New Directions in the Controversial Study of Self-esteem: A Review with Suggestions for Future Research

Abstract
The construct of self-esteem (SE) is controversial due to conceptual and methodological problems that have led to the near abandonment of its study. While little is known about the theoretical underpinnings of SE and its functions, clinicians, educators, organizational leaders, and policy-makers dangerously push for SE programs in hopes of boosting performance. Attempting to boost performance using unsubstantiated praise as a motivator may actually contribute to egotistical and narcissistic attitudes and related behaviours, yet good performances tend to raise self-ratings of SE. There are still good reasons to study SE because evidence supports positive relationships between SE and happiness, SE and well-being, as well as low SE and anxiety, rumination, depression, and poor self-regulation. Self-evaluation and self-regulation are strongly related to both SE and the cognitive phenomenon of inner speech (IS), and both SE and IS are strongly influenced by individual and contextual differences. Therefore, I use the present review to theorize about functions of SE within a self-system, place the study within current paradigms considering both psychological and social influences, and offer suggestions for future research in fundamental SE phenomenology using IS sampling.

Keywords: self-esteem, self-evaluation, self-concept, self-regulation, self-system, inner-speech, descriptive experience sampling (DES), terror management theory (TMT), sociometer theory

Introduction
Self-esteem (SE) is one of the most popular and controversial psychological constructs studied in psychology (Leary, 1999; Mruk, 2013; Zeigler-Hill, 2013). Rosenberg originally defined SE as a positive or negative *global* or overall attitude toward the self, but more recent
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evidence has led to conceptualization of SE subtypes (Rosenberg, Schooler, Schoenbach, & Rosenberg, 1995). The global SE definition is still the most widely used (Baumeister, Smart, & Boden, 1996; Mruk, 2013), commonly termed trait SE after the stability thought to be associated with SE (Brown & Marshall, 2013; Rosenberg et al., 1995). Popularity of the construct is reflected in more than 47,000 publications since the year 2000 (EBSCO search of PsycINFO, PsycARTICLES, & Academic Search Complete; Google Scholar, 2015).

Controversy over the construct exploded in the 1970’s when having low SE was thought to cause social problems such as risky sexual behaviour, drug abuse, under-employment, poor academic achievement, and violence (Leary, 1999; Zeigler-Hill, 2013). Controversy continues over the paradox of both low and high SE being related to dysfunctional states such as anxiety, depression, rumination (disturbing focus on negative self-related thoughts), and antisocial behaviours (Baumeister, Bushman, & Campbell, 2000; Mruk, 2013).

Low SE is used as an indicator of poor mental health and has been included as a criterion for clinical diagnosis in multiple past editions of the DSMIV (Mruk, 2006), and SE is still used in current DSM criteria such as Bipolar I Disorder (Post, 2015). Efforts to boost SE are abundant in therapies aimed at increasing well-being, although not much is actually known about antecedents, functions, development, causal factors, or universality of SE—making accurate diagnosis, measurement and empirically-based intervention questionable.

Some still argue a place for the SE construct in the current pursuit of science (e.g., Zeigler-Hill, 2013) and specifically in well-being (e.g., Mruk, 2013), while others argue for the abandonment of SE (Baumeister, Campbell, Krueger, & Vohs, 2003; Damon, 1995; Seligman, 1995). If there is danger in misunderstanding and misusing SE, then steps should be taken to re-examine what we know about the construct before moving forward. I dedicate the remainder of this paper to a brief look at SE definitions, theories, functions, measures and evidence, in three parts.

In Part 1 of this paper, I looked at the controversies of defining and studying SE. Overall, I found much potential use for the construct in spite of controversies. In Part 2, I briefly examined theoretical and empirical support for functions of SE, including terror management theory, sociometer theory, ethological perspective, and the humanistic perspective. In order to move forward with more clarity into the complex construct of SE, I evaluated a new definition of SE in Part 3. I concluded by using this investigation to posit a future research methodology for the study of SE across contexts and differences.

1. Controversies in Defining and Studying Self-esteem

Aside from social controversies discussed in the introduction of this paper, many scientific problems exist with the SE concept. Multiple definitions of SE may have contributed to multiple SE theories, findings, and applications as well as to difficulties in pin-pointing the usefulness of a SE construct. Many self-related terms can be mistakenly equated with, or more appropriately considered as contributors to, high or low SE under the current definitions of SE as an attitude or feeling about the self. For example, self-worth and competence (Diener & Diener, 1995; Mruk, 2013), self-judgment and self-reaction (Garrison, 1997), as well as self-respect and self-confidence (Brandon, 2011) are considered contributors to SE, while terms such as self-blame (Baumeister et al., 2003) are associated with low SE (for more self terms related to SE, see table 1). The term SE can also be considered synonymous with terms such as egotism, narcissism, and sense of superiority (Baumeister, Smart, & Boden, 1996), which is a huge conceptual problem for those outlining the nature of SE (i.e., Mruk 2006; 2013).
1.1. Multiple Approaches and Uni-dimensional Definitions are Problematic

While cognitive mental processes are implicated by some SE terms such as self-evaluation, there are also emotion related and performance based components implicated by various viewpoints of SE (Brown & Marshall, 2013). There is a need to re-evaluate the foundational definition of SE because of the common tendency to define SE on single dimensions rather than considering multi-dimensional or integrative approaches (Bednar, Wells & Peterson, 1989; Brown & Marshall, 2013; Marsh, Craven & Martin, 2013; Mruk, 2013).

