary control processes.

Self-protection is, by contrast, an emergency system that operates when interests

are threatened by a possible decline in a self-component below the tolerance point. Put simply, self-protection is a form of damage control. The difference between selfenhancement and self-protection can be likened to the difference between the parasympathetic and sympathetic functions of the autonomic nervous system. The parasympathetic system is responsible for regulating ordinary processes of respiration and digestion. Analogously, self-enhancement regulates the superordinate needs to feel good and to view oneself positively by making slight adjustments in response to environmental disturbances. The sympathetic component of the autonomic system, on the other hand, is an arousal system that marshals the body's defenses to counteract environmental challenges or threats. Likewise, self-protective processes are evoked when environmental feedback threatens to reduce an interest below the tolerance point.

Self-protection can also be evoked by a failure of interests to advance sufficiently. A common self-protective mechanism is to assume that unacceptable present circumstances will improve in the future. People who are in financial difficulty, for example, might dream of winning the lottery and deflect current difficulties with the vague assumption of future riches. Mid-life identity crises occur, in part, due to the recognition that the "tomorrow" so long awaited-for has arrived with no discernible advancement in interests. Self-protective mechanisms, therefore, are more elaborate, dramatic, and difficult to maintain than self-enhancing ones. Consistent with this assumption, the tendency to view one's traits more favourably than others' (representing high-level interests) is greater when considering negative characteristics than when considering positive ones (Alicke & Govorun, 2005).

Whereas self-enhancement strategies typically represent only a minor discrepancy between perceived and objective self-components, self-protective processes sometimes require considerable distortion in order to raise the self back toward the aspiration point, or to prevent further slippage. When an aspiring poet, for example, is rejected by virtually every publication outlet, her continued belief in her superior skill may require extreme measures such as denigrating the whole enterprise of modern poetry. Reality constraints make such self-protective processes difficult to maintain. The success of other poets, the relative transparency of the system, and the continued rejection of one's own works necessitates unusual creativity to maintain the desired self-conception.

#### Relation between Self-Enhancement and Self-Protection

Although self-enhancement and self-protection are sometimes treated as polar ends of a single dimension, our analysis of interests, and empirical evidence as well, suggests that they should be treated separately (Elliot & Mapes, 2005; Sedikides & Gregg, 2008). In our account, self-enhancement is a routine function that operates to maintain interests in reasonable and defensible proximity to their aspiration levels. Selfprotective mechanisms are evoked when an event, or series of events, threatens to decline an interest below the tolerance level, or when high-level interests fail to advance as anticipated.

Explicating the relation between self-enhancement and self-protection is complicated by the fact that some psychological theories and phenomena primarily involve one of these motives, some entail both, and in some instances, self-protective efforts further self-enhancement goals (Sedikides & Green, in press; Sedikides & Luke, 2007; Sedikides & Strube, 1997). For example, individuals are relatively open to negative feedback (Kumashiro & Sedikides, 2005) or remember it well (Green, Sedikides, Pinter, & Van Tongeren, in press) when such openness or efficient memory enables future task performance or enable good interpersonal relationships. In this case, immediate selfprotection concerns relax to make room for long-term self-enhancement gains. In practice, it is sometimes difficult to distinguish unequivocally among these possibilities due to the absence of baseline measures to indicate perceived and objective levels of functioning with regard to an interest, or to indicate assessments of aspiration and tolerance levels. It is possible, however, to characterize approximately the relevant literature according to whether a phenomenon is most likely to involve self-enhancement, self-protection, or both.

Examples of self-enhancement primarily entail mid-level or high-level interests such as thinking about oneself in positive global trait terms (e.g., power/effectance). A prominent case is the better-than-average effect: people rate themselves more favourably than an average peer on most trait dimensions (Alicke, 1985; Alicke, Klotz, Breitenbecher, Yurak, & Vredenburg, 1995; Sedikides, Gaertner, & Toguchi, 2003). Although various non-motivational mechanisms contribute to the better-than-average effect (Chambers & Windschitl, 2004; Heine & Hamamura, 2007), the effect is at least partly due to the desire to maintain a favourable self view (Alicke & Govorun, 2005; Alicke, Vredenburg, Hiatt, & Govorun, 2001; Gaertner, Sedikides, & Chang, 2008). Indeed, people do truly believe they are above average (Williams & Gilovich, 2008).

Self-protection has been aroused in legions of social-psychological studies in which important interests (such as to be intelligent) are threatened in order to assess the effects on various aspects of behaviour or judgement (Beauregard & Dunning, 1998; Buckingham & Alicke, 2002; Green & Sedikides, 2004; Guenther & Alicke, 2008). For the most part, the behavioural and attributional strategies that emerge serve to avoid decrements in self-views rather than to promote one's standing on a dimension (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001). Students who are told that they are in the 20<sup>th</sup> percentile on a novel intelligence test, for example, are more likely to find ways to avoid reducing their beliefs in their intelligence than they are to find ways of increasing them.

The self-serving bias (Campbell & Sedikides, 1999; Mezulis et al., 2004) reflects both self-enhancement and self-protection. This phenomenon entails taking more credit than one deserves for positive outcomes (i.e., self-enhancement), as well as failing to accept adequate responsibility for negative outcomes (i.e., self-protection). Striving to enhance the value of positive outcomes serves self-enhancement, whereas striving to deflect blame for negative outcomes serves self-protection, assuming that the negative outcome or feedback threatens to reduce an interest below tolerance.

Instances in which self-protective mechanisms wind up serving self-enhancement have long been recognized by psychologists, most notably in the guise of the Freudian defense mechanisms (A. Freud, 1936/1946; S. Freud, 1926/1961). In current social psychology, Terror-Management Theory (TMT) provides a cogent example. According to TMT, people marshal various resources to deflect anxiety-arousing thoughts about their mortality. In this respect, TMT falls squarely into the self-protection camp. However, many of the terror management strategies that people deploy have selfenhancing consequences, such as bolstering self-esteem, fostering interpersonal relationships, promoting ingroup solidarity, supporting cultural institutions, and even motivating the creation of enduring artworks (Arndt, Routledge, Greenberg, & Sheldon, 2005; Castano, Yzerbyt, & Paladino, 2004; Mikulincer, Florian, & Hirschberger, 2003). In fact, in its most recent incarnations (Landau, Greenberg, Solomon, Pyszczynski, & Martens, 2006; Pyszczynski, Greenberg, & Goldenberg, 2003; Pyszczynski, Greenberg, Solomon, Arndt, & Schimel, 2004), TMT focuses as much on the positive or selfenhancing implications of existential anxiety as on its harmful or destructive consequences.

In this regard, protection against existential anxiety is similar to many of the Freudian defense mechanisms, which are also purported to have self-enhancing consequences. Reaction formation, for example, presumably enables people with moral shortcomings to view themselves as paragons of morality (Baumeister, Dale, & Sommer, 1998). Similarly, projection can create an illusion of superiority by transferring a person's own negative qualities onto others (Schimel, Greenberg, & Martens, 2003).

Just as defense mechanisms against anxiety and unfavourable self-views can transmute self-protection into positive high-level interests, self-enhancement can serve self-protection interests. Narcissism is a case in point. When threatened with negative performance feedback, narcissists defend themselves through such self-enhancing strategies as displaying the self-serving bias even when the slighted co-worker is a friend (Campbell, Reeder, Sedikides, & Elliot, 2000), or derogating and punishing critics (Bushman & Baumeister, 1998) in a presumed effort to regain control (DeWall, Baumeister, Stillman, & Gailliot, 2007).

Practical difficulties sometimes obfuscate the distinction between selfenhancement and self-protection. A person who exaggerates her contribution to a group effort may do so protectively (e.g., to avoid looking bad) or enhancingly (e.g., to convince herself and others that she has been underestimated). Furthermore, people are often unaware of which goals they are pursuing. Similarly, people may engage in wishful or fanciful thinking (e.g., imagining inherited wealth) in order to pull themselves out of their financial doldrums (self-protection) or to elevate their standing on the relevant selfdomain (e.g., prosperity) (self-enhancement).

# What Kind of Explanations Do Self-Enhancement/Self-Protection Interpretations Provide?

In this section, we clarify four specific points about self-enhancement and selfprotection as explanatory mechanisms that have sometimes been obscured in the literature. *First*, virtually all interesting psychological phenomena are multiply determined. Self-enhancement and self-protection, therefore, never provide complete accounts of behaviour or judgement. To include self-enhancement and self-protection in explanations is to argue that these motives are necessary components of a behaviour or judgement. For example, it may be impossible to understand why a man who is continually rejected by women persists in viewing himself as a Lothario without recognizing the importance of this identity-image in his self-concept. In this case, selfenhancement and self-protection are necessary components of the explanation.

*Second*, it is critical to reiterate that self-enhancement and self-protection are very specific types of motives. To say that a behaviour was motivated is not necessarily to claim that self-enhancement or self-protection was involved. Self-enhancement and self-

protection motives are invoked when investigators wish to claim that behaviour was impelled by the desire to elevate self-regard or to avoid reducing it. In this sense, the "cognition versus motivation" distinction that has pervaded the psychological literature can be misleading. All purposive behaviour is motivated or else people would do nothing at all. Similarly, all non-reflexive behaviour involves cognitive processes. The crucial question, therefore, is whether the self-enhancement/self-protection motives increase the predictive and explanatory power of the phenomenon under investigation or whether it is possible to account for an effect without reference to these motives. The primary advantage of non-motivational explanations is parsimony: If a phenomenon can be explained solely in terms of cognitive processes, then that is one less set of variables to account for.

The parsimony claim can be deceiving, however. Explanations that suffice outside the social realm are often inadequate when applied to social behaviour and judgement. Stereotyping provides a prominent example. As a form of categorization, stereotyping is a natural outgrowth of the non-motivated tendency to distinguish among classes of objects. In fact, early social-cognitive treatments of stereotyping emphasized this categorization explanation (Brewer, 1988; Hamilton & Trolier, 1986; Rothbart & John, 1985). However, while it is important to recognize that the natural tendency to categorize makes some form of stereotyping inevitable, it is probably true that relatively few instances of placing people in pernicious social categories can be explained purely by this propensity, and current views recognize that stereotyping can also reflect motives such as defensive projection (Govorun, Fuegen, & Payne, 2006). Again, in our view, the most complete explanations for social behaviour and judgement are likely to involve both the reasons that spurred the event (although these reasons will not always entail selfenhancement or self-protection) and the cognitive processes involved.

*Third*, self-enhancement and self-protection can be achieved without any motive to enhance or maintain self-views. As Miller and Ross (1975) noted, expectancies

provide one non-motivational explanation for such effects: People simply expect to do well and align their perceptions with these expectancies. Even when expectancies suffice, however, they may inadvertently serve self-enhancement. A person who blames others for his misfortunes rather than himself because he (non-motivationally) expects that others are more likely to be at fault, winds up accruing the same self-benefits as one whose implicit or explicit motive is to feel better about himself. Biased memories are an even more potent source of non-motivational self-enhancement and self-protection. When people work on collaborative tasks, for example, their own inputs are naturally more salient (Harris, 2007). Thus, it is important to distinguish between self-enhancement and self-protection as processes that are motivated by the desire to promote or protect a selfimage, and between self-enhancement and self-protection that are achieved as offshoots of non-motivated processes (Gramzow & Willard, 2006). The former are purposeful, whereas the latter are inadvertent.

*Fourth*, invoking self-enhancement or self-protection explanations for an event does not imply that these motives are universally linked to such events. For example, the claim that a person denied responsibility for a bad decision in order to avoid self-blame does not entail that all such denials reflect motivated processes. Similarly, claims for motivated self-enhancement and self-protection do not exclude the possibility that other motivational and non-motivational mechanisms operate simultaneously.

#### What Kinds of Motives Are Self-Enhancement and Self-Protection?

Although we view the cognition-motivation distinction as a useful heuristic for highlighting different aspects of psychological explanation, the distinction is sometimes obscured by a failure to analyze carefully the properties of self-enhancement and selfprotection motives. We begin this section, therefore, by examining the sense in which judgements and actions reflecting self-enhancement and self-protection can be said to be biased or in error, and clarify the distinction between bias and error. Subsequently, we examine the conscious or unconscious nature of these motives and consider the aims toward which they are directed. This is followed by a consideration of whether and to what extent people engage in self-deception when their actions and judgements are characterized by self-enhancement or self-protection.

