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On the nature and origin of self-esteem

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CHAPTER 5

The Relationship Between Implicit and Explicit Self-esteem From a Self-Organizing Self-Esteem Perspective

Abstract

In this chapter we aim to develop a theoretical conceptualization of the distinction between implicit and explicit self-esteem based on the SOSE model. From this perspective, we suggest that a qualitative distinction between implicit and explicit self-esteem is different at the trait level and the state level. At the state level, we suggest that implicit and explicit self-esteem form one state self-esteem process, which changes in its quality (i.e. implicit or explicit) from moment-to-moment depending on the lower-order network at each moment. At the trait level, we suggest that implicit and explicit trait self-esteem can be conceptualized as separate trait self-esteem attractors, resulting from distinct pathways of long-term iterative development of state self-esteem. We discuss this conceptualization in the context of the two dominant (and competitive) perspectives of the implicit-explicit relationship, namely that implicit self-esteem and explicit self-esteem are *one* versus *separate* constructs. We suggest that our model unites the two traditional perspectives by incorporating the distinction between state and trait self-esteem mechanisms, and by accounting for the temporal nature of the two processes.²¹

²¹ This chapter is based on De Ruiter, N.M.P., Kunnen, E.S. & Van Geert, P.L.C. *The relationship between implicit and explicit self-esteem from a Self-Organizing Self-Esteem (SOSE) perspective*. Manuscript in preparation.

This thesis has so far focused on the distinction between the micro level of self-esteem and the macro level of self-esteem, resulting in state self-esteem and trait self-esteem, respectively. We have, thus far, not made a distinction in the experiential *quality* of self-esteem as *implicit* versus *explicit*, as such a distinction is not a pivotal factor in the Self-Organizing Self-Esteem (SOSE) model (see Chapter 2). This distinction is, however, a prominent topic in mainstream self-esteem literature.

Self-esteem – as an *attitude* involving a positive or negative reaction to, or association with, the self (Gawronski & Bodenhausen, 2007; Olson & Fazio, 2009) – is thought to take the form of implicit self-esteem as well as explicit self-esteem (Greenwald & Banaji, 1995). This distinction stems from the common conceptualization of self-esteem as a cognition, and classical duality theories thereof, which hold that there are two qualities of human cognition (Epstein, 1990; Fazio, 1990; Gawronski & Bodenhausen, 2006; Greenwald & Banaji, 1995; Strack & Deutsch, 2004). The first, which corresponds to implicit self-esteem (Epstein, 2006; Peters & Gawronski, 2011), is characterized as being automatic and emotional/behavioral. Implicit self-esteem is generally referred to as the automatic association between the self and positive or negative evaluations, which the individual is unable or unwilling to report on (Buhrmester, Blanton, & Swann, 2011; Koole & DeHart, 2007). The second type of cognition, which corresponds to explicit self-esteem (Epstein, 2006; Peters & Gawronski, 2011), is characterized as being slow, analytical, and reflective. Explicit self-esteem is referred to as the evaluation of the self based on the reflective association between the self and positive or negative evaluations (Brown, 1993; Rosenberg, 1965; Tafarodi & Swann, 2001).

To date, there is much dispute regarding the nature of the relationship between implicit and explicit self-esteem, stemming from a more fundamental question regarding the origin of implicit versus explicit self-esteem. Some researchers believe that implicit and explicit self-esteem are distinct constructs or processes (Bosson, Swann, & Pennebaker, 2000; Greenwald & Banaji, 1995; Strack & Deutsch, 2004), possibly stemming from two different systems in the brain (Epstein, 2006) – although most researchers agree that it is unlikely that the two are completely independent from each other (Dijksterhuis et al., 2009; Evans, 2008; Koole & DeHart, 2007). Others believe that the two are different qualities of the same construct, where implicit self-esteem is an indirect measure and explicit self-esteem is a direct measure of that construct (Gawronski & Bodenhausen, 2007; Olson & Fazio, 2009) (for reviews, see Evans, 2008; Frankish, 2010).

5.1 Aim of the Current Chapter

In the current chapter, we discuss the nature of implicit and explicit self-esteem from the framework provided by the Self-Organizing Self-Esteem model, while drawing on existing theoretical perspectives and models regarding attitudes. We suggest that the SOSE model can contribute to the ongoing discussion regarding the relationship between implicit self-esteem and explicit self-esteem by integrating the two perspectives, i.e., of implicit and

explicit self-esteem as *separate* processes/concepts versus implicit and explicit self-esteem as *one* process/concept with two qualities.

We suggest that – from the SOSE model – the nature of the implicit-explicit distinction is different for state self-esteem and trait self-esteem. First, however, we begin by highlighting pivotal findings regarding implicit and explicit self-esteem that have emerged from extant studies to date (for reviews, see Buhrmester et al., 2011; Dijksterhuis, Albers, & Bongers, 2009; Koole & DeHart, 2007).

5.2 Implicit and Explicit Self-Esteem Research to Date

Implicit-cognition research has only relatively recently been applied to the self-esteem construct – resulting in *implicit self-esteem* – (Greenwald & Banaji, 1995). Since this marriage, studies have shown that implicit self-esteem is functionally related to explicit self-esteem, where – for example – both act as a buffer for psychological processes, such that negative experiences have a relatively smaller negative effect on processes such as motivation (Greenwald & Farnham, 2000), and emotional responses (Baccus et al., 2004; Dijksterhuis, 2004) for individuals with higher self-esteem than individuals with lower self-esteem. However, implicit and explicit self-esteem are not equal representatives of the same construct (Dijksterhuis et al., 2009). Researchers have drawn this conclusion based on the fact that the correlational association between traditional implicit and explicit measures is frequently found to be low (Klavina, Schröder-Abé, & Schütz, 2012; Krizan & Suls, 2008).

The low correlation between the two qualities of self-esteem has led many researchers to wonder what the implicit-explicit dissociation might mean (Fazio & Olson, 2003). Research has revealed that, while an implicit-explicit discrepancy may be inherent to the self-esteem construct, relatively larger implicit-explicit gaps are indicative of relatively maladaptive self-esteem. First, a large discrepancy in which an individual exhibits high explicit self-esteem in combination with low implicit self-esteem is indicative of *fragile* self-esteem (Bosson, Brown, Zeigler-Hill, & Swann, 2003; Jordan, Spencer, Zanna, Hoshino-Browne, & Correll, 2003), as opposed to *secure* self-esteem that is realistic and well-anchored (Kernis, 2003). These individuals are thought to harbor, but not reveal, negative self-feelings. As a result, their (explicit) self-esteem is thought to be relatively delicate and defensive, such that they tend to have a higher need for self-protective and self-enhancement techniques and tendencies (Bosson et al., 2003; Jordan et al., 2003). Indeed, it is this form of ‘high’ self-esteem that is associated (but not synonymous) with narcissism (Jordan et al., 2003; Nuttin, 1985; Zeigler-Hill, 2006).