Defining SE on a single dimension such as competence is problematic. According to Mruk’s (2006; 2013) interpretation and expansion of Diener and Diener’s (1995) two-factor model of competence and worth, SE will arise when one’s competent actions lead to personally meaningful successes. However, one’s competent actions may not contribute to one’s SE unless one has a sense of personal meaning and worth attached to those competent actions. Therefore, Mruk argues that high SE cannot be defined on the dimension of competence alone because those with low SE have competence in areas such as scoring high on math tests or performing a job well. In other words, more than competence is needed for SE to arise from high scores or good performances. In this view then, competence in combination with worth is needed for genuine SE to arise.

There is also a tendency to view SE as an affective variable, such as with self-worth or state SE, that is feeling good or bad about oneself at the moment (Brown & Marshall, 2013). Like defining SE as competence alone, defining SE as an affective state variable in isolation of other variables is potentially dangerous. In this case it is because it paves the way for SE to be associated with characteristics associated with worth such as dignity and honour, but also makes way for association with characteristics such as egotism and narcissism because these characteristics are also defined by feelings of positive self-worth (Baumeister, Bushman & Campbell, 2000; Mruk, 2013).

Affective feelings are considered flexible states, so there is no room for a long-term, global view of SE. Likewise, a definition of global SE does not allow for the rise and fall of SE throughout the lifespan. Mruk (2013) found that the two views are held in opposition to each other rather than in conjunction, with global SE defined as a stable trait over time, and with state SE defined as unstable or flexible in response to contextual influence. Here is yet another example of problematic uni-dimensional SE definitions or approaches to SE (Marsh, Craven & Martin, 2013).

The volume of SE definitions and categorizations is problematic, ranging from cognitive definitions, such as one describing oneself as powerful or confident, to affective definitions, such as attaching positive or negative emotion to self-perception, and evaluative definitions, or one comparing one’s current level of self-worth to a standard or ideal (Mruk, 2013). Indeed, SE is implicated in an array of self-processes and functions, indicating a probable need for more integrative approaches (Marsh, Craven & Martin, 2013; Mruk, 2013). Tables 1 and 2 provide a more detailed sample of SE definitions and approaches, most of which are uni-dimensional, but some of which contain combined cognitive, affective, and behavioural elements.

1.2. Convergent and Divergent Validity

Multiple conceptions of SE lead to potential overlap with other constructs, creating major issues of validity, meaning it is difficult to tease very similar concepts apart. Marsh, Craven, and Martin (2013) treated the issue of equating the SE construct with the potentially larger construct of self-concept, or the overall view one has of oneself. The bilateral relationship between self-concept and domain specific outcomes such as academic achievement, and lack of significant contribution of SE to these domain specific outcomes, means SE may be a smaller part of a larger self-concept. Self-concept may be both a cause and effect of domain specific outcomes.
Blascovich & Tomaka (1991) reviewed the literature for measures of SE, concurrent validity, construct validity, face validity, test item analysis, test item content, test reliability, factor analysis and multitrait-multimethod matrix, finding 40 different SE measures. The researchers found that there was insufficient rationale or evidence for the design and use of many of these measures (see Table 1 for examples of measures). Even the original, most commonly used global self-esteem scale, the RSES, has been statistically analyzed for best fit, factor loadings, reliability and validity, with similar mixed results (Suls, 2013).

O’Brien, Bartoletti, and Leitzel (2013) found limitations on the associations between high SE and adaptive behaviour such as school performance, and between associations of low SE and maladaptive behaviour such as delinquency. Specifically, reports of high global SE seems to overlap with personality traits of neuroticism and extraversion as well as variables such as affective self-worth and happiness, but seems to be distinct from self-concepts, narcissism, and self-efficacy. This team also found that high SE diverges from adaptive behaviour in those with unstable or defensive SE, meaning that some divergent evidence may be explained in terms of distinct types of SE.

Rosenberg, Schooler, Schoenbach, & Rosenberg (1995) tested the hypotheses that global SE is more relevant to overall psychological well-being than specific academic SE, and that specific SE is more relevant to behaviour than global SE. The researchers found support for their hypotheses along with indications that the degree to which specific SE affects global SE depends on how much worth or value is personally placed on the specific area of achievement, such as competence in academics. It seems more work is needed to help clarify the converging and diverging nature of the relationships between SE, self-concept, competence, worth, wellbeing, behaviour, personality, and mood.

1.3. Negative Consequences of High Self-esteem

Controversy stems from empirical evidence implicating negative consequences of high SE (Baumeister, Bushman, & Campbell, 2000; Baumeister, Smart & Boden, 1996; Leary, 1999). The heterogeneous nature of high SE also includes those who are defensive and conceited (Baumeister et al., 2003), as well as those who are narcissistic (Suls, 2013). The need for a positive view of oneself can overlap with negative traits in such a way that one may avoid facts that lead to discrepancy or affect one’s positive view of oneself (Mruk, 2013). For example, narcissists and egotists may avoid discrepancy by avoiding long-term or intimate interpersonal relationships to avoid discovery of ego-harming facts.