## Relation to Error and Bias

Researchers who study self-enhancement and self-protection from a motivational perspective generally imply that such judgements are biased or erroneous, but the nature of the presumed bias or error is not always obvious. To assess the relation between self-enhancement and self-protection on the one hand, and error and bias on the other, it is important to be clear about the distinction between error and bias (Funder, 1987; Krizan & Windschitl, 2007; Kruglanski, 1989). An error is a mistake made in relation to a well-established criterion. For example, a person who thinks that it is Tuesday when it is actually Wednesday has made an error by the universally-accepted standards of the calendar.

By contrast, a bias is a systematic propensity to reach a certain conclusion. Whereas error refers to the outcome of a judgement, in particular whether the judgement is correct or incorrect, bias refers to its derivation. Biases and errors are not necessarily related. On any particular occasion, a person can be biased but error-free, or erroneous and unbiased. An example of the former is a person with a biased view of his golfing abilities (consistently overestimating) who manages to outplay a far superior opponent. Similarly, a racially-biased juror may assume, correctly as it turns out, that a Black defendant is guilty of a crime. Example of erroneous and unbiased judgements abound: Essentially, all random errors fall into this category. Thus, a person who simply guesses, incorrectly, that she will lose a competition that she actually wins is erroneous but not necessarily biased.

Biases and errors can represent purely perceptual or cognitive distortions, or they can serve one or more of an actor's interests. For example, a person who is nearsighted or farsighted has a purely perceptual bias of the visual field, one which is erroneous as well. On the other hand, biased views of one's own traits and abilities, or stereotyped expectations for certain minority groups, can be purposive to the extent that they represent self-promotion, either by exaggerating one's own virtues, or by derogating those of another person or group. Biased judges may ignore evidence that contradicts a desired conclusion or distort evidence to support that conclusion.

Viewed in this context, self-enhancement and self-protection motives yield judgements that are biased by the wish to raise a specific or global self-component beyond its current level (i.e., closer to the aspiration level), or to avoid falling below the tolerance level. Such judgements can be correct or incorrect, although biased judgements will likely yield more erroneous judgements than unbiased ones in the long run. Judgements that are both biased and erroneous require the most arduous selfenhancement and self-protection efforts to overcome the reality constraints that contradict them. People who consistently adhere to manifestly erroneous judgements are sometimes said to be "in denial."

#### Implicit versus Explicit Aspect

A notable feature of self-enhancement and self-protection motives is that they can be unconscious or implicit. Furthermore, their inaccessibility is different from that of biological motives such as maintaining an optimal balance of blood nutrients. When people self-enhance or self-protect, researchers typically assume that they have reasons for their actions that they are unable or unwilling to explicate (Peters, 1958). For example, a racially-prejudiced person might deny that the reason he dislikes minorities is that he is motivated to maintain a positive view of himself by derogating others. Similarly, someone who believes that she is above average on virtually all desirable characteristics might fail to recognize that this view serves to maintain positive, selfrelated affect as well as an interest in self-perceptions of competence and all-around goodness.

The implicit aspect of self-enhancement and self-protection is tied to the Freudian

legacy of unconscious motives whose purpose is to protect the self (i.e., the "ego"). However, the social-psychological use of these terms is much broader than the Freudian one. Whereas Sigmund Freud (1915/1961a, 1923/1961b, 1926/1961c) and Anna Freud (1936/1946) believed that the ego defenses were invoked to repress sexual and aggressive urges, the social-psychological use of self-protection and self-enhancement motives applies to any self-related interest, including perceptions of own faces, abilities, social and physical traits, moral standing, beliefs, and values (Dunning, 1999; Epley & Whitchurch, 2008; Sedikides & Gregg, 2008). Social and personality psychologists have, therefore, expanded considerably the scope of interests to which the self-enhancement and self-protection motives apply. In the modern scheme, virtually any self-aspect that is a source of interest or value, or is capable of producing significant psychic pleasure or pain, is a candidate for strategic maneuvering.

Demonstrations of implicit self-enhancement in the research literature are plentiful. The name-letter effect is one of the most compelling (Nuttin, 1985). In a typical study, research participants, when presented with pairs of letters, one from their name and one that is not from their name, reliably prefer the letter that is included in their name. Furthermore, participants are unaware that the basis of their preference inheres in the association of the letter with their names. Other examples of implicit self-enhancement phenomena include viewing others stereotypically after receiving negative feedback (Gilbert & Hixon, 1991), or counterstereotypically after being praised by a minority group member (Sinclair & Kunda, 1999).

### Role of Self-Deception

An important conceptual issue regarding self-enhancement and self-protection is whether self-deception is a necessary component of these motives. In other words, do people know what they are "up to" when they engage in self-enhancement or selfprotection? If so, at what level of awareness are such strategies registered?

Consider the example of a student who blames everyone but his own poor study

habits for a low test grade. Penetrating these excuses is sometimes as simple as raising an eyebrow, or if that does not work, asking the student to reflect on his or her test preparation. Rather than representing deeply-buried unconscious needs, self-serving tendencies can be motivational ploys of which people are vaguely aware but refuse to "spell out" (Fingarette, 2000). This might be called a light versus a deep form of self-deception, one that is akin to failing to open mail that contains unwanted bills (Greenwald, 1980). In fact, many of the self-protective or self-enhancing tendencies that social psychologists study, in contrast to the unconscious motives that the Freuds postulated, are probably of this preconscious variety. For example, people defend themselves by reinterpreting negative attributes or minimizing their impact by placing them in a broader context (Dunning, Meyerowitz, & Holzberg, 1989; Murray, 1999).

When extreme self-deceptions occur, they are more likely to be enlisted for selfprotection than self-enhancement. Whereas self-enhancement is a luxury, self-protection is a necessity. Except for psychotic delusions and extreme personality disorders, selfenhancement includes mundane tendencies such as thinking that one is slightly better than others, choosing to compare with worse-off others, and construing events in a way that frames one's actions and attributes in a positive light. These tendencies can sometimes be subverted simply by pointing out the facts to the self-enhancer.

The self-deception involved in self-protection, on the other hand, can be far more potent, and hence, much more difficult to overcome. Examples abound. Parents refuse to believe the misdeeds of their children even when the facts are obvious; patients go to great lengths to ignore serious health conditions; people make excuses for poor or improper social behaviour that stretch the credulity; individuals are convinced they are morally motivated, and they resort to moral superiority judgements when their rationality and agency are questioned; and a large proportion of the civilized world believes that they will lead many, and perhaps infinitely many, lives (Batson, Thompson, & Chen, 2002; Hoorens, 1993; Jordan & Monin, 2008; Sedikides & Gregg, 2008).

Because self-analysis is frequently a complex and obscure task, however (Sedikides, Horton, & Gregg, 2007), dramatic processes such as repression and denial rarely need to be invoked. To take a mundane example, analyzing one's traits and abilities requires assessing how one fares in the general distribution of these characteristics. If I were to assess my general intelligence, for example, I should locate where I stand on this trait in a relevant population: It matters little whether I have gotten smarter over time, particularly if others have gotten smarter at an even faster rate. In a rational sense, therefore, large-sample social comparison information trumps temporal comparison for analyzing general characteristics. Nevertheless, recent research has shown that people use temporal comparison information selectively to further selfenhancement and self-protection purposes. In one study (Zell & Alicke, in press), actors took different parts of a social sensitivity test biweekly for a 10-week period, and received feedback about their increasing or decreasing performance over that period (temporal comparison information), as well as information about whether they generally performed better or worse than a large sample of other students who took the same test (social comparison information). Yoked observers simply learned of the actors' performance over time and were exposed to the same social comparison information. Results showed that observers paid no attention to temporal comparison information, basing their evaluations of the actors' social sensitivity skills purely on whether they performed better or worse than others. Actors, on the other hand, eschewed temporal comparison information when it suggested that their performance declined, but used it to their advantage when it suggested that they were getting better. Consequently, actors evaluated themselves more favourably than did observers regardless of whether social comparison information indicated that they were better or worse than others. In such nuanced feedback environments, elaborate self-deceptions are not required; rather, simple and chronic biases suffice to enhance and protect the self.

On Motive Activation and Moderating Conditions

Situationally-elicited self-enhancement/self-protection can be understood in terms of the traditional motivational language of Dollard and Miller (1950). Self-enhancement encompasses various approach motives that guide people toward selecting situations in which they are likely to excel, and toward promoting their virtues when there is no fear of contradiction. Self-protection, on the other hand, comprises an assortment of avoidance tendencies, and involves retreating from threatening situations, making excuses designed to deflect negative self-implications, misremembering unfavourable information about the self, avoiding situations that threaten failure, and evaluating other people and groups unfavourably to maintain relatively positive self-views.

We have described self-enhancement as a largely routine regulatory system that operates to maintain interests in acceptable proximity to their aspired levels. However, self-enhancement processes are also activated by situational opportunities. Small gains, such as minor recognitions and faint praise, can be exaggerated; situations in which the deck is stacked in one's favour can be approached (e.g., a student taking an easy class); and peers can be selected with whom comparisons are likely to be favourable (e.g., an older child entering into competitions with younger ones).

Affect plays a relatively minor role in self-enhancement. Events that arouse positive affect may fuel self-enhancement efforts, such as when the positive emotional impact of a successful event boosts related self-constructs—what we have referred to as horizontal spread (Sedikides, 1992). On the other hand, negative affect is a necessary concomitant of self-protection (Leary, Springer, Negel, Ansell, & Evans, 1998). Selfprotection, as described earlier, occurs when events threaten to reduce an interest below tolerance. However, if the interest in one's standing with regard to a self-construct is only tepid, self-protective efforts will be minimal or absent. For example, a person who has no desire to be perceived as rude, but does not care a great deal about this characteristic anyway, will have little motivation for self-protection, even when events conspire to make her appear more rude than his tolerance level permits. The context in which selfenhancement and self-protection motives are potentiated, therefore, largely determines their strength. These motives are at their fullest strength when a characteristic is central to the individual's identity, and when an evaluative audience is an important source of social or material reward (Kelly, 2000; Leary, 1995).

Given that self-enhancement and self-protection are but two of the many motives that drive self-evaluation and social-evaluation, their initiation depends on the standing of other motivational conditions. When the stakes are high, and the penalties for bias and error are substantial, accuracy needs may trump self-enhancement/self-protection motives (Dauenheimer, Stahlberg, Spreeman, & Sedikides, 2002; Sedikides & Strube, 2007). People will process carefully and remember negative feedback that is diagnostic of their limitations (Green, Pinter, & Sedikides, 2005 As much as an adolescent music aficionado might like to imagine herself performing to the adulation of millions, a complete lack of musical ability will usually reel in these ambitions. (Observation of the tryouts for the popular "American Idol" and "Britain's Got Talent" television shows suggests, however, that the latitude for such fantasies is fairly wide.)

The objective determinability of the judgement dimension also constrains the operation of self-enhancement and self-protection: After losing a tennis match without winning a game, it would be pathetic to claim that one's opponent had a lucky day. Furthermore, as Swann and his colleagues (Swann, Rentrow, & Guinn, 2003) have demonstrated in numerous studies, the self-system tends to be conservative, and so fluctuations in current self-conceptions are unlikely to vary dramatically as the result of self-enhancement and self-protection forces. Primarily, these motives serve to maintain specific and global self-concepts at a point that is slightly-to-moderately above the veridical level. Note, however, that objectivity and reality can be stretched to accommodate self-protective responding (i.e., social comparisons) as a response to self-threat (Stapel & Johnson, 2007, Study 1).