Alternatively (and arguably less researched), a large discrepancy involving high implicit self-esteem and low explicit self-esteem is indicative of *damaged* self-esteem (Schroder-Abe, Rudolph, & Schutz, 2007). This kind of discrepancy has been found to be connected to victimization (Leeuwis, Koot, Creemers, & Van Lier, 2014), supporting the conceptualization that damaged self-esteem is largely due to the social context (Franck et al., 2007). Furthermore, damaged self-esteem is associated with depressive symptoms, suicidal ideation and loneliness (Creemers, Scholte, Engels, Prinstein, & Wiers, 2012) as

well as psychological disorders such as anxiety (Schreiber, Bohn, Aderka, Stangier, & Steil, 2012).

At the other end of the spectrum, researchers have found that factors that *decrease* the implicit-explicit discrepancy are those that are psychologically advantageous, in that they are related to self-knowledge and self-trust. For example, higher perceived validity of one's own intuition (Jordan, Whitfield, & Zeigler-Hill, 2007) attitude accessibility (LeBel, 2010), and meditation (Koole, Govorun, Cheng, & Gallucci, 2009) are associated with larger implicit-explicit correlations. Furthermore, findings show that explicit self-esteem, rather than implicit self-esteem, is associated with self-protective mechanisms such as impression management (Buhrmester et al., 2010; Greenwald & Banaji, 1995), and that it is specifically *explicit* self-esteem that is made more accurate when individuals are more self-focused (Pryor, Gibbons, Wicklund, Fazio, & Hood, 1975) and are asked to be honest (Olson, Fazio, & Hermann, 2007).

These results suggest that implicit self-esteem is – by nature – less filtered than explicit self-esteem (Dijksterhuis & Aarts, 2010; Dijksterhuis et al., 2009). However, these conclusions regarding the nature of implicit and explicit self-esteem have – as yet – not solved the debate regarding the origin of implicit versus explicit self-esteem. In self-esteem literature, therefore, the question remains: are these two types of self-esteem the same or distinct self-esteem constructs (Fazio, 1990; Gawronski & Bodenhausen, 2006)? In the following section I reason that – from the SOSE model – the two perspectives are not necessarily in opposition if a distinction is made between state self-esteem and trait self-esteem.

5.3 Applying the SOSE Model to the Conceptualization of Implicit and Explicit Self-Esteem

In this section we argue that, firstly, SOSE mechanisms at the state level result in an implicit-explicit relationship that resembles the conceptualization that the two are different qualities of the *same* process. Secondly, we argue that mechanisms at the trait level result in an implicit-explicit relationship that resembles the conceptualization that the two are *separate* processes/concepts. Based on our SOSE conceptualization of how trait and state self-esteem interact, we then also show how the two conceptualizations of the implicit-explicit relationship can form one overarching conceptualization.

5.3.1 State self-esteem: implicit and explicit as one dynamic process.

In Chapter 3 we empirically validated the SOSE conceptualization (described in Chapter 2) of state self-esteem as a continuous process of self-organization out of lower-order self-experiential components. In this section, we suggest that the distinction between implicit and explicit state self-esteem is a function of the type of lower-order components of state self-esteem at t_x .

Recall that lower-order elements of state self-esteem include self-experiences in the form of self-directed emotions, autonomous actions, and self-evaluative cognitions (see Chapter 2). Emotional and behavioral self-experiences can be categorized as being *experiential* (Epstein, 1990), and informative of the *feel* of an experience (Perry, 2009). In con-

trast, cognitive self-experiences can be categorized as being *reflective* (Epstein, 1990), and informative of the *content* of experience (Perry, 2009).

We suggest that experiential lower-order components give way to implicit state self-esteem, while reflective lower-order components give rise to explicit state self-esteem. The *quality* of state self-esteem thus refers to whether it is implicit or explicit, where the lower-order components of state self-esteem determine what this quality will be (which we will describe below). This conceptualization therefore extends the conceptualization outlined in Chapter 2 regarding the lower-order network of state self-esteem. In Chapter 2 we described how the nature of emergent state self-esteem depends on the positivity versus negativity of lower-order components, and on the similar versus dissimilar connections between them, where these two dimensions determine the valence of state self-esteem as well as whether or not state self-esteem is genuine or not, respectively.

According to the SOSE model, the network of lower-order state self-esteem components is volatile, such that self-experiential components of varying quality can come and go depending on how the individual thinks, feels, and acts in relation to him- or herself and in response to the current context. The central point here is that self-related cognitions may or may not be a part of the current network of lower-order components. If the real-time state self-esteem network consists of only emotional and behavioral self-related components (that is, there is a lack of *self-directed* cognitions, not of cognitions per se), the dynamic interaction between these components will give rise to the self-organization of state self-esteem at t_x that is experiential by nature, i.e., implicit.

However, if the individual's real-time self-esteem network includes (a) self-related cognitive component(s) (e.g., thinking that one is a failure), the dynamic interaction between this cognitive component and the other self-directed emotions and actions will give rise to the self-organization of state self-esteem at t_x that is reflective by nature, i.e. explicit. The phenomenology of this distinction can be understood in terms of the direction of conscious attention (Dehaene & Naccache, 2001), which we describe below.

The role of the direction of attention.

We suggest that, if a self-evaluative cognition is introduced to the network, the interaction between this component and the other self-experiential components will mean that attention is directed at those self-experiential components. As a result, the individual's emotional-behavioral self-experiential components will be reflected upon, making the individual aware of the *content* of those experiences, and resulting in the emergence of reflective state self-esteem. An introduction of a self-directed cognitive component into the lower-order network therefore results in a shift of attention, namely, toward the self. This shift in attention then causes state self-esteem to become explicit. This is in accordance with the classic conceptualization that cognitive elaboration is necessary for explicit processes (Fazio & Olson, 2003).