Seligman (1995) argued that high SE can make children more susceptible to depression, and Damon (1995) argued that SE is a dangerous mirage because people put faith in something that was not real. Baumeister, Smart, and Boden (1996) argued that increased SE was positively associated with negative behaviours including violence. High SE has also been associated with social desirability bias and self-deception (Baumeister, Campbell, Krueger, & Vohs, 2003). According to Mruk (2006; 2013), some critics claim that high SE leads to social and mental health problems, while other critics argue for the abandonment of the construct altogether due to the complexity of conceptualizing, defining, and measuring it. Mruk argues for the continued study of SE because there is much evidence supporting the usefulness of the construct.

2. Functions of Self-esteem

By now what is apparent is that SE may be both a feeling and an attitude that informs the self about the self, with some function related to self-motivation and self-regulation. There seems to be contextual differences in affective, cognitive, and behavioural factors, which should be taken into account when conceptualizing and defining SE. The next step is to further investigate functions of SE
across contexts to see how social, environmental and psychological contexts play a role in SE. A working definition should be functional enough to describe a phenomenon as a whole as well as how the parts work together (Mruk, 2013). After examining these contexts I present an evaluation of a new definition of SE that considers context, and then use the definition toward future research suggestions.

2.1. Theoretical Functions of Self-esteem

It took examination of some theoretical aspects of SE to understand definitions of SE in Part 1, but there remain many questions about the functions of SE. For example, researchers (Baumeister et al., 2003; Leary, 1999; Leary & Baumeister, 2000; Mruk, 2006; 2013) have asked questions such as: Why is SE important? What is the nature of SE and how does it work? Is it a need? Why do our beliefs about others’ evaluations of us affect our evaluations of ourselves? Is it universal? How does it develop? Is high SE required for healthy psychological functioning, or is low SE a cause of unhealthy functioning? This section provides a closer look at theoretical and empirically supported functions of SE.

Leary (1999) and Mruk (2013) reviewed perspectives on the functions of self-esteem including the humanistic perspective, the goal and coping perspective, the ethological perspective, terror management theory (TMT), and sociometer theory. Leary (2013) also looked at similar SE perspectives through the contexts of passive or active appraisal perspectives, arguing that the available theories fall into two functions that ultimately work off each other: (1) passive representations of self relevant information (subjective feedback, emotions) related to SE and self-concept (e.g., humanistic, goal and coping theories), and (2) active representations of self relevant information that SE may use to assess social, interpersonal, or cultural standing (e.g., dominance theory, TMT, sociometer theory). The same concept of active and passive representations can be applied to the various self-terms and SE definitions presented in Tables 1 and 2; for example, state, trait, and global SE can be seen as passive emotional feedback, and SE as a psychological process, function, or indicator of discrepancy can be representative of active SE.

Both Leary (1999) and Mruk (2013) point to a goal and coping framework arguing that SE is a complex mechanism arising from active feedback, circularity, and self-regulation. Although the theory is much more complex than this, the theory posits that SE is subjective feedback about the adequacy of the self that is positive when coping with threat, and negative when avoiding threat. For example, one may tell oneself, using positive subjective feedback, that one did well after successfully dealing with potentially harmful stimuli such as a fight with a loved one or a stressful conflict at work, or one may tell oneself the opposite after avoiding threats. SE in this manner is seen as subjective self-information relay circularity, positively reinforcing coping while providing a negative consequence for avoidance, potentially guiding self-regulation or future actions.

The two-factor model (Diener & Diener, 1995; adapted into practice by Mruk, 2013) posits that SE has two interrelated components: (1) a sense of personal worth (self-respect), and (2) a sense of personal efficacy (self-confidence), and that (3) these two components depend on each other such that one is the need to feel worthy to act and the other contributes to the competent action that follows, and vice versa. Taking goal and coping theories into account, a healthy sense of self-worth may contribute to healthy coping and approaching of goals. Positive feelings of worth and value arise from successful completion of meaningful goals and will serve as motivators to continue approaching goals. Likewise, negative feelings of self-blame or low self-worth may arise from failure of obtaining personally meaningful goals, motivating one to cope and to reset goals.

The ethological view is based on reinforcing long-term consequences of social interaction (Leary, 1999). In Barkow’s (1980) theoretical perspective on the evolutionary adaptation of a ‘self’,
being an individual amongst others allows for self-evaluation of self-rank to be possible, where evaluating the self as higher than others is the maintenance of SE. Therefore, SE is seen as an adaptation that functions to maintain dominance in interpersonal relationships. SE may have evolved as a mechanism to monitor dominance because consequences of dominance (e.g. mates, reproduction, high-status in society, etc.) are typically related to both SE and survival whereas low SE may have been related to social deference in the evolutionary past (Barkow, 1980).