Cultural Specificity versus Universality of Motives

Self-enhancement and self-protection motives are also manifested differently across cultures. At the explicit level, Easterners (e.g., Japanese) self-enhance less than Westerners (e.g., Americans); that is, the former are less likely to self-aggrandize openly than the latter (Heine & Hamamura, 2007). However, Easterners self-enhance strategically and selectively. In particular, they privately rate themselves as better-thanaverage on domains that are personally-important to them (i.e., collectivistic attributes such as loyal or respectful). Westerners also manifest the same strategic selfenhancement pattern by privately rating themselves as better-than-average on personallyimportant domains (i.e., individualistic attributes such as self-reliant or leader) (Sedikides, Gaertner, & Vevea, 2005, 2007a,b). Crucially, an Eastern public preference for collectivistic attributes (e.g., conformity) can also be a strategic, self-protective attempt to avoid a negative reputation (Yamagichi, Hashimoto, & Schug, 2008).

Indeed, although manifestations of self-enhancement and self-protection differ depending on cultural context (Matsumoto, 2007), the motives appear to be equally powerful across cultures. At the implicit level (e.g., response latencies, name-letter preferences, birthday-number preferences, semantic priming), Easterners love the self as much as Westerners do (Hetts, Sakuma, & Pelham, 1999; Kitayama & Karasawa, 1997; Yamaguchi et al., 2007). Also, Easterners do manifest the self-serving bias (Mezulis et al., 2004). In addition, average levels of self-esteem lie above theoretical scale midpoints, while trait self-enhancement (e.g., self-esteem) shows the same structure (i.e., same pattern of correlations with other personality traits) across both Eastern and Western cultures (Cai, Wu, & Brown, in press; Schmitt & Allik, 2005; Sheldon, Elliot, Kasser, & Kim, 2001). Finally, self-enhancement tendencies are positively related to psychological health in both the West (Taylor, Lerner, Sherman, Sage, & McDowell, 2003a) and the East (Cai et al., in press; Gaertner et al., 2008), a topic to which we will return. *What the Motives Accomplish* 

The purpose of the Freudian defense mechanisms is to counteract debilitating

anxiety. However, anxiety is neither a necessary nor perhaps even a prevalent component of the social-psychological analysis of self-enhancement and self-protection motives. For example, self-enhancement can reflect a quest for self-improvement in a particular domain (Sedikides, 1999, in press) or the illusion of self-improvement (Ross & Wilson, 2003). Likewise, self-protection occurs for purposes such as to avoid losing confidence in a goal-pursuit (Paulhus, Fridhandler, & Hayes, 1997; Sedikides, Green, & Pinter, 2004; Tesser, 2003). Chronic strategies such as defensive pessimism (Norem & Cantor, 1986) are concocted to avoid disappointments, or to palliate their effects, and, if successful, protect the self by lowering tolerance.

What, then, is the object of a self-protective motive such as taking less responsibility than one deserves for failure? In keeping with our depiction of hierarchically-related interests, we argue that such motives serve both lower-level and higher-level interests in the vertical hierarchy. For Freud, the first level of self-protection is to avoid threatening sexual and aggressive thoughts, with the ulterior goal of controlling or limiting anxiety. In our view, the immediate interest of self-serving motives and actions is to enhance or defend a specific self-aspect, whereas the broader interest is to maintain the highest feasible level of positive self-evaluations and psychological health. For example, making excuses for poor performance on a math test ameliorates unfavourable evaluations of one's math ability and ultimately serves to prevent negative affect associated with the performance, as well as the spread of negative affect into other self-aspects (Snyder & Higgins, 1988).

#### Benefits and Costs

Self-enhancement and self-protection entail physical health benefits (Creswell et al., 205; Taylor, Lerner, Sherman, Sage, & McDowell, 2003b). In particular, as a response to stress, high (compared to low) self-enhancers have lower cardiovascular responses, more rapid cardiovascular recovery, and lower baseline cortisol levels. Selfenhancement appears to serve a stress-buffering function.

In addition, self-enhancement and self-protection entail psychological health benefits. For example, self-enhancement (multiply operationalized) linearly predicts psychological health (Sedikides et al., 2004; Taylor et al., 2003a; see also Gramzow, Sedikides, Panter, & Insko, 2000). Specifically, self-enhancement is positively related to psychological resources (e.g., extraversion, positive reframing, optimism, mastery, planning, active coping), social resources (e.g., positive relations, family support), and psychological adjustment (e.g., purpose in life, personal growth, subjective well-being); on the other hand, self-enhancement is negatively related to psychological distress (e.g., anxiety, depression, neuroticism, hostility). Furthermore, self-enhancement is positively related to the psychological health (e.g., positive affect, resilience) of high-exposure survivors of the September 11 terrorist attack (Bonanno, Rennicke, & Dekel, 2005). Finally, self-enhancement is positively related to psychological health (e.g., subjective well-being, self-esteem) and is negatively related to psychological distress (e.g., depression) not only in individualistic cultures but also in collectivistic cultures such as China (Anderson, 1999; Cai et al., in press), Hong Kong (Stewart et al., 2003), Japan (Kobayashi & Brown, 2003), Korea (Chang, Sanna, & Yang, 2003), Taiwan (Gaertner et al., 2008), and Singapore (Kurman & Sriram, 1997). As another case in point, selfenhancement is positively related to the psychological health of civilians exposed to urban combat at war time and also predicts the psychological health of widows two years later (Bonanno, Field, Kovacevic, & Kaltman, 2002) in Bosnia. More generally, high self-esteem confers vital benefits to the individual (Swann, Chang-Schneider, & McClarty, 2007), such as psychological health (Trzesniewski et al., 2006), social acceptance (Leary, Cottrell, & Phillips, 2001), and existential safety (Pyszczynski et al., 2004).

Does self-enhancement entail social costs? Individuals (e.g., narcissists) who present themselves to others in an overly grandiose or arrogant manner invite dislike and derision (Robins & Beer, 2001; Sedikides, Gregg, & Hart, 2007; Sedikides, Campbell, Reeder, Elliot, & Gregg, 2002), and this is no surprise given that the norm of modesty is valued in the West (Gregg, Hart, Sedikides, & Kumashiro, 2008; Sedikides et al., 2007). Such boasters may cope with disapproval by being unaware of it (Kenny & DePaulo, 1993) or immune to it (Robins & Beer, 2001). Regardless, most people engage in a slightly or moderately positive self-presentation, a tactic that safeguards considerably against disapproval. Indeed, positive self-presentation predicts success in social groups and exchange relationships (Baumeister, 1982; Hogan 1982). For example, observers perceive actors who claim superior problem-solving skills as honest (Vonk, 1999), and perceive actors who express self-superiority beliefs as open, assertive, and extraverted (Bond, Kwan, & Li, 2000). Moreover, moderate self-enhancers do not appear to endure long-term relational liabilities. For example, high self-esteem facilitates, and low self-esteem constrains, relationship development and satisfaction (Murray, Holmes, & Griffin, 2000; Murray, Rose, Bellavia, Holmes, & Kusche, 2002). In all, slight-to-moderate (i.e., non-narcissistic) self-enhancement appears to entail more social benefits than social costs.

# Supporting Self-Enhancement/Self-Protection Interpretations Common Ways to Support Self-Enhancement/Self-Protection Explanations

The most compelling way to support empirically self-enhancement/self-protection explanations is to introduce manipulations that potentially affect a self-aspect and then assess their consequences on self- or social-evaluation. Manipulations used in this capacity include providing low versus high performance feedback, furnishing negative versus positive personality feedback, reminding people of their mortality versus a different negative stimulus (e.g., dental pain), supplying objective data to indicate that people's behaviours or characteristics are either worse versus better than others', conveying social criticism versus praise, or introducing superior versus inferior comparison others (Alicke et al., 1997; Campbell & Sedikides, 1999; Pyszczynski et al., 2004; Sedikides & Gregg, 2003). A second way to support self-enhancement/self-protection explanations is by constructing manipulations that are intended differentially to influence the self or another person (e.g., acquaintance, average peer). Motivational explanations are bolstered when the manipulation influences the self but not others. As a case in point, participants in one study were led to believe (on the basis of an ostensibly valid personality inventory) or were asked to imagine identical and negative social/performance feedback. Participants remembered the feedback more poorly when it pertained to the self (e.g., "I would often lie to my parents," "I would make fun of others because of their looks") than another person ("Chris would often lie to his parents," "Chris would make fun of others because of their looks" (Green, Sedikides, & Gregg, 2008; Sedikides & Green, 2000, 2004).

A third strategy refers to directing the manipulation at self-aspects that are either high or low in personal relevance (i.e., central vs. peripheral). Motivational explanations are supported when the manipulation influences central but not peripheral self-aspects. For example, negative social/performance feedback is remembered more poorly when it pertains to central self-aspects (e.g., untrustworthy, unkind) rather than peripheral selfaspects (e.g., unpredictable, complaining; Green et al., 2008; Sedikides & Green, 2000, 2004). So, feedback of the form "An employer would not rely on you to have an important project completed by the deadline" and "You would purposely hurt someone to benefit yourself" is remembered poorly compared to feedback of the form "People cannot tell whether you are joking" and "You would get irritated and comment loudly if the weather was bad."

A fourth way to support self-enhancement/self-protection explanations is to demonstrate differences between groups of people whose personal characteristics suggest that they should have varying motivations for self-enhancement or protection. The most prominent studies of this type involve differences between people who score relatively high or low on global self-esteem measures. Research has shown, for example, that low self-esteem people self-handicap in order to reduce the implications of failure, whereas high self-esteem people self-handicap in order to enhance the implications of success (Tice, 1991). In addition, compared to their high self-esteem counterparts, low self-esteem people are less prone to define their traits self-servingly (Beauregard & Dunning, 2001) and less likely to use their own attributes as a basis for evaluating others (Dunning & Beauregard, 2000).

Various forms of logic provide a fifth means of supporting self-enhancement/selfprotection interpretations. For example, if workers on a collaborative project each claim to do more than their share, then it is safe to assume that one of them has miscalculated, although legwork would still be required to tie this misperception to self-enhancement or self-protection motives (Ross & Sicoly, 1979). The better-than-average effect demonstrates similar logic in that investigators can safely assume that, for a given trait, 90% of a population is not really in the top 10% of that population, barring a severely skewed distribution.

Finally, the most direct way to demonstrate a self-enhancement or self-protection bias is to refer a person's actions or attributions to an objective standard. A recent study illustrates this tack (Preuss & Alicke, 2008). In one experiment, actors were led to believe that they were making dating videotapes that would be viewed and evaluated by their peers. On these tapes, they described their goals and aspirations, hobbies, and attitudes. After making the videotape, actors watched the tapes that six others had made. Actors then ranked themselves and the six other persons both in terms of their overall dating attractiveness and on a series of personality characteristics. At the same time, observers (i.e., people who did not make any video presentations) watched and ranked the same block of seven presentations. Actors and observers also predicted where they thought the actor would be ranked among the six other persons by a group of opposite-sex peers who viewed the presentations (metaperceptions). To assess accuracy, actors' self-rankings and metaperceptions were compared to the ranks given to them by observers. The results were clear: Participants were consistently overly-optimistic not only in their selfrankings, but also in their projections of how they would be viewed by others. In general, actors overestimated their dating popularity by about one full rank both in terms of their self rankings and their metaperceptions (i.e., their estimate of the rank that others would give them). Descriptive analysis showed that, on both self-rankings and metaperceptions, 60% of the actors were self-enhancers (i.e., ranked themselves higher than did yoked observers), 25% were self-diminishers, and 15% provided rankings that were identical to those provided by observers. These findings show, therefore, that actors are generally miscalibrated (compared to observers' opinions) in the direction of self-enhancement when it comes evaluating an important characteristic (dating popularity), and that they self-enhance even when strong reality constraints are present—that is, when they run the risk of their self-evaluations being directly contradicted by objective data.

### Addressing Alternative Explanations

Each of the aforementioned methods for supporting self-enhancement/selfprotection explanations can, of course, be counterposed by non-motivational alternatives. Four types of alternatives loom most prominently: expectancies, self-presentational concerns, differential memory, and egocentrism.

