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No shades of gray: Splitting and self-esteem instability

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Abstract

Splitting refers to the tendency to form cognitive representations of the self and others that are either all-good or all-bad. Previous research and theory concerning splitting has proposed that reliance on this defense mechanism should be associated with unstable self-esteem. The present research examined this hypothesis by measuring the tendency of 183 participants to engage in splitting and then tracking their state self-esteem each evening for seven consecutive days. Hierarchical multiple regression analyses found that the proposed association between splitting of the self image and self-esteem instability only emerged among individuals with relatively high levels of self-esteem. For individuals with low levels of self-esteem, their self-esteem was unstable regardless of whether they relied on splitting or not. The implications of splitting for the stability of self-esteem are discussed.

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1. Introduction

Imagine what it would be like to simultaneously possess two opposing cognitive representations of who you are, such that one representation is almost exclusively positive and the other representation is primarily negative. This sort of self-concept fragmentation is typical of individuals who employ the defense mechanism of *splitting*. Splitting refers to the formation of cognitive representations of the self and others that are either all-good or all-bad, with a consequent inability to perceive the self or others as possessing both good and bad qualities simultaneously (Akhtar & Byrne, 1983; Freud, 1938/1941; Kernberg, 1975; Volkan, 1976). For individuals who employ splitting, more complex and integrated evaluations – and the anxieties associated with this ambivalence – are sacrificed in favor of dichotomous good or bad judgments (Freud, 1938/1941). The present study examines whether the simplistic views of the self that characterize splitting are associated with the stability of self-esteem.

Splitting is considered to be a normal aspect of psychological development during infancy and early childhood (Kernberg, 1975; Klein, 1946; Mahler, 1968), but it is expected to recede once the child has developed the capacity to understand primary caretakers as simultaneously possessing both good and bad qualities. However, a number of researchers have found that some individuals continue to employ splitting into adulthood (e.g., Dean, 2004; Gabbard, 1989; Klein, 1946). Individuals who rely on splitting are believed to experience chaotic shifts in their feelings of self-worth as either all-good or all-bad self-representations are made salient (Akhtar & Byrne, 1983; Kernberg, 1975; Kohut, 1971; Mahler, 1974; Volkan, 1976). Therefore, it is not surprising that splitting is associated with certain forms of severe personality pathology such as borderline personality disorder and narcissistic personality disorder (American Psychiatric Association, 2000). Narcissists, for example, are thought to engage in the defensive splitting of negative self-attributes in an effort to preserve their tenuous feelings of self-worth (Kernberg, 1975; Kohut, 1972). Although splitting is most often found within clinical samples, previous research has shown that there is sufficient variability in self-reports of splitting among non-clinical samples to allow the prediction of

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psychological maladjustment (e.g., Gould, Prentice, & Ainslie, 1996; Watson & Biderman, 1993).

The extreme cognitive representations of the self that are formed through the splitting process are believed to result in self-esteem fluctuations as the individual alternates between extremes of self-idealization and self-devaluation (Horowitz, Markman, Stinson, Fridhandler, & Ghannam, 1990). Despite the clear consensus that individuals who rely heavily on splitting should experience unstable self-esteem, there is actually very little direct evidence in support of this contention. One exception is that Gould et al. (1996) found an association between splitting and retrospective accounts of self-esteem instability using the Stability of Self Scale (Rosenberg, 1965; 1979). However, it has been shown that retrospective accounts of self-esteem fluctuations – such as those assessed by the stability of self scale – are not associated with measures of self-esteem instability which actually track self-reports of state self-esteem over repeated measurements (e.g., Kernis, Grannemann, & Barclay, 1989). As a result, the association between splitting and actual changes in state self-esteem over time remains unclear.