Leary, Tambor, Terdal, and Downs (1995), and Leary and Baumeister (2000) also hypothesized about the involvement of SE in maintaining social relations. In this view, SE is affectively laden with emotions, acting as an internal sociometer, monitoring the degree to which one is valued or devalued in relation to others. The sociometer consists of global SE and domain-specific SE, containing individual differences in trait SE (Leary & Baumeister, 2000). A person’s state is a marker of the degree to which a person is included or excluded by others, called inclusionary status. One’s motivation to maintain SE is useful for avoiding social rejection and exclusion (Leary et al. 1995).

Humanistic researchers defined SE as stemming from congruence between the real self and the ideal self (Cohen, 1959), indicating a sense of how well the self is living up to expectations provided by culture and environment (Mruk, 2013). Higgins (1987) argued that this sense of how the self is doing provides a signal of autonomous behaviour to the self, whereby discomfort or anxiety arises from inconsistencies between one’s actual state of affairs and one’s ideal imagined state of affairs. Higgins warned that the type, magnitude, and accessibility of discrepancy probably determines type of discomfort felt and has potentially different outcomes (e.g., larger discrepancies leading to social anxiety or depression than smaller discrepancies).

The terror management theory (TMT) perspective posits that mortality salience, or our human awareness of mortality creates death-anxiety, and that SE as well as having a cultural worldview and meaning in life serves as buffers against this death-anxiety (Pyszczynski, Greenberg, Solomon, Arndt, & Schimel, 2004). Leary, Tambor, Terdal, and Downs (1995) argued that it is unclear why a mechanism for buffering against death-anxiety and uncertainty may have evolved, because it should be more adaptive to worry about misfortunes in order to avoid death and successfully survive and reproduce. However, because death is unavoidable, and we are aware of this fact, we need some mechanism to cope with this awareness because it is highly anxiety producing. Cognitively, the dissonance or mismatch between one’s will to survive and one’s awareness of mortality produces anxiety when one’s own mortality is made consciously or unconsciously salient (Pyszczynski et al., 2004). One will seek to reduce this death-anxiety or close the gap between mortality salience and will to survive in various ways that are all associated with having SE: creating cultural legacies, increasing meaning in life, doing acts of heroism, investing in family etc. (Becker, 1973).

2.2. Empirical Evidence for Functions of Self-esteem

Leary (2013) evaluated theories of SE in terms of empirical evidence and found that overall, (1) SE seems to be universal (with some variations across cultures) in that people seem to experience changes in how they feel about themselves as a result of their own actions and others’ evaluations of them, (2) people are generally affected by this information even if they think otherwise, and (3) people prefer to feel good rather than bad about themselves. Higher ratings of SE tend to be moderately to strongly related to better adjustment, self-efficacy, locus of control, non-neuroticism, life satisfaction, optimistic coping style, and constructive thinking, while SE and these last two factors are also related in the same way to a common physiological measure of immunocompetence or immune health (O’Brien, Bartoletti, Leitzel & O’Brien, 2013).
Baumeister and colleagues (2003) reviewed empirical evidence regarding whether high SE causes better performance, interpersonal success, happiness, or better lifestyles than low SE, finding that higher SE does not cause better school or job performance, but is partially the result of good performance in these areas. High SE predicts success and well-being in areas such as relationships, work, and health (Orth & Robins, 2014), but boosting SE beforehand does not increase academic performance or job performance and can actually decrease performance in these areas (Baumeister et al. 2003). High SE only contributes to academic performance when the outcome is of personal value or worth to the participant, which is in-line with Deiner & Deiner (1995), Marsh, Craven, and Martin (2013) as well as Mruk’s (2013) findings on the co-dependency of worth and competence.

Researchers are interested in levels of SE, self-regulation, affect, and depression. Low SE, or a more negative attitude about the self, has been a predictor of dysfunctional regulatory behaviours such as sexual compulsivity (Chaney & Burns-Wortham, 2015). Low SE is also associated with rumination, or repetitive negative self-related thoughts linked to depression (Zawadzki, 2015) and poor self-regulation (Morin et al., 2015). There are also moderate relationships between low SE, hopelessness, and loneliness (Baran, Baran, & Maskan, 2015). Although high SE does not cause happiness, high SE is strongly related to happiness while low SE is related to depression under certain circumstances (Baumeister et al., 2003).

Narcissism, SE, and violence share a theoretical and empirical relationship. Those with boosted self-worth without self-competence have narcissistic, self-absorbed, or self-inflated evaluations of themselves (Mruk, 2013). Narcissism is associated with high SE and with increased aggression when pride or ego self-worth is wounded, but high or low SE does not seem to cause violence and there is no established relationship between these variables (Baumeister et al., 2003). There is no evidence for low SE as a cause of delinquency, and high SE does not stop young people from risk-taking behaviours (e.g., substance use, early sex), and it may be that high SE fosters risk-taking experimentation (Baumeister et al., 2003). Currently, the empirical evidence does not support boosting SE without the combined contexts of self-improvement (Baumeister et al. 2003), self-competence (Mruk, 2013), or personal value (Marsh, Craven, & Martin 2013).