*Expectancies*. All experimentally-manipulated feedback occurs against the background of existing self-knowledge. This self-knowledge varies in the directness with which it relates to the experimental manipulation. For example, participants who are informed that they are physically weak or unattractive, slow-witted, or socially inept, may have prior evidence to support or contradict this feedback. Researchers, therefore, often explain to participants that the task measures a novel characteristic in order to minimize the influence of prior knowledge. Nevertheless, participants may still view the feedback in terms of their perceived global standing on the evaluative dimension. In other words, while they may harbour only weak expectations regarding how socially sensitive they are as measured by this specific test, they still have a general sense of their standing on this trait—a standing that is incorporated into their self-evaluation.

Given that there is no way to eliminate global expectations, it is impossible completely to circumvent this potential quandary. However, expectancies only occasionally pose significant problems. In fact, given that most people have comparatively positive self-views, the fact that negative feedback manipulations are so frequently successful suggests that expectancies are usually surmountable. And of course, evidence for self-enhancement and self-protection have been obtained in numerous studies that do not provide task-related feedback and, therefore, that do not entail expectancy issues. Finally, expectancies do not account for the data (but selfenhancement/self-protection explanations do), when expectancies are experimentally controlled or manipulated (Alicke et al., 2001; Sedikides & Green, 2004).

Self-Presentation. The possibility sometimes arises that self-enhancement and self-protection efforts are geared primarily to save face in public situations. Self-presentational alternatives first rose to prominence in the early phases of self-serving bias research. According to these views, the tendencies to take undue credit for positive events and to minimize one's role in negative events occur primarily to impress or save face before evaluative audiences. Such machinations reflect a different type of self-enhancement or self-protection, namely, a concern with regulating public impressions rather than enhancing or protecting self-images. In response, self-enhancement/self-protection proponents were able to show that these effects persevere in highly private response conditions (Greenberg, Pyszczynski, & Solomon, 1982), thereby establishing that self-presentation could not completely explain the self-serving bias. Demonstrating effects in private response conditions has become a common feature of self-enhancement/self-protection experiments that wish to minimize self-presentational concerns (Sedikides, 1993).

*Memory*. Differential memory accounts of self-enhancement/self-protection phenomena are usually applied to comparative judgements in which participants compare their characteristics or prospects with those of other peers or groups, or with hypothetical

entities such as an average peer. For example, Weinstein's (1980, 1984) original explanation for the optimistic bias—the tendency to view one's life prospects more favourably than those of others—was that people selectively recall their own strengths or others' weaknesses. Similar accounts have been applied to self-serving attributional tendencies. When people accord themselves more credit than they deserve for positive outcomes, or overestimate their contributions to collaborative efforts, a compelling explanation for these attributions is that their own positive actions, attributes, and efforts are more easily brought to mind.

Of course, this immediately raises the question to a self-enhancement adherent as to why positively-biased memories are so readily available; indeed, as diary studies have demonstrated, people remember positive life events better than negative life events (Skowronski, Betz, Thompson, & Shannon, 1991; Walker, Skowronski, & Thompson, 2003), and, relatedly, affect associated with positive life events dissipates at a slower rate than affect associated with negative life events (Skowronski, Gibbons, Vogl, & Walker, 2004; Walker et al., 2003). It seems plausible to assume that the desire to view oneself favourably could result in positive information receiving a privileged place in memory. This is precisely the type of thorny issue that sometimes makes it difficult to choose between motivational and non-motivational explanations of specific experimental findings (Greenwald, 1975; Tetlock & Levi, 1982). We will return to this issue momentarily. For now, however, it is important to note two points. First, research on selfenhancement and self-protection has moved far beyond its roots in the self-serving bias; our previous discussion of the role of expectancies speaks to this issue. Second, differential memory fails to provide a plausible alternative for many instances of social protection; we have presented research, for example, showing that self-protection is observed even when controlling for information or feedback availability (Sedikides & Green, 2000, 2004).

Egocentrism. Piaget (1929) introduced egocentrism into the psychology

vernacular to refer to children's inability during the preoperational stage of development to adopt the perspective of others, a tendency that is not completely relinquished in adulthood (Epley, Keysar, Van Boven, & Gilovich, 2004). Egocentrism should not be confused with egoism: Whereas egoism refers to self-enhancement that purposefully fosters positive self-feelings or self-beliefs, egocentrism is the tendency to use one's own experiences, attributes, or expectations as a basis for evaluating others (Gilovich, Medvec, & Savitsky, 2000; Kruger, Epley, Parker, & Ng, 2005). Thus, whereas egoism is clearly motivational, egocentrism results from the fact that one's own experiences are hyper-accessible.

Egocentrism has been a frequent explanation for social comparison effects that require people to evaluate their characteristics and outcomes versus those of their peers. Among the findings to which egocentrism explanations have been applied are that self judgements account for more of the variance in self versus average peer comparative judgements than do judgements of the average peer (Klar & Giladi, 1999), that people rate themselves below average in behavioural domains in which they know they fare poorly (presumably because they ruminate disproportionately about their own shortcomings; Kruger, 1999), and that people are unduly pessimistic about their chances in competitions when obstacles are introduced (such as task difficulty) that would impede everyone's performance (again, because they concentrate disproportionately on how the adversity would affect them; Moore & Kim, 2003; Windshitl, Kruger, & Simms, 2003).

Egocentrism is undoubtedly a critical component of many social judgement phenomena, as is focalism (the tendency to overweight information that is in focal attention rather than the background; Pahl & Eiser, 2006, 2007). However, in most of the studies in which egocentrism and focalism are posed as alternatives to motivational phenomena, the manipulations reduce self-enhancement effects but do not eliminate them. And, while it is demonstrably true that people place undue emphasis on their own experiences, values, and attributes in comparative judgements, it is entirely possible that they sometimes do this to promote their own positive characteristics (Dunning, 2002; Sedikides, 2003). Nevertheless, self-enhancement and self-protection are minimized (but often not eliminated) when the judgement domain is highly objective and verifiable, very difficult, or very rare (Alicke & Govorun, 2005; Dauenheimer et al., 2002; Burson, Larrick, & Klayman, 2006; Kruger & Burrus, 2004), when people are induced to think carefully about their own shortcomings or the obstacles that may obviate success (Sedikides, & Herbst, 2002; Sedikides, Herbst, Hardin, & Dardis, 2002; Sedikides et al., 2007), and when people work jointly with close others on interdependent-outcome task (Sedikides, Campbell, Reeder, & Elliot, 1998).

#### Hopeless Ambiguity?

In 1919, a team of English scientists led by Arthur Eddington of the Cambridge Observatory went on an expedition to observe an eclipse that would provide a critical test of Albert Einstein's general relativity theory and perhaps supplant the long-held cosmology of their own beloved Isaac Newton. In response to Einstein's casual receipt of the information that his theory had been corroborated, a graduate student asked what he would have done if the data had contradicted his theory. Einstein calmly replied: "Then I would have been sorry for the dear Lord; the theory is correct" (Isaacson, 2007, p. 259).

Einstein's comment bespeaks the less dramatic truth that single experiments rarely establish or overturn prevailing theoretical perspectives (Lakatos, 1970). How could one, for example, design an experiment to show unequivocally that high selfesteem protects against existential anxiety, that people evaluate themselves more favourably than others in order to maintain positive self-views, or that making excuses for poor performance forestalls self-concept decline? Support for broad theoretical assumptions, such as whether self-enhancement and self-protection motives contribute significantly to personal identity, social judgement, and intergroup behaviour, depend on the outcomes of whole research programs rather than individual experiments.

The self-perception versus cognitive dissonance debate that launched the

motivation-cognition distinction exemplifies the difficulty of providing conclusive evidence from a single or a small set of studies. Bem's self-perception theory is capable of explaining the acquisition of many self-knowledge components, including knowledge of intentions, goals, interpersonal characteristics, and behavioural traits (Alicke, 1987). On the other hand, even some of cognitive dissonance theory's strongest adherents have advocated delimiting its scope (Cooper & Fazio, 1984). So here's the rub: All motivational accounts are accompanied by cognitive mechanisms that explain how these motives are realized in action and judgement (Kruglanski, 1996; Kunda, 1990), and these cognitive mechanisms, which include expectancies, selective memory, and a host of judgement biases, are often well-established phenomena with wide applicability. Thus, virtually every self-enhancement or self-protection explanation coexists with one or more pervasive non-motivational mechanisms, and it is incumbent on self-theorists to show what self-enhancement/self-protection assumptions can add to these already powerful and compelling explanatory factors.

The illusion of control provides another example of the difficulties that researchers confront in carving out a self-enhancement/self-protection niche against the background of a robust non-motivational phenomenon. The general tendency to exaggerate control is well-established and is often exhibited in circumstances that seem unrelated to self-enhancement or self-protection. For example, it is difficult to imagine how self-enhancement is served by paying four times as much money to repurchase a personally-chosen lottery ticket versus one that someone else selected (Langer & Roth, 1975). On the other hand, it seems reasonable to assume that overestimating one's control over random events serves sometimes to enhance self-efficacy beliefs (i.e., selfenhancement) or to deflect thoughts of being victimized by such events (i.e., selfprotection). The just-world hypothesis, for example, assumes that holding faultless victims responsible for their fates maintains the illusion that the world is an equitable place where rewards and costs are distributed in proportion to good and bad deeds. Although many studies support the just-world hypothesis, the specific motive it posits the desire to view the world as just—is difficult to pinpoint empirically. Most studies on this topic are consistent with the non-motivational assumption that certain conditions exacerbate the tendency to overestimate how much control victims exerted (Lerner & Miller, 1978; Miller, 2001).

Ultimately, the strength of any scientific hypothesis derives from the weight of evidence from studies designed to demonstrate the validity of its assumptions, and by the diversity of findings that support it. With regard to individual studies, the trick is to hold constant other motives or other non-motivational variables while varying factors designed to increase or decrease self-enhancement/self-protection tendencies. The health and vigor of self-enhancement/self-protection hypotheses derives in part from the numerous studies that have convincingly isolated these motives from alternative interpretations (Alicke & Govorun, 2005; Alicke et al., 2001; Sedikides, 1993; Sedikides & Green, 2004). No single one of these studies provides evidence that a determined and clever naysayer cannot contradict. At this point, however, a preponderance of the evidence clearly establishes self-enhancement and self-protection as vital to explaining how people construct their identities, maintain them, and evaluate other people.

#### Integrative Explanations

In concluding this section, we want to emphasize again that either/or explanations are not the answer to the hoary cognition-motivation debate. Self-enhancement and selfprotection processes, especially the type that can be manipulated ethically in a laboratory setting, generally occur against the background of powerful perceptual and informationprocessing forces that can account for many aspects of the phenomenon under investigation. As we have noted previously, for example, egocentrism—a nonmotivational factor—is an important contributor to frequently demonstrated phenomena such as the better-than-average effect and the optimistic bias. Self-enhancement is only one explanatory mechanism that contributes to such effects. To take another research example, consider the phenomenon of belief perseverance—the tendency to adhere to beliefs that have been objectively invalidated (Ross, Lepper, & Hubbard, 1975). Belief perseverance is a robust phenomenon, having been demonstrated in a variety of settings. However, almost all of these studies examine the perseverance of beliefs that are largely irrelevant to the judges' self-concept. From a self-enhancement or self-protection standpoint, it seems odd that a person would perseverate on a negative self-belief, especially one that was objectively invalidated. Accordingly, recent research (Guenther & Alicke, 2008) has shown that, when participants receive negative feedback about their performance on a task that is said to measure an important intellectual trait, and are subsequently told that this feedback was mistaken, they perseverate on it significantly less than do observers who are simply aware of the feedback. Nevertheless, some degree of perseverance on the negative characteristic remains, showing that perseverance is indeed a viable phenomenon, and that self-protection interests are only partially able to surmount this tendency.

#### Does It Really Matter?

Even when the weight of the evidence supports a purposive selfenhancement/self-protection interpretation, the question remains as to what such explanations afford. In other words, is it really worth all the trouble to establish this type of motivational explanation? In our view, there are four related reasons why such explanations are important.