Showers and Kevlyn (1999) have suggested that splitting may be a primitive form of evaluative compartmentalization (i.e., the segregation of positive and negative self-beliefs into separate self-aspects). For example, an individual with a compartmentalized self-concept structure may have one self-aspect labeled “me as a creative scholar” which contains positive attributes and another self-aspect that is “me during final exams” which contains only negative attributes. In contrast, someone with an integrative self-concept structure may have a single self-aspect representing “me as a student” that contains both positive and negative attributes. In a recent study, Zeigler-Hill and Showers (2007) found that compartmentalization was associated with self-esteem instability among those with high levels of self-esteem. The unstable self-esteem of compartmentalized individuals was attributed to shifts in the salience of their positive and negative self-aspects. That is, the state self-esteem of these individuals was believed to change in accordance with the salience of their positive or negative self-aspects. Given the conceptual similarity between splitting and evaluative compartmentalization, the findings of Zeigler-Hill and Showers (2007) may be viewed as indirect support for the link between splitting and self-esteem instability. This indirect support is, of course, less than satisfying. Therefore, to fill this gap in the extant literature, the purpose of the present study was to examine whether splitting was associated with self-esteem instability when instability was measured by tracking changes in state self-esteem over time.

1.1. Self-esteem instability

Although the vast majority of self-esteem research has focused on *self-esteem level* (i.e., relatively enduring favorable or unfavorable attitudes toward the self), the importance of changes in self-esteem over time has also been

noted (see Kernis, 2005 for a review). The term *self-esteem instability* refers to transient fluctuations in moment-to-moment feelings of self-worth over time (Kernis, 2003; Kernis, 2005). According to the model of self-esteem instability developed by Kernis and his colleagues (e.g., Kernis et al., 1989), individuals with stable high self-esteem are believed to possess a solid basis for their positive feelings of self-worth. As a result, the self-esteem of these individuals is relatively unaffected by events that may have an evaluative component. That is, the solid foundation for their feelings of self-worth protects individuals with stable high self-esteem from the variety of adversities that individuals frequently encounter in their day-to-day lives. In contrast, individuals with unstable high self-esteem are thought to possess positive feelings about the self that are highly vulnerable to challenge. Thus, the self-esteem of individuals with unstable high self-esteem functions as if it is constantly at stake (e.g., Greenier et al., 1999). As a consequence, individuals with unstable self-esteem have been found to employ a variety of self-protective and self-enhancing strategies in an effort to protect their seemingly precious self-esteem resources (see Kernis, 2005 for a review).

1.2. Overview and predictions

Splitting allows individuals to maintain separate and contradictory cognitive representations of the self. We propose that individuals who use splitting to form all-good and all-bad cognitive representations of the self will experience unstable self-esteem. The reason we believe that those individuals who split their self image will experience this instability is that shifts in the salience of their all-good and all-bad cognitive representations are likely to occur over time. That is, positive experiences should activate the all-good cognitive representation of the self which will, in turn, increase the accessibility of positive beliefs about the self and boost state self-esteem. In contrast, negative experiences should result in the all-bad cognitive representation of the self being made salient with the accompanying flood of negative thoughts and drop in self-esteem. This vulnerability to shifts between the all-good and all-bad self-representations should result in greater fluctuations in state self-esteem (i.e., *higher highs* and *lower lows*) for those individuals who rely on splitting. However, splitting is not confined to cognitive representations of the self. Rather, splitting may also be applied to cognitive representations of other individuals as well. Although it is unclear what relationship, if any, would emerge between self-esteem instability and other-directed splitting, this form of splitting was included in the present study for exploratory purposes.

Measures of narcissism and neuroticism were also included in the present study because these constructs have been linked to both self-esteem instability (Rhodewalt, Madrian, & Cheney, 1998; Zeigler-Hill, Chadha, & Osterman, 2008) and splitting (Kernberg, 1975; Kohut, 1972;

Volkan, 1976). These measures were included in an effort to clarify the relationship between splitting and self-esteem instability.

2. Method

2.1. Participants

Participants were 199 (42 men and 157 women) students enrolled in undergraduate psychology courses who participated in return for partial fulfillment of a research participation requirement. The mean age of participants was 20.49 years ($SD = 3.85$). The racial/ethnic composition was 51% white, 47% black, and 2% other.