Self-esteem does not predict the quality or duration of interpersonal relationships, even though those with high SE claim to be more attractive, to have better relationships, and to make better impressions than those with low SE (Baumeister et al. 2003). Narcissistic individuals with high SE also claim to do well in these areas but tend to have fewer long-term relationships with people than those with high and low SE alone. Interpersonal processes (Leary, 2013) and one’s primacy of personal over collective self, for example, individualistic versus collective cultures (Sedikides & Gaertner, 2013), have strong influences on SE. A collection of evidence on the strong relationships between culture, interpersonal relations, self, and SE is also presented in Kernis (2013). Based on these reports it seems that SE may serve a highly social function.

Leary and colleagues (1995) performed a series of experiments to test the sociometer theory of SE as a marker of social inclusionary status. Participants’ feelings of social acceptance or rejection in a real social situation correlated highly with their own ratings of high or low state SE respectively. Similarly, levels of SE correlated highly with the degree to which participants generally felt included or excluded by other people overall in life. Social rejection caused lower SE when participants were excluded from a group for personal reasons rather than random reasons, with social exclusion having a larger effect on SE than social inclusion. People with unstable SE also showed more extreme behavioural and emotional reactions than those with
stable SE, regardless of low or high stable SE. Leary and colleagues (1995) therefore argued that those with less stable SE are more sensitive to cues suggesting acceptance or rejection, overall arguing that SE is a subjective sociometer indicating one’s inclusionary status in a social situation, facilitating successful social inclusion.

Mortality salience has been shown to produce death-related anxiety in a number of studies (Terror Management Theory or TMT; Greenberg, Solomon, Pyszczynski, Rosenblatt, Burling, Lyon, Pinel & Simon, 1992; Baldwin & Wesley, 1996; Greenberg, Solomon & Pyszczynski, 1997; Arndt & Greenberg, 1999). In a mortality salience condition (thinking about one’s own death), those with high global SE tended to view their lives as more meaningful than those with low SE, indicating a moderating role of SE in meaning in life, commonly relating to overall well-being (Study 1, Taubman-Ben-Ari, 2010). This suggests that high global SE and meaning in life are buffers against death-anxiety produced by mortality salience. Greenberg, Solomon and Pyszczynski (1997) argued for further empirical and conceptual refinements of TMT, SE and death-anxiety. Pyszczynski et al., (2004) thoroughly reviewed and updated the TMT related functions of SE, all of which has been consistent with the findings reported by Taubman-Ben-Ari (2010) and previous TMT researchers.

3. New Directions and Suggestions for Future Research

Even though some scientists argue for the abandonment of studying SE because of difficulties in defining the construct or understanding its functions, there are good reasons to continue the study in both clinical and well-being contexts. Whatever the function of SE, there is consensus that SE contributes to coping with human challenges that we all face in life (e.g., failure, loss, setbacks; Mruk, 2006; 2013), including the challenges presented by awareness of our eventual death (Greenberg et al., 1992), and by challenges in our social environments (Leary, Tambor, Terdal & Downs, 1995). No single theory so far explains all the evidence for SE, but there is much overlap between theoretical hypotheses and evidence across the literature. This final section provides arguments for the continued study of SE, an evaluation of a new definition of SE, and suggestions for future research considering multiple contexts and individual differences.

Leary (2004) wrote that there was rich evidence for the SE construct but that theories such as sociometer and TMT could not explain all the evidence. Later, Leary (2013) wrote that some SE theories do not consider social cognitive aspects such as interpersonal processes, arguing that an accountable theory of SE must consider the strong influence of interpersonal influence on even those who claim that these influences do not affect them, as well as that interpersonal influence is typically connected to real and imagined evaluations of others. Others’ evaluations of us, whether real or imagined, influence our self-evaluations and how we deal with social threats (Leary, 2013). Self-evaluation is a key process in self-regulation (Morin, 2006), and individual or cultural variations in interpersonal processes such as self-evaluation and other contexts known to elicit SE may help explain some variation in evidence.

3.1. Evaluating a New Definition of Self-esteem

To refine an integrative, functional definition of SE, Mruk (2013) outlined more than 30 years of phenomenological investigation into the “lived structure” of SE, coming up with 5 tenets of theory. The objective was to describe both the nature and structure of SE, defining it as “the lived status of one’s competence at dealing with the challenges of living in a worthy way over time” (p. 27).

Five pillars establish Mruk’s base for the functioning of SE: (1) lived status, or the existential state of being, whereby SE is something that is present, stable, but flexible depending on circumstances (e.g., economic, social, marital status), further influenced by one’s past, can be
activated in the present, and can impact one’s future; (2) *competence*, typically referred to as efficacy or one’s set of physical, social, and cognitive abilities and skills, but with added emphasis that SE is a developmental process that involves mastery of skill sets (e.g., learning the body, staying fit, interpersonal communication, problem-solving and reasoning etc.); (3) *challenge*, or a task that has an uncertain outcome, taxes one’s efficacy, and presents as an opportunity to rise to the challenge or to fall back (typically discussed in terms of losses or gains; e.g., raising a family, earning a living, dealing with health challenges etc.); (4) *worth*, or the attachment of personal value to one’s actions, and (5) *time*, or the process of SE development, activation, and reinforcement throughout the lifespan.

