Self-esteem discrepancies and identity-expressive consumption
Evidence from Norwegian adolescents
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Self-Esteem Discrepancies and Identity-Expressive Consumption:
Evidence from Norwegian Adolescents

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Abstract

Prior research established that simultaneously holding discrepant explicit (deliberate, controlled) and implicit (automatic, uncontrolled) self-esteem gives rise to self-enhancing behaviors. Given that individuals tend to enhance their self-concepts with brands that are associated with positive identities, the present study examined whether self-esteem discrepancy was related to the extent to which individuals developed connections with brands that are associated with their in-groups. Findings from an adolescent sample (ages 16-18) indicated that adolescents with larger discrepancies between explicit and implicit self-esteem were more likely to construct their self-concepts using in-group-linked brands.

Keywords: self-esteem discrepancy, identity, self-brand connection, consumption
Self-Esteem Discrepancies and Identity-Expressive Consumption: Evidence from Norwegian Adolescents

**Introduction**

Self-esteem, commonly defined as individuals’ attitudes toward themselves, has long been a central construct in psychology due to its association with various psychological and behavioral outcomes, such as anxiety, well-being, and in-group favoritism (Pyszczynski, Greenberg, Solomon, Arndt, & Schimel, 2004). Current literature acknowledges two types of self-esteem: *explicit self-esteem*, which represents deliberate and reflective self-evaluations, and *implicit self-esteem*, which represents automatic and uncontrolled self-evaluations (Greenwald & Banaji, 1995). Because explicit and implicit self-esteem are outcomes of distinct evaluative processes (i.e., deliberate vs. automatic), one’s standing on the two forms of self-esteem can be incongruent (Nosek, 2007). Such discrepancies in self-esteem indicate a lack of integration in the self-concept, which in turn give rise to self-affirming behaviors (e.g., defensiveness and self-enhancement) to cope with this state of ambivalence (Bosson, Brown, Zeigler-Hill, & Swann, 2003; Jordan, Spencer, Zanna, Hoshino-Browne, & Correll, 2003; Schröder-Abé, Rudolph, Wiesner, & Schütz, 2007).

Recent research revealed that material possessions could also reduce the psychological discomfort accompanied by ambivalent self-views and discrepant feelings of self-worth (Noguti & Bokeyar, 2014; Park & John, 2011). These studies suggest that occurs because individuals tend to reinforce the way they view their self-concepts through material possessions, particularly with those that convey self-relevant symbolic attributes. For example, individuals self-enhance by constructing and communicating their self-concepts with brands that represent a facet of the social groups or identities they value (e.g., in-groups, Escalas & Bettman, 2005). To illustrate,
someone who identifies with being a designer can self-enhance by incorporating brands that are associated with the designer identity (e.g., Mac®) into the self-concept (e.g., “I am a Mac® person”).

In sum, two major conjectures can be drawn from the previous literature: (1) large discrepancies between explicit and implicit self-esteem are associated with ambivalent self-views that give rise to self-enhancement needs (Bosson et al., 2003), and (2) individuals self-enhance by constructing their self-concepts with identity-expressive brands (Escalas & Bettman, 2005). Consequently, it is possible that, to maintain positive self-views, individuals with large self-esteem discrepancies would be more inclined to construct their self-concepts with in-group-linked brands. The current paper examines this postulation in an adolescent sample. Recent studies found that self-esteem discrepancies were associated with aggression (Sandstrom & Jordan, 2008) and social anxiety (Schreiber, Bohn, Aderka, Stangier, & Steil, 2012) in adolescents, suggesting that it might also be consequential in other domains such as materialism. Furthermore, adolescents’ consumption behavior is heavily influenced by peer groups (Achenreiner, 1997), indicating that an adolescent group is suitable for investigating the link between self-esteem discrepancies and identity-expressive self-brand connections. The current study thus tests the following hypothesis:

H1: Adolescents with large self-esteem discrepancies (i.e., high explicit – low implicit self-esteem or high implicit – low explicit self-esteem) develop stronger connections to in-group-linked brands than adolescents with small self-esteem discrepancies do.
Method

Sample and Design

A priori statistical power analyses indicated that, for the subsequent statistical analyses, a minimum of 55 observations were necessary to obtain 80% statistical power to detect medium-size effects when using the conventional 5% statistical significance criterion (Faul, Erdfelder, Albert-Georg, & Buchner, 2007).

