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Self-Concept Structure and the Quality of Self-Knowledge

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Abstract

Objective—Explores the hidden vulnerability of individuals with compartmentalized self-concept structures by linking research on self-organization to related models of self functioning.

Method—Across three studies, college students completed self-descriptive card sorts as a measure of self-concept structure and either the Contingencies of Self-Worth Scale; Likert ratings of perceived authenticity of self-aspects; or a response latency measure of self-esteem accessibility. In all, there were 382 participants (247 females; 77% White, 6% Hispanic, 5% Black, 5% Asian, 4% Native American, and 3% Other).

Results—Consistent with their unstable self-evaluations, compartmentalized individuals report greater contingencies of self-worth and describe their experience of multiple self-aspects as less authentic than do individuals with integrative self-organization. Compartmentalized individuals also make global self-evaluations more slowly than do integrative individuals.

Conclusions—Together with previous findings on self-clarity, these results suggest that compartmentalized individuals may experience difficulties in how they know the self, whereas individuals with integrative self-organization may display greater continuity and evaluative consistency across self-aspects, with easier access to evaluative self-knowledge.

Keywords

self-knowledge; compartmentalization; self-esteem; authenticity; self-clarity; self-worth; self-evaluation; response latency

The self-concept is an organized system that shapes how individuals feel about themselves, other individuals, and their social relationships (Leary & Tangney, 2011; Vazire & Wilson, 2012). Generally speaking, individuals who have more positive beliefs about themselves tend to report higher levels of self-esteem (Showers, 1992). However, there is more to the link between the self-concept and self-esteem than the sheer number of positive or negative

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self-beliefs. Research suggests that the manner in which the content of the self-concept is organized is important because it influences the accessibility of specific aspects of self-knowledge (cf. Higgins, Van Hook, & Dorfman, 1988; Segal, Hood, Shaw, & Higgins, 1988; Showers, 1992). Two individuals with self-concepts containing identical content may experience very different feelings of self-worth depending on how their self-concepts are organized (see Showers & Zeigler-Hill, 2006, for a review).

There are a number of structural models of the self, including models of self-complexity (Linville, 1985, 1987), self-concept clarity (Campbell, 1990), self-discrepancies (Higgins, 1987), and multiple self-aspects (McConnell, 2011). The focus of the present study will be on the model of evaluative self-organization (Showers, 1992, 2000) which is unique among the models of self-concept structure because it takes into account both the category structure of the self-concept as well as the valence of specific beliefs (Showers & Zeigler-Hill, 2012). The model of evaluative organization focuses on the distribution of positive and negative beliefs across the self-aspects that constitute the working self-concept (Showers, 1992).

According to this model, there are two basic strategies for organizing self-knowledge that are referred to as *compartmentalization* and *integration*. The organization of compartmentalized self-concept structures is that positive and negative self-beliefs are separated into distinct self-aspects so that each of these self-concept categories contains primarily positive or primarily negative information. For example, a compartmentalized college student may use positive attributes (e.g., friendly, relaxed, fun and entertaining) to describe who he is with his friends on the weekend but use negative attributes (e.g., like a failure, tired, disorganized) to describe how he feels about himself during the week of final exams. Integrative self-concept structures, in contrast, have self-aspect categories that contain a combination of positive and negative self-beliefs. For example, a college professor with an integrative self-concept structure may use a mixture of positive and negative attributes (e.g., energetic, creative, disorganized) to describe the self-aspect category “me in the classroom”. Although we will refer to compartmentalized and integrative self-concept structures for ease of explanation, it is important to note that these styles of organization fall on a continuum from perfectly compartmentalized to fully integrated.¹

The basic model of evaluative organization tested by Showers (1992) holds that compartmentalization will be associated with more positive mood and higher self-esteem than will integration when an individual's positive self-aspect categories are perceived to be relatively important (i.e., positive compartmentalization). Positively compartmentalized individuals tend to report higher levels of self-esteem, presumably because these individuals are shielded from negative self-beliefs that are relegated to self-aspects perceived as unimportant. However, the vulnerability of a compartmentalized self-concept structure surfaces when the individual's negative self-aspects *become* important or are made salient in some way. Then, negative self-beliefs may flood the individual and cause them to experience strong negative feelings.

¹A perfectly compartmentalized self-concept structure has self-aspect categories that consist of purely positive or purely negative attributes. A fully integrative self-concept structure, according to the card sort methodology used to assess it, is one in which all self-aspects have the same proportion of positive or negative attributes (i.e., the same proportion that characterizes the self as a whole).

Individuals who possess important negative self-aspects may benefit from an integrative self-concept structure because that type of organization maintains access to both positive and negative self-beliefs within the same self-aspect category. Thus, integration should minimize the impact of frequently activated negative self-beliefs. Although integrative self-aspects contain both positive and negative self-beliefs, multiple integrative self-aspects may differ in their overall importance and valence. To the extent that the most positive self-aspects are the most important, a person's self-structure is described as positive-integrative; if the most negative self-aspects are most important, then a person's self-structure is negatively integrative. In support of the basic model of compartmentalization, multiple studies have found baseline correlations between self-structure and global mood or self-esteem, such that positively-compartmentalized individuals report more positive mood and higher self-esteem than do positively-integrative individuals, whereas negative-integratives have less negative mood and higher self-esteem than do negatively-compartmentalized individuals (e.g., Showers, 1992; Showers & Kling, 1996; Showers & Kevlyn, 1999; Limke & Showers, 2010; Ditzfeld & Showers, 2014).

However, despite the generally elevated mood and self-esteem of positively-compartmentalized individuals, Zeigler-Hill and Showers (2007) showed that positively-compartmentalized individuals are prone to the hidden vulnerability of self-esteem instability when their negative compartments are activated (e.g., by stressful events). In contrast, the relatively modest self-evaluations of positively integrative individuals seem to be associated with even-keeled resilience to external stress, presumably because access to specific negative beliefs is normative for individuals with this type of structure. In a daily diary task, Zeigler-Hill and Showers found that individuals with compartmentalized self-concept structures are especially reactive to negative events in their daily lives; in addition, these compartmentalized individuals were especially reactive to a laboratory manipulation of social rejection, displaying relatively unstable self-esteem. Showers and Kling (1996) observed resilience in integrative individuals, who were especially quick to recover from a sad mood induction under conditions of self-reflection, presumably because they are less likely to become trapped in a spiral of negative thoughts, whereas compartmentalized individuals in an induced mood recovered more slowly. Moreover, in a relationship context, although individuals with evaluatively integrative perceptions of a romantic partner reported relatively modest liking for their partners, their relationships were more likely to be ongoing one year later, presumably because integrative thoughts about the partner inoculated them against any flaws that surfaced during the year (Showers & Zeigler-Hill, 2004).² These results suggest that there may be more to understanding the self-esteem of compartmentalized individuals than simply asking them to report how positively they feel about themselves in general.

²These partner-structure results show how the organization of partner knowledge is linked to overall liking and loving for the partner and also to relationship outcomes. It is not clear to what extent people's compartmentalized or integrative perceptions of relationship partners reflect the evaluative organization of the self. Showers and Kevlyn (1999) assessed self- and partner-structure over a one-week interval and found a correlation, $r = .60, p < .001$. However, the self-assessments (completed at Time 2) could easily have been biased by the initial assessment of partner structure. Nonetheless, the associations between partner structure and liking and loving measures persisted when self-structure was covaried.

Therefore, it is the positive-compartmentalized individuals who are the focus of the present investigation of the quality of self-knowledge. The prior research suggests that although positively-compartmentalized individuals typically report the highest self-esteem, this self-esteem may often be fragile, as shown by the prior evidence for the hidden vulnerability of situationally-activated negative compartments, day-to-day self-esteem instability, and poor relationship outcomes (in the case of compartmentalized partner knowledge). Here, we examine novel measures of the quality of self-knowledge that are consistent with these vulnerabilities.

Comparison to Relevant Models of Self-Esteem

Note that the effects of compartmentalized or integrative self-structures are most interesting if they go beyond effects that can be explained simply by the positive or negative content of individuals' self-beliefs, or by the perceived importance of positive or negative self-aspects and attributes. In the present research, our statistical analyses control for measures of self-concept content and perceived importance when testing effects of self-structure. In fact, measures of self-concept content (i.e., positivity or negativity) generally explain a substantial proportion of variance in criterion measures such as self-esteem or mood, but these effects are moderated by self-structure, so that integration is most advantageous (compared to compartmentalization) when the self-concept is basically negative. When the self-concept content is relatively positive, an integrative self has more modest mood and self-esteem than does a compartmentalized self, but the integrative self may be more stable and resilient in response to negative events.