The first reason is an obvious one; namely, to advance effective covering laws that govern a wide range of cases. To illustrate, we return to the example of self-serving attributional biases. In essence, these biases involve exaggerating the favourable dispositional implications of positive outcomes and minimizing the impact of negative ones. If this occurs because people wish to feel good about themselves, then researchers can anticipate the instigation of these motives and predict their effects. Simply put, these biases should emerge when conditions favour the need for self-enhancement or selfprotection and should recede when these needs are diminished (Campbell & Sedikides, 1999). Thus, it should be possible to predict the types of actions and self-evaluations that occur under various conditions, and many studies have been designed for precisely these purposes (Mezulis et al., 2004; Shepperd, Malone, & Sweeny, 2008).

Another reason for pursuing self-enhancement/self-protection explanations is to supplement other explanatory factors that do not provide a complete account of selfrelated phenomena. The reinterpretation of cognitive dissonance effects by Aronson and colleagues (Aronson et al., 1991) is an illustrative example. These investigators have transported cognitive dissonance into the self-enhancement/self-protection arena by assuming that dissonance reduction is a type of rationalization that helps people to avoid perceiving themselves as hypocritical. Festinger (1957), of course, conceptualized dissonance in terms of the drive reduction theories that were prevalent in the 1950s, particularly Hull's (1943). For Festinger, aligning attitudes with behaviours served simply to reduce a tension state, analogous to the reduction of physiological tension. But the perspective of Aronson and colleagues has the advantage of redressing a question that Festinger's formulation ignores, namely: Why would inconsistency produce tension in the first place? Aronson and colleagues make the reasonable assumption that inconsistency, especially between values and behaviours, has potentially negative consequences for the self. The point, then, is to show that attitude change occurs when these negative consequences are present, and is reduced or eradicated when they are absent—an effect that Aronson and his colleagues have demonstrated in a series of studies (Aronson et al., 1991; Fried & Aronson, 1995; Stone, Aronson, Crain, Winslow, & Fried, 1994).

The third reason for invoking self-enhancement/self-protection explanations is that such explanations elucidate behaviours that would otherwise appear puzzling and paradoxical. Such behaviours include setting out to perform badly (Baumeister, Cooper, & Skib, 1979), creating impediments to one's success (Berglas & Jones, 1978), procrastination (Tice & Baumeister, 1997), failure to comply with medical advice (Sacket & Snow, 1979), misguided perseverance (Brockner, Rubin, & Lang, 1981), revenge that is costly to the self (Brown, 1968), and various health risks such as substance abuse, engaging in unprotected sex, sunbathing excessively, failing to exercise, and dieting (Leary, Tchividjian, & Kraxberger, 1994). In all of these cases, the motives to enhance or protect the self provide cogent explanations.

The final, more encompassing, reason for pursing motivational selfenhancement/self-protection explanations is that psychology, as the science of thought, behaviour, and emotion, naturally desires to convey an accurate and comprehensive depiction of its subject matter. Although non-human behaviour can be explained without reference to self-enhancement/self-protection, such concepts are indispensable for explaining the antecedents of human functioning and the psychological processes that underlie behavioural decisions and explanations. Human brains permit not only advanced problem-solving, verbal representation and projection into the future, but they also confer the capacity for self-evaluation (Sedikides & Skowronski, 1997, 2003; Sedikides, Skowronski, & Dunbar, 2006). Whereas good and bad feelings in other animals pertain to appetitive needs and freedom from harm, humans have a fundamental need for belongingness and social acceptance (Ellemers, Spears, & Doosje, 2002; Knowles & Gardner, 2008; Leary & Cox, 2007) that leads them to assess whether the impressions they convey are likely to lead to social acceptance or rejection. Furthermore, as terror management theorists have emphasized, humans are aware that their lives are finite, and this recognition spurs many of their actions and judgements, including self- and socialevaluations (Pyszczynski et al., 2004).

#### Epilogue

In his best-selling compendium on the works of Shakespeare, the literary critic, Harold Bloom, makes the sweeping claim that Shakespeare invented the human being (1998). Bloom does not mean to say that Shakespeare was the first to note that people have expectancies, memories, or that they contrast and assimilate information from a standard. What he means is that Shakespeare, more than any writer before and perhaps since, depicted the ego strivings, self-delusions, passions, and illusions that engender the great tragedies and joys of human experience. In fact, the Western literary canon, from Homer to the present, is a long description of these common themes that pervade the human condition.

Social and personality psychologists, following an academic tradition from the pre-Socratics to the existentialists of the late 19<sup>th</sup> and early 20<sup>th</sup> centuries, have also pursued these themes throughout their history. And now, research on the self-enhancement and self-protection motives stands exactly where Aristippus, Epicurus, Hobbes, and Bentham would like it to stand: At the center of psychological explanations of self-identity and social attribution. These motives have been invoked as key factors in accounting for the ways in which people view and appraise themselves, their social world, their close others, and their groups. Self-definition and social attribution are complex, multiply-determined processes, and the motives to view oneself favourably, or to avoid viewing oneself unfavourably, are central to a thorough understanding of their operation.

In this article, we have defined the motives, delineated their scope, discussed their interrelation, and elaborated on their functionality. In addition, we raised epistemic issues such as what qualifies as a motivational explanation and whether such an explanation matters. We hope that our treatment of the self-enhancement and self-protection motives will clarify their use and interpretation and will further invigorate an already thriving area of research.

#### References

- Alicke, M. D. (1985). Global self-evaluation as determined by the desirability and controllability of trait adjectives. *Journal of Personality and Social Psychology*, *49*, 1621-1630.
- Alicke, M. D. (1987). Public explanation and private ratiocination: Communication between the public and private selves. In R. H. Hogan & W. H. Jones (Eds.), *Perspectives in personality: Theory, measurement, and interpersonal dynamics* (Vol. 2, pp. 143-180).
  Greenwich, CT: JAI.
- Alicke, M. D., & Govorun, O. (2005). The better-than-average effect. In M. D. Alicke, D. A.Dunning, & J. I. Krueger (Eds.), *The self in social judgment* (pp. 85-106). Philadelphia, PA: Psychology Press.
- Alicke, M. D., Klotz, M. L., Breitenbecher, D. L., Yurak, T. J., & Vredenburg, D. S. (1995). Personal contact, individuation, and the better-than-average effect. *Journal of Personality* and Social Psychology, 68, 804-825.
- Alicke, M. D., LoSchiavo, F. M., Zerbst, J. I., & Zhang, S. (1997). The person who outperforms me is a genius: Esteem maintenance in upward social comparison. *Journal of Personality* and Social Psychology, 73, 781-789.
- Alicke, M. D., Vredenburg, D. S., Hiatt, M., & Govorun, O. (2001). The "better than myself effect." *Motivation and Emotion*, 25, 7-22.
- Allport, G. W. (1937). Personality: A psychological interpretation. New York, Holt.
- Anderson, C. A. (1999). Attributional style, depression, and loneliness: A cross-cultural comparison of American and Chinese students. *Personality and Social Psychology Bulletin*, 25, 482-499.
- Arndt, J., Routledge, C., Greenberg, J., & Sheldon, K. M. (2005). Illuminating the dark side of creative expression: Assimilation needs and the consequences of creative action following mortality salience. *Personality and Social Psychology Bulletin*, 31, 1327-1339.

- Aronson, E. (1992). The return of the repressed: Dissonance theory makes a comeback. *Psychological Inquiry*, *3*, 303-311.
- Atkinson, J. W., & Raynor, J. O. (1974). *Motivation and achievement*. Washington, DC: Winston.
- Batson, C. D., Thompson, E. R., & Chen, H. (2002). Moral hypocrisy: Addressing some alternatives. *Journal of Personality and Social Psychology*, *83*, 330-339.
- Baumeister, R. F. (1982). A self-presentational view of social phenomena. *Psychological Bulletin*, 91, 3-26.
- Baumeister, R. F., Bratslavsky, E., Finkenauer, C., & Vohs, K. D. (2001). Bad is stronger than good. *Review of General Psychology*, 5, 323-370.
- Baumeister, R. F., Cooper, J., & Skib, B. A. (1979). Inferior performance as a selective response to expectancy: Taking a dive to make a point. *Journal of Personality and Social Psychology*, 37, 424-432.
- Baumeister, R. F., Dale, K., & Sommer, K. L. (1998). Freudian defense mechanisms and empirical findings in modern social psychology: Reaction formation, projection, displacement, undoing, isolation, sublimation, and denial. *Journal of Personality*, 66, 1081-1124.
- Beauregard, K.S., & Dunning, D. (1998). Turning up the contrast: Self-enhancement motives prompt egocentric contrast effects in social judgement. *Journal of Personality and Social Psychology*, 74, 606-621.
- Beauregard, K. S., & Dunning, D. (2001). Defining self worth: Trait self-esteem moderates the use of self-serving trait definitions in social judgement. *Motivation and Emotion*, 25, 135-162.
- Bem, D. J. (1967). Self-perception: An alternative interpretation of cognitive dissonance phenomena. *Psychological Review*, 74, 183-200.

Bem, D. J. (1972). Self-perception theory. Advances in experimental social psychology, 6, 1-62.

- Berglas, S., & Jones, E. E. (1978). Drug choice as a self-handicapping strategy in response to noncontingent success. *Journal of Personality and Social Psychology*, *36*, 405-417.
- Bonanno, G. A., Field, N. P., Kovacevic, A., & Kaltman, S. (2002). Self-enhancement as a buffer against extreme adversity: Civil war in Bosnia and traumatic loss in the United States. *Personality and Social Psychology Bulletin*, 28, 184-196.
- Bonanno, G. A., Rennicke, C., & Dekel, S. (2005). Self-enhancement among high-exposure survivors of the September 11<sup>th</sup> terrorist attack: Resilience or social maladjustment? *Journal of Personality and Social Psychology*, 88, 984-998.
- Bond, M. H., Kwan, S. Y., & Li, C. (2000). Decomposing a sense of superiority: The differential social impact of self-regard and regard for others. *Journal of Research in Personality*, 34, 537-553.
- Brewer, M. B. (1988). A dual process model of impression formation. In T. K. Srull & R. S.Wyer (Eds.), *Advances in social cognition* (Vol. 1, pp. 1-36). Hillsdale, NJ: Lawrence Erlbaum Associated, Inc.
- Brockner, J., Rubin, J. Z., & Lang, E. (1981). Face-saving and entrapment. *Journal of Experimental Social Psychology*, 17, 68-79.
- Brown, B. R. (1968). The effects of need to maintain face on interpersonal bargaining. *Journal of Experimental Social Psychology*, 17, 68-79.
- Buckingham, J. T., & Alicke, M. D. (2002). The influence of individual versus aggregate social comparison information on self-evaluations. *Journal of Personality and Social Psychology*, 83, 1117-1130.
- Burson, K. A., Larrick, R. P., & Klayman, J. (2006). Skilled or unskilled, but still unaware of it: How perceptions of difficulty drive miscalibration in relative comparisons. *Journal of Personality and Social Psychology*, 90, 60-77.
- Bushman, B. J., & Baumeister, R. F. (1998). Threatened egotism, narcissism, self-esteem, and direct and displaced aggression: Does self-love or self-hate lead to violence? *Journal of Personality and Social Psychology*, 75, 219-229.

- Cai, H., Wu, Q., & Brown, J. D. (in press). Is self-esteem a universal need?: Evidence from The People's Republic of China. *Asian Journal of Social Psychology*.
- Campbell, W. K., Reeder, G., Sedikides, C., & Elliot, A. J. (2000). Narcissism and comparative self-enhancement strategies. *Journal of Research in Personality*, *34*, 329-347.
- Campbell, K. W., & Sedikides, C. (1999). Self-threat magnifies the self-serving bias: A metaanalytic integration. *Review of General Psychology*, *3*, 23-43.
- Castano, E., Yzerbyt, V., & Paladino, M.-P. (2004). Transcending oneself through social identification. In J. Greenberg, S. L. Koole, & T. Pyszczynski (Eds.), *Handbook of experimental existential psychology* (pp. 305-321). New York: Guilford Press.
- Chambers, J. R. & Windschitl, P. D. (2004). Biases in social comparative judgments: The role of nonmotivated factors in above-average and comparative-optimism effects. *Psychological Bulletin*, 130, 813-818.
- Chang, E. C., Sanna, L. J., & Yang, K. (2003). Optimism, pessimism, affectivity, and psychological adjustment in US and Korea: A test of mediation model. *Personality and Individual Differences*, 34, 1195-1208.
- Cooper, J. (2007). *Cognitive dissonance: 50 years of a classic theory*. London: Sage Publications.
- Cooper, J., & Fazio, R. (1984). A new look at dissonance. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 17, pp. 229-268). New York, NY: Academic Press.
- Creswell, J. D., Welch, W. T., Taylor, S. E., Sherman, D. K., Gruenewald, T. L., & Mann, T. (2005). Affirmation of personal values buffers neuroendocrine and psychological stress responses. *Psychological Science*, *16*, 846-851.
- Crocker, J., & Wolfe, C. T. (2001). Contingencies of self-worth. *Psychological Review*, 108, 593-623,
- Dauenheimer, D. G., Stahlberg, D., Spreeman, S., & Sedikides, C. (2002). Self-enhancement, self-assessment, or self-verification?: The intricate role of trait modifiability in the selfevaluation process. *Revue Internationale De Psychologie Sociale*, 15, 89-112.