2.2. Measures

2.2.1. Splitting

The defense mechanism of splitting was measured using the splitting index (Gould et al., 1996). The splitting index is a 24-item measure which captures the tendency of individuals to split cognitive representations of the self (e.g., “My feelings about myself are very powerful, but they can change from one moment to the next”; $\alpha = .86$), family members (e.g., “It is impossible to love my parents all the time”; $\alpha = .84$), and other individuals (e.g., “I have doubts about my closest friends”; $\alpha = .85$). Participants were asked to provide ratings of agreement on scales ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The splitting index has been shown to possess high internal consistency, high test-retest reliability, and to correlate in the expected directions with measures of borderline personality features, narcissism, self-esteem, and a retrospective measure of self-esteem instability (Gould et al., 1996).

2.2.2. Self-esteem level

Participants completed the Rosenberg self-esteem scale (RSES; Rosenberg, 1965), a well-validated measure of global self-regard (Blaskovich & Tomaka, 1991; Demo, 1985). The RSES consists of 10 items to which participants provide ratings of agreement on scales ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Participants were instructed to complete the scale according to how they typically or generally feel about themselves. For the present study, the internal consistency of this measure was high, $\alpha = .83$.

2.2.3. Self-esteem instability

The method for measuring self-esteem instability was adapted from the procedure used by Kernis et al. (1989). Participants were asked to complete a modified version of the RSES at the end of each day for 7 consecutive days. The RSES was modified to capture state self-esteem by instructing participants to give the response that best reflected how they felt at the moment they completed the form. Responses were made on scales ranging from 0 (*strongly disagree*) to 9 (*strongly agree*). The within-subject

standard deviation across the repeated assessments of state self-esteem served as the index of self-esteem instability such that higher standard deviations indicated more unstable self-esteem.

2.2.4. Narcissism

Narcissism was measured using the Narcissistic Personality Inventory (NPI; Raskin & Hall, 1979). The version of the NPI used in the present research contains 37 true-false statements that Morf and Rhodewalt (1993) adapted from a psychometric analysis of the NPI by Emmons (1987). Because the 37-item NPI consists only of items with factor loadings higher than .35 (Emmons, 1987) and eliminates most duplicate items, this version is assumed to be a better measure of narcissism than the original instrument from which it is derived. Previous research has demonstrated the reliability and validity of the NPI (e.g., Emmons, 1987; Raskin & Terry, 1988). For the current sample, the internal consistency of this measure was high, $\alpha = .84$.

2.2.5. Neuroticism

The measure of neuroticism employed in the present study was the neuroticism scale from the Big Five Inventory (BFI; John & Srivastava, 1999). The BFI is a well-validated measure of the Big Five personality traits (see John & Srivastava, 1999 for a review). The neuroticism scale of the BFI consists of 8 potentially descriptive phrases for which participants are asked to provide ratings of agreement on scales ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). For the current sample, the internal consistency of this measure was high, $\alpha = .83$.

2.3. Procedure

During a laboratory session, participants completed measures of splitting, self-esteem level, narcissism, and neuroticism in small groups of 2–5 participants. At the end of the laboratory session, participants were instructed to complete measures of state self-esteem via the internet each evening at approximately 10 pm for 7 consecutive days. Of the 199 participants who began the study, 16 participants were excluded due to failure to complete daily measures for 4 or more days.¹ Analyses were conducted using the 183 remaining participants (38 men and 145 women). The 183 participants included in the final analyses submitted a total of 963 daily measures.

¹ In order to assess self-esteem instability, it is essential that participants complete multiple measures of state self-esteem. As a result, some minimum number of completed state self-esteem measures must be established in order for participants to be included in the analyses. The decision to only include participants in the final analyses who contributed data for 4 or more days follows the convention established in previous research (e.g., Zeigler-Hill & Abraham, 2006; Zeigler-Hill & Showers, 2007). The excluded participants did not differ from those participants included in the final analyses on any of the measures collected during the laboratory session, $|rs| < 1.21$, *ns*.