145 adolescents between ages 16 and 18 (67.6% female, $M_{age} = 17.10$) from various high schools located in southern Norway participated voluntarily in the study during a university education fair. Respondents were informed that the study was related to peer groups and brands. Data were collected via a paper-and-pencil survey. Respondents were strictly told not to disclose any personal information except for their age and gender. They were also reminded that they were free to terminate the survey at any time.

Procedure and Measures

Implicit self-esteem was measured using the name-liking measure (“How much do you like your name?”; Gebauer, Riketta, Broemer, & Maio, 2008) and explicit self-esteem was assessed with Wichstrøm’s (1995) global self-worth scale, which was validated among Norwegian adolescents (5 items, e.g., “I am satisfied with myself”; $\alpha = .79$). The self-esteem measures were rated on a 4-point Likert-type scale (1 = not at all, 4 = very much).

Adolescents’ identities were operationalized with peer groups. Following the procedure used by Escalas and Bettman (2005), respondents were asked to indicate a group that they belonged to (i.e., an in-group; “in this box, we would like you to write the name of a group at school that you belong to and feel a part of. This should be a group with members who are very similar to one another and have similar interests.”), followed by a brand that was associated with
that group (i.e., an in-group brand; “in this box, we would like you to write the name of a brand which is very popular among the members of the group you belong to.”). Respondents then evaluated the extent to which the in-group brand was part of their self-concept using a self-brand connection measure (3 items, e.g., “this brand reflects who I am”; α = .83; Escalas & Bettman, 2005) with a 4-point Likert-type yes/no scale (1 = NO, 2 = no, 3 = yes, 4 = YES).

This procedure was repeated for the out-group, in which respondents indicated a group they did not belong to (“in this box, we would like you to write the name of a group at school that you do not belong to and do not feel a part of. You should feel that you are not this type of person and you do not fit into this group. This should be a group with members who are very similar to one another and have similar interests.”), and a brand that was associated with that group (i.e., an out-group brand; “in this box, we would like you to write the name of a brand which is very popular among the members of the group you do not belong to.”). The same self-brand connection measure was also presented for the out-group brand (α = .88). The peer groups and the brands were idiosyncratic to the respondents and were not a focus of the study (example responses: football players and Puma®, gamers and PlayStation®).

To rule out the possibility that the results are due to a general sensitivity to social influences, respondents answered a susceptibility to normative influences measure (3 items, e.g., “it is important that my friends like the products and brands I buy”; α = .76; Bearden, Netemeyer, & Teel, 1989) using the same 4-point Likert-type yes/no scale presented above. This variable was included as a covariate. Overall, survey items were adapted from the literature in a manner whereby young respondents could respond to the statements easily. Composite scores were calculated for all multi-item variables.
Results and Discussion

Table 1 presents summary statistics and zero-order correlations between variables in the study. Consistent with previous studies that used the name-liking measure (e.g., Gebauer et al., 2008), there was a moderate positive correlation between respondents’ implicit and explicit self-esteem scores. Preliminary analyses showed that the survey procedure successfully elicited respondents’ social identities and adolescents discriminated in-group brands over out-group brands, as the self-brand connection scores for the in-group brand were significantly higher than the out-group brand, $M_{\text{difference}} = 1.00, t(144) = 13.49, p < .001, d = 1.18$. This finding coincides with previous studies on social identities and self-brand connections conducted among adults (e.g., Escalas & Bettman, 2005). Self-brand connection scores for the out-group brand were not related to any other variables in the study. Supplementary analyses showed that out-group brand connections were also not related to self-esteem discrepancies. This variable is thus not discussed further.

Table 1

Descriptive statistics and correlations between variables in the study.

<table>
<thead>
<tr>
<th>Variables</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implicit self-esteem</td>
<td>-</td>
<td>.406**</td>
<td>.116</td>
<td>-1.41</td>
<td>.038</td>
<td>-.002</td>
</tr>
<tr>
<td>Explicit self-esteem</td>
<td>-</td>
<td>-</td>
<td>.069</td>
<td>-.104</td>
<td>-.024</td>
<td>-.070</td>
</tr>
<tr>
<td>In-group brand connections</td>
<td>-</td>
<td>-</td>
<td>.080</td>
<td></td>
<td>.167*</td>
<td>.071</td>
</tr>
<tr>
<td>Out-group brand connections</td>
<td>-</td>
<td>-</td>
<td></td>
<td>.136</td>
<td></td>
<td>-.014</td>
</tr>
<tr>
<td>Susceptibility to normative influences</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.012</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
</tr>
</tbody>
</table>

| $M$                              | 3.17  | 3.07  | 2.29  | 1.29  | 1.89  | -     |
| $SD$                             | 0.87  | 0.58  | 0.80  | 0.45  | 0.60  | -     |
| 95% CI for $M$                    | [3.02, 3.31] | [2.97, 3.16] | [2.16, 2.42] | [1.22, 1.37] | [1.79, 1.99] | -     |
| Skewness                         | -0.782 | -0.257 | 0.121 | 1.335 | 0.168 | -     |
| Kurtosis                         | -0.223 | -0.473 | -0.500 | 0.800 | -0.846 | -     |