On the other hand, if there is an absence of self-directed cognitive components in the lower-order network, the individual – at that moment – will not be directing attention on the current self-directed emotions or autonomous actions. The emotional-behavioral self-

experiences will thus not be reflected upon, making the individual aware of only the *feel* of those experiences, resulting in the emergence of implicit state self-esteem.

The role of the direction of attention has previously been conceptualized as pivotal in determining the nature of cognition. Specifically, the Unconscious Thought Theory (UTT; Dijksterhuis & Nordgren, 2006) – which refers to thought processes in general, rather than to self-esteem – posits that the difference between unconscious and conscious thought depends on the direction of attention. For conscious thought, attention is directed at the thought-object itself. For unconscious thought, attention is directed at something peripheral to the thought-object (Dijksterhuis & Nordgren, 2006). Applying this theory to state self-esteem, the ‘thought-object’ becomes the experience of the self. Therefore, in accordance with the UTT, state self-esteem is conscious (i.e., explicit) when attention is directed at the current experience of the self (i.e. the current self-experiential components), and state self-esteem is unconscious (i.e., implicit) when attention is directed elsewhere (i.e., to something external, such as a conversation partner).

If the direction of attention is the mechanism that explains whether state self-esteem is experienced as implicit or explicit, then a re-direction of attention (i.e., to and from self-experiential components) will predict a transformation from one quality of state self-esteem to another, from one moment to the next moment. Therefore, implicit state self-esteem has the potential to become explicit state self-esteem (Dijksterhuis & Nordgren, 2006; Fazio & Olson, 2003; Jordan, Logel, Spencer, Zanna, & Whitfield, 2008; Olson & Fazio, 2009), given that self-experiential components become the subject of attention (Fazio, Powell, & Herr, 1983). Likewise, explicit state self-esteem will become implicit state self-esteem if attention is shifted away from the self-experiential components at that moment.

Implicit is not inaccessible.

Our conceptualization of implicit and explicit state self-esteem suggests that individuals experience (and are aware of) both implicit and explicit state self-esteem. The difference, therefore, refers to a distinction in the quality of the experience, where the quality of the experience can be transformed by means of an attentional shift.

Returning to our earlier distinction between *feel* and *content*, an awareness of implicit state self-esteem means that state self-esteem is experienced as a feeling without reflecting on the content of that feeling (Perry, 2009). Explicit state self-esteem, however, means that state self-esteem is experienced through reflective means, where the individual is aware of the content of the experience.

Our conceptualization, therefore, adopts the position that “implicit” is not synonymous with “inaccessible” (see also Fazio & Olson, 2003; Gawronski, Hofmann, & Wilbur, 2006). We conceive of implicit state self-esteem as being “implicit” only in the sense that the individual may not have had the intention of having a valenced experience of the self, and that the information processing that led to the experience is a spontaneous affective reaction that is not reflective (for a discussion, see Gawronski et al., 2006).

The temporal nature of implicit and explicit state self-esteem.

Thus far, we have discussed a static distinction between implicit and explicit state self-esteem. Here we introduce a temporal aspect, examining how the two qualities of state self-esteem form one process that changes from moment to moment.

Given the SOSE perspective of state self-esteem as a continuous process of self-organization, we suggest that the emergent nature of state self-esteem is also continuously self-organizing as implicit or explicit. With each new iteration of self-organization, state self-esteem has the potential to transition between implicit and explicit. An “iteration of self-organization” can be conceptualized as occurring whenever the network of lower-order self-experiential components changes, either because components come or because they leave. This results in a re-organization of the network, giving rise to the next iteration of emergent state self-esteem. This may occur as a result of one’s own actions (in the broadest sense of the word, including emotions, behavior, cognitions, etc.) or due to the immediate context. In this way, implicit and explicit state self-esteem are part of the same temporal process.

This perspective is supported by the Iterative Reprocessing (IR) model of attitudes (Cunningham & Zelazo, 2007), which acknowledges the undeniable malleability of, and continuum between, *automatic* (i.e., experiential) and *controlled* (i.e., reflective) attitudes (Van Bavel, Xiao, & Cunningham, 2012). The IR model suggests that evaluation is dynamic and involves a series of iterative adjustments based on additional information provided by the context or of one’s own experience. Like the SOSE perspective of implicit and explicit state self-esteem, the IR model suggests that implicit and explicit evaluations have a sequential relationship (forming one process), rather than a parallel one (forming two processes).

Like other models of attitudes – such as the Associative-Propositional-Evaluation (APE) model (Gawronski & Bodenhausen, 2006, 2007) – the IR model suggests that reflective evaluations are normally based on experiential ones, such that evaluations first emerge as experiential (Van Bavel et al., 2012). As the evaluative process continues, more iterations give way to the possibility of additional reflections – resulting in the emergence of a relatively reflective evaluative process. For example, a negative affective reaction toward the self can be elaborated upon with a self-evaluative thought, such as “I dislike myself” (Gawronski & Bodenhausen, 2006).

It is important to note that, while state self-esteem may iteratively change between experiential and reflective, we are not suggesting that a reflective experience *replaces* an experiential one. Rather than approaching this iterative change as a mutually exclusive transformation, we suggest that it is more accurate to approach it as an additive process. If earlier iterations are experiential by nature, further iterations may result in an additional reflective quality (which can also be removed when attention is directed elsewhere). This means that “cognitive and affective processes work in concert rather than independently” (Van Bavel et al., 2012, p. 445). Experiential processes are thus continuously engaged throughout the iterative process (Cunningham & Zelazo, 2007; Van Bavel et al., 2012). At

any given moment, therefore, it is unlikely that there will be a neat distinction between implicit and explicit state self-esteem. Instead, the state self-esteem experience lies on a continuum between predominantly experiential to predominantly reflective (Carlston, 2010).

The implicit-explicit discrepancy of valence at the state self-esteem level.

As we described at the beginning of the current chapter, many researchers have attested to the ‘filtered’ nature of explicit self-esteem (Dijksterhuis & Aarts, 2010; Dijksterhuis et al., 2009), where not all aspects of implicit self-esteem are necessarily made explicit – resulting in an implicit-explicit discrepancy of valence (e.g., implicit self-esteem is negative while explicit self-esteem is positive). Here we incorporate this issue into our SOSE conceptualization of state self-esteem, and we discuss how a discrepancy in valence might arise between implicit and explicit state self-esteem between t_x and t_{x+1} .

