

The Relationship between Self-esteem, Self-compassion and Subjective Well-being

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Abstract. With the aim of providing an integrated understanding of how self-esteem and self-compassion interact to influence subjective well-being, specifically how is it explained by the dual process model of information processing, this essay reviewed the insights obtained from studies examining the nature of self-esteem, the dual process model in explaining the explicit-implicit self-esteem discrepancies, and the role of self-compassion in modulating the relationship between different type of combinations of implicit and explicit self-esteem and subjective well-being. It is concluded that, firstly, high self-esteem can be both the product of the self-verification process where individuals deem that they have accomplished the role of their identities and the psychological buffer by which individuals attenuate the anxiety of death. Secondly, the distinction between associative and propositional processing paves the way for explicit-implicit self-esteem discrepancies. Thirdly, when individuals are both low explicit self-esteem and implicit self-esteem, self-compassion as a propositional process could override associative processes to reduce negative affect; for individuals with both low explicit self-esteem and low implicit self-esteem, self-compassion could reduce people's defensive tendencies.

1 Introduction

The feeling of self-worth has been widely considered a major component of subjective well-being. Individualism and capitalism seem to equate individuals' self-worth with being ahead of others and high productivity. As a consequence, a considerable amount of people consistently work overtime, self-impose stresses, set unrealistic goals and ignore physical health in order to pursue traditionally-defined success. This raised several questions such as what force drives people to behave in such a way and whether should make the sources of security the amount of money that is vastly beyond one's survival need or the physical attractiveness one cannot sense without a mirror. To answer such questions, it is valuable to investigate the mechanisms by which one's self-worth is gained. This essay mainly focuses on self-esteem, its subtypes (implicit and explicit self-esteem), and self-compassion as determining factors of self-worth and discusses how they contribute to subjective well-being.

2 General Self-Esteem

2.1 Definition

Self-esteem, as one of the most fundamental parts of the self-concept, is commonly conceptualized as the overall evaluation of, or attitude towards oneself. It also refers to individuals' feelings of their worth of living in the world

that impacts their psychological functioning. For example, studies have found that low self-esteem links to mental disorders such as depression or anxiety [1], and participants' self-esteem scores are positively correlated with both their hedonic happiness and eudaimonic happiness ratings [2]. Longitudinal studies have shown that self-esteem scores predict adolescents' future life outcomes such as education level and socioeconomic status [3]. Therefore, the research of self-esteem has always been one of the focal points for psychologists for decades.

2.2 Self-esteem as an outcome

Researchers argued that high global self-esteem can be both the outcome of one's previous life events and the objective that everyone pursues. Concerning the former, the identity theory suggests that individuals' self-concept involves multiple identities that are presented in various social positions in society (e.g., students, daughters, doctors), and everyone has an expectation of the standard role of each identity which serves as a reference level for them to behave accordingly [4]. Additionally, self-esteem is commonly defined as "the ratio of successes over pretensions" [5], implying that individuals consistently self-verify the extent to which their actual performance over each social position matches their standard, and self-esteem is gained within the such process. This self-verification model is validated by the results of Cast and Burke's study in which participants' perceived accomplishment of

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spousal role identity (e.g., one may perceive that as a husband he is responsible for 30% of the housework) were investigated, coupled with their self-esteem level, and a positive correlation was found between these two constructs [4].

The ways individuals verify themselves consist of two dimensions: self-liking and self-competence. Firstly, individuals will internalize the opinions or attitudes towards themselves expressed by, or how they are treated by their significant others, which functions as a benchmark by which they evaluate themselves [6]. There are a considerable amount of studies demonstrating that the participants who perceive themselves as those who would like to be socially excluded report lower self-esteem than those who believe that they are liked or accepted by others [7]. The sociometer theory assumes that self-esteem acts as a monitor of one's fitness or inclusion in the social group he/she belongs to [8]. Namely, individuals do not pursue self-esteem for its own sake, but rather concerned with its reflection of the extent to which they are rejected by important social groups, and adjust their behaviors accordingly, as belonging to a social group and gaining dominance within that greatly facilitates their chance of survival and reproduction from the evolutionary perspective. For example, studies have found that participants who anticipated a great risk of social rejection tend to pay more attention to social feedback and have heightened self-awareness of signs relating to proper forms of behaviors in order to adjust their behaviors to be accepted by others [9]. Although self-esteem could be the result of perceived social acceptance, the level of self-esteem per se could determine how likely individuals will interpret the social feedback they received as positive or negative. For example, low self-esteem could predispose the person to more likely interpret others as rejecting, by biasing their attention to the rejecting-related information [10].