Notes. *p < .05, **p < .01. For gender, 0 = male and 1 = female.
Multiple regression analyses were conducted to test the main hypothesis of the study, which predicted that discrepancies between explicit and implicit self-esteem were associated with adolescents’ connections to in-group-linked brands. It was expected that the effect of a large discrepancy would manifest itself as a significant interaction effect between explicit and implicit self-esteem scores. In the multiple regression analysis, explicit self-esteem, implicit self-esteem, and their interaction term were entered as predictors together with the control variables (gender and susceptibility to normative influences). Respondents’ self-brand connection scores for the in-group brand was the dependent variable. Continuous predictors were mean-centered prior to the analysis.

As seen in Table 2, neither explicit nor implicit self-esteem had a significant main effect; however, the predicted significant interaction effect emerged, revealing that discrepant levels of explicit and implicit self-esteem were associated with respondents’ connections to in-group brands.

Table 2

Multiple regression analysis results for self-esteem variables predicting adolescents’ in-group brand connections.

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>SE B</th>
<th>95% CI for B</th>
<th>t</th>
<th>p</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implicit self-esteem</td>
<td>0.02</td>
<td>0.09</td>
<td>[-0.15, 0.19]</td>
<td>0.23</td>
<td>.816</td>
<td>1.33</td>
</tr>
<tr>
<td>Explicit self-esteem</td>
<td>0.05</td>
<td>0.12</td>
<td>[-0.19, 0.30]</td>
<td>0.41</td>
<td>.682</td>
<td>1.21</td>
</tr>
<tr>
<td><strong>Interaction effect</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implicit x Explicit self-esteem</td>
<td>-0.32</td>
<td>0.13</td>
<td>[-0.58, -0.06]</td>
<td>-2.44</td>
<td>.016</td>
<td>1.14</td>
</tr>
<tr>
<td><strong>Control variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>0.12</td>
<td>0.14</td>
<td>[-0.16, 0.39]</td>
<td>0.85</td>
<td>.395</td>
<td>1.01</td>
</tr>
<tr>
<td>Susceptibility to normative influences</td>
<td>0.20</td>
<td>0.11</td>
<td>[-0.01, 0.42]</td>
<td>1.86</td>
<td>.065</td>
<td>1.01</td>
</tr>
</tbody>
</table>

Note. $R^2 = .09$, $F(5, 139) = 2.60$, $p = .028$. 
The interaction was further probed with the Johnson-Neyman procedure, which was executed using Hayes’s PROCESS Macro (Hayes, 2013). This method explores the conditional effect of the independent variable on the dependent variable for all values of the moderator variable, and returns a “region of significance” where this conditional effect is significantly different from zero. By examining all score levels of the moderator, the Johnson-Neyman method presents a more complete picture of the interaction effect and yields more informative results than the traditional pick-a-point-based approaches (see Hayes, 2013).

The results of the Johnson-Neyman analysis are depicted in Figure 1. Because the focus was on self-esteem discrepancies in both directions, the moderating roles of explicit and implicit self-esteem were examined separately. The Johnson-Neyman probe revealed that, when implicit self-esteem was low (below -0.88, mean-centered, see Figure 1a), explicit self-esteem had a significant positive effect on in-group brand connections. Similarly, when explicit self-esteem was low (below -0.49, mean-centered, see Figure 1b), implicit self-esteem was significantly associated with stronger connections to in-group-linked brands. Note that the study hypothesis also suggested that at high levels of implicit (explicit) self-esteem, explicit (implicit) self-esteem would be negatively associated with self-brand connection scores. As seen in Figure 1, at high levels of implicit (explicit) self-esteem, the conditional effect of explicit (implicit) self-esteem was negative with comparable coefficient values; however, although the direction of the results corroborated with the hypothesis, these effects did not reach significance at the 5% level, possibly due to insufficient data points at high levels of the moderators.