We suggest that a transformation between implicit and explicit state self-esteem can only be *discrepant in valence* if the self-directed component is of a different valence than the emotional-behavioral components in the lower-order network. This is in accordance with the SOSE perspective of state self-esteem, where the emergent valence of state self-esteem is a function of the positivity and negativity of its lower-order components (see Chapter 2).

For example, let state self-esteem at t_x be implicit and negative (i.e. negative self-directed emotional-behavioral components). If at t_{x+1} a *positive* self-directed cognition is introduced into the lower-order network, attention will be directed toward the emotional-behavioral components, making state self-esteem at t_{x+1} explicit. Moreover, because the new self-directed component is positive, we can expect that this positivity will influence the valence of state self-esteem, such that state self-esteem becomes positive at t_{x+1} . A discrepancy in valence thus arises between implicit state self-esteem at t_x (negative) and explicit state self-esteem at t_{x+1} (positive). A newly introduced self-directed cognition can therefore cause both a shift in attention toward the self (making state self-esteem explicit) while also causing a shift in valence (we will discuss what this means for the macro level of self-esteem, i.e., trait self-esteem, in the section *Integrating single-process and dual-process perspectives from the SOSE model*).

However, according to the Associative-Propositional-Evaluation (APE) model, in order for an experiential evaluation to be successfully transformed into a reflective one, the newly reflective evaluation must be endorsed by the individual; or in APE terminology, it must have a positive *truth-value* (Gawronski & Bodenhausen, 2006). Here, a truth-value is simply referred to as subjective truth, rather than objective truth. Therefore, an evaluation is said to have a positive truth-value if there is cognitive consistency between the evaluation in question and existing reflective evaluations that are momentarily considered to be relevant for the judgment at hand (Gawronski & Bodenhausen, 2006). According to the APE model, experiential evaluations need not have a positive truth-value, but reflective ones do.

Applying this notion to state self-esteem, a newly introduced self-directed cognition may have a positive or negative truth-value. A self-directed cognition has a positive

truth-value if it is consistent with existing reflective self-evaluations. Note that this does not mean that the self-directed cognition is necessarily consistent with the current emotional-behavioral self-experiences in the lower-order network, as these are not ‘reflective’ evaluations, as emphasized in the APE model (Gawronski & Bodenhausen, 2006). A self-directed cognition has a negative truth-value (i.e., the new cognition is subjectively false) if it is *inconsistent* with existing reflective self-evaluations. We will discuss the nature of these ‘existing reflective self-evaluations’ and their ‘consistency’ with momentary self-cognitions from a SOSE perspective in the section *Integrating single-process and dual-process perspectives from the SOSE model*. At this point, suffice it to say that whether or not a new self-directed cognition results in a transformation of the *quality* of the emergent state self-esteem from one moment to the next depends on whether it has a positive or negative truth-value.

Let us consider the case in which a newly introduced self-directed component (e.g., the thought “I’m worthless”) has a positive truth-value (i.e., it is consistent with existing reflective self-evaluations). If this self-directed component at t_{x+1} is of similar valence to the emotional-behavioral self-experiences at t_x (e.g., embarrassment and seeking reassurance), the implicit-explicit discrepancy in valence will be minimal from one moment to the next (i.e., it will stay negative). On the other hand, if the self-directed component at t_{x+1} is of different valence compared to the emotional-behavioral self-experiences at t_x (e.g., the thought “I’m special”), an implicit-explicit discrepancy in valence will occur from one moment to the next (i.e., state self-esteem becomes more positive). An implicit-explicit discrepancy in valence between state self-esteem at t_x and t_{x+1} therefore depends upon the self-directed component having both a different valence from the existing emotional-behavioral self-experiences and having a positive truth-value.

In contrast, a self-directed component that has a negative truth-value (i.e., is *inconsistent* with existing reflective self-evaluations) can be expected to disappear quickly from the individual’s experience (in accordance with cognitive-dissonance research; Martinie, Milland, & Olive, 2013), thereby having no effect on the current self-organization of state self-esteem. The individual will thus not experience a transformation of the quality of state self-esteem from t_x to t_{x+1} if the self-directed cognition has a negative truth-value, such that state self-esteem remains implicit.

5.3.2 Trait self-esteem: implicit and explicit as two distinct constructs.

Above we discussed the nature of implicit and explicit self-esteem at the *state* self-esteem level. Here we discuss what the implicit-explicit relationship is at the *trait* self-esteem level. We suggest that the nature of the implicit-explicit relationship at the trait self-esteem level is different than at the state level, due to a difference in the fundamental ontology of state and trait self-esteem. Our conceptualization of these differences is grounded in the SOSE model (see Chapter 2).

In Chapter 4 we empirically validated the SOSE conceptualization of trait self-esteem as a landscape of various trait self-esteem attractors. From this perspective, each trait self-esteem attractor is the result of self-organization out of state self-esteem iterations

(based on self-amplifying feedback loops); such that each state self-esteem experience becomes the input for the following state self-esteem experience until a pattern (i.e., attractor) emerges. The content of a trait self-esteem attractor state thus includes the self-experiences that gave way to the specific state self-esteem iterations for that attractor state. Because the development of trait self-esteem attractors occurs across the long term (i.e. weeks, months, years), there is time for an individual to experience the repetition of various qualities of state self-esteem, thereby giving way to various trait self-esteem attractor states (see Chapter 2).

Here, we suggest that the characteristics regarding the iterative development of state self-esteem into trait self-esteem attractors across the long term can also be applied to the emergence of trait self-esteem attractors as predominantly implicit versus predominantly explicit. In Chapter 2 we described how trait self-esteem attractor states emerge out of iterations of state self-esteem that are similar to each other. We therefore suggested that state self-esteem experiences that are more negative self-organize into a relatively negative trait self-esteem attractor, for example. Therefore, trait self-esteem attractors differ from each other across the dimension of *valence*, i.e., positivity or negativity. Here, we introduce a dimension of *quality*, i.e., implicit or explicit. We reason that state self-esteem experiences that are similar to each other in their implicit or explicit quality will self-organize into predominantly implicit or explicit trait self-esteem attractors, respectively. This conceptualization of separate trait self-esteem attractor states for implicit versus explicit experiences of the self is in accordance with the traditional duality-perspective, in which the self is a “conglomerate of multiple subsystems”, some of which are available for self-report and others are not, where the latter function implicitly (Koole & Pelham, 2003).