3. Results

Table 1 presents the means, standard deviations, and intercorrelations for the measures in the present study. Consistent with previous research (e.g., Greenier et al., 1999; Kernis et al., 1989; Zeigler-Hill & Abraham, 2006), the association between self-esteem level and self-esteem instability was significant such that those with relatively low levels of self-esteem tended to report more fluctuations in their state self-esteem over time, $r = -.26, p < .001$. In comparison to women, men reported significantly higher levels of narcissism ($M_{Men} = 21.76, M_{Women} = 17.28; t[181] = -4.10, p < .001$), lower levels of neuroticism ($M_{Men} = 2.43, M_{Women} = 2.93; t[181] = 3.51, p < .001$), and higher levels of self-esteem instability ($M_{Men} = .71, M_{Women} = .54; t[181] = -2.00, p < .05$). No other sex differences emerged for the variables in the present study.

3.1. Splitting and self-esteem instability

The association between splitting and self-esteem instability was examined using hierarchical multiple regression. Although a main effect association was predicted between splitting of the self image and self-esteem instability, preliminary analyses included self-esteem level, narcissism, neuroticism, and sex as predictors because of their role in previous research concerning self-esteem instability (e.g., Zeigler-Hill et al., 2008). All continuous predictor variables were centered for the purpose of testing interactions (Aiken & West, 1991). Preliminary results showed no significant interactions involving narcissism, neuroticism, or sex, so these interaction terms were trimmed. In the final version of the analyses, the main effect terms for self-esteem level, narcissism, neuroticism, and sex were entered on Step 1. On Step 2, the main effect terms for the splitting of the self image, splitting of family images, and splitting of others' images were entered. On Step 3, the interactions of self-esteem level with each of the three forms of splitting were entered. These regression analyses were followed by the simple slopes tests recommended by Aiken and West (1991) to describe the interaction of continuous variables.

The only main effects to emerge from this analysis were for sex ($\beta = .22, p < .01$) and neuroticism ($\beta = .33, p < .001$). The main effect for sex showed that men tended to report higher levels of self-esteem instability than women, whereas the association between neuroticism and self-esteem instability was such that individuals with higher levels of neuroticism reported greater self-esteem instability. Although none of the splitting main effects reached conventional levels of significance ($\beta s < .11, ns$), two interactions involving splitting and self-esteem level did emerge. The first of these interactions involved splitting of the self image and self-esteem level ($\beta = .24, p < .01$). The predicted values for this interaction are presented in Fig. 1. Simple slopes tests found that greater reliance on self-directed splitting was associated with greater self-esteem instability among individuals with high self-esteem ($\beta = .33, p < .01$) but that this form of splitting was unrelated to self-esteem instability among those with low levels of self-esteem ($\beta = .05, ns$). Taken together, these results suggest that splitting of the self image is only associated with self-esteem instability among individuals with relatively high levels of self-esteem. For individuals with low self-esteem, their state

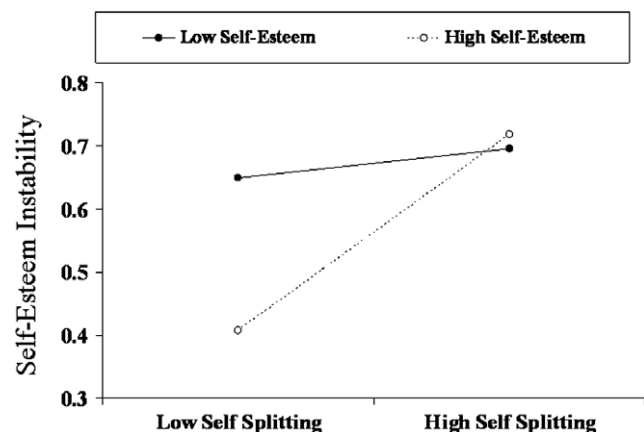


Fig. 1. Adjusted predicted values for self-esteem instability, illustrating the interaction of splitting of the self-image and self-esteem level at values that are one standard deviation above and below their respective means.