Secondly, perceived self-competence is another dimension a person references when evaluating himself, which is similar to self-efficacy which denotes one's perceived capacity of controlling the environment. Its sources mainly come from the successful realization of goals and enhancing attributional style. Regarding the former, self-esteem arises when individuals observe that their actual performance matches the perceived standard as a role player. For example, Kwan et al. found the self-esteem of 143 college students both from China and America is positively associated with their GPA [11]. As for the latter, enhancing attributional style (vs. depressive attributional style) means that a person tends to attribute positive or successful events to enduring qualities of themselves, and negative events to situational factors, leading them to feel confident about their abilities rather than self-doubt. To provide empirical evidence, Duval and Silvia conducted an experiment in which the participants who were told that their internal reasons caused the experimental task failure experienced a larger loss of self-esteem than those who were told the external reasons lead to the failure [12].

2.3 Self-esteem as a Motive

Also, self-esteem could be the motive denoting a universal tendency that everyone pursues a positive evaluation of the self through numerous endeavors. For example, the terror management theory posits that human beings as mortal species surviving in the meaningless universe have the fear of both physical and psychological death, which is known as mortality salience [13]. However, it is argued that an intense feeling of self-worth could attenuate this inherent anxiety, as the culturally constructed conceptual reality bestows meaning, order and permanence [13]. Empirical evidence includes Schmeichel et al.'s study where participants' state self-esteem was boosted by presenting them words representing positive traits, and it was found that their tendency to defend the thoughts of death or illness decreased proportionally [13].

3 Explicit versus Implicit Self-Esteem

The dual process model in cognitive and social psychology suggests that individuals process information via two systems- explicit processing which is slow, deliberative, analytical and logical; and implicit processing which is fast, automatic, intuitive, and affect-based [14]. It also provides a perspective to consider a taxonomy of global self-esteem: explicit self-esteem (ESE) might stem from the cognitive system as a result of rational and deliberate analyses of self-relevant feedback and experiences, and implicit self-esteem (ISE) could be the product of unconscious and automatic processing of affective experiences. The distinction between ESE and ISE is evidenced by Grumm et al.'s study in which the ESE was modified as the result of experimental manipulation without the change of ISE and vice versa [15]. The measurement used in this study assessing both ESE and ISE was consistent with the common measurement used in most related studies. The explicit self-esteem was measured by responses to self-report questionnaires asking the participants to explicitly describe themselves by either commendatory adjectives or pejorative terms and to evaluate their performances regarding the aspects that college students perceive to be important such as social competence with a 7-point Likert scale. The ISE was measured by the self-esteem implicit association test (IAT) which assesses the relative strength between the four categories: "my name", "other's name", "positive attributes" and "negative attributes", and one "name" category and one "attributes" category were paired together to form two combinations. The test was conducted on computers and the participants were asked to categorize any words presented on the screen (either "names" or "attributes") into any combination by two keys on the left-hand side and right-hand side respectively. The difference in response time participants spent on the congruent combination ("my name" and "positive attributes" on the left vs. "other's name" and "negative attributes" on the right) and incongruent combination ("my name" and negative attributes" vs. "other's name" and "positive

attributes") was calculated to indicate ISE. The finding of their study is that the ISE can be altered by subliminal conditioning without a change of EES, the EES can be increased by leading participants to think about their desirable traits and the ISE remained unchanged, implying the two systems can operate independently and simultaneously.

4 The Relationship between Explicit Self-esteem and Implicit Self-esteem

Given that ISE is defined as the automatic and intuitive evaluation of the self that occurs outside of awareness, and ESE as the deliberate and logical processing of self-related information that requires cognitive efforts [16], it is believed that ISE develops earlier than ESE, which can be traced back to the pattern of interaction with significant others in early childhood even before the knowledge of the language [17]. In agreement with this idea, Baumrind argued that having affectionate and nurturing interactions with the parents, coupled with clear guidance on what is acceptable behavior paves the way for both high ISE and ESE, which is known as the authoritative parenting style [17]. DeHart found that the college students who were from divorced families had a weaker preference for their initials than did their intact-family counterparts, and 219 college students' ISE was positively correlated with their reported parental nurturing and negatively correlated with over-protectiveness [18]. The relation between nurturing and ISE could be explained by the aforementioned tendency that individuals internalize others' attitudes towards and means of treating themselves to evaluate themselves, and the authors explained that over-protectiveness tarnishes children's feeling of autonomy and competence, since it prevents them from winning full acclaim on their accomplishments.