Therefore, previous research on self-esteem that links a “balanced” view of the self (i.e., endorsement of both positive and negative self-attributes) to low self-esteem and mild depression (Kuiper & Derry, 1982; Taylor & Brown, 1988) is consistent with this model. Endorsing similar numbers of positive and negative self-beliefs is a feature of self-concept content, whereas the distinction between compartmentalization and integration reflects self-concept structure. A “balanced” view of the self is likely to correspond to either negative compartmentalization or negative integration. In other words, a balanced self is relatively negative compared to the typical self that is mostly positive, but that negativity should be moderated by self-structure. In a given context, negative integratives may struggle to resolve the mix of positive and negative attributes associated with their most relevant self-aspects in order to feel better about themselves overall, whereas negatively compartmentalized selves are flooded with the negative attributes that characterize their most important self-aspects.

Overview

The present focus is on the self-structure of those with relatively positive self-concepts (i.e., those whose self-concept content is mostly positive or those who identify positive self-aspects as most important). In particular, we explore the hidden vulnerability of individuals with positively compartmentalized self-structures by examining the following indices of the quality of self-knowledge: contingencies of self-worth, an index of the fragile self (Crocker & Wolfe, 2001); the experience of authenticity, stemming from self-determination theory

(Sheldon, Ryan, Rawsthorne, & Ilardi, 1997), and the accessibility of evaluative self-knowledge (Demarree, Petty, & Strunk, 2010).

Contingent Self-Worth

Beliefs in contingencies of self-worth potentially explain how self-knowledge becomes evaluatively compartmentalized. As a characteristic of the self, contingencies of self-worth refer to what an individual believes he or she must do or be in order to have value and worth as a person (Crocker & Wolfe, 2001; Deci & Ryan, 1995). People with contingent high self-esteem can only maintain a positive self-evaluation as long as they meet the contingencies (or standards) upon which their feelings of self-worth are based. This makes self-esteem potentially fragile (Kernis, 2003). For example, undergraduates who base their self-esteem on academic competence are highly reactive to good (or bad) grades (Crocker, Karpinski, Quinn, & Chase, 2003) or letters of acceptance (or rejection) from graduate programs (Crocker, Sommers, & Luhtanen, 2002). Fluctuations in how a person with contingent self-esteem feels about the self may be the basis of distinct positive or negative self-aspect categories, reflecting reactions to repeated experiences of success or failure in the contingent domains.

At the same time, once positive or negative compartments are formed to organize self-knowledge (e.g., good daughter, stressed-out friend), that compartmentalization may in turn contribute to fragility and contingencies. A minor setback may activate the purely negative “stressed-out” self, leading to a flood of negative thoughts and feelings that intensify reactions to the event and create the experience of contingency. Thus, the association between contingencies of self-worth and a positively compartmentalized self-concept structure may be a reciprocal, bidirectional process. Moreover, much of the literature on compartmentalization (e.g., Showers, 2002) has suggested that the origins of compartmentalization versus integration of the self lie in motivational processes such that positive-compartmentalized individuals seek self-enhancement whereas positive-integration is associated with motives of realism or self-protection. Thus, the goal of self-enhancement may be a “third variable” that leads to both positive-compartmentalization and contingent self-esteem. As Crocker and Park (2004) note, “People are not merely passive victims, their self-esteem tossed around by events over which they have no control. Instead, they actively pursue self-esteem by attempting to validate or prove their abilities or qualities in the domains in which self-worth is invested. People work to achieve success and avoid failure in these areas, to demonstrate to themselves and others that they are worthy because they satisfy their contingencies of self-worth, or at least do not fail in these domains. In other words, people are motivated by self-validation goals in the domains in which they have invested their self-worth” (p. 393). We suggest that the relationship between self-enhancement goals and compartmentalization is both direct and mediated by the experience of contingencies. As indicated above, the relationship between compartmentalization and contingencies of self-worth is likely bidirectional – compartmentalized individuals may experience more intense contingencies; in turn, the experience of contingent self-worth likely contributes to compartmentalization of the self.

An alternative view is that the distinction between compartmentalization and integration is partly physiological, originating in the fundamental emotional reactivity of compartmentalized individuals (arousal model; cf. Ditzfeld & Showers, 2013). From this perspective, compartmentalized individuals are inherently emotionally reactive, and so their preferred high-arousal emotions may lead to valence-based self-aspect categories. In this view, emotional reactivity to life events is another “third variable” that may both create compartmentalized structures and intensify experiences of contingency. Again, it would seem that any relationship between self-structure and experiences of contingency would be bidirectional, with compartmentalization facilitating feelings of contingency and vice versa.

Experience of Authenticity

Research by Sheldon et al. (1997) on the cross-role variation of traits suggests that the evaluative inconsistencies across the self-aspects of compartmentalized individuals may have consequences for the experience of psychological authenticity. Consistent with self-determination theory (Deci & Ryan, 1980), people experience a feeling of authenticity when they perceive their behavior to be internally caused and when they act with a sense of choice and self-expression. Sheldon et al. found that authenticity fluctuated with trait variation across roles, and that authenticity, role conflict, and cross-role inconsistencies each had a unique association with psychological well-being.

To the extent that positively-compartmentalized individuals have contingent self-evaluations, their feelings of authenticity should be undermined. They are more likely to feel that their outcomes are controlled by external events and their self-evaluations are contingent on the approval of others. In contrast, the more stable, realistic perspective of positive-integratives should facilitate a sense of choice among a set of behaviors, each of which has strengths and weaknesses. Integratives may tend to focus on internal effort and choices, feeling that they have done reasonably well even when the result was not perfect. As a result, they may more often feel that, in pursuing their outcomes, they have been able to engage in self-expression to an adequate degree. Previous findings related to psychological maltreatment suggest that negative-integratives may be still engaged in the struggle of resolving contrasting positive and negative self-beliefs, whereas positive-integratives may have more fully accomplished this goal (Showers, Zeigler-Hill, & Limke, 2006). Hence, our predictions about the differential authenticity experienced by compartmentalized versus integrative individuals should be more pronounced for individuals with relatively positive self-concepts, i.e., positive-compartmentalized versus positive-integrative.

Accessibility of Evaluative Self-Knowledge

An additional consequence of the evaluative inconsistencies across the self-aspects of positive-compartmentalized individuals, along with perceived contingencies of self-worth and low authenticity, is that it should be difficult to make global statements about the self. At best, a compartmentalized individual may show good discriminative ability across situations, tying their self-evaluations to specific situations. At worst, attempts to make global self-statements may be confused and uncertain.

Another consequence of this evaluatively unstable self-concept structure is vulnerability to self-change, because self-evaluations are likely to fluctuate in response to external feedback or events (cf. Zeigler-Hill & Showers, 2007). In contrast, positive-integrative individuals have been described as resilient and relatively even-keeled. They are relatively modest in circumstances that are neutral to positive, and less reactive to negative experience. Because positive-integrative individuals experience negative attributes across a range of self-aspects, they are accustomed to focusing on weaknesses and flaws, and so they may be inoculated against the activation of negative attributes during negative events. As a result, their global self-evaluations may be more stable and resistant to change.

This characteristic of the durability of self-esteem has been examined in research on self-esteem accessibility by DeMarree et al. (2010). They point out that global statements of self-esteem represent attitudes about the self and, hence, the accessibility of these attitude statements should represent their strength and resistance to change. This hypothesis was confirmed by measures of response latencies to items on a standard self-esteem scale. Consistent with predictions, the self-evaluations of fast responders were less influenced by a negative thought manipulation than those of slow responders. However, when feedback was ambiguous (a neutral Barnum description), the a priori self-esteem of fast responders was more likely to influence interpretations of the feedback and future predictions than was the self-esteem of slow responders.

These studies of self-esteem accessibility suggest that positive-compartmentalized individuals, although they tend to report high self-esteem, may have difficulty making global self-evaluations, and therefore may be slower to respond to self-esteem items. In contrast, individuals with positive-integrative self-structures (i.e., those who are secure in their positive and negative self-beliefs), although their self-evaluations may be more modest, should be more consistent across self-aspects, and therefore respond more quickly to self-evaluative statements.

Predictions Overview

The present studies examine the association of evaluative self-organization with three dimensions related to self-esteem fragility: contingencies of self-worth, the experience of authenticity, and accessibility of global self-evaluations. We predicted that positive-compartmentalized self-organization would be associated with self-esteem that is more contingent, self-aspects that are experienced as less authentic, and self-evaluations that are less accessible than those associated with positive-integrative self-concept structures. The underlying rationale is that compartmentalized individuals are plagued by some degree of confusion or uncertainty about who they are and how they feel about themselves as a result of the inconsistencies that exist within compartmentalized self-concept structures. That is, the segregation of positive and negative attributes – which is at the very core of compartmentalization – is likely to create evaluative inconsistency across self-aspects resulting in greater variability in evaluations between self-aspects than is found in integrative self-concept structures. These disparate and extreme feelings of self-worth may fuel reliance on external outcomes in an attempt to bolster tenuous feelings of self-worth;

they may undermine the perceived authenticity of multiple self-aspects; and they may increase the latency of self-evaluations.