Additionally, just as the valence dimension of trait self-esteem attractor states can be conceptualized as continuous, we also suggest that the quality dimension is continuous. As such, trait self-esteem attractor states need not be strictly implicit or explicit, but may be characterized by an intermediate quality, depending on the quality of their lower-order input. In general, trait self-esteem attractor states can be conceptualized as differing from each other across two dimensions: valence and quality.

Recall from Chapter 2 that a trait self-esteem attractor of a specific nature (e.g., positive versus negative, or implicit versus explicit – as introduced here) is experienced by an individual through the constraint that it has on the individual’s current and future state self-esteem experiences. Therefore, an *implicit* trait self-esteem attractor increases the likelihood of current and future *implicit* state self-esteem experiences, while an *explicit* trait self-esteem attractor increases the likelihood of current and future *explicit* state self-esteem experiences. Together, these trait self-esteem attractor states provide possibilities for the direction that state self-esteem can take at any given moment. A moment-to-moment transition from one trait self-esteem attractor to another corresponds with the sequential changes that occur in the state self-esteem process (regarding valence or the implicit/explicit quality). The stronger the trait self-esteem attractor (i.e., the wider and deeper the basin of attrac-

tion), the larger the likelihood that state self-esteem will move toward, and maintain, that corresponding quality.

Additionally, recall from Chapter 2 that – while only one trait self-esteem attractor can be experienced at a time – trait self-esteem is multi-stable, in that multiple trait self-esteem attractors can simultaneously exist. An individual may therefore have multiple explicit trait self-esteem attractors as well as multiple implicit trait self-esteem attractors. A given trait self-esteem attractor state is experienced in the present moment when state self-esteem corresponds with its lower-order input. This is demonstrated in Figure 1 (an attractor landscape), where each valley represents a different trait self-esteem attractor, and where the ball represents state self-esteem.

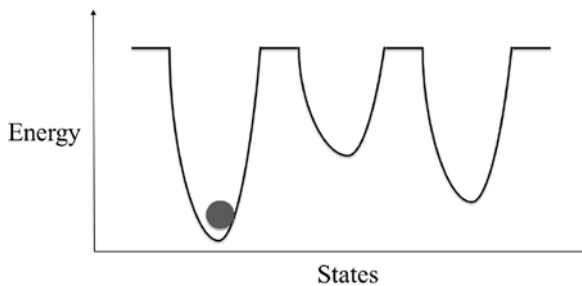


Figure 1. An attractor landscape, portraying trait self-esteem attractors as valleys and state self-esteem as a ball rolling into one valley at a time. This figure is from Chapter 2 in the current thesis.

The implicit-explicit discrepancy of valence at the trait self-esteem level.

The above conceptualization of implicit and explicit trait self-esteem corresponds with the traditional findings regarding a discrepancy between implicit and explicit trait self-esteem. As discussed earlier, a relatively large implicit-explicit discrepancy has been found to be dysfunctional (Bosson et al., 2003), where this discrepancy can be decreased by means of characteristics related to more self-knowledge (Jordan et al., 2007; Koole et al., 2009; LeBel, 2010). From the SOSE perspective, large discrepancies in valence between implicit and explicit trait self-esteem attractors indicate that there is intrinsic inconsistency within the trait self-esteem landscape.

This conceptualization is supported by Vallacher, Nowak, Froehlich and Rockloff's (2002) research based on self-narratives. Vallacher et al. found that individuals who are lower in subjective self-certainty demonstrated larger differences between positive and negative states of self-narratives. Based on this finding, a higher discrepancy in valence of attractor states can indeed be conceptualized as being less advantageous (i.e., less self-certainty) than a lower discrepancy. A discrepancy in valence between *implicit* and *explicit* trait self-esteem attractors can therefore also be expected to correspond with lower self-certainty, and therefore to be experienced as aversive. From the SOSE model perspective, a

larger discrepancy between implicit and explicit trait self-esteem attractors (and thus lower self-certainty) would be reflected in a real-time pull between largely discrepant, and inconsistent, potential experiences of state self-esteem.

While the SOSE model conceptualization of the implicit-explicit relationship at the trait level is similar to the traditional duality perspective regarding implicit and explicit self-esteem as separate constructs, there are also important differences between the two perspectives. Specifically, while traditional duality perspectives conceive of implicit versus explicit self-esteem constructs as mental representations (Strack & Deutsch, 2004), we conceive of them as attractor states. While it is possible to form representations regarding implicit or explicit attractor states, the SOSE model suggests that these representations are not the essence of implicit or explicit trait self-esteem. Forming a representation about an attractor state is possible in as far as individuals are able to form an aggregative conclusion regarding their own self-experiential history. A representation of implicit trait self-esteem is thus an aggregative conclusion regarding one's emotional-behavioral self-experiential history, while a representation of explicit trait self-esteem is an aggregative conclusion regarding one's reflective self-experiential history.

5.3.3 Integrating single-process and dual-process perspectives from the SOSE model.

While researchers tend to adopt *either* the perspective that implicit and explicit attitudes such as self-esteem are part of one process *or* that they are themselves two processes or constructs, our SOSE conceptualization allow these perspectives to be integrated. At the *state* level, implicit and explicit self-esteem are conceptualized as separate iterations in one continuous process of self-organization. At the *trait* level, implicit and explicit self-esteem are conceptualized as distinct attractor states (where individuals may differ in how many implicit or explicit attractor states they develop). Moreover, these two conceptualizations can be integrated, as trait and state self-esteem processes are highly integrated in the SOSE model.

As we discussed in Chapter 2, the self-organization of an existing trait self-esteem attractor is triggered in real time when a lower-order component of that attractor state emerges in real-time (which first results in the self-organization of state self-esteem). This is the bottom-up relationship between state self-esteem and trait self-esteem. Moreover, each time that a specific trait self-esteem attractor is triggered in real-time, it is experienced through the constraint that it has on state self-esteem, and the lower-order interactions thereof. This is the top-down relationship between trait self-esteem and state self-esteem, which also results in the strengthening of the trait self-esteem attractor state (due to the self-amplifying feedback loops between the state and trait levels; see Chapter 2). Trait self-esteem and state self-esteem are thus dynamically connected by a bi-directional relationship.