Again, research suggests that ISE which represents the associative processes constitutes the basis of individuals' evaluation of the self, whereas it could be shaped by ESE that reflects beliefs and values [19]. Specifically, the associative processes (vs. propositional processes) describe that people possess automatic affective reactions as the result of an implicit association when encountering the relevant cues, which occurs beyond people's control and regardless of their endorsement [20]. For example, the image regarding violence may be activated unintentionally when individuals encounter cues of African Americans even though the person does not admit they are more violent. It is argued that ESE is the product of the transformation from ISE as the associative affect into a propositional format that represents beliefs [21], and this transforming process is modulated by the person's value. As Gawronski and Bodenhausen summarized, the nature of the propositional reasoning process is the affirmation of validity: when a propositional implication of an affect is in line with other beliefs that are considered true in the given context, it is considered valid [21]. For example, some may have a negative affect towards over-weighted people who are usually associated with laziness, and

they have not realized it could be discrimination and been educated that being diligent to engage in physical practices is a virtue, the negative affect would be validated. In contrast, when they have activated negative affect towards black people and be aware that it is bad to discriminate against minority groups, the affect is likely to be suppressed to prevent cognitive dissonance. It also could be inferred that the negative affect might be strong enough that people vacillate the existing value (e.g., it is okay to hold negatives evaluations towards black people) or resort to rationalization (e.g., reports showed that the crime rate of black people indeed outnumbers other' races) to achieve cognitive coherence [22].

Referring back to the evaluation of the self, one could infer that a person's automatic affective evaluation of the self will be activated when a person encounters relevant stimuli, which resemble sediment that is consistently stored in his/her memory; and ESE modifies this associative affect through deliberate cognitive judgements of the self. Consistent with this idea, with the support of the theory that individuals will show positive bias in the implicit evaluations of stimuli relating to the self [20], Cunningham et al. found that 93 undergraduate students displayed a relative liking for the letters included in their own names across a 4-week interval, indicating the stability of positive bias in ISE [20]. Furthermore, in their second experiment, the relative liking for such letters diminished when half of the participants were asked to think about the reasons why they have a preference for such letters. This finding largely suggests that deliberate cognitive processing can exert an impact on automatic evaluation.

The independence between the associative processes and propositional processes gives rise to the possibility that the development of ESE departs from ISE. For example, a person may possess low ISE due to parents' insensitivity in early childhood, whereas his/her ESE might be relatively high because of certain personal achievements or popularity among peers. Fragile self-esteem is defined as when a person's low ISE is coupled with high ESE. People with fragile self-esteem tends to harbor an uncertain and insecure inherent feeling of self-worth, which is tackled by heightened compensatory self-enhancement or self-protective behaviors [23]. For example, studies showed that participants with fragile self-esteem displayed more unrealistic optimism about the future, a strong preference for a flattering profile; possess higher level of narcissism [24], and gloat about their successes and escape responsibility in their failures [25], which might prevent the person from learning from failure and future improvements.

5 Self-Compassion

Self-compassion is another dimension of self-concept. Self-esteem describes the overall evaluation of the self that is based on life experiences, personal achievements and the way people evaluate themselves, which is subject to a contingency; in other words, low self-esteem coupled with frustration or shame may arise when encountering failures. In contrast, self-compassion

emphasizes the liking or feeling of caring and compassion towards oneself regardless of whether one's performance matches their anticipation of that identity, which features a non-judgmental attitude towards the self and stable self-acceptance [26].