- DeWall, C. N., Baumeister, R. F., Stillman, T. F., & Gailliot, M. T. (2007). Violence restrained: Effects of self-regulation and its depletion on aggression. *Journal of Experimental Social Psychology*, 43, 62-76.
- Dollard, J., & Miller, N. (1950). Personality and psychotherapy: an analysis in terms of *learning, thinking and culture*. New York: McGraw-Hill.
- Dunning, D. (1999). A newer look: Motivated social cognition and the schematic representation of social concepts. *Psychological Inquiry*, *10*, 1-11.
- Dunning, D. (2002). The zealous self-affirmer: How and why the self lurks so pervasively behind social judgement. In S. Fein & S. Spencer (Eds.), *Motivated social perception: The Ontario symposium* (Vol. 9, 45-72). Mahwah, NJ: Erlbaum.
- Dunning, D., & Beauregard, K. S. (2000). Regulating impressions of others to affirm images of the self. *Social Cognition*, 18, 198-222.
- Dunning, D., Meyerowitz, J. A., & Holzberg, A. D. (1989). Ambiguity and self-evaluation: The role of idiosyncratic trait definitions in self-serving assessments of ability. *Journal of Personality and Social Psychology*, 57, 1082-1090.
- Ellemers, N., Spears, R., & Doosje, B. (2002). Self and social identity. *Annual Review of Psychology*, *53*, 161-186.
- Elliot, A. J., & Devine, P. G. (1994). On the motivational nature of cognitive dissonance:
   Dissonance as psychological discomfort. *Journal of Personality and Social Psychology*, 67, 382-394.
- Elliot, A. J., & Mapes, R. R. (2005). Approach-avoidance motivation and self-concept evaluation. In A. Tesser, J. V. Wood, & D. A. Stapel (Eds.), *On building, defending and regulating the self: A psychological perspective* (pp. 171-196). New York, NY: Psychology Press.
- Epley, N., Keysar, B., Van Boven, L., & Gilovich, T. (2004). Perspective taking as egocentric anchoring and adjustment. *Journal of Personality and Social Psychology*, 87, 327-339.

- Epley, N., & Whitchurch, E. (2008). Mirror, mirror on the wall: Enhancement in selfrecognition. *Personality and Social Psychology Bulletin*, 34, 1159-1170.
- Feinberg, J. (1984). The moral limits of the criminal law: Harm to others (Vol. 1). New York, NY: Oxford University Press.

Festinger, L. (1957). A theory of cognitive dissonance. Evanston, IL: Row, Peterson.

Fingarette, H. (2000). Self-deception. Berkeley, CA: University of California Press.

- Forgas, J. P. (2001). (Ed.). The Handbook of affect and social cognition. Mahwah, NJ: Lawrence Erlbaum Associates.
- Forgas, J. P. (2006). (Ed.). Affect in social thinking and behavior: Frontiers in social psychology. New York, NY: Psychology Press
- Freud, A. (1946). *The ego and the mechanisms of defense*. New York: International Universities Press. (Originally work published in 1936.)
- Freud, S. (1961a). Instincts and their vicissitudes. In J. Strachey (Ed. and Trans.), *The standard edition of the complete works of Sigmund Freud* (Vol. 14, pp. 111-142). London: Hogarth Press. (Original work published in 1915.)
- Freud, S. (1961b). The ego and the id. In J. Strachey (Ed. and Trans.), *The standard edition of the complete works of Sigmund Freud* (Vol. 19, pp. 12-66). London: Hogarth Press. (Original work published in 1923.)
- Freud, S. (1961c). Inhibitions, symptoms, and anxiety. In J. Strachey (Ed. and Trans.), *The standard edition of the complete works of Sigmund Freud* (Vol. 20, pp. 77-178). London: Hogarth Press. (Original work published in 1926.)
- Fried, C. B., & Aronson, E. (1995). Hypocrisy, misattribution, and dissonance reduction. *Personality and Social Psychology Bulletin*, 21, 925-933.
- Funder, D.C. (1987). Errors and mistakes: Evaluating the accuracy of social judgment. *Psychological Bulletin*, *101*, 75-90.

- Gaertner, L., Sedikides, C., & Chang, K. (2008). On pancultural self-enhancement: Welladjusted Taiwanese self-enhance on personally-valued traits. *Journal of Cross-Cultural Psychology*, 39, 463-477.
- Gilbert, D.T., & Hixon, J.G. (1991). The trouble of thinking: Activation and application of stereotypical beliefs. *Journal of Personality and Social Psychology*, *60*, 509-517.
- Gilovich, T., Medvec, V. H., & Savitsky, K. (2000). The spotlight effect in social judgmen: An egocentric bias in estimates of the salience of one's own actions and appearance. *Journal* of Personality and Social Psychology, 78, 211-222.
- Govorun, O., Fuegen, K., & Payne, B. K. (2006). Stereotypes focus defensive projection. Personality and Social Psychology Bulletin, 32, 781-793.
- Gramzow, R. H., Sedikides, C., Panter, A. T., & Insko, C. A. (2000). Aspects of self-regulation and self-structure as predictors of perceived emotional distress. *Personality and Social Psychology Bulletin*, 26, 188-206.
- Gramzow, R. H., & Willard, G. (2006). Exaggerating current and past performance: Motivated self-enhancement versus reconstructive memory. *Personality and Social Psychology Bulletin*, 32, 1114-1125.
- Green, J. D., Pinter, B., & Sedikides, C. (2005). Mnemic neglect and self-threat: Trait modifiability moderates self-protection. *European Journal of Social Psychology*, 35, 225-235.
- Green, J. A., & Sedikides, C. (2004). Retrieval selectivity in the processing of self-referent information: Testing the boundaries of self-protection. *Self and Identity*, *3*, 69-80.
- Green, J. D., Sedikides, C., & Gregg, A. P. (2008). Forgotten but not gone: The recall and recognition of self-threatening memories. *Journal of Experimental Social Psychology*, 44, 547-561.
- Green, J. D., Sedikides, C., Pinter, B., & Van Tongeren, D. R. (in press). Two sides to selfprotection: Self-improvement strivings and feedback from close relationships eliminate mnemic neglect. *Self and Identity*.

- Greenberg, J., Pyszczynski, T., & Solomon, S. (1982). The self-serving attributional bias: Beyond self-presentation. *Journal of Experimental Social Psychology*, *18*, 56-67.
- Greenwald, A. G. (1975). On the inconclusiveness of "crucial" cognitive tests of dissonance versus self-perception theories. *Journal of Experimental Social Psychology*, *11*, 490-499.
- Greenwald, A. G. (1980). The totalitarian ego: Fabrication and revision of personal history. *American Psychologist*, *35*, 603-618.
- Gregg, A. P., Hart, C. M., Sedikides, C., & Kumashiro, M. (2008). Lay conceptions of modesty: a prototype analysis. *Personality and Social Psychology Bulletin*, *34*, 978-992.
- Guenther, C. L., & Alicke, M. D. (2008). Self-enhancement and belief perseverance. *Journal of Experimental Social Psychology*, 44, 706-712.
- Hamilton, D. L., & Trolier, T. K. (1986). Stereotypes and stereotyping: An overview of the cognitive approach. In J. F. Dovidio & S. L. Gaertner (Eds.), *Prejudice, discrimination, and racism* (pp. 127-163). Orlando, FL: Academic Press.
- Harris, P. (2007). The impact of perceived experience on likelihood judgements for self and others: An experimental approach. *European Journal of Social Psychology*, *37*, 141-151.

Heider, F. (1958). The psychology of interpersonal relations. New York: Wiley.

- Heine, S. J., & Hamamura, T. (2007). In search of East Asian self-enhancement. *Personality and Social Psychology Review*, 11, 4-27.
- Hetts, J. J., Sakuma, M., & Pelham, B. W. (1999). Two roads to positive regard: Implicit and explicit self-evaluation and culture. *Journal of Experimental Social Psychology*, 35, 512-559.
- Hogan, R. (1982). A socioanalytic theory of personality. In M. M. Page (Eds.), *Nebraska Symposium on Motivation* (pp. 55-89). Lincoln: University of Nebraska Press.
- Hoorens, V. (1993). Self-enhancement and superiority biases in social comparison. In Stroebe, W.
  & Hewstone, M. (Eds.), *European Review of Social Psychology* (Vol. 4, pp. 113-139).
  Chichester, UK: Wiley.

Hull, C. L. (1943). Principles of behavior. Appleton-Century-Crofts, New York .

Isaacson, W. (2007). Einstein: His life and universe. New York, NY: Simon & Schuster .

James, W. (1890). Principles of psychology (Vol. 1 & 2). New York, NY: Holt.

- Jordan, A. H., & Monin, B. (2008). From sucker to saint: Moralization in response to self-threat. *Psychological Science*, *19*, 809-815.
- Kay, A. C., Jimenez, M. C., & Jost, J. T. (2002). Sour grapes, sweet lemons, and the anticipatory rationalization of the status quo. *Personality and Social Psychology Bulletin*, 28, 1300-1312.
- Kelley, H. H. (1967). Attribution theory in social psychology. In D. Levine (Ed.), *Nebraska symposium on motivation* (Vol, 15, 129-238). Lincoln, NE: University of Nebraska Press.
- Kelly, A. E. (2000). Helping construct desirable identities: A self-presentational view of psychotherapy. *Psychological Bulletin*, 126, 475-494.
- Kenny, D. A., & DePaulo, B. M. (1993). Do people know how others view them?: An empirical and theoretical account. *Psychological Bulletin*, 114, 145-161.
- Kitayama, S., & Karasawa, M. (1997). Implicit self-esteem in Japan: Name letters and birthday numbers. *Personality and Social Psychology Bulletin, 23*, 736-742.
- Klar, Y., & Giladi, E. E. (1999). No one in my group can be below the group's average: A robust positivity bias in favor of anonymous peers. *Journal of Personality and Social Psychology*, 73, 885-901.
- Klinger, E. (1990). *Daydreaming: Using waking fantasy and imagery for self-knowledge and creativity*. Los Angeles: Tarcher.
- Knowles, M. L., & Gardner, W.L. (2008). Benefits of membership: The activation and amplification of group identities in response to social rejection. *Personality and Social Psychology Bulletin*, 34, 1200-1213.
- Kobayashi, C., & Brown, J. D. (2003). Self-esteem and self-enhancement in Japan and America. *Journal of Cross-Cultural Psychology*, *34*, 567-580.
- Krizan, Z., & Windschitl, P. D. (2007). The influence of outcome desirability on optimism. *Psychological Bulletin*, 133, 95-121.