From this perspective, a real-time self-evaluative cognition (with a positive truth-value, such that explicit state self-esteem emerges) triggers and self-amplifies the corresponding explicit trait self-esteem attractor. A real-time self-directed emotion or autonomous action that is not accompanied by self-evaluative cognitions triggers and self-

amplifies the corresponding implicit trait self-esteem attractor. At the same time, the existence of an implicit trait self-esteem attractor provides state self-esteem with the potential to be experienced implicitly, and increases the likelihood that this potential will be realized. An explicit trait self-esteem attractor will provide an alternative potential, i.e., the experience of state self-esteem as reflective. In this way, implicit and explicit trait self-esteem attractors differentially predict real-time behavior. This is figuratively displayed below (Figure 2). For the sake of simplicity, the figure only portrays one implicit and one explicit attractor state (implicit trait self-esteem and explicit trait self-esteem, respectively).

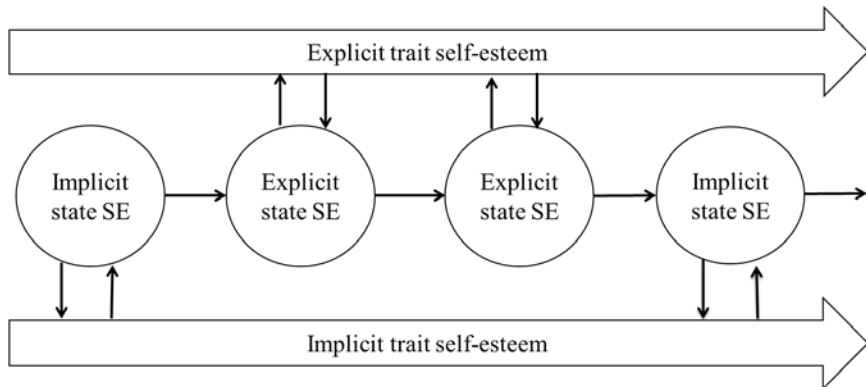


Figure 2. SOSE perspective of implicit-explicit trait self-esteem and implicit-explicit state self-esteem as one system.

We now return to the conceptualization of a *truth-value*, defined in the APE model as positive when the cognition in question is consistent with existing reflective evaluations (Gawronski & Bodenhausen, 2006). This was incorporated into our SOSE model such that implicit state self-esteem can only be transformed into explicit state self-esteem at the next moment if the newly introduced self-directed cognition has a positive truth-value. Our SOSE model provides further clarification regarding what an ‘existing reflective evaluation’ is, and what it means for the self-directed component to be ‘consistent’ with it.

From the SOSE perspective, an existing reflective evaluation can be conceptualized as an existing explicit trait self-esteem attractor. A self-directed cognition is thus consistent with an existing reflective evaluation if it is similar to the content (i.e. lower-order input) of that attractor state. If the self-directed cognition is consistent with the explicit trait self-esteem attractor state, this will trigger the explicit trait self-esteem attractor state. According to the bi-directional dynamics described in the SOSE model, this triggering will mean that the explicit trait self-esteem will constrain the state self-esteem variability – resulting in state self-esteem being momentarily constrained as ‘explicit’. This thus corresponds with the notion that a positive truth-value allows the implicit state self-esteem to be transformed into explicit state self-esteem.

Although the Iterative Reprocessing (IR) model does not explicitly make a state-trait distinction, nor does it explicitly concern self-esteem, it supports our above conceptualization by making a distinction between evaluations and attitudes. In the IR model, evaluations are the *current* evaluative processes (which rapidly shift between implicit and explicit in reaction to the context). This can be compared to state self-esteem – iteratively changing between implicit and explicit – from the SOSE perspective. Alongside evaluations, the IR model posits that individuals also experience attitudes, which are stable patterns of pre-existing connections between evaluations (of which only a few are active at any point in time). These can be compared to pre-existing implicit and explicit trait self-esteem attractors from the SOSE perspective.

Moreover, like the SOSE model, the IR model also suggests that attitudes (i.e., trait self-esteem attractors) and evaluations (i.e., state self-esteem) are continuously interacting with each other, where evaluations are thought to activate existing attitudes, and attitudes are thought to guide current evaluations (Cunningham, Zelazo, Packer, & Van Bavel, 2007). This can be compared to the bi-directional relationship between trait and state self-esteem in the SOSE model. Our SOSE model builds on the IR model by explicitly describing the underlying mechanisms that determine whether self-esteem is currently experiential or reflective (i.e., based on the quality of the lower-order components), and how these mechanisms differ for state and trait self-esteem.

5.4 Summary

In this chapter, we suggest that – from the SOSE-model perspective – implicit and explicit *trait* self-esteem are *separate* constructs insofar as they are separate attractor states that have differentiated themselves from each other across the long term. The model also suggests that implicit and explicit *state* self-esteem are part of the *same* process, as they represent different qualities that sequentially emerge with each iteration of the state self-esteem process. Implicit and explicit trait self-esteem are connected to implicit and explicit state self-esteem through a bottom-up process of emergence and a top-down process of constraint. With this conceptualization, it is possible to integrate the two traditional perspectives of implicit and explicit self-esteem. The SOSE model therefore provides a framework from which an overarching conceptualization of implicit and explicit self-esteem can be developed (see Figure 2).

To date, extant research has investigated the implicit-explicit discrepancy in valence based on trait self-esteem measures of implicit and explicit self-esteem. In distinguishing how mechanisms resulting in an implicit-explicit discrepancy differ at the trait level and the state level (thereby including ‘state self-esteem’ in the theoretical discussion), our model also extends the mainstream discussions regarding the origin and nature of this discrepancy. Moreover, extant research has focused predominantly on the discrepancy between implicit and explicit self-esteem as static constructs, without considering how this discrepancy unfolds and fluctuates across time. The SOSE model thus also expands upon the theoretical discussions of implicit versus explicit self-esteem by offering a process per-

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spective of the origin and nature of an implicit-explicit discrepancy, at both the state and trait level.