Stemming from Buddhism, self-compassion is defined with respect to three components: self-kindness, feelings of common humanity and mindfulness [27]. Self-kindness describes that, rather than harshly criticising or being judgmental and captious about oneself, a person treats his/her flaws supportively, calmly and open-mindedly, acknowledging the fact that perfection is impossible [27]. Feelings of common humanity pertain to the sense that personal failures and hardships are shared by human beings as a whole, which attenuates the feeling of isolation and self-blame since he/she is not the only person who should be blamed [27]. Lastly, mindfulness of self-compassion emphasizes the acknowledgement and acceptance of one's suffering, instead of struggling to ignore or ruminate on the undesired aspect of the self, one's attention is brought to the present moment while experiencing the sensations and thoughts in an objective manner [28].

It is argued that self-compassion is derived from the early relationship with primary caregivers. Namely, if the child receives warm, consistent and supportive caregiving, it would be more readily to be self-compassionate and respond to life adversities with self-acceptance, as the way children treat themselves might be imitated from their parents' modelling [29]. The attachment theory suggests that infants will develop an intimate relationship with their primary caregivers, and use it as a secure base to explore the world. When they feel threatened or upset, they will shift their attention to seeking comfort and security from their parents [30]. However, when their bids for proximity with their caregivers are failed to be met with responsiveness and sensitivity, and they are ignored or rejected instead, the children might develop a sense of insecurity that they are not deserve compassion and liking, and the self-reliance would develop as a survival tool that consistently set high standards for and be judgmental about themselves to seek external validations [29].

6 The Role of Self-compassion in Modulating the Relationship between Self-esteem and Subjective Well-being

Undoubtedly, self-esteem accounts for a significant part of mental health. Numerous studies suggest that negative evaluation of the self is a predictor of mental disorders such as depression, anxiety, eating disorders [31], and substance use disorder [32], and higher self-esteem links to greater life satisfaction and optimism [33]. However, the mere pursuit of self-esteem might not be the most optimal means of approaching subjective well-being for several reasons. Firstly, since the gaining of self-esteem entails the successful match between one's expectation of the standard as numerous role players in different social positions and their actual performance, it is subject to contingency and could come with unrealistic goals that

are beyond one's control. For example, a student may perceive that he/she should achieve A in all subjects or have lots of friends in school to be called a competent student or a person think he/she should never break up with the loved one as a competent partner. Therefore, the sense of security and self-worth acquired from external validations is vulnerable and unstable. Secondly, the discrepancy between ISE and ESE could be raised because ISE as the product of associative processes that derive from early experiences tend to be more stable than ESE, which could lead to fragile self-esteem that links to Narcissism, inaccurate self-concept and aggression [24]. Neff argued that the pursuit of self-esteem is followed by the craving for superiority, which may elicit the tendency to brag about oneself while dismissing others, the person's interpersonal relationship could be impaired as a result [26].

Self-compassion, as an alternative way by which one could approach peace of mind without any type of evaluation and social comparison, could help people deal with situations that evoke low self-esteem effectively [27]. Unlike high self-esteem which could facilitate narcissism or lower self-concept clarity, to the best of my knowledge, there is no study demonstrating that higher self-compassion leads to negative psychological functioning. Instead, a plethora of studies found a positive association between self-compassion and positive life outcomes such as happiness, optimism, motivation, and body appreciation [34].

As for the specific role self-compassion plays in mitigating the relationship between self-esteem and subjective well-being, it is argued that self-compassion including explicit propositional processing could override implicit negative responses and help manage negative life experiences when a person's both ISE and ESE are low; and attenuate people's tendency to defend for self-ego when a person's ESE is higher than ISE. Regarding the former, the dual model theory suggests that the interplay of associative and reflective processing induces depression, with associative processing acting as the foundation and reflective as its adjustments [35]. That is to say, depressive individuals may possess a biased associative processing pattern of self-relevant information derived from previous life experiences that may give rise to negative affect when they encounter relevant stimuli, whereas it can be eliminated by proper reflective processing [35]. For example, for people who have low ISE, their automatic and unconscious negative affect derived from encountering relevant stimuli might be eliminated by their positive explicit evaluation of themselves that maybe come from personal achievements or narcissism. If the person's ESE is low, however, his/she could exploit self-compassion as the cognitive resource to overcome the negative affect in order not to engage in rumination which induces stronger distress. Empirical evidence such as Phillips's study found that low ISE participants who also possess low self-compassion exhibited a higher degree of depressive symptoms and lower level of life satisfaction than those who possess high self-compassion [36].