- Kruger, J. (1999). Lake Woebegone be gone! The "below-average-effect" and the egocentric nature of comparative ability judgments. *Journal of Personality and Social Psychology*, 77, 221-232.
- Kruger, J., & Burrus, J. (2004). Egocentrism and focalism in unrealistic optimism (and pessimism). *Journal of Experimental Social Psychology*, 40, 332-340.
- Kruger, J., Epley, N., Parker, J., & Ng, Z.-W. (2005). Egocentrism over e-mail: Can we communicate as well as we think? *Journal of Personality and Social Psychology*, 89, 925-936.
- Kruglanski, A. W. (1989). Lay epistemics and human knowledge: Cognitive and motivational biases. New York, NY: Plenum Press.
- Kumashiro, M., & Sedikides, C. (2005). Taking on board liability-focused feedback: Close positive relationships as a self-bolstering resource. *Psychological Science*, *16*, 732-739.
- Kunda, Z. (1990). The case for motivated reasoning. Psychological Bulletin, 108, 480-498.
- Kurman, J., & Sriram, N. (1997). Self-enhancement, generality of self-evaluation, and affectivity in Israel and Singapore. *Journal of Cross-Cultural Psychology*, 28, 421-441.
- Lakatos, I. (1970). *Criticism and the growth of knowledge*. New York, NY: Cambridge University Press.
- Landau, M. J., Greenberg, J., Solomon, S., Pyszczynski, T., & Martens, A. (2006). Windows into nothingness: Terror management, meaninglessness, and negative reactions to modern art. *Journal of Personality and Social Psychology*, 90, 879-892.
- Langer, E. J., & Roth, J. (1975). Heads I win, tails it's chance: The illusion of control as a function of the sequence of outcomes in a pure chance task. *Journal of Personality and Social Psychology*, 32, 951–955.
- Leary, M. R. (1995). Self-presentation: Impression management and interpersonal behavior.Madison, WI: Brown & Benchmark.

- Leary, M. R., Cottrell, C. A., & Phillips, M. (2001). Deconfounding the effects of dominance and social acceptance on self-esteem. *Journal of Personality and Social Psychology*, 81, 898-909.
- Leary, M. R., & Cox, C. (2007). Belongingness motivation: The mainspring of social action. In J. Shah & W. Gardner (Eds.), *Handbook of motivation science* (pp. 27-40). New York: Guilford Press.
- Leary, M. R., Springer, C., Negel, L., Ansell, E., & Evans, K. (1998). The causes, phenomenology, and consequences of hurt feelings. *Journal of Personality and Social Psychology*, 74, 1225-1237.
- Leary, M. R., Tchividjian, L. R., & Kraxberger, B. E. (1994). Self-presentation can be hazardous to your health: Impression management and health risk. *Health Psychology*, *13*, 461-470.
- Lerner, M. J., & Miller, D. T. (1978). Just-world research and the attribution process: Looking back and ahead. *Psychological Bulletin*, *85*, 1030-1051.
- Lewin, K. (1935). A dynamic theory of personality. New York: McGraw-Hill.

Lewin, K. (1936). Principles of topological psychology. New York: McGraw-Hill.

- Liberman, N., Trope, Y., & Stephan, E. (2007). Psychological distance. In A. W. Kruglanski &
  E. T. Higgins (Eds.), *Social psychology: Handbook of basic principles* (Vol. 2, pp. 353-383). New York: Guilford Press.
- Linville, P. W. (1985). Self-complexity and affective extremity: Don't put all of your eggs in one basket. *Social Cognition* **3**, 94–120.
- Markus, H., & Nurius, P. (1986). Possible selves. American Psychologist, 41, 954-969.
- Marlowe, D., & Crowne, D. P. (1961). Social desirability and response to perceived situational demands, *Journal of Consulting Psychology*, 25, 109–115.
- Matsumoto, D. (2007). Culture, context, and behavior. Journal of Personality, 75, 1285-1320.
- Mezulis, A. H., Abramson, L. Y., Hyde, J. S., & Hankin, B. L. (2004). Is there a universal positive bias in attributions?: A meta-analytic review of individual, developmental, and

cultural differences in the self-serving attributional bias. *Psychological Bulletin, 130*, 711-747.

- Mikulincer, M., Florian, V., & Hirschberger, G. (2003). The existential function of close relationships: Introducing death into the science of love. *Personality and Social Psychology Review*, 7, 20-40.
- Miller, D. T., & Ross, M. (1975). Self-serving biases in the attribution of causality: Fact or fiction? *Psychological Bulletin*, 82, 213-225.
- McArthur, L. A. (1972). The how of what and why: Some determinants and consequences of causal attributions. *Journal of Personality and Social Psychology*, 22, 171-193.
- McConnell, A. R., & Strain, L. M. (2007). Content and structure of the self-concept. In C. Sedikides & S. J. Spencer (Eds.), *<u>The Self: Frontiers of social psychology</u>* (pp. 51-73). New York, NY: Psychology Press.
- Miller, D. T. (2001). Disrespect and the experience of injustice. *Annual Review of Psychology*, 52, 527-53.
- Moore, D. A., & Kim, T. G. (2003). Myopic social prediction and the solo comparison effect. *Journal of Personality and Social Psychology*, 85, 1121-1135.
- Murray, S. L. (1999). The quest for conviction: Motivated cognition in romantic relationships. *Psychological Inquiry*, *10*, 23-34.
- Murray, S. L., Holmes, J. G., & Griffin, D. W. (2000). Self-esteem and the quest for felt security: How perceived regard regulates attachment processes. *Journal of Personality and Social Psychology*, 78, 478-498.
- Murray, S. L., Rose, P., Bellavia, G., Holmes, J. G., & Kusche, A. (2002). When rejection stings: How self-esteem constrains relationship-enhancement processes. *Journal of Personality* and Social Psychology, 83, 556-573
- Norem, J. K., & Cantor, N. (1986). Defensive pessimism: Harnessing anxiety as motivation. Journal of Personality and Social Psychology, 51, 1208-1217.

Nozick, R. (1974). Anarchy, state and utopia. New York, NY: Basic Books, Inc.

- Oettingen, G. (1996). Positive fantasy and motivation. In P. M. Gollwitzer & J. A. Bargh (Eds.),
   *The psychology of action: Linking cognition and motivation to behavior* (pp. 236-259).
   New York, NY: Guilford Press.
- Pahl, S., & Eiser, J. R. (2006). The focus effect and self-positivity in ratings of self-other similarity and difference. *British Journal of Social Psychology*, 45, 107-116.
- Pahl, S., & Eiser, J. R. (2007). How malleable is comparative self-positivity?: The effects of manipulating judgemental focus and accessibility. *European Journal of Social Psychology*, 37, 617-627.
- Paulhus, D. L., Fridhandler, B., & Hayes, S. (1997). Psychological defense: Contemporary theory and research. In R. Hogan, J. Johnson, & S. Briggs (Eds.), *Handbook of personality* (pp. 544-580). New York: Academic Press.
- Peters, R. S. (1958). The concept of motivation. New York: Humanities Press .
- Piaget, J. (1929). *The child's conception of the world*. New York, NY: Harcourt, Brace Jovanovich.
- Preuss, G., & Alicke, M. D. (2008). *Self-perceptions, metaperceptions and self-enhancement*. Unpublished manuscript, Ohio University.
- Pyszczynski, T., & Greenberg, J. (1987). Toward an integration of cognitive and motivational perspectives on social inference: A biased hypothesis-testing model. *Advances in experimental social psychology*, 20, 297-340.
- Pyszczynski, T., Greenberg, J., & Goldenberg, J. L. (2003). Freedom versus fear: On the defense, growth, and expansion of the self. In M. R. Leary & J. P. Tangney (Eds.), *Handbook of self and identity* (pp. 314-343). New York, NY: Guilford Press.
- Pyszczynski, T., Greenberg, J., Solomon, S., Arndt, J., & Schimel, J. (2004). Why do people need self-esteem?: A theoretical and empirical review. *Psychological Bulletin*, 130, 435-468.
- Rawls, J. (1971). A theory of justice. Cambridge: Harvard University Press.
- Reeve, J. M. (1997). Understanding motivation and emotion. Forworth, Texas: Harcourt Brace.

- Robins, R. W., & Beer, J. S. (2001). Positive illusions about the self: Short-term benefits and long-term costs. *Journal of Personality and Social Psychology*, 80, 340-352.
- Roese, N. J., & Olson, J. M. (2007). Better, stronger, faster: Self-serving judgement, affect regulation, and the optimal vigilance hypothesis. *Perspectives on Psychological Science*, 2, 124-141.
- Ross, L., Lepper, M. R., & Hubbard, M. (1975). Perseverance in self-perceptions and social perception: Biased attributional processing in the debriefing paradigm. *Journal of Personality and Social Psychology*, 32, 880–892.
- Ross, M., & Sicoly, F. (1979). Egocentric biases in availability and attribution. *Journal of Personality and Social Psychology*, 37, 322-336.
- Ross, M., & Wilson, A. E. (2003). Autobiographical memory and conceptions of self: Getting better all the time. *Current Directions in Psychological Science*, 12, 66-69.
- Rothbart, M., & John, O. P. (1985). Social categorization and behavioral episodes: A cognitive analysis of the effects of intergroup contact. *Journal of Social Issues*, *41*, 81-104.
- Rothbaum, F., Weisz, J. R., & Snyder, S. S. (1982). Changing the world and changing the self: A two-process model of perceived control. *Journal of Personality and Social Psychology*, 42, 5-37.
- Sacket, D. L., & Snow, J. C. (1979). The magnitude of compliance and noncompliance. In R. B.
  Haynes, D. W. Taylor, & D. L. Sackett (Eds.), *Compliance in health care* (pp. 11-22).
  Baltimore, MD: Johns Hopkins University Press.
- Sales, S. M. (1971). Need for stimulation as a factor in social behavior. *Journal of Personality and Social Psychology*, *19*, 124-134.
- Schimel, J., Greenberg, J., & Martens, A. (2003). Evidence that projection of a feared trait can serve a defensive function. *Personality and Social Psychology Bulletin*, 29, 969-979.
- Schmitt, D. P., & Allik, J. (2005). Simultaneous administration of the Rosenberg self-esteem scale in 53 nations: Exploring the universal and culture-specific features of global selfesteem. *Journal of Personality and Social Psychology*, 89, 623-642.

- Sedikides, C. (1992). Changes in the valence of the self as a function of mood. *Review of Personality and Social Psychology*, 14, 271-311.
- Sedikides, C. (1993). Assessment, enhancement, and verification determinants of the selfevaluation process. *Journal of Personality and Social Psychology*, 65, 317-338.
- Sedikides, C. (1995). Central and peripheral self-conceptions are differentially influenced by mood: Tests of the differential sensitivity hypothesis. *Journal of Personality and Social Psychology*, 69, 759-777.
- Sedikides, C. (1999). A multiplicity of motives: The case of self-improvement. *Psychological Inquiry*, *9*, 64-65.
- Sedikides, C. (2003). On the status of self in social prediction: Comment on Karniol (2003). *Psychological Review*, *110*, 591-594.
- Sedikides, C. (in press). On self-protection and self-enhancement regulation: The role of selfimprovement and social norms. In J. P. Forgas, R. F. Baumeister, & D. Tice (Eds.), *The psychology of self-regulation*. New York, NY: Psychology Press.
- Sedikides, C., Campbell, W. K., Reeder, G., & Elliot, A. J. (1998). The self-serving bias in relational context. *Journal of Personality and Social Psychology*, 74, 378-386;
- Sedikides, C., Campbell, W. K., Reeder, G., & Elliot, A. J. (2002). The self in relationships:
  Whether, how, and when close others put the self "in its place." In W. Stroebe & M.
  Hewstone (Eds.), *European Review of Social Psychology* (Vol. 12, pp. 237-265).
  Chichester, UK: Wiley.
- Sedikides, C., Campbell, W. K., Reeder, G., Elliot, A. J., & Gregg, A. P. (2002). Do others bring out the worst in narcissists? The "Others Exist for Me" illusion. In Y. Kashima, M. Foddy, & M. Platow (Eds.), *Self and identity: Personal, social, and symbolic* (pp. 103-123). Mahwah, NJ: Lawrence Erlbaum Associates.
- Sedikides, C., Gaertner, L., & Toguchi, Y. (2003). Pancultural self-enhancement. Journal of Personality and Social Psychology, 84, 60-70.