5.5 References

- Baccus, J., Baldwin, M., & Packer, D. (2004). Increasing implicit self-esteem through classical conditioning. *Psychological Science*, 15(7), 498–502.
- Bosson, J., Brown, R. P., Zeigler-Hill, V., & Swann, W. B. (2003). Self-Enhancement Tendencies Among People With High Explicit Self-Esteem : The Moderating Role of Implicit Self-Esteem. *Self and Identity*, 2, 169–187. doi:10.1080/15298860390208801
- Bosson, J., Swann, W., & Pennebaker, J. (2000). Stalking the perfect measure of implicit self-esteem: The blind men and the elephant revisited? *Journal of Personality and Social Psychology*, 79(4), 631–643. doi:10.1037//0022-3514.79.4.631
- Brown, J. D. (1993). Self-esteem and self-evaluation: Feeling is believing. In J. Suls (Ed.), *The Self in Social Perspectives*. (pp. 27–58). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Buhrmester, M. D., Blanton, H., & Swann, W. B. (2010). Implicit self-esteem: Nature, measurement, and a new way forward. *Journal of Personality and Social Psychology*, 100(2), 365–385. doi:10.1037/a0021341
- Buhrmester, M. D., Blanton, H., & Swann, W. B. (2011). Implicit self-esteem: nature, measurement, and a new way forward. *Journal of Personality and Social Psychology*, 100(2), 365–85. doi:10.1037/a0021341
- Carlston, D. (2010). Models of implicit and explicit mental representation. In B. Gawronski & B. K. Payne (Eds.), *Handbook of Implicit Social Cognition: Measurement, Theory, and Application* (pp. 38–61). New York, NY US: The Guilford Press.
- Creemers, D. H. M., Scholte, R. H. J., Engels, R. C. M. E., Prinstein, M. J., & Wiers, R. W. (2012). Implicit and explicit self-esteem as concurrent predictors of suicidal ideation, depressive symptoms, and loneliness. *Journal of Behavior Therapy and Experimental Psychiatry*, 43(1), 638–46. doi:10.1016/j.jbtep.2011.09.006
- Cunningham, W., & Zelazo, P. (2007). Attitudes and evaluations: a social cognitive neuroscience perspective. *Trends in Cognitive Sciences*, 11(3), 97–104. doi:10.1016/j.tics.2006.12.005
- Cunningham, W., Zelazo, P., Packer, D., & Van Bavel, J. (2007). The iterative reprocessing model: A multilevel framework for attitudes and evaluation. *Social Cognition*, 25(5), 736–761.
- Dehaene, S., & Naccache, L. (2001). Towards a cognitive neuroscience of consciousness: basic evidence and a workspace framework. *Cognition*, 79, 1–37.
- Dijksterhuis, A. (2004). I like myself but I don't know why: enhancing implicit self-esteem by subliminal evaluative conditioning. *Journal of Personality and Social Psychology*, 86(2), 345–55. doi:10.1037/0022-3514.86.2.345
- Dijksterhuis, A., & Aarts, H. (2010). Goals, attention, and (un)consciousness. *Annual Review of Psychology*, 61, 467–90. doi:10.1146/annurev.psych.093008.100445
- Dijksterhuis, A., Albers, L., & Bongers, K. (2009). Digging for the real attitude: Lessons from research on implicit and explicit self-esteem. In R. E. Petty, R. H. Fazio, & P.

- Brinol (Eds.), *Attitudes. Insights from the New Implicit Measures* (pp. 229 – 250). New York, NY US: Psychology Press.
- Dijksterhuis, A., & Nordgren, L. F. (2006). A Theory of Unconscious Thought. *Perspectives on Psychological Science*, 1(2), 95–109. doi:10.1111/j.1745-6916.2006.00007.x
- Epstein, S. (1990). Cognitive-experiential self-theory. In L. A. Pervin (Ed.), *Handbook of Personality: Theory and Research* (pp. 165–192). NY US: Guilford Press.
- Epstein, S. (2006). Conscious and Unconscious Self-Esteem from the Perspective of Cognitive-Experiential Self-Theory. In M. H. Kernis (Ed.), *Self-Esteem Issues and Answers: A Sourcebook of Current Perspectives* (pp. 69–76). New York, NY US: Psychology Press.
- Evans, J. (2008). Dual-processing accounts of reasoning, judgment, and social cognition. *Annual Review of Psychology*, 59, 255–78. doi:10.1146/annurev.psych.59.103006.093629
- Fazio, R. H. (1990). Multiple processes by which attitudes guide behavior: The MODE model as an integrative framework. In M. P. Zanna (Ed.), *Advances in Experimental Social Psychology* (Vol. 23) (pp. 75–109). New York: Academic Press.
- Fazio, R. H., & Olson, M. A. (2003). Implicit measures in social cognition. research: their meaning and use. *Annual Review of Psychology*, 54, 297–327. doi:10.1146/annurev.psych.54.101601.145225
- Fazio, R. H., Powell, M. C., & Herr, P. M. (1983). Toward a process model of the attitude-behavior relation: Accessing one's attitude upon mere observation of the attitude object. *Journal of Personality and Social Psychology*, 44(4), 723–735. doi:10.1037//0022-3514.44.4.723
- Frankish, K. (2010). Dual-Process and Dual-System Theories of Reasoning. *Philosophy Compass*, 5(10), 914–926. doi:10.1111/j.1747-9991.2010.00330.x
- Gawronski, B., & Bodenhausen, G. V. (2006). Associative and propositional processes in evaluation: an integrative review of implicit and explicit attitude change. *Psychological Bulletin*, 132(5), 692–731. doi:10.1037/0033-2909.132.5.692
- Gawronski, B., & Bodenhausen, G. V. (2007). Unraveling the processes underlying evaluation: Attitudes from the perspective of the APE model. *Social Cognition*, 25(5), 687–717.
- Gawronski, B., Hofmann, W., & Wilbur, C. J. (2006). Are “implicit” attitudes unconscious? *Consciousness And Cognition: An International Journal*, 15(3), 485–499. doi:10.1016/j.concog.2005.11.007
- Gilbert, D. (1999). What the mind's not. In S. Chaiken & Y. Trope (Eds.), *Dual-process Theories in Social Psychology* (pp. 1–3). New York, NY US: Guilford Press.
- Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: attitudes, self-esteem, and stereotypes. *Psychological Review*, 102(1), 4–27.