Within this theory, competence is importance for SE when dealing with challenges because thinking about what one can or cannot accomplish is a large part of one’s attitude toward the self. Worthiness plays into SE because SE cannot occur in a vacuum but must be tied to another factor in order to arise. In this sense Mruk (2013) argues that SE is tied to the value or worth of our actions, but that this connection is difficult to study because the concept of worth is attached to meaning and value systems such as “virtue”, and these systems tend to be based on what is considered right and wrong, something that scientists are not accustomed to studying empirically.

Both competence and worthiness are tied to a lived status and social norms. Economic, social, religious, and marital etc. inform us by rules and institution of what is considered good, right, virtuous, normal, and the opposite. Most importantly, competence is needed for worthiness because certain actions lead to feeling value, but worthiness is needed to balance competence because not all actions performed well lead to society’s norms of virtue or worthiness. For example, competence without worthiness can lead to lying, cheating, or hurting others for personal benefit, and worthiness without competence, or feeling worthy without doing anything to represent that worthiness, is by definition narcissism.

Mruk’s definition deals with the complexities and nuances of SE, underlining the co-dependence of competence on worthiness and vice-versa to help draw a line between healthy, balanced SE and narcissistic, egotistic SE. Further, because each individual may have a different value system or lived status (culture, religion, generation) attached to their SE, there are probably variations in interpersonal processes that contribute to SE. Measures may not be sensitive to these individual differences, manifesting as mixed evidence. Mruk’s (2013) definition is probably more sensitive to cultural and individual differences than previous uni-dimensional definitions because it captures SE of those from cultures who would otherwise rate low on a global SE scale due to cultural differences in attitudes about the self and others. Further, unlike in other SE definitions, development and flexibility of SE are taken into account. This definition has been useful in guiding me to suggestions for future research, provided in the next section after the following summary.

### 3.2. Importance of the Self-system, Individual Differences and Context

In light of this review, I see SE as a psychological mechanism that makes use of, and contributes to, cognition, affect, and behaviour as part of a larger informative *self-system*, or working information relays of self-related processes. Self-esteem, self-evaluation, self-concept and self-regulation most likely inform and influence each other closely in this system, making it difficult to tease apart the concepts or claim causal relationships. McCombs (1986) postulated that self-regulatory components of the self-system, such as SE, self-efficacy, and self-concept, may be causally related to self-regulated learning such that for self-regulated learning to occur, learners must first have positive views of themselves and their abilities to perform specific tasks (positive self-concept). Mruk (2013) would probably argue against this causal claim, instead arguing that learners must experience competent performances in conjunction with positive self-concept in order for SE to
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occur, and this may also be true for self-regulated learning.

McCombs (1986) also claimed a reciprocal relationship between the processes involved in self-regulated learning, such that continuous self-evaluation of one’s competence and efficacy changes one’s perceptions of the self (self-concept), the task, and goal importance, further influencing motivation, self-regulation, and actual task performance. Task performance further influences self-regulatory processes and vice versa in a reciprocal manner, making this aspect of the model comparable to Mruk’s argument of a bi-directional relationship between competence (task performance) and worth (self-concept, self-evaluation etc.) for SE to occur. Other models of the self consider the influences of both cognition and social construction (e.g., Harter, 1999), but a more realistic model of a self-system should consider neurocognitive and socioecological influences such as function and structure of our brains, social worlds, environments, and genetics (e.g., Morin, 2004). Either way, it is difficult to claim a causal relationship between any of these variables due to lack of direct supporting evidence, but it is at least clear that differences in individual self-systems may influence individual SE.

A SE mechanism is imperative for survival because it potentially facilitates navigation and defense against stressors in our environment. Different cognitive, affective, or behavioural aspects of SE may facilitate navigation of stressors depending on the context of the stressor, past reinforced instances of SE, and other individual differences. Building from Morin’s (2004) model of self-awareness, these individual differences may include personality traits, cognitive profile, psychopathology, meaning or purpose in life, coping styles, social communication skills, interpersonal relationships, cultural differences in attitudes about the self and group, and differences in processes related to self-regulation, including self-evaluation, self-concept, motivation, problem-solving and other executive functions. Context of a stressor may be a past memory, a simulation of a future event, or an actual event happening at the time. Stressors vary from social interactions to existential worries. Past reinforced instances of SE include past approach or avoidance of stressors and the consequential result and associated affect of navigating those stressors.

In a social situation, negative subjective feedback may indicate social rejection, as in the sociometer theory. In an imagined simulation of a task, positive affect may accompany some self-evaluation after remembering success on a similar past task, facilitating motivation. During mortality salience, when the prospect of death becomes evident to us, positive affect may accompany positive life memories and self-concepts of meaning in life to boost SE and buffer us from thoughts of meaninglessness, worthlessness, and death-anxiety. Levels of SE may fluctuate throughout the lifespan, activating the most in uncertain times such as adolescence, relationship troubles, and when thinking about end of life.


There is a lack of agreement about how to define SE and its possible functions, however ‘lived status’ (Mruk, 2013), or context and individual differences (Baumeister, Tice & Hutton, 1989) as well as others’ evaluations of us and our own self-evaluations (Leary, 2013) have a significant impact on SE and consequently on well-being. Leary (2013) and colleagues (Leary, Raimi, Jongman-Sereno & Diebels, 2015) argued that both interpersonal and intrapersonal processes influence SE, contrary to much research that has focused on only intrapsychic motives such as maintenance of cognitive or affective states. Therefore a methodology is needed to investigate SE across these contexts and differences.