Study 1: Contingencies of Self-Worth

Study 1 extends the results of Zeigler-Hill and Showers (2007) that demonstrated the hidden vulnerability of compartmentalized individuals by documenting their self-esteem instability. Here, that instability is hypothesized to be associated with perceived contingencies of self-worth, either as a cause or consequence of the compartmentalized self-organization. The basic rationale is twofold: Both positive-compartmentalization and the experience of contingent self-worth may stem from either a) motivational factors (i.e., self-enhancement goals) or b) physiologically-based emotional reactivity, subsequently reinforcing each other in a bidirectional process, such that experiences of contingency (i.e., fluctuations in self-worth) contribute to an evaluatively compartmentalized self-structure, *or* compartmentalization magnifies emotional reactions to events, thereby contributing to contingency beliefs.

Method

Participants and Procedure: Participants were 153 undergraduate students (103 women) enrolled in psychology courses who participated in return for partial fulfillment of a research participation requirement. The mean age of participants was 19.03 years ($SD = 2.07$). The ethnic composition was 80% White, 5% Black, 4% Asian, 4% Native American, 5% Hispanic, and 2% Other. Participants completed a self-descriptive card sorting task to assess self-concept content and structure as well as measures of self-esteem level and contingencies of self-worth.

Measures

Self-Descriptive Card Sorting Task: The self-descriptive card sorting task (Showers, 1992; Showers & Kling, 1996) measures the content and structure of the self-concept. The present card sort is based on one originated by Zajonc (1960) and later extended by Linville (1985, 1987). For this task, respondents are provided with a deck of 40 cards, each containing a potentially self-descriptive attribute. The deck consisted of 20 positive attributes (e.g., intelligent) and 20 negative attributes (e.g., incompetent). Respondents were instructed to consider different aspects of themselves or their lives and to sort the cards into groups such that each group of cards described an aspect of themselves or their lives. The instructions used for this task were very similar to those reported by Showers and Kevlyn (1999). Respondents were allowed to form as many groups as necessary to describe themselves, with each group containing as many or as few attributes as desired. Respondents could use attributes in more than one group and were not required to use attributes that did not describe them. Table 1 presents sample card sorts from two participants in this study.

After completing the self-descriptive card sorting task, respondents were asked to provide supplementary ratings concerning the positivity, negativity, and importance of each self-aspect generated during the card sorting task. The self-descriptive card sorting task and the supplementary ratings were used to calculate evaluative organization, differential importance, and the proportion of negative attributes.

The measure of evaluative organization is a *phi* (ϕ) *coefficient* (or Cramer's V; Cramer, 1974; Everitt, 1977) based on a chi-square statistic. Phi is an index of the tendency for positive and negative attributes to appear in separate self-aspects. The chi-square statistic is computed using the expected frequencies (based on the number of negative attributes included in the entire card sort) and the observed frequencies (based on the number of negative attributes appearing within each self-aspect). Phi is normalized by dividing by the number of attributes included in the card sort (N):

$$\phi = \sqrt{\frac{\chi^2}{N}}$$

Phi can range from 0 (perfect integration which reflects positive and negative attributes being evenly distributed across all self-aspects) to 1 (perfect compartmentalization which reflects each self-aspect being composed of either purely positive or purely negative attributes). The measure of evaluative organization is independent of the number of self-aspects that respondents generated and the proportion of positive and negative attributes that respondents included in their card sorts (see Showers & Kevlyn, 1999, for additional computational details). Phi was only computed for respondents who included two or more negative attributes in their card sorts. Typically, from 5 to 10% of the sample is excluded for this reason (cf Zeigler-Hill & Showers, 2007).³

Differential importance is a measure of the relative importance of positive and negative self-aspects that is derived from the work of Pelham and Swann (1989). Differential importance is computed as the within-subject correlation between respondents' overall evaluations of their self-aspects (i.e., positivity ratings minus negativity ratings) and the importance ratings assigned to those self-aspects by the respondents. Differential importance scores can range from -1 to +1 such that positive scores indicate that positive self-aspects are considered by respondents to be more important than negative ones whereas negative scores indicate that negative self-aspects are considered to be more important than positive ones.

The *proportion of negative attributes* is a straightforward measure of self-concept content that is calculated by dividing the number of negative attributes appearing in a respondent's card sort by the total number of attributes used by the respondent.⁴

Self-Esteem Level: The Rosenberg Self-Esteem Scale (Rosenberg, 1965) consists of 10 items to which participants provide ratings of agreement on scales ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Participants were asked to complete the scale according to

³Researchers who are interested in self-complexity (Linville, 1988) may be interested to know that in the present studies there was no association between phi and the number of self-aspect groups generated in the card sort, $|r|s < .04$, *ns* (cf. Jones & Jetten, 2010). Phi was correlated with including fewer attributes in each self-aspect group, $r_s < -.38$, $p_s < .001$, which makes sense if compartmentalized participants are only drawing on attributes of one valence among the set of 40 attributes provided. Although a greater number of self-aspect groups was associated with more contingent self-worth in one domain (academic competence: $\beta = .10$, $p < .04$), and average number of items per group was associated with less contingent self-worth in one domain (others' approval: $\beta = -.08$, $p < .05$), when these predictors were controlled in the present analyses they had no multivariate effect and did not alter the results reported here.

⁴For the card sort parameters, test-retest reliabilities over an average elapsed time of 22 months in a sample of 79 college students were as follows: phi, $r = .56$; DI, $r = .07$; neg, $r = .71$, (Showers, Abramson, & Hogan, 1998).

how they typically or generally feel about themselves. For the present study, the internal consistency of this measure was high, $\alpha = .85$.

Contingent Self-Esteem: Contingent self-esteem was measured using the Contingencies of Self-Worth Scale (Crocker, Luhtanen, et al., 2003; Crocker & Wolfe, 2001) which consists of 35 items assessing seven domains that commonly serve as the basis for self-esteem among college students. These domains are family support (e.g., “Knowing that my family members love me makes me feel good about myself”; $\alpha = .82$), others' approval (e.g., “I can't respect myself if others don't respect me”; $\alpha = .81$), physical appearance (e.g., “When I think I look attractive, I feel good about myself”; $\alpha = .75$), God's love (e.g., “I feel worthwhile when I have God's love”; $\alpha = .95$), virtue (e.g., “Doing something I know is wrong makes me lose my self-respect”; $\alpha = .84$), competition (e.g., “Knowing that I am better than others on a task raises my self-esteem”; $\alpha = .87$), and academic competence (e.g., “Doing well in school gives me a sense of self-respect”; $\alpha = .80$). Each of these subscales has been found to possess adequate psychometric properties and to correlate in the expected directions with related constructs such as the Big Five dimensions of personality (Crocker, Luhtanen, et al., 2003).

Results—Of 153 participants who began the study, 10 participants did not complete the card sorting task or used fewer than two negative attributes; 3 participants did not complete the measures of self-esteem level or contingent self-esteem. Data from the remaining 140 participants (91 women) were analyzed.

Evaluative Organization and Contingent Self-Esteem: The present analyses examined the association between self-concept structure and contingent self-esteem by regressing the domain-specific aspects of contingent self-esteem onto measures of self-concept content, structure, and self-esteem. Table 2 presents descriptive statistics and intercorrelations for these variables. We used GLM Multivariate in SPSS to conduct overall multivariate tests of the predictors and their interactions for the 7 domains of contingent self-esteem. Then, each domain of contingent self-esteem was examined separately because previous studies have found important differences between these domains (e.g., Crocker & Luhtanen, 2003). Because contingencies of self-worth are often associated with low levels of self-esteem (e.g., Park, Crocker, & Kiefer, 2007), these hierarchical multiple regression analyses controlled for self-esteem level. Continuous predictor variables were centered for the purpose of testing interactions (Aiken & West, 1991), and proportion of negative attributes was arcsine transformed. The main effect terms for evaluative organization, differential importance, proportion of negative attributes, and self-esteem level were entered on Step 1 and the two-way interactions of evaluative organization, differential importance, and proportion of negative attributes were entered on Step 2. Preliminary analyses included interactions involving self-esteem but these terms were trimmed from the final set of analyses because none approached conventional levels of significance. Three-way interactions were also trimmed from the final set of analyses because they consistently failed to reach conventional levels of significance. The overall multivariate model obtained significant main effects for phi, DI, and self-esteem, $F(7,129)s > 2.64, ps < .02$, qualified by the Phi \times DI interaction, $F(7, 126) = 3.41, p = .002$. The results for each individual domain of contingent self-esteem

are presented in Table 3 and are summarized below. Any $\Phi \times \text{DI}$ interactions were followed by simple slopes tests to describe the interaction of continuous variables (Aiken & West, 1991).