As for the latter, despite that relative high ESE might temporarily compensate for the negative feelings brought

by low ISE, the positive feeling about the self could be unstable and poorly-grounded, as it is contingent upon the self or external-imposing standards such as attractiveness, and personal achievements. Explicit-implicit self-esteem discrepancy is considered a major cause of Narcissism and individuals mask deep-rooted inferiority by surface-level grandiosity [37], coming along with several adverse effects. For example, Jordan et al. posit that the positive self-feeling of individuals with fragile self-esteem are vulnerable to negative life events and failures, once their positive self-view is threatened by such events, they tend to engage in numerous self-enhancement processes and maladaptive strategies such as anger and aggression [38]; and people with fragile self-esteem displayed more ethnic discrimination; Lambird and Mann found they tend to have poorer poor self-regulation after ego threat [39]; Neff argued that the pursuit of self-esteem leads people to dismiss negative feedback, and the people who might threaten their ego, escape personal responsibility in failures, which could hinder personal growth, and pursuing superiority would cause people more likely to express hostility and exploit others for their gain, which could influence the interpersonal relationship [40]. In contrast, self-compassion is an open-hearted awareness that advocates the acceptance of all aspects of the self rather than evaluating or comparing to self-imposing standards or other people, the mindfulness could deliver individuals' attention from elaborate cognitive processing to the acceptance of the present moment experiences, which can alleviate mental suffering [28]. According to the social mentality theory that individuals' behaviors, emotions and cognition are evolved from the motivation to build relationships with others [2], individuals have both the threat system that includes insecurity and defensiveness and the self-smoothing system that includes security and calmness. Self-compassion which sees the self as a part of the whole human beings and weaken the boundaries between individuals could activate the self-smoothing system while deactivating the threat system, enhancing life satisfaction and interpersonal relationship [2].

7 Conclusion

This essay presented summarized the various ideas about the nature of self-esteem, elaborated on how the dual model in information processing gives rise to the distinction between ISE, and ESE and their discrepancies, and how the concept of self-compassion as another dimension of self-concept differ from self-esteem, and what role does it play in modulating the relationship between self-esteem and subjective well-being. Firstly, self-esteem could be the outcome of self-verification when people's perceived identity role is matched with their actual performance, and the pursuit of self-esteem could be the motive that people want to attenuate the anxiety of death. Secondly, the dual model theory posits the distinction between associative and propositional processing, which remains applicable when people are evaluating the self, paving the way for explaining the

explicit-implicit self-esteem discrepancies. Thirdly, unlike self-esteem, self-compassion is defined as the compassionate and nonjudgmental attitude towards oneself that accepts all personal flaws and sees them as a condition of human beings as a whole. Lastly, when a person's low in both ISE and ESE, self-compassion may suppress negative affect by overriding implicit associative processing; and when ISE is low and ESE is high, self-compassion could help attenuate the tendency to defend the inflated self-ego.

Despite the clear benefits brought by self-compassion on many psychological functionings documented by numerous studies, some people may still hold negative attitudes towards self-compassion that treating oneself with kindness and tolerance may facilitate self-indulgence, and laziness, which could result in behavioral outcomes. For future research, therefore, it is valuable to investigate the correlation between self-compassion and several behavioral outcomes such as socio-economic status or education levels.

References

1. J.E. Roberts, S.M. Monroe, *Clin. Psychol. Rev.* **14**, 161 (1994).
2. R. Pandey, G.K. Tiwari, P. Parihar, P.K. Rai, *Psychol. Psychother. Theory, Res. Pract.* **94**, 1 (2021).
3. T. von Soest, L. Wichstrøm, I.L. Kvaalem, *J. Pers. Soc. Psychol.* **110**, 592 (2016).
4. A.D. Cast, P.J. Burke, *Soc. Forces* **80**, 1041 (2002).
5. W. James, "The self," *The self in social psychology*, R. F. Baumeister, Ed., London: Psychology Press, 1999, 69.
6. R.W. Tafari, W.B. Swann, *Pers. Individ. Dif.* **31**, 653 (2001).
7. L. Zadro, K.D. Williams, R. Richardson, *J. Exp. Soc. Psychol.* **40**, 560 (2004).
8. M.R. Leary, "Sociometer theory," *Handbook of theories of social psychology: Geographical perspectives*, P. A. M. Van Lange, E. T. Higgins and A. W. Kruglanski, Eds., London: SAGE Publications, 2012, 141.
9. J.E. Kiat, E. Straley, J.E. Cheadle, *Soc. Neurosci.* **12**, 612 (2017).
10. S.D. Dandeneau, M.W. Baldwin, *J. Soc. Clin. Psychol.* **23**, 584 (2004).
11. V.S.Y. Kwan, L.L. Kuang, N.H.H. Hui, *Self Identity* **8**, 176 (2009).
12. T.S. Duval, P.J. Silvia, *J. Pers. Soc. Psychol.* **82**, 49 (2002).
13. B.J. Schmeichel, M.T. Gailliot, E.A. Filardo, I. McGregor, S. Gitter, R.F. Baumeister, *J. Pers. Soc. Psychol.* **96**, 1077 (2009).
14. B. Djulbegovic, I. Hozo, J. Beckstead, A. Tsalatsanis, S.G. Pauker, *BMC Med. Inf. Decis. Making* **12**, 1 (2012).