Combining these lines of research provides reason to investigate inner-speech (IS), or the experience of talking to oneself. One reason for this is that IS often contains information about the
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self and others, and is highly social cognitive, including others’ evaluations of us and evaluations of ourselves in relation to our world (Morin et al., 2011). SE is also conceptualized in relation to the self and others (Kernis, 2013; Sedikides & Gaertner, 2013), and is highly related to self-regulation (Leary, 1999; Mruk, 2013).

When one experiences a nerve-wracking social situation, a doubt about one’s identity, or awareness of mortality, one may say to oneself, “I’ll make it through as best as possible… what I think is more important than what others think…” This is an example of self-evaluative IS reflecting SE and potential related behaviour (“…make it through as best as possible…”). If this is the case, IS related to SE may be a viable sampling ground for SE experiences, related contexts, behaviours, and functions.

In Mruk’s (2006) phenomenological approach to “integrated description” (p. 55) of SE experiences, SE and related behaviour are described as a co-constitutive process changing through time. In a “stepwise process” (p. 52), researchers look at SE experience by identifying the phenomena to be studied, typically through analyzing interview data or self-reports, and then identifying the potential parts of the phenomenon and examining them for potential quantifiable relationships between the parts and the whole of the phenomenon. This technique is sensitive to findings from participants’ experiences in the lab and in real life, but a common objection is in the use of retrospective methods when studying experience, due to the malleability of memories of experiences.

A real-time, random-thought sampling technique should be used instead of typical interview or retrospective self-report methods to reduce common problems that arise with these qualitative methods. Researchers can use integrated description sampling to ask questions about the content and structure of the SE construct by randomly asking participants about the real-time content of their IS during moments thought to elicit SE.

3.3.1. Context, Individual Differences and Inner-speech Sampling

Technology has recently become more sophisticated in that sampling of real-time, online IS can be performed with minimal interference using a pager, beeper device, or ring-tone (for a review see Morin, El-Sayed & Racy, 2014). Typically, participants jot down notes about one’s own IS. An additional method to consider is that if participants are in private at the time of the beep, they could report through a voice recorder on their own cell phone. Many people have a smart phone compatible with an application like this. In a variation of this, some non-verbal participants could record their SE related inner experiences, including IS if present, by jotting them down, typing them on their smart phones, or communicating them to their workers, families, or psychologists, to see if there are differences in IS between verbal and non-verbal samples. There are many limitations to consider when sampling non-verbal participants, which is elaborated on in Morin, El-Sayed & Racy (2014).

After a typical sampling period such as 8 beeps a day for 7 days, IS and inner experience data could be coded for content thought to be related to SE such as emotion, behaviour, self-regulation, self-evaluation, self-concept, self-worth, self-efficacy, and motivation. Participants could be trained in the lab about what IS and inner experiences are and how to identify instances (see Hurlburt’s method called descriptive experience sampling or DES written about in context of IS in Morin, et al., 2014), and then they could be randomly sampled in their natural everyday settings. Participants would be asked to report if and what they were saying to themselves at the time of the beep, and in addition to earlier IS studies, they would be asked what events were related to the contents of their IS (not just what they were doing at the time of the beep) as well as what they were feeling at the time of the beep. Asking about related activities and emotions could shed more light on association
between SE, behaviour, and affect in naturalistic contexts, and maybe add some insight about how to look further at the functions of SE.

Importance of context can be studied in an experimental condition to test the buffering hypothesis of SE, participants could be called in to the lab for some “last-minute paperwork” that could activate SE (e.g., questionnaires provoking contexts of defense or protection of one’s own beliefs, culture, and mortality), and then beeped at that time to report IS. To study potential individual differences, participants could return to the lab in a counterbalanced manner to fill out questionnaires related to individual and cultural differences.

Personality traits, social skills, coping styles, interpersonal communication, cognitive profile, psychopathologies, cultural demographics, global mood, global SE, state SE & SE stability are some potential individual differences in SE that can be studied to see if any of these traits impact participants’ reported self-evaluations, moods, and interpersonal processes and related behaviours. The data from a control group with naturally occurring instances of SE related IS and an experimental group with provoked SE would be compared to see if attempting to provoke SE in contexts make a difference on contents of self-evaluative and social inner speech, related events, and related emotions compared to naturally occurring IS.

**Conclusion**

This review is not exhaustive, but is meant to inform a big-picture view of the status of SE research and to argue for possible steps forward. The study of SE is still controversial, muddied by divergent evidence, multiple definitions and equally as many possible functions. However, proposed SE functions can fit into all of the reviewed theoretical frameworks just as well. The strongest evidence suggests that SE is enhanced by the opinions and actions of others, affected by one’s cultural view of the self, influences self-regulation, and is strongly associated with wellbeing in a variety of healthy and clinical samples.