Family Support: The only effect obtained for family support was the interaction of evaluative organization and differential importance, $\beta = .26, p < .01$. The predicted values for this interaction are presented in Figure 1, Panel A. Simple slopes tests found that the association between compartmentalization and family support was significant for individuals with high differential importance, $\beta = .36, p < .01$, but not for individuals with low differential importance, $\beta = -.11, ns$. Among individuals with important positive self-aspects, compartmentalized individuals were more contingent in the domain of family support than were integrative individuals.

Others' Approval: Main effects emerged for evaluative organization, $\beta = .32, p < .001$, and self-esteem level, $\beta = -.23, p < .05$. The main effect of compartmentalization was qualified by its interaction with differential importance, $\beta = .19, p < .03$; Figure 1, Panel B. Simple slopes tests found the same pattern as the previous analysis such that compartmentalization was associated with the others' approval dimension for individuals with high differential importance, $\beta = .33, p < .01$, but not for those with low differential importance, $\beta = .11, ns$. Among individuals with important positive self-aspects, compartmentalized individuals were more contingent in the domain of others' approval than were integrative individuals.

Physical Appearance: There was a main effect for self-esteem level, $\beta = -.29, p < .01$, accompanied by the same interaction of evaluative organization and differential importance observed for others' approval, $\beta = .30, p < .001$; Figure 1, Panel C. The simple slopes tests were similar to those reported above such that compartmentalization was associated with basing one's self-esteem on physical appearance for individuals with high differential importance, $\beta = .29, p < .01$, but not for those with low differential importance, $\beta = .03, ns$. For individuals with important positive self-aspects, compartmentalization was associated with greater contingency in the domain of physical appearance than was integrative organization.

God's Love: Main effects emerged for evaluative organization, $\beta = .24, p < .01$, and proportion of negative attributes, $\beta = -.22, p < .05$. The main effect of evaluative organization was qualified by its interaction with differential importance, $\beta = .23, p < .01$; Figure 1, Panel D. Simple slopes tests confirmed that compartmentalization was associated with the tendency to base one's self-esteem on God's love for individuals with high differential importance, $\beta = .42, p < .001$, but not for those with low differential importance, $\beta = .01, ns$.

Virtue: A main effect for evaluative organization, $\beta = .33, p < .001$, was qualified by its interaction with differential importance, $\beta = .27, p < .005$; Figure 1, Panel E. Simple slopes tests confirmed that compartmentalization was associated with basing one's self-esteem on feelings of virtue for individuals with high differential importance, $\beta = .35, p < .01$, but not for those with low differential importance, $\beta = .03, ns$.

Competition: No main effects, $\beta s < .14$, $ps > .14$, or interactions, $\beta s < .14$, $ps > .15$, reached conventional levels of significance for this domain of contingent self-esteem.

Academic Competence: No main effects, $\beta s < .15$, $ps > .12$, or interactions, $\beta s < .10$, $ps > .28$, approached conventional levels of significance for this domain of contingent self-esteem.⁵

Discussion—In 5 of 7 domains, compartmentalization was associated with contingent self-worth for individuals with positively-structured self-concepts (i.e., those in which positive self-aspects were perceived to be more important than negative ones). This pattern of results is consistent with previous research on the hidden vulnerability of compartmentalization (Zeigler-Hill & Showers, 2007), and suggests that positively compartmentalized individuals may possess fragile selves (or fragile self-esteem). In contrast, positively integrative individuals are especially low on these contingencies of self-worth, consistent with the view that they tend to be even-keeled and resilient in the face of threat.

Individuals with important negative self-aspects, both compartmentalized and integrative, show contingencies that fluctuate across domains, being greatest for the domains of virtue and family support, and lowest for others' approval. Focusing on the discrepancy between greater contingencies of self-worth for negatively integrative individuals and the lowest contingencies of self-worth for positively integrative individuals, we interpret this discrepancy in terms of a previously discussed process in which negatively integrative individuals are still struggling to resolve conflicting positive and negative self-beliefs, whereas positively integrative individuals may have resolved any such conflicts (i.e., their integration is successful; Showers, Zeigler-Hill, & Limke, 2006). For example, a victim of childhood maltreatment may struggle to resolve feelings of inadequacy derived from parental neglect with positive self-beliefs gleaned from parental attention in “the good times”; eventually, the experience of another healthy relationship may prevail, alleviating any contingencies of self-worth associated with the maltreatment. Whereas the former process (the struggle of those who are negatively integrative) contributes to feelings of contingency, it is only the latter process (the resolution of negative attributes for those who are positively integrative) that creates a secure, noncontingent experience of self-worth.

One interpretation of compartmentalized individuals' endorsement of contingency items is that these reports reflect a motivated bias. When compartmentalized individuals anticipate success in a domain, it may be safe to acknowledge contingency beliefs, given the expectation that the contingency will be satisfied by good outcomes. In contrast, the reports of low contingency for integrative individuals may follow from a more secure, stable, and

⁵Only in Study 1 was there a significant association between gender and phi, $t(138) = 2.11$, $p < .05$, such that males were more integrative than were females. Males also reported less contingent self-worth than did females in the domains of family support and academic competence, $t(138) > 2.56$, $ps < .05$. However, when gender was included in the contingency regressions, all effects for phi or $\Phi \times DI$ remained significant. In Studies 2 and 3, there were no gender differences for any predictor or criterion variable. Moreover, across all 3 studies, there were no significant associations for gender and self-esteem, both for the entire sample and for the subsample with valid phi values. We attribute the lack of gender effects for self-esteem, and the Study 1 gender difference for phi to issues of self-selection into these studies, based either on the description of the study on our SONA sign-up system (e.g., “Personality”) or the alternative studies available to these participants.

realistic set of beliefs about the self that do not assume positive feedback or positive outcomes in that domain.

The consistency of the findings for compartmentalization across 5 domains is remarkable, as is the absence of any effect in the two domains of competition and academic competence. Interestingly, Table 2 shows that the academic domain has the highest mean contingency, $M = 5.52$, and lowest standard deviation, $SD = 1.02$. Despite the contingencies, academic competence and competition are domains in which high-achieving college students may have relatively reliable good outcomes, whereas they may still be struggling to navigate the domains of social and family relationships and individual values. In other words, academic competence and competition may be domains in which contingencies are usually satisfied, and so these contingencies do not reflect the compartmentalized or integrative structure of self-beliefs. Our findings suggest that compartmentalized individuals remain vulnerable to negative feedback in domains that are largely interpersonal (family support, others' approval, physical appearance) or moral (virtue and God's love). Interestingly, Zeigler-Hill (2006) found that these same domains were characterized by interpersonal styles that blend nurturance and submission, and involve reliance on the approval of others.

Study 2: Authenticity of The Self

Study 2 extends the findings for contingencies of self-worth by examining the authenticity of the self as defined by self-determination theory (Deci & Ryan, 1995). Individuals who are *self-determined* perceive their behavior as being under their own volitional control such that their actions reflect who they are and who they want to be rather than being motivated by external factors (e.g., a desire to be accepted by others). Individuals should experience heightened authenticity when their behavior (what they do) is in alignment with their self-concepts (who they believe themselves to be; Ryan & Deci, 2000). In support of this idea, individuals with more authentic selves have been found to report less self-concept fragmentation (i.e., cross-situation variation in personality traits; Sheldon et al., 1997). We adopted the view of authenticity employed by Sheldon et al. for the present study. More specifically, their view of authenticity is that it captures the degree to which individuals believe the aspects of their self-concept reflect who they actually are (i.e., their true self). Here, we predict that positive-integration will be associated with heightened feelings of authenticity across self-aspects compared to positive-compartmentalization. Although positive-compartmentalization is often self-enhancing, Study 1 suggests that it may lead to a relatively fragile and contingent sense of self-esteem. If positively-compartmentalized individuals feel that their outcomes are contingent on external factors such as others' approval, they are less likely to experience their actions as self-determined. To the extent that positive-integratives have resolved their inconsistencies to form a more coherent, non-contingent sense of self, they should experience greater authenticity across self-aspects.

Participants—Participants were 167 undergraduate psychology students (106 women) who participated in return for partial fulfillment of a research participation requirement. The mean age of participants was 19.88 years ($SD = 2.07$). The racial/ethnic composition was 77% White, 8% Hispanic, 5% Asian, 4% Native American, 2% Black, and 4% other.