Table 1 Intercorrelations and descriptive statistics for measures of splitting, self-esteem level, narcissism, neuroticism, and self-esteem instability

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|--------------------------------|---------|--------|---------|---------|---------|--------|-----|
| 1. Splitting of the self image | – | | | | | | |
| 2. Splitting of family images | .35*** | – | | | | | |
| 3. Splitting of others' images | .49*** | .39*** | – | | | | |
| 4. Self-esteem level | -.70*** | -.14 | -.25*** | – | | | |
| 5. Narcissism | -.25*** | -.01 | -.09 | .27*** | – | | |
| 6. Neuroticism | .45*** | .16* | .23** | -.57*** | -.30*** | – | |
| 7. Self-esteem instability | .27*** | .10 | .15* | -.26*** | -.02 | .31*** | – |
| Mean | 2.58 | 1.60 | 2.06 | 4.17 | 18.21 | 2.83 | .57 |
| Standard deviation | .89 | .70 | .76 | .75 | 6.26 | .81 | .48 |

* $p < .05$.
 ** $p < .01$.
 *** $p < .001$.

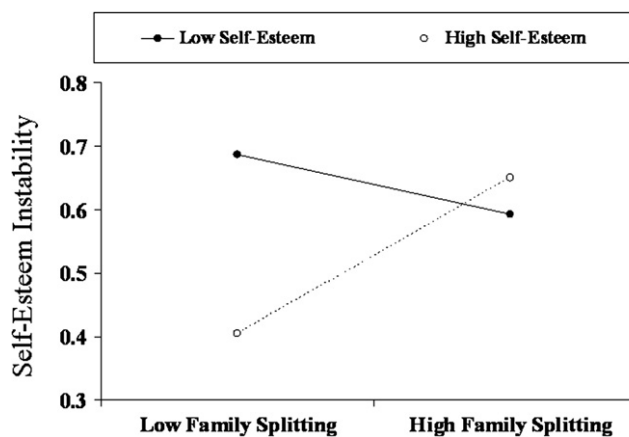


Fig. 2. Adjusted predicted values for self-esteem instability, illustrating the interaction of splitting of family images and self-esteem level at values that are one standard deviation above and below their respective means.

self-esteem was relatively unstable regardless of whether they relied on splitting of the self image or not.

The second interaction to emerge from this analysis involved splitting of family images and self-esteem level ($\beta = .23, p < .01$). The predicted values for this interaction are presented in Fig. 2. Simple slopes tests found that greater reliance on splitting of family images was associated with greater self-esteem instability among individuals with high self-esteem ($\beta = .26, p < .01$) but that family-directed splitting was unrelated to self-esteem instability among those with low levels of self-esteem ($\beta = -.10, ns$). The pattern of predicted values for this interaction is very similar to the pattern found for the previous interaction involving self-directed splitting. That is, these results suggest that family-directed splitting is only associated with self-esteem instability among individuals with relatively high levels of self-esteem, whereas it is unrelated to self-esteem instability among those with low self-esteem.

4. Discussion

For the present study, the predicted association between self-directed splitting and self-esteem instability was significant only for individuals with relatively high levels of self-esteem. Among individuals with high self-esteem, those who reported greater reliance on splitting were found to possess less stable state self-esteem than individuals reporting less reliance on self-directed splitting. In contrast, individuals with relatively low self-esteem tended to possess unstable state self-esteem regardless of their reliance on self-directed splitting. Self-esteem level may be important because individuals with low self-esteem have been found to be less certain about their self-concepts (Baumeister, Tice, & Hutton, 1989; Campbell, 1990; Campbell et al., 1996) which may lead these individuals to rely more heavily on environmental cues to tell them how to feel about themselves (Kernis, Paradise, Whitaker, Wheatman, & Goldman, 2000). The present findings may suggest that for