15. M. Grumm, S. Nestler, G.v. Collani, *J. Exp. Soc. Psychol.* **45**, 327 (2009).
16. C.H. Jordan, S.J. Spencer, M.P. Zanna, E. Hoshino-Browne, J. Correll, *J. Pers. Soc. Psychol.* **85**, 969 (2003).
17. D. Baumrind, *Psychol. Bull.* **94**, 132 (1983).
18. T. DeHart, B.W. Pelham, H. Tennen, *J. Exp. Soc. Psychol.* **42**, 1 (2006).
19. S.L. Koole, A. Dijksterhuis, A. Van Knippenberg, *J. Pers. Soc. Psychol.* **80**, 669 (2001).
20. W.A. Cunningham, C.L. Raye, M.K. Johnson, *J. Cogn. Neurosci.* **16**, 1717 (2004).
21. B. Gawronski, G.V. Bodenhausen, *Psychol. Bull.* **132**, 692 (2006).
22. A.W. Kruglanski, *Psychol. Bull.* **106**, 395 (1989).
23. A.W. Paradise, M.H. Kernis, *J. Soc. Clin. Psychol.* **21**, 345 (2002).
24. J.K. Bosson, R.P. Brown, V. Zeigler-Hill, W.B. Swann, *Self Identity* **2**, 169 (2003).
25. G. Fitch, *J. Pers. Soc. Psychol.* **16**, 311 (1970).
26. K.D. Neff, *Soc. Personal. Psychol. Compass* **5**, 1 (2011).
27. K. Neff, *Self Identity* **2**, 85 (2003).
28. K. Raab, *J. Health Care Chaplain.* **20**, 95 (2014).
29. M. Wei, K.Y.H. Liao, T.Y. Ku, P.A. Shaffer, *J. Pers.* **79**, 191 (2011).
30. J. Bowlby, *Behav. Brain Sci.* **2**, 637 (1979).
31. J.F. Sowislo, U. Orth, *Psychol. Bull.* **139**, 213 (2013).
32. C. Yang, Y. Zhou, Q. Cao, M. Xia, J. An, *Front. Psychiatry.* **10**, e388 (2019).
33. V.C. Gian, S. Patrizia, A. Guido, J.R. Abela, C.M. McWhinnie, *Epidemiol. Psichiatr. Soc.* **19**, 63 (2010).
34. L. Hollis-Walker, K. Colosimo, *Pers. Individ. Dif.* **50**, 222 (2011).
35. C.G. Beevers, *Clin. Psychol. Rev.* **25**, 975 (2005).
36. W.J. Phillips, D.W. Hine, A.D.G. Marks, *Stress Heal.* **34**, 143 (2018).
37. J.K. Bosson, C.E. Lakey, W.K. Campbell, V. Zeigler-Hill, C.H. Jordan, M.H. Kernis, *Soc. Personal. Psychol. Compass* **2**, 1415 (2008).
38. C.H. Jordan, S.J. Spencer, M.P. Zanna, *Personal. Soc. Psychol. Bull.* **31**, 693 (2005).
39. K.H. Lambird, T. Mann, *Personal. Soc. Psychol. Bull.* **32**, 1177 (2006).
40. K.D. Neff, R. Vonk, *J. Pers.* **77**, 23 (2009).