Measures—Study 2 employed the same self-descriptive card sorting task and self-esteem measure used in Study 1.

Authenticity: For each self-aspect category created during the card-sorting task, participants rated their level of agreement with three authenticity items taken from Sheldon et al. (1997; i.e., “I experience this aspect of myself as an authentic part of who I am”, “I feel tense and pressured in this aspect of my life”, and “I have freely chosen this way of being”). Responses were provided on scales ranging from 1 (*strongly disagree*) to 9 (*strongly agree*) and authenticity scores were calculated by averaging the responses to these items across the self-aspects for each participant.⁶

Procedure: Participants attended a single laboratory session during which they completed the self-descriptive card sorting task, items concerning the differential importance and authenticity of the self-concept aspects generated during the card sort, and measures that are not relevant to the present study (e.g., Ditzfeld & Showers, 2011, 2014).

Results—Of 167 participants, 20 were excluded for the following reasons: 14 used fewer than 2 negative attributes, 3 created fewer than 3 groups, and 3 did not complete measures for all their groups. Analyses used the remaining 147 participants (95 women).

Evaluative Organization and Authenticity: Analyses were conducted using hierarchical multiple regression. Authenticity scores were regressed onto measures of evaluative organization, differential importance, proportion of negative attributes, and self-esteem level. Main effects were entered on Step 1 with interaction terms entered on subsequent steps. Three-way interactions and interactions involving level of self-esteem were trimmed from the final analysis because none reached statistical significance. Table 4 presents descriptive statistics and intercorrelations for these variables.

The regression results are presented in Table 5. There were significant main effects for evaluative organization, $\beta = -.18, p < .05$, and proportion of negative attributes, $\beta = -.33, p < .001$, qualified by their interaction, $\beta = .20, p < .05$. Figure 2 presents the predicted values for this interaction. Simple slopes tests found that integration was significantly associated with heightened authenticity for individuals with relatively positive self-concepts, $\beta = -.29, p < .001$, but not for those with relatively negative self-concepts, $\beta = .07, ns$.

The interaction of differential importance and proportion of negative attributes also reached conventional levels of significance, $\beta = -.17, p < .05$. This interaction showed that the association between negative content and authenticity was most pronounced for individuals who perceived their positive self-aspects as being more important than their negative self-aspects. Individuals with high differential importance and low negative content viewed self-aspects as especially authentic but individuals with high differential importance and high negative content viewed self-aspects as especially inauthentic. In other words, people tended

⁶The reliability for the three authenticity items was $\alpha = .67$ ($N = 870$, treating each self-aspect category as an observation for each of 167 participants).

to feel inauthentic when they had many negative attributes, even though they rated them as relatively unimportant.

Discussion—Individuals with positively integrative self-concept structures rated the aspects of their self-concept as being more authentic than other individuals. Drawing from self-determination theory (Deci & Ryan, 1995), this suggests that individuals with positively integrative self-concept structures may be especially likely to accept responsibility and take ownership for who they are. These findings are consistent with the results of Study 1 because they suggest that positively integrative individuals are less likely than other individuals to require validation from external sources. Interestingly, this suggests that positive integration may be accompanied by a perceived fulfillment of psychological needs and that their reported feelings of self-worth may reflect something akin to a *true* form of high self-esteem (Deci & Ryan, 2000). In the words of Kernis and his colleagues (2000), individuals with positively integrative self-concept structures appear to be “masters of their psychological domain” (p. 1304).

Individuals with compartmentalized self-concept structures reported experiencing their self-aspects as being less authentic than positively integrative individuals. Compartmentalized individuals may have reported less authentic aspects of themselves because of the perceived salience and social relevance of those domains (e.g., “work is an important part of my life but who I am there is not *really* me”). To this end, these results may reflect the difficulty that compartmentalized individuals have with internalizing aspects of themselves they have created for extrinsic motives (e.g., acceptance, power, money; Ryan & Deci, 2000). This finding suggests the intriguing possibility that compartmentalized individuals may be more likely than integrative individuals to generate self-aspects for specific contexts even when they do not think of those aspects as being authentic parts of who they are.

Study 3: Self-Esteem Accessibility

Study 3 examined whether evaluative organization was associated with self-esteem accessibility. The “accessibility” of self-esteem refers to how strongly an individual holds positive or negative attitudes toward the self (DeMarree et al., 2010). That is, the ease (i.e., speed) with which a person evaluates the self should predict the strength of that attitude across contexts such that stronger attitudes will be accessed more easily. Our prediction was that integrative individuals will have easier access to their self-evaluations than will compartmentalized individuals because of the inconsistencies that characterize compartmentalization. That is, the segregation of positive and negative attributes which defines compartmentalization likely makes it more difficult for these individuals to formulate coherent global feelings of self-worth. In addition, experiences of inauthenticity and contingent self-worth may make it difficult to know how one feels about the self. In contrast, although individuals with integrative self-concept structures may have inconsistent information about themselves, the fact that these positive and negative beliefs exist within the same self-aspects suggest that integrative individuals may have formulated coherent self-evaluations of their integrative categories that are relatively consistent across self-aspects and stable over time, increasing their accessibility.

Participants—Participants were 62 undergraduate psychology students (38 women) who participated in return for partial fulfillment of a research participation requirement. The mean age of participants was 19.16 years ($SD = 2.88$). The racial/ethnic composition was 69% White, 11% Black, 11% Asian, 5% Native American, 2% Hispanic, and 2% other. Participants attended a single laboratory session during which they completed the self-descriptive card sorting task as well as a variety of computer-based tasks which included a self-esteem measure and several other tasks not relevant to the present study. These additional measures and findings are reported in Ditzfeld and Showers (2013b) and Ditzfeld (2014).

Measures—This study included the self-descriptive card-sorting task and self-esteem scale used in Studies 1 and 2. An important difference was that the measure of self-esteem in Study 3 was administered via computer which allowed us to capture the response latency for each of the 10 items.

Self-Esteem Accessibility: Our measure of self-esteem accessibility was adapted from DeMarree et al. (2010). The items from the Rosenberg Self-Esteem Scale were presented sequentially on a computer and the time taken for participants to respond to each of these 10 items, on a scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*), was recorded. Participants were not informed that their response latencies were being recorded so their responses reflect their natural response speed. Consistent with the approach of Demarree et al., response latencies to individual items were log-transformed and then averaged, so that higher scores indicate slower responses.

Results—Of 62 participants, 2 individuals used fewer than 2 negative attributes, 2 created fewer than 3 groups, and 1 had an average self-esteem accessibility that was 3 standard deviations above the mean. Analyses used the remaining 57 participants (35 females).

Evaluative Organization and Self-Esteem Accessibility: Self-esteem accessibility scores were regressed onto measures of evaluative organization, differential importance, proportion of negative attributes, and self-esteem level. The sample size limited the analysis to consideration of two-way interactions. We note that a sample size of 55 provides a power of .80 for testing a moderate effect size ($f^2 = .15$) using 7 predictors with perfect reliability (Cohen, 1988). Because a preliminary analysis showed no significant interactions involving the proportion of negative attributes, this term was entered as a main effect only on Step 1. On Step 2, we entered all remaining main effects. All possible two-way interactions of evaluative organization, differential importance, and self-esteem were entered on Step 3. Table 4 presents descriptive statistics and intercorrelations for these variables.

The regression results appear in Table 5. This analysis revealed a significant interaction of evaluative organization and self-esteem, $\beta = .38$, $p < .01$, such that among those with high self-esteem, the response times of compartmentalized individuals were longer than were those of integrative individuals. In addition, there was an interaction of evaluative organization and differential importance, $\beta = -.36$, $p < .02$, with simple slope analyses indicating that compartmentalized individuals with important negative aspects were especially slow.

Although, most likely, long latencies occur when compartmentalized individuals, both those with high self-esteem and those with important negative aspects, evaluate themselves in relatively positive terms (e.g., agreeing with positively worded self-esteem items), we examined this explicitly by computing 4 different latency means for subsets of agree or disagree responses to positively-worded (e.g., “On the whole, I am satisfied with myself”) or negatively-worded (e.g., “At times, I think I am no good at all”) self-esteem items. The 4 latency means represent the following responses: *Agree* or *strongly agree* for positively-worded items (POSME); *disagree* or *strongly disagree* for negatively-worded items (NEGNOTME); *agree* or *strongly agree* for negatively-worded items (NEGME); and *disagree* or *strongly disagree* for positively-worded items (POSNOTME). Thus, the number of latencies averaged for each participant varied from 1 to 5 for each latency variable, depending on whether that participant responded agree or disagree to each positively- or negatively-worded item. If an individual did not have at any appropriate responses for that variable, no mean was computed. In fact, only 6 participants gave any disagree responses to positively-worded items (POSNOTME), so this variable was not analyzed further. POSME ($n = 56$), NEGNOTME ($n = 56$), and NEGME ($n = 35$) were analyzed using the hierarchical regression outlined above for the mean of all log-transformed latency items.