individuals with low self-esteem, uncertainty about the self already exists and is not further influenced by use of splitting. In contrast, individuals with high self-esteem may be more affected by the uncertainty about the self that is introduced or exacerbated by the use of splitting. If there are advantages in terms of self-esteem stability for individuals who do not employ self-directed splitting, these advantages appear to be found primarily among individuals who possess relatively high levels of self-esteem. These results also suggest that it may be difficult for individuals who rely on self-directed splitting to maintain high levels of self-esteem because negative events may lead to the activation of their all-bad self-representations with consequent drops in their self-esteem. For individuals who are less reliant on self-directed splitting, similar negative events may have much less impact on state self-esteem because these individuals are less likely to be overwhelmed by negative information due to their continued access to positive self-beliefs.

Similar results emerged for splitting whether the target was the self or members of one's family. However, it is important to note that the relationship between self-esteem instability and splitting directed toward others was limited to family members rather than encompassing other individuals in general. One explanation for this pattern is that splitting may only influence self-esteem instability to the degree that the representation being split is relevant to the self. That is, family-directed splitting may have been associated with self-esteem instability because of the link between members of one's family and the self. Splitting is thought to interfere with the integration of mental representation of the self and close family members which may result in fragmented views of the self and consequent instability with regard to feelings of self-worth (see Kernberg, 1976 for a similar argument).

Important conceptual similarities exist between splitting and an evaluatively compartmentalized self-concept structure (Showers, 1992; Showers & Zeigler-Hill, 2003). For example, both processes provide individuals with a method for dealing with negative self-beliefs by limiting access to that information. Splitting accomplishes this goal through the use of repression, whereas compartmentalization achieves the same goal through the isolation of negative information by relegating those beliefs to self-aspects that are unimportant and are rarely activated. Taken together, the present results and those of Zeigler-Hill and Showers (2007) suggest that both splitting and compartmentalization leave individuals vulnerable to fluctuations in state self-esteem as shifts in the salience of positive and negative self-aspects occur. Future research should continue to examine the similarities between splitting and compartmentalization as well as exploring the conditions under which individuals who employ these processes may experience changes in their feelings of self-worth.

It should be noted that the present research was based on a process model which assumed that splitting is a relatively stable feature of the individual that influences reactions to potentially self-relevant events. However, due to

its correlational nature, the data in the present study cannot rule out the possibility that the direction of causality may be either bidirectional or reversed. For example, among those characterized by high levels of self-esteem, instability may lead individuals to rely on splitting in an attempt to protect their fragile feelings of self-worth. Of course, it is also possible that both splitting and self-esteem instability are by-products of some third variable such as negative relationships with early caregivers.

One important limitation of the present study is its reliance on self-reported splitting. Using self-report methods for measuring splitting may seem problematic given that splitting is thought to operate outside of conscious awareness; however, the habitual employment of defenses such as splitting is believed to result in conscious derivatives that can be identified by the individual (e.g., Bond, 2004). Alternate methods that may allow researchers to detect indicators of splitting that may escape the target's awareness (e.g., observer ratings) are appealing, but these techniques are costly, time consuming, and may be plagued by low inter-rater reliability. In comparison, self-report measures of splitting are cheaply and easily administered.

In summary, the findings of the present study provide initial evidence that the splitting of self and family images are associated with self-esteem instability among individuals with high levels of self-esteem. More specifically, individuals with high self-esteem who reported greater reliance on splitting were found to possess less stable state self-esteem than other individuals with high self-esteem. The link between splitting and self-esteem instability is believed to be due to shifts in the salience of all-good and all-bad cognitive representations of the self. For individuals characterized by low self-esteem, their self-esteem tended to be unstable regardless of the extent to which they employed splitting. The results of the present study suggest that splitting may play an important role in determining whether high self-esteem is secure or fragile.

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