- Sedikides, C., Gaertner, L., & Vevea, J. L. (2005). Pancultural self-enhancement reloaded: A meta-analytic reply to Heine (2005). *Journal of Personality and Social Psychology*, 89, 539-551.
- Sedikides, C., Gaertner, L. & Vevea, J. L. (2007a). Inclusion of theory-relevant moderators yield the same conclusions as Sedikides, Gaertner, and Vevea (2005): A meta-analytic reply to Heine, Kitayama, and Hamamura (2007). Asian Journal of Social Psychology 10, 59-67.
- Sedikides, C., Gaertner, L. & Vevea, J. L. (2007b). Evaluating the evidence for pancultural selfenhancement. *Asian Journal of Social Psychology*, *10*, 201-203.
- Sedikides, C., & Green, J. D. (2004). What I don't recall can't hurt me: Information negativity versus information inconsistency as determinants of memorial self-defense. *Social Cognition*, 22, 4-29.
- Sedikides, C., & Green, J. D. (in press). Memory as a self-protective mechanism. *Social and Personality Psychology Compass*.
- Sedikides, C., Green, J. D., & Pinter, B. (2004). Self-protective memory. In D. R. Beike, J. M. Lampinen, & D. A. Behrend (Eds.), *The self and memory* (pp. 161-179). Philadelphia, PA: Psychology Press.
- Sedikides, C., & Gregg, A. P. (2003). Portraits of the self. In M. A. Hogg & J. Cooper (Eds.), *Sage handbook of social psychology* (pp. 110-138). London: Sage Publications.
- Sedikides, C., & Gregg, A. P. (2008). Self-enhancement: Food for thought. Perspectives on Psychological Science, 3, 102-116.
- Sedikides, C., Gregg, A. P., & Hart, C. M. (2007). The importance of being modest. In C. Sedikides & S. Spencer (Eds.), *The self: Frontiers in social psychology* (pp. 163-184). New York, NY: Psychology Press.
- Sedikides, C., & Herbst, K. (2002). How does accountability reduce self-enhancement?: The role of self-focus. *Revue Internationale De Psychologie Sociale*, *15*, 113-128

- Sedikides, C., Herbst, K. C., Hardin, D. P., & Dardis, G. J. (2002). Accountability as a deterrent to self-enhancement: The search for mechanisms. *Journal of Personality and Social Psychology*, 83, 592-605.
- Sedikides, C., Horton, R. S., & Gregg, A. P. (2007). The why's the limit: Curtailing selfenhancement with explanatory introspection. *Journal of Personality*, 75, 783-824.
- Sedikides, C., & Luke, M. (2007). On when self-enhancement and self-criticism function adaptively and maladaptively. In E. C. Chang (Ed.), *Self-criticism and self-enhancement: Theory, research, and clinical implications* (pp. 181-198). Washington, DC: APA Books.
- Sedikides, C., Rudich, E. A., Gregg, A. P., Kumashiro, M., & Rusbult, C. (2004). Are normal narcissists psychologically healthy?: Self-esteem matters. *Journal of Personality and Social Psychology*, 87, 400-416.
- Sedikides, C., & Skowronski, J. A. (1997). The symbolic self in evolutionary context. *Personality and Social Psychology Review*, 1, 80-102.
- Sedikides, C., & Skowronski, J. J. (2003). Evolution of the self: Issues and prospects. In M. R. Leary & J. P. Tangney (Eds.), *Handbook of self and identity* (594-609). New York, NY: Guilford.
- Sedikides, C., Skowronski, J. J., & Dunbar, R. I. M. (2006). When and why did the human self evolve? In M. Schaller, J. A. Simpson, & D. T. Kenrick (Eds.), *Evolution and social psychology: Frontiers in social psychology* (pp. 55-80). New York, NY: Psychology Press.
- Sedikides, C., & Strube, M. J. (1997). Self-evaluation: To thine own self be good, to thine own self be sure, to thine own self be true, and to thine own self be better. Advances in Experimental Social Psychology, 29, 209-269.
- Sheldon, K.M., Elliot, A.J., Kim, Y., & Kasser, T. (2001). What's satisfying about satisfying events? Comparing ten candidate psychological needs. *Journal of Personality and Social Psychology*, 80, 325-339.

- Shepperd, J., Malone, W., & Sweeny, K. (2008). Exploring causes of the self-serving bias. *Social* and Personality Psychology Compass, 2, 895-908.
- Sinclair, L., & Kunda, Z. (1999). Reactions to a Black professional: Motivated inhibition and activation of conflicting stereotypes. *Journal of Personality and Social Psychology*, 77, 885-904.
- Skowronski, J. J., Betz, A. L., Thompson, C. P., & Shannon, L. (1991). Social memory in everyday life: Recall of self-events and other-events. *Journal of Personality and Social Psychology*, 60, 831-843.
- Showers, C. (1992). Compartmentalization of positive and negative self-knowledge: Keeping bad apples out of the bunch. *Journal of Personality and Social Psychology*, 62, 1036-1049.
- Skowronski, J. J., Gibbons, J. A., Vogl, R. J, & Walker, W. R. (2004). The effect of social disclosure on the affective intensity provoked by autobiographical memories. *Self and Identity*, *3*, 285-309.
- Snyder, C. R., & Higgins, R. L. (1988). Excuses: Their effective role in the negotiation of reality. *Psychological Bulletin*, *104*, 23-35.
- Stapel, D. A., & Johnson, C. S. (2007). When nothing compares to me: How defensive motivations and similarity shape social comparison effects. *European Journal of Social Psychology*, 37, 824-838.
- Stewart, S. M., Byrne, B. M., Lee, P. W. H., Ho, L. M., Kennard, B. D., Hughes, C., & Emslie, G. (2003). Personal versus interpersonal contributors to depressive symptoms among Hong Kong adolescents. *International Journal of Psychology*, 38, 160-169.
- Stone, J., Aronson, E., Crain, A. L., Winslow, M. P., & Fried, C. B. (1994). Inducing hypocricy as a means of encouraging young adults to use condoms. *Personality and Social Psychology Bulletin*, 20, 116-128.
- Swann, W. B., Jr. Chang-Schneider, C., & McClarty, K. (2007). Do our self-views matter?: Selfconcept and self-esteem in everyday life. *American Psychologist*, 62, 84-94.

- Swann, W.B., Jr., Rentfrow, P.J., & Guinn, J. (2003). Self-verification: The search for coherence. In M. Leary and J. Tangney. *Handbook of self and identity:* Guilford, New York.
- Taylor, S. E., Lerner, J. S., Sherman, D. K., Sage, R. M., & McDowell, N. K. (2003a). Portrait of the self-enhancer: Well-adjusted and well-liked or maladjusted and friendless? *Journal of Personality and Social Psychology*, 84, 165-176.
- Taylor, S. E., Lerner, J. S., Sherman, D. K., Sage, R. M., & McDowell, N. K. (2003b). Are selfenhancing cognitions associated with healthy or unhealthy biological profiles? *Journal of Personality and Social Psychology*, 85, 605-615.
- Tesser, A. (2003). Self-evaluation. In M. Leary & J. Tangney (Eds.), Handbook of self and identity (pp. 275-290). New York, NY: Guilford Press.
- Tetlock, P. E. & Levi, A. (1982). Attribution bias: On the inconclusiveness of the cognitionmotivation debate. *Journal of Experimental Social Psychology*, *18*, 68-88.
- Tice, D. M. (1991). Esteem protection or enhancement?: Self-handicapping motives and attributions differ by trait self-esteem. *Journal of Personality and Social Psychology*, 60, 711-725.
- Tice, D. M., & Baumeister, R. F. (1997). Longitudinal study of procrastination, performance, stress, and health: The costs and benefits of dawdling. *Psychological Science*, 8, 454-458.
- Triplett, N. (1897). The dynamogenic factors in pacemaking and competition. *American Journal* of Psychology, 9, 507-533.
- Trzesniewski, K. H., Donnellan, M. B., Caspi, A., Moffitt, T. E., Robins, R. W., & Poultin, R. (2006). Adolescent low self-esteem is a risk factor for adult poor health, criminal behavior, and limited economic prospects. *Developmental Psychology*, 42, 381-390.
- Vohs, K. D., Baumeister, R. F., & Ciarocco, N. J. (2005). Self-regulation and self-presentation: Regulatory resource depletion impairs impression management and effortful selfpresentation depletes regulatory resources. *Journal of Personality and Social Psychology*, 88, 632-657.

- Vonk, R. (1999). Impression formation and impression management: Motives, traits, and likeability inferred from self-promoting and self-deprecating behavior. *Social Cognition*, 17, 390-412.
- Walker, W. R., Skowronski, J. J., & Thompson, C. P. (2003). Life is pleasant—and memory helps to keep it that way. *Review of General Psychology*, *7*, 203-210.
- Weary, G. (1979). Self-serving attributional biases: Perceptual or response distortions? *Journal* of Personality and Social Psychology, 37, 1418-1420.
- Weary Bradley, G. (1978). Self-serving biases in attribution process: A re-examination of the fact or fiction question. *Journal of Personality and Social Psychology*, *36*, 56-71.
- Weiner, B. (1972). Theories of motivation: From mechanism to cognition. Chicago: Rand McNally.
- Weinstein, N. D. (1980). Unrealistic optimism about future life events. *Journal of Personality* and Social Psychology, 39, 806-820.
- Weinstein, N. D. (1984). Why it won't happen to me: Perceptions of risk factors and susceptibility. *Health Psychology*, *3*, 431-457.
- Williams, E. F., & Gilovich, T. (2008). Do people really believe they are above average? *Journal of Experimental Social Psychology*, 44, 1121-1128.
- Wilson, T. D., Wheatley, T. P., Kurtz, J. L., Dunn, E. W., & Gilbert, D. T. (2004). When to fire: Anticipatory versus postevent reconstrual of uncontrollable events. *Personality and Social Psychology Bulleting*, 30, 340-351.
- Windschitl, P. D., Kruger, J., & Sims, E. N. (2003). The influence of egocentrism and focalism on people's optimism in competition: When what affects us equally affects me more. *Journal of Personality and Social Psychology*, 85, 389-408.
- Yamagichi, T., Hashimoto, H., & Schug, J. (2008). Preferences versus strategies as explanations for culture-specific behavior. *Psychological Science*, 19, 579-584.

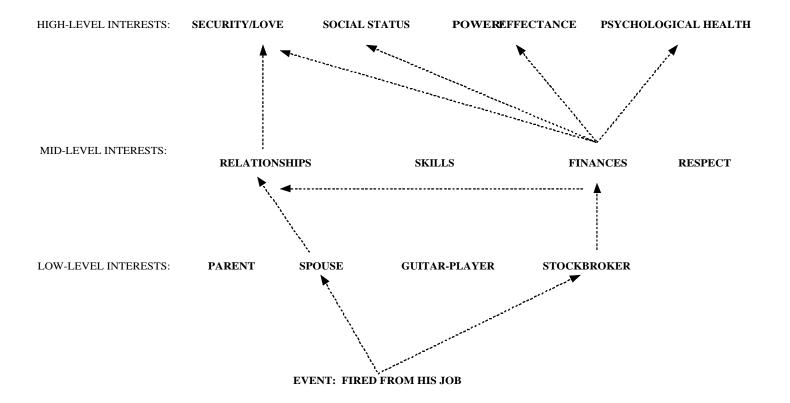
- Yamaguchi, S., Greenwald, A. G., Banaji, M. R., Murakami, F., Chen, D., Shiomura, K., Kobayashi, C., & Cai, H. (2007). Apparent universality of positive implicit self-esteem. *Psychological Science*, 18, 498-500.
- Zell, E., & Alicke, M.D. (in press). Self-evaluative effects of temporal and social comparison. Journal of Experimental Social Psychology.
- Zuckerman, M. (1979). Attribution of success and failure revisited, or: The motivational bias is alive and well in attribution theory. *Journal of Personality*, 47, 245-287.

## Author Note

Address correspondence to Mark D. Alicke, Department of Psychology, Ohio University,

229 Porter Hall, Athens, Ohio 45701, USA; email: alicke@ohio.edu

Figure 1: A Hypothetical Network of Interests



# A HYPOTHETICAL NETWORK OF INTERESTS

Figure 2: An Example of Basketball Skill with Aspiration Level, Perceived Level, Objective Level, and Tolerance