Table 5, Panel 3 presents the results of the POSME regression. This obtains a significant main effect for phi, $\beta = .40$, $p < .03$, qualified by two interactions: $\text{Phi} \times \text{SE}$, $\beta = .34$, $p < .03$, and $\text{Phi} \times \text{DI}$, $\beta = -.42$, $p < .005$. Figure 3 shows the same $\text{Phi} \times \text{SE}$ interaction described above for the 10-item latency measure, such that among individuals with high self-esteem, compartmentalized individuals have longer latencies than do integratives. As before, predicted values for the $\text{Phi} \times \text{DI}$ interaction indicate that compartmentalized individuals with important negative aspects are slowest to respond.

The NEGNOTME regression obtained one significant effect for self-esteem, $\beta = -.32$, $p < .03$, such that individuals with high self-esteem were quicker to disagree with negatively-worded items. This result is consistent with previous literature on self-schemas and depression (Bargh & Tota, 1988; Gotlib & McCann, 1984). There were no effects for compartmentalization. Similarly, for the smaller sample of individuals who had valid NEGME latencies, the only significant result was a main effect for self-esteem, $\beta = .38$, $p = .051$, such that individuals with high self-esteem were slowest to agree with negatively-worded items.

Discussion—These data suggest that, among individuals who report high levels of self-esteem, compartmentalized individuals take longer to access (or generate) positive self-evaluations than do individuals with integrative self-concept structures. This is consistent with the view that positively integrative individuals have more fully resolved their inconsistently-valenced attributes and have easy access to a positive view of self. This well-integrated self may be the basis of their resilience in the face of stressful negative events. This result is also consistent with low contingencies of self-worth and the feelings of authenticity reported by individuals with positively integrative self-concept structures. The auxiliary finding that negative compartmentalized individuals are especially slow in their self-evaluations may stem from the fact that their self-concepts are so negative that it takes

fairly elaborate processing in order to generate even slightly positive (but socially acceptable) statements of self-worth.

Because the sample size in this study did not permit tests of three-way interactions that might be of interest and because the power of our tests only permits identification of moderate to large effect sizes, we encourage replication of these results. Note that global self-esteem, but not compartmentalization, predicted response latencies for negatively-worded items. One possible explanation is that both compartmentalization and integration represent *attempts* to cope with negative self-knowledge. Both types of self-concept organization may provide substantial protection against the impact of negative characteristics, albeit via different strategies (Showers, 1995); however, they may ultimately differ in their ability to provide a securely positive sense of self-worth.

General Discussion

To summarize, the present studies find that among people with relatively positive self-concepts and high self-esteem, compartmentalized individuals show greater contingencies of self-worth, lower feelings of authenticity, and are slower to endorse positive self-statements than are integrative individuals. We argue that these findings are the result of the evaluative inconsistencies that compartmentalized individuals experience across self-aspects and, therefore, inconsistencies in their experience of self-worth. The latter inconsistencies were previously demonstrated by Zeigler-Hill and Showers (2007) in response to negative feedback (social rejection) and in association with negative daily events.

These findings also elaborate on previous work on the self-clarity of individuals with compartmentalized and integrative self-concept structures (Boyce, 2008). A state self-clarity manipulation, for which participants gave multiple examples of behaviors consistent with previously-endorsed traits, increased the integration of the self for individuals with high trait clarity, but increased compartmentalization for individuals with low trait clarity, who may have had greater difficulty generating behavioral examples of the traits they had previously endorsed. We argue that this increased compartmentalization is a defensive structure that reflects individuals' attempts to feel good about themselves in the face of self-doubt, whereas increased integration reflects a lowering of defenses when individuals feel secure in their self-evaluations.

It is important to note that compartmentalized individuals' lack of self-clarity may be most apparent in their global self-evaluations, as they attempt to make sense of evaluative inconsistencies across multiple self-aspects or domains. Thus, compartmentalized individuals could be completely clear and certain about their self-worth in specific domains (e.g., academic competence), but insecure and unclear about their global self-worth. Nonetheless, their slow endorsements of evaluative self-statements, their contingencies, and their lack of authenticity all suggest that it may be difficult for positive compartmentalized individuals to make coherent global self-evaluations (except possibly those that are superficial or guided by impression management goals).

A subset of positively compartmentalized individuals, previously labeled as “genuinely compartmentalized,” may be very secure in the low importance ratings of their negative self-

aspects, and should show low vulnerability to threat and secure high self-esteem (Thomas, Ditzfeld, & Showers, 2013). However, they do not seem to be represented in substantial numbers in the samples studied here. One possibility is that individuals with such securely compartmentalized selves are excluded from the analyses because they report no negative attributes.

Implications

These findings suggest the following implications that may be associated with these qualities of compartmentalized individuals' self-knowledge. First, compartmentalized individuals may be prone to deny their negative characteristics in order to facilitate choices, progress, or action if maintaining access to both positive and negative attributes creates confusion and inconsistency. We think this process is at the heart of recent findings that compartmentalized individuals are indeed prone to unethical behavior (Showers, Thomas, & Grundy, 2013). It should be easy for them to deny the negative implications of that behavior by minimizing the importance of any activated negative self-aspects.

At the same time, it is important to be mindful of the potential benefits of a compartmentalized self-structure, which include the ability to embrace positivity. For example, Ditzfeld and Showers (2014) found that, relative to integratives, compartmentalized individuals typically report *experiencing* more high-arousal emotions (both positive and negative), *preferring* high-arousal positive emotions, and *perceiving* high-arousal negative emotions as less negative. Other findings in this vein indicate that positive-compartmentalization is associated with the absence of symptoms of disordered eating (Showers & Larson, 1999), successful coping with sexual maltreatment (Showers, Zeigler-Hill, & Limke, 2006), and elevated liking and loving for a current romantic partner (Showers & Kevlyn, 1999).

An interesting question is which type of self-organization is more open to self-change (cf. DeMarree, et al., 2010). Whereas integrative individuals should be more accepting of concrete feedback, especially negative feedback, their global self-evaluations may be relatively resilient to self-change. In contrast, the uncertainty of compartmentalized individuals about the global self may make them vulnerable to dissociative disorders or false memories, as there is a wider range of possible behaviors that are plausible for them, and their difficulty in attending to positive and negative self-beliefs simultaneously may make them less certain about self-knowledge that may sometimes be outside their scope of awareness (e.g., unpleasant thoughts about the self that have been swept under the rug for the moment). However, they may also be prone to deny or avoid negative feedback if it is inconsistent with the positive selves that they prefer, creating a defensive response and fragile high self-esteem. It is unlikely that positively compartmentalized individuals will be able to avoid the eventual priming of their negative self-aspects which would lead to decreases in their feelings of self-worth and is likely at the core of their uncertain global self-views.

Conclusion—Across three studies, among individuals with relatively positive self-concepts or high self-esteem, those with compartmentalized self-concept structures reported

greater contingencies of self-worth in 5 domains, lower perceived authenticity of their multiple self-aspects, and were slower to make global self-evaluations than were individuals with evaluatively integrative selves. These findings are consistent with the view that compartmentalization, although often self-enhancing, also implies vulnerability to a variety of self-threats and difficulties related to the quality of self-knowledge, likely stemming from the evaluative inconsistency of multiple selves. In contrast, individuals with positively integrative self-structures may have more fully resolved their mix of positive and negative self-attributes and may have more authentic multiple selves and more stable, accessible, and resilient feelings of self-worth.