It seems that SE is a self-evaluating mechanism that may be a part of a larger self-system, developing and fluctuating throughout the lifespan, influenced by contexts and individual differences. The SE mechanism most likely functions to facilitate psychological and physical self-protection, regulation, and well-being when we are faced with social or personal stressors, anxiety, threats to ego, threats to personal beliefs, and threats to life. The stability of one’s SE, along with the influence of one’s interpersonal network, affects how one will evaluate and react to situations. There may be specific individual differences in cognitive goal and coping styles, motivation, personality traits, self-culture dynamics, and a myriad of other genetic and epigenetic factors.

Substantial controversy remains within the study of SE, therefore it is worth re-investigating the theoretical foundations of SE before advocating for SE in clinical settings and classrooms. Further understanding of overall high and low SE and how they are related to overall psychological functioning is still needed. Mruk’s syntheses, evaluations and definition of the SE construct is productive in terms of guiding SE research toward clarity, parsimony, and practicality, with a functional definition that takes contexts and individual differences into account.

One window into the foundation of a construct is investigation into its phenomenology. Thought sampling is arguably the most appropriate method for capturing the contents of one’s inner experiences. Inner speech (IS) in particular is a key inner experience that should be studied to understand the contents and possible functions of SE, because IS is a key player in both self-evaluation and self-regulation, and it is at least clear that SE involves some evaluative and regulatory aspects. The existing research can then be compared to new findings, and a stronger basis for the construct may emerge.
After re-defining and conceptualizing SE for measurement, if those with high SE also score high on measures indicating dysfunction, then another approach will have to be taken. But for now, support for the continued study of SE using well-being, social cognition, and TMT frameworks is in direct opposition to claims that SE is a useless concept no longer in need of empirical investigation. Indeed, leaving the construct un-attended at this point could be devastating for those implementing SE treatment and enhancement programs.

Table 1. A Sample of Self-related terms related to the Self-esteem Concept

<table>
<thead>
<tr>
<th>Term &amp; General Association to SE</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-worth &amp; self-competence are dimensions of SE</td>
<td>Diener &amp; Diener, 1995; Mruk, 2013</td>
</tr>
<tr>
<td><strong>Self-judgment &amp; self-reaction</strong> are dimensions of SE</td>
<td>Garrison, 1997</td>
</tr>
<tr>
<td><strong>Self-respect &amp; self-confidence</strong> are dimensions of SE</td>
<td>Branden, 2011</td>
</tr>
<tr>
<td><strong>Self-liking &amp; self-competence</strong> are dimensions of global self-esteem</td>
<td>Tafarodi &amp; Swann Jr., 1995</td>
</tr>
<tr>
<td><strong>Confidence &amp; self-efficacy</strong> are equated to global SE</td>
<td>Brown &amp; Marshall, 2013</td>
</tr>
<tr>
<td><strong>Self-regard</strong> is equated generally to SE</td>
<td>Leary, 1999</td>
</tr>
<tr>
<td><strong>Floccinaucinihilipilification</strong> is involved in low SE and is defined as “estimating as worthless”</td>
<td>Baumeister et al., 2003, p. 7</td>
</tr>
<tr>
<td>Fourty scales representing feelings of inadequacy, social self-esteem, self-concept, self-perception, self-description, personal evaluation, body-esteem, and similar variables were collected to represent measures of SE</td>
<td>Blascovich &amp; Tomaka, 1991</td>
</tr>
<tr>
<td><strong>Self-blame</strong> is a negative self-attitude associated with low SE</td>
<td>Baumeister et al., 2003</td>
</tr>
<tr>
<td><strong>Self-evaluation</strong> is generally equated to SE</td>
<td>Brown &amp; Marshall, 2013</td>
</tr>
<tr>
<td>Equating the SE construct with the potentially larger construct of self-concept, or the overall view one has of oneself, is problematic</td>
<td>Marsh, Craven, &amp; Martin, 2013</td>
</tr>
<tr>
<td><strong>Pride, egotism, arrogance, honour, defensiveness, conceitedness, narcissism, and sense of superiority</strong> are sometimes associated with both high and low SE</td>
<td>Baumeister, Smart, &amp; Boden, 1996; Mruk, 2013; Suls, 2013</td>
</tr>
</tbody>
</table>

Note. SE = self-esteem

Table 2. A Sample of Self-esteem Terms and Definitions

<table>
<thead>
<tr>
<th>Term &amp; Definition</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>SE is an attitude toward the self in reaction to self-evaluation; global SE is a stable trait</td>
<td>Rosenberg et al., 1995</td>
</tr>
<tr>
<td><strong>Domain specific SE</strong> is an attitude about the self in a specific area of skill, also known as trait SE</td>
<td>Brown &amp; Marshall, 2013; Rosenberg et al., 1995</td>
</tr>
</tbody>
</table>
State SE is emotional, feelings of self-worth, also known as affect toward the self, Brown & Marshall, 2013

Low SE indicates a discrepancy between the self-concepts of perceived real self and ideal self; high SE indicates less of a gap between these self-concepts, Cohen, 1959

SE can be defined as “the lived status of one’s competence at dealing with the challenges of living in a worthy way over time”, Mruk, 2013, p. 27

SE is sometimes considered a function mechanistic to the self-system, specifically to motivation, self-regulation, or both, McCombs, 1986; Mruk, 2013

Note. SE = self-esteem

References