- Greenwald, A. G., & Farnham, S. (2000). Using the implicit association test to measure self-esteem and self-concept. *Journal of Personality and Social Psychology*, 79(6), 1022–1038. doi:10.1037//0022-3514.79.6.1022
- Jordan, C. H., Logel, C., Spencer, S. J., Zanna, M. P., & Whitfield, M. L. (2008). The heterogeneity of self-esteem: Exploring the interplay between implicit and explicit self-esteem. In R. E. Petty, R. H. Fazio, & P. Briñol (Eds.), *Attitudes. Insights From the New Implicit Measures* (pp. 251–281). New York, NY US: Psychology Press.
- Jordan, C. H., Spencer, S. J., Zanna, M. P., Hoshino-Browne, E., & Correll, J. (2003). Secure and defensive high self-esteem. *Journal of Personality and Social Psychology*, 85(5), 969–78. doi:10.1037/0022-3514.85.5.969
- Jordan, C. H., Whitfield, M., & Zeigler-Hill, V. (2007). Intuition and the correspondence between implicit and explicit self-esteem. *Journal of Personality and Social Psychology*, 93(6), 1067–79. doi:10.1037/0022-3514.93.6.1067
- Kernis, M. (2003). Toward a conceptualization of optimal self-esteem. *Psychological Inquiry*, 14(1), 1–26. doi:10.1207/S15327965PLI1401_01
- Klavina, E., Schröder-Abé, M., & Schütz, A. (2012). Facets of self-esteem at an implicit level? Investigation of implicit–explicit correlations and development of four IATs. *Personality and Individual Differences*, 53(5), 693–698. doi:10.1016/j.paid.2012.05.028
- Koole, S. L., & DeHart, T. (2007). Self-affection without self-reflection: origins, models, and consequences of implicit self-esteem. In C. Sedikides & S. Spencer (Eds.), *The Self in Social Psychology* (pp. 36–86). New York: Psychology Press.
- Koole, S. L., Govorun, O., Cheng, C. M., & Gallucci, M. (2009). Pulling yourself together: Meditation promotes congruence between implicit and explicit self-esteem. *Journal of Experimental Social Psychology*, 45(6), 1220–1226. doi:10.1016/j.jesp.2009.05.018
- Koole, S. L., & Pelham, B. W. (2003). On the nature of implicit self-esteem: the case of the name letter effect. In *Motivated social perception: The Ontario symposium* (Vol. 9, No. 93-116) (pp. 93–116). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Krizan, Z., & Suls, J. (2008). Are implicit and explicit measures of self-esteem related? A meta-analysis for the Name-Letter Test. *Personality and Individual Differences*, 44(2), 521–531. doi:10.1016/j.paid.2007.09.017
- LeBel, E. P. (2010). Attitude accessibility as a moderator of implicit and explicit self-esteem correspondence. *Self and Identity*, 9(2), 195–208. doi:10.1080/15298860902979166
- Leeuwis, F. H., Koot, H. M., Creemers, D. H. M., & Van Lier, P. (2014). Implicit and explicit self-esteem discrepancies, victimization and the development of late childhood internalizing problems. *Journal of Abnormal Child Psychology*. doi:10.1007/s10802-014-9959-5

- Martinie, M.-A., Milland, L., & Olive, T. (2013). Some theoretical considerations on attitude, arousal and affect during cognitive dissonance. *Social and Personality Psychology Compass*, 7(9), 680–688. doi:10.1111/spc3.12051
- Nuttin, J. M. (1985). Narcissism beyond Gestalt and awareness: the name letter effect. *European Journal of Social Psychology*, 15, 353–361. doi:doi:10.1002/ejsp.2420150309 .
- Olson, M. A., & Fazio, R. H. (2009). Implicit and explicit measures of attitudes. The perspective of the MODE model. In R. E. Petty, R. H. Fazio, & P. Briñol (Eds.), *Attitudes. Insights From the New Implicit Measures* (pp. 19–62). New York, NY US: Psychology Press.
- Olson, M. A., Fazio, R. H., & Hermann, A. D. (2007). Tendencies underlie reporting discrepancies between implicit and explicit measures of self-esteem. *Psychological Science*, 18(4), 287–291.
- Perry, J. (2009). Subjectivity. In P. McLaughlin, Brian, A. Beckermann, & S. Walter (Eds.), *The Oxford Handbook of Philosophy of Mind* (pp. 223–238). Oxford Handbooks Online.
- Peters, K. R., & Gawronski, B. (2011). Mutual influences between the implicit and explicit self-concepts: The role of memory activation and motivated reasoning. *Journal of Experimental Social Psychology*, 47(2), 436–442.
- Pryor, J. B., Gibbons, F. X., Wicklund, R. A., Fazio, R. H., & Hood, R. (1975). Self-focused attention and self-report validity. *Journal of Personality*, 45(4), 513–527. doi:10.1111/j.1467-6494.1977.tb00168.x
- Rosenberg, M. (1965). *Society and the Adolescent Self-Image*. New Jersey: Princeton University Press.
- Schreiber, F., Bohn, C., Aderka, I. M., Stangier, U., & Steil, R. (2012). Discrepancies between implicit and explicit self-esteem among adolescents with social anxiety disorder. *Journal of Behavior Therapy and Experimental Psychiatry*, 43(4), 1074–81. doi:10.1016/j.jbtep.2012.05.003
- Schroder-Abe, M., Rudolph, A., & Schutz, A. (2007). High implicit self-esteem is not necessarily advantageous: discrepancies between explicit and implicit self-esteem and their relationship with anger expression and psychological health. *European Journal of Personality*, 21(3), 319–339. doi:10.1002/per
- Strack, F., & Deutsch, R. (2004). Reflective and impulsive determinants of social behavior. *Personality and Social Psychology Review*, 8(3), 220–47. doi:10.1207/s15327957pspr0803_1
- Tafarodi, R., & Swann, W. B. (2001). Two-dimensional self-esteem: Theory and measurement. *Personality and Individual Differences*, 31, 653–673.
- Vallacher, R. R., Nowak, A., Froehlich, M., & Rockloff, M. (2002). The Dynamics of Self-Evaluation. *Personality and Social Psychology Review*, 6(4), 370–379. doi:10.1207/S15327957PSPR0604_11

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- Van Bavel, J., Xiao, Y., & Cunningham, W. (2012). Evaluation is a dynamic process: Moving beyond dual system models. *Social and Personality Psychology Compass*, 6(6), 438–454. doi:10.1111/j.1751-9004.2012.00438.x
- Zeigler-Hill, V. (2006). Discrepancies between implicit and explicit self-esteem: implications for narcissism and self-esteem instability. *Journal of Personality*, 74(1), 119–44. doi:10.1111/j.1467-6494.2005.00371.x