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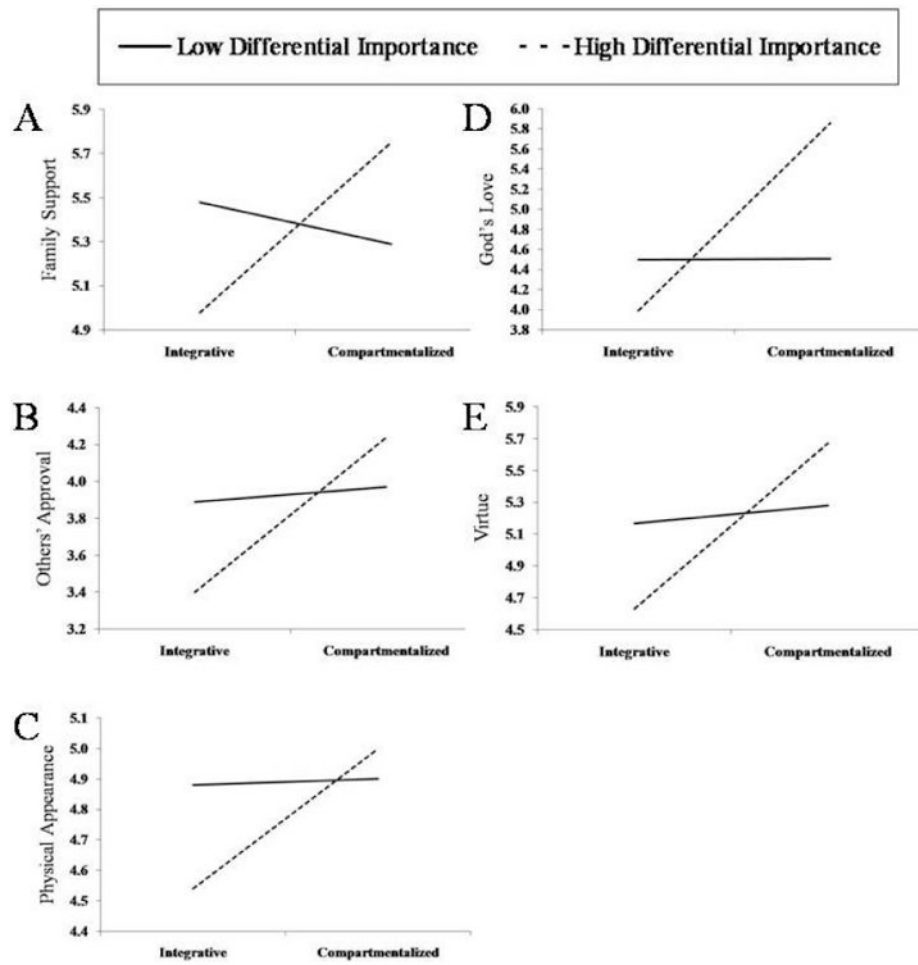


Figure 1. The predicted values for contingent self-esteem illustrating the interactions of evaluative organization and differential importance at values that are one standard deviation above and below their respective means.

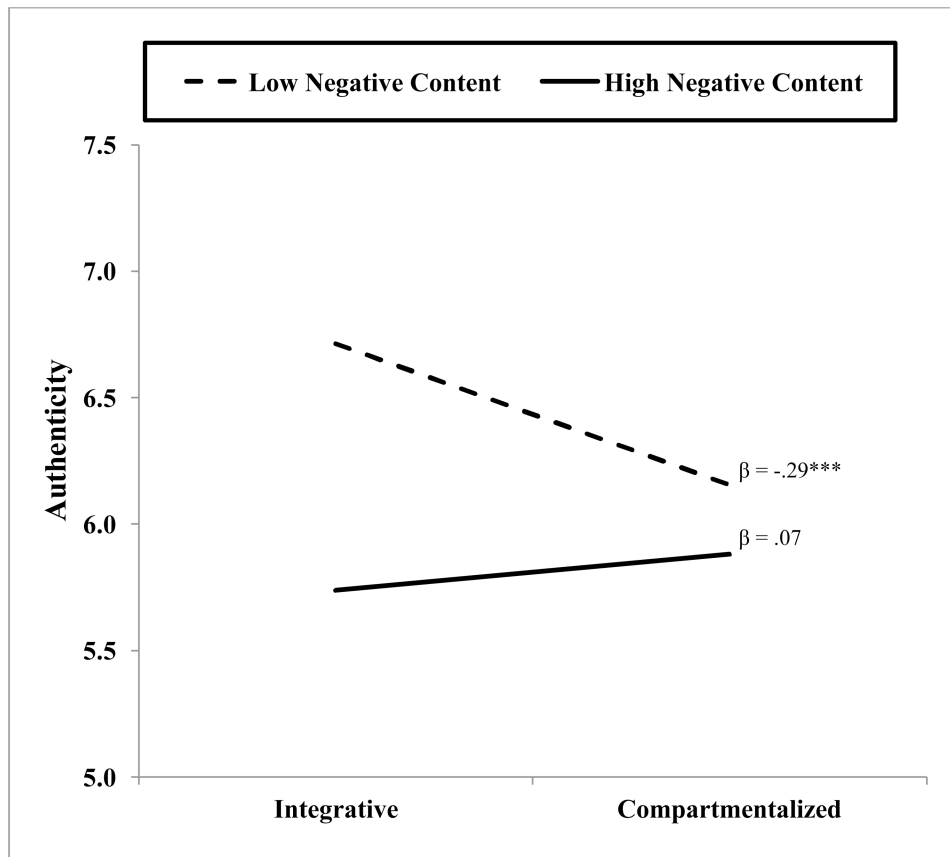


Figure 2. Predicted values for mean perceived authenticity of self-aspects, illustrating the interaction of evaluative organization and proportion of negative attributes at values that are one standard deviation above and below their respective means. Likert scale ratings on this measure range from 1 to 9. Beta weights represent simple slopes analyses.

*** $p < .001$

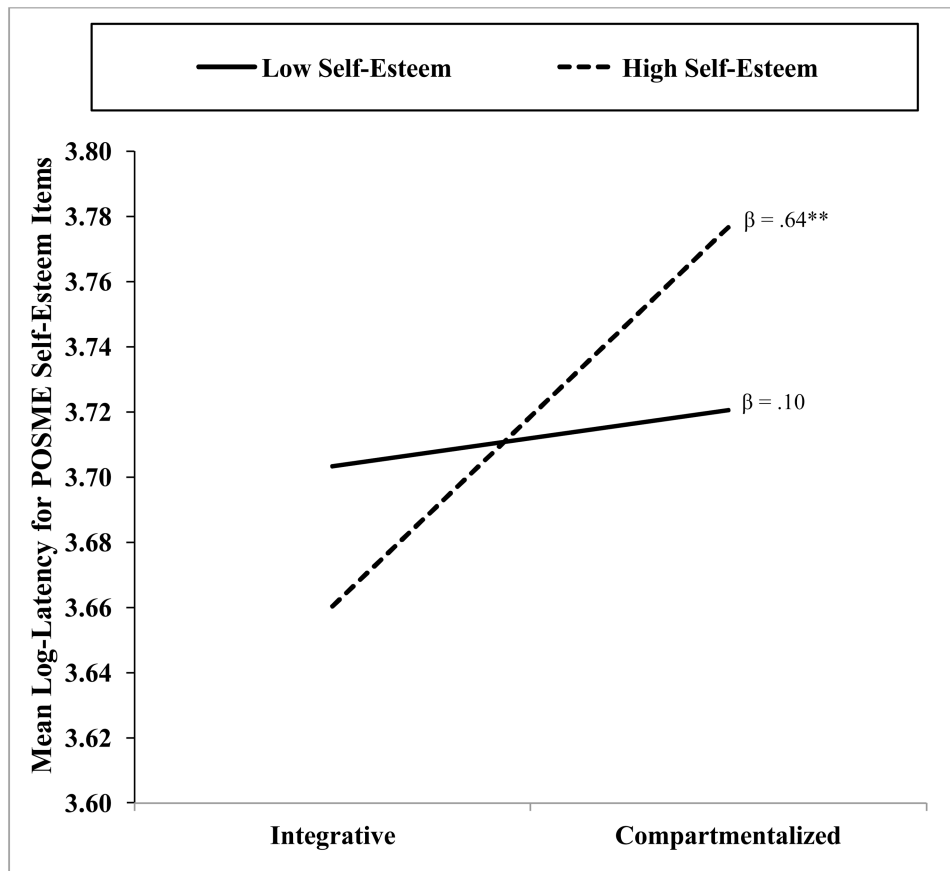


Figure 3. Self-esteem accessibility of POSME items (i.e., mean log latencies for describes-me responses to positively-worded self-esteem items [Rosenberg, 1965]). Predicted values illustrate the interaction of evaluative organization and self-esteem at values that are one standard deviation above and below their respective means. Higher scores reflect longer latencies. Beta weights represent simple slopes analyses.