Consequently, supplementary analyses were conducted to elucidate the effects of self-esteem discrepancies. First, self-brand connection scores were examined at high and low values (+/- 1SD) of the moderators. As seen in Figure 2, participants with large self-esteem
discrepancies (in both directions) reported stronger connections to the in-group-linked brands than participants with small discrepancies did. Next, the influence of the size of discrepancy was scrutinized using a method suggested by Briñol, Petty, and Wheeler (2006). In this analysis, first a discrepancy index was created by computing the absolute differences between the standardized explicit and implicit self-esteem scores (the higher the index, the larger the size of discrepancy in either direction). Second, a dummy variable was generated to examine the effect of the direction of the discrepancy (implicit self-esteem < explicit self-esteem = 0, 52 participants; explicit self-esteem < implicit self-esteem = 1, 70 participants). Next, these two variables and their interaction term were entered into a multiple regression analysis with in-group brand connections as the dependent variable, controlling for gender and susceptibility to normative influences. The results revealed that the main effect of the direction of the discrepancy was not significant ($B = 0.34$, $t(116) = 1.31$, $p = .193$); however, as anticipated, the size of discrepancy had a significant positive effect on in-group brand connection scores ($B = .41$, $t(116) = 2.39$, $p = .018$). The interaction effect was not significant ($B = -0.18$, $t(116) = -0.84$, $p = .401$). In sum, the results confirmed that self-esteem discrepancies, regardless of the direction of the discrepancy, were associated with the extent to which adolescents incorporated in-group-linked brands into their self-concepts.

These findings are in accord with previous research that demonstrated a link between self-esteem discrepancies and self-enhancing through material possessions (Park & John, 2011). It can thus be argued that integrating in-group-linked brands into the self-concept may reduce the ambivalence accompanied by adolescents’ inconsistent self-evaluations. In support of this view, prior research demonstrated that individuals perceived negative information about self-relevant brands as a self-threat, and they reported stronger self-brand connections to overcome the threat
and to protect their self-views (Cheng, White, & Chaplin, 2012). In sum, the results suggest that identity-expressive brands may enable adolescents with large self-esteem discrepancies (in either direction) to maintain a positive self-image.

![Graphical displays of the Johnson-Neyman analysis results. Moderating variables are implicit self-esteem in the upper graph (a) and explicit self-esteem in the lower graph (b). The Johnson-Neyman regions of significance are highlighted in gray.](image)

*Figure 1:* Graphical displays of the Johnson-Neyman analysis results. Moderating variables are implicit self-esteem in the upper graph (a) and explicit self-esteem in the lower graph (b). The Johnson-Neyman regions of significance are highlighted in gray.
Conclusions

The current study demonstrates that simultaneously holding inconsistent implicit and explicit self-evaluations is related to adolescents’ identity-based consumption behavior, and it thereby adds relevance to several research domains. First, this study offers a new insight on social identity theory’s self-esteem hypothesis, which proposed a link between self-esteem and intergroup behavior but yielded inconclusive results, mainly due to the limited focus on explicit self-esteem only (see Rubin & Hewstone, 1998). The current research suggests that the relationship between self-esteem and identity-based behaviors should be examined by considering both implicit and explicit self-esteem. This proposal is further supported by Jordan et al.’s findings (2003, Study 2), which showed that self-esteem discrepancies were associated with in-group bias.

Figure 2: In-group brand connection scores at high and low points of the self-esteem variables (+/- 1SD from the mean; for implicit self-esteem, +1SD refers to the highest observed value).
The results also add to the psychology and consumer behavior literature. Individuals use commercial brands in part to maintain a positive self-concept, suggesting a link between self-esteem and self-brand connections. The present study introduces the idea that individuals with a discrepant self-esteem may be more likely to develop self-brand connections. In this way, self-brand connections may enhance the self-concept and help reduce the dissonance arising from discrepant self-evaluations. Although explicit self-esteem has been a popular construct in consumer research, implicit self-esteem has received relatively less attention. Parallel to Park and John’s (2011) article, the present study focuses jointly on implicit and explicit self-esteem, and finds that the discrepancies between the two are related to consumer behavior. Taken together, these findings provide converging evidence on the importance of self-esteem discrepancies for consumer research.

The correlational nature of the analysis in the present study does not permit a causal interpretation. Future studies could therefore aim at establishing causality, for example by experimentally manipulating self-esteem discrepancies (e.g., Park and John, 2011, Study 2). The results presented here should also be replicated in future studies, preferably in adult samples. Furthermore, future research could examine variables that mediate the relationship between self-esteem discrepancies and materialism. Self-evaluation motives (e.g., self-enhancement and self-verification) would be potential candidates as mediators. Investigating cultural influences in the relationship between self-evaluation motives and self-esteem discrepancies would also be a welcome contribution to the literature.
References