** $p < .01$

Table 1
Examples of Actual Card Sorts Illustrating Compartmentalization and Integration

Panel A: Compartmentalized Organization				
When I am around new people	How I feel on bad days	Me almost everyday	What I wish to be like (but I'm not)	The way I am around my true friends
- Uncomfortable	- Like a failure	Friendly	Successful	Successful
- Insecure	- Sad & blue	Happy	Confident	Giving
- Inferior	- Weary	Hardworking	Comfortable	Capable
- Isolated	- Unloved	Energetic	Independent	Friendly
- Indecisive	- Hopeless	Interested	Outgoing	Happy
- Tense	- Irritable	Fun & entertaining	Optimistic	Hardworking
- Not the "real me"	- Immature	Lovable	Communicative	Energetic
		Intelligent	Needed	Interested
		Organized		Fun & entertaining
		Capable		Lovable
		Giving		Confident
				Comfortable
				Outgoing
				Optimistic

Panel B: Integrative Organization			
Me with my family	Me at school	Me with my sorority	Me with my friends
Happy	Mature	Friendly	Confident
Friendly	- Lazy	Outgoing	Optimistic
Lovable	- Sad and blue	Fun & entertaining	Outgoing
Giving	Capable	Comfortable	Needed
Comfortable	Organized	- Inferior	Energetic
Communicative	Confident	Energetic	Communicative
Energetic	Hardworking	- Not the "real me"	Happy
Confident	Successful	- Insecure	Friendly
Optimistic	Interested	Confident	Lovable
Needed	Independent	Independent	Giving
Interested	Intelligent	- Uncomfortable	Fun & entertaining
Successful	- Tense	Interested	Comfortable
Hardworking	Energetic	Hardworking	- Immature
Independent	Comfortable	Energetic	- Independent
- Self-centered	Friendly	Communicative	
Needed	Happy	Happy	
- Indecisive	- Insecure	- Disorganized	
Outgoing	- Incompetent	- Indecisive	
	- Indecisive		

Note. Negative attributes are identified by a minus sign. Panel A: compartmentalization = 1.00, differential importance = .83, and proportion of negative attributes = .30. Panel B: compartmentalization = .29, differential importance = .96, and proportion of negative attributes = .22.

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Table 2
Study 1: Intercorrelations and Descriptive Statistics for Study 1 Variables

	1	2	3	4	5	6	7	8	9	10	11
1. Evaluative organization (phi)	—										
2. Differential importance (DI)	.09	—									
3. Proportion of negatives (neg)	.44***	-.08	—								
4. Self-esteem level	-.05	.37***	-.42***	—							
5. Family Support	.09	.01	-.09	.16	—						
6. Others' Approval	.33***	-.08	.25**	-.26**	.19*	—					
7. Physical Appearance	.12	.05	.11	-.22**	.27***	.47***	—				
8. God's Love	.16	.20*	-.15	.21*	.40***	.21*	.12	—			
9. Virtue	.29***	.17*	.00	.13	.35***	.28***	.29***	.33***	—		
10. Competitor	.06	.10	.11	-.06	.05	.23**	.35***	-.04	-.01	—	
11. Academic Competence	.16	-.05	.08	.02	.32***	.30***	.37***	.23**	.36***	.38***	—
<i>Mean</i>	0.69	0.45	0.31	4.20	5.43	4.11	4.94	4.88	5.19	4.96	5.52
<i>Standard Deviation</i>	0.23	0.47	0.14	0.63	1.09	1.35	1.12	1.89	1.21	1.14	1.02

Note. $N = 140$.

* $p < .05$;

** $p < .01$;

*** $p < .001$.

Table 3
Multivariate Regression of Contingencies of Self-Worth Domains onto Self-Concept Content, Self-Concept Structure, and Self-Esteem Level

	Family Support ^a	Others' Approval ^b	Physical Appearance ^c	God's Love ^d	Virtue ^e	Competition ^f	Academic Competence ^g
<i>Step 1</i>							
Evaluative organization (phi)	.16	.32***	.11	.24**	.33***	.00	.15
Differential importance (DI)	-.07	-.02	.14	.13	.11	.14	-.09
Proportion of negatives (neg)	-.11	.02	-.05	-.22*	-.12	.09	.04
Self-esteem level	.16	-.23*	-.29**	.08	.06	-.08	.08
<i>Step 2</i>							
Phi × DI	.26**	.19*	.30***	.23**	.27**	.10	.10
Phi × Neg	.03	.05	-.07	.03	.00	-.01	.06
DI × Neg	-.17	-.04	.07	-.17	.06	.14	-.02

Note. N = 140.

^aStep 1: $R^2 = .05, p < .05$; Step 2: $R^2 = .10, p < .01$, Change in $R^2 = .05, p < .05$.

^bStep 1: $R^2 = .16, p < .001$; Step 2: $R^2 = .21, p < .001$, Change in $R^2 = .05, p < .05$.

^cStep 1: $R^2 = .08, p < .05$; Step 2: $R^2 = .19, p < .01$, Change in $R^2 = .11, p < .01$.

^dStep 1: $R^2 = .12, p < .001$; Step 2: $R^2 = .17, p < .001$, Change in $R^2 = .05, p < .05$.

^eStep 1: $R^2 = .12, p < .01$; Step 2: $R^2 = .21, p < .01$, Change in $R^2 = .09, p < .01$.

^fStep 1: $R^2 = .03, ns$; Step 2: $R^2 = .06, ns$, Change in $R^2 = .03, ns$.

^gStep 1: $R^2 = .03, ns$; Step 2: $R^2 = .04, ns$, Change in $R^2 = .01, ns$.

* $p < .05$;

** $p < .01$.

Table 4
Intercorrelations and Descriptive Statistics for Study 2 and Study 3 Variables

	Study 2 (N = 147)				
	<i>M</i>	2	3	4	5
1. Authenticity of self-aspects	—				
2. Proportion of negative self-beliefs	-.44 ^{***}	—			
3. Differential importance	.01	-.16	—		
4. Compartmentalization	-.32 ^{***}	.33 ^{***}	.08	—	
5. Self-esteem level	.30 ^{***}	-.42 ^{***}	.25 ^{**}	-.14	—
Mean (<i>SD</i>)	6.21(.94)	.32(.14)	.52(.14)	.75(.22)	4.31(.49)
	Study 3 (N = 57)				
	<i>M</i>	2	3	4	5
1. Self-esteem accessibility	—				
2. Proportion of negative self-beliefs	-.03	—			
3. Differential importance	.15	-.22	—		
4. Compartmentalization	.19	.39 ^{**}	.34 ^{***}	—	
5. Self-esteem level	-.04	-.33 [*]	.28 [*]	.05	—
Mean (<i>SD</i>)	3.69(.08)	.29(.15)	.69(.30)	.76(.23)	3.34(.47)

Note. Proportion of negative self-beliefs was arcsine transformed; actual values were $M = .31$, $SD = .13$ (Study 2) and $M = .28$, $SD = .14$ (Study 3). Self-esteem level was assessed using a 5-point scale in Study 2 and a 4-point scale in Study 3. Self-esteem accessibility is the mean log-latency for responses to the Rosenberg Self-Esteem Scale; the non-log transformed value was $M = 5422.77$ ms, $SD = 1168.73$ ms.

* $p < .05$;

** $p < .01$;

*** $p < .001$

Table 5
Regressions for Authenticity of Self-Aspects (Study 2), Self-Esteem Accessibility (Study 3), and Self-Esteem Accessibility for POSME items (Study 3) onto Measures of Self-Concept Content, Self-Concept Structure, and Self-Esteem Level

Study 2 (N = 147)			
Authenticity of Self-Aspects	R²	sr²	sr
<i>Step 1</i>	.25***		
Proportion of negatives (neg)	.08***		-.28***
Differential importance (DI)	.00		-.06
Evaluative organization (phi)	.03*		-.17*
Self-esteem level	.02		.14
<i>Step 2</i>	.29***		
Phi × DI	.00		.06
Phi × Neg	.03*		.17*
DI × Neg	.02*		-.14*
Study 3 (N = 57)			
Self-Esteem Accessibility	R²	sr²	sr
<i>Step 1</i>	.06		
Proportion of negatives (neg)	.01		-.11
Differential importance (DI)	.00		.06
Evaluative organization (phi)	.04		.19
Self-esteem level	.01		-.11
<i>Step 2</i>	.24*		
Phi × DI	.10*		-.31*
Phi × Self-Esteem	.12**		.34**
DI × Self-Esteem	.00		-.02
Study 3 (N = 56)			
Self-Esteem Accessibility (POSME)	R²	sr²	sr
<i>Step 1</i>	.12		
Proportion of negatives (neg)	.05		-.22
Differential importance (DI)	.00		-.04
Evaluative organization (phi)	.10*		.31*
Self-esteem level	.00		-.05
<i>Step 2</i>	.33**		
Phi × DI	.13**		-.36**
Phi × Self-Esteem	.07*		.27*
DI × Self-Esteem	.00		-.07

Note. The squared semipartial correlation (sr^2) is the proportion of unique variance of each predictor, beyond the variance of all other variables on that step. The sign of semipartial correlation (sr) signifies the direction of the association between the predictor and criterion.

*
 $p < .05$;

**
 $p < .01$;

 $p < .001$

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