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Our possessions, our selves: Domains of self-worth and the possession–self link

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Abstract

The extent to which a possession is linked to self is a critical determinant of whether a possession elicits grief if lost. We propose a framework for understanding the formation of the possession–self link, arguing that a possession's ability to represent the important domains on which a person bases her self-worth affects the possession–self link. We also show that dispositional tendencies to incorporate possessions into the self moderate this relationship, while the monetary value of the possession does not affect the strength of the possession–self link.

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Baby teeth, a salt-and-pepper shaker collection, and a broken dirt bike are just some of the items that people on the television show *Clean House* are forced to part with when having their home decluttered and redesigned. Viewers may find it hard to understand why the owner dissolves into tears as seemingly useless items are sold at a yard sale or thrown in the trash. Victims who have suffered a total loss of their homes and personal belongings in natural disasters such as wildfires or floods lament the irreplaceable possessions that have personal significance to them, such as family photos or heirlooms (Archibold & Moore, 2007; Kovach, 2007). These individuals react to the loss of possessions with intense feelings; they grieve for their loss.

Why might individuals display strong reactions to the loss of certain possessions? Material possessions are often much more than their functional properties (Belk, 1988; Levy, 1959); for example, possessions may be used to construct

one's self and thus become a symbolic manifestation of who one is (Csikszentmihalyi & Rochberg-Halton, 1981; Richins, 1994). Possessions with such properties become an extension of the self (Belk, 1988); therefore, the loss of these possessions is a threat to self-identity. Burris and Rempel (2004) similarly argue that the loss of special possessions elicits strong negative reactions because special possessions are identity markers, and the loss of an identity marker is a symbolic form of death of self.

In this paper, we propose that the extent to which a possession is linked to the self is a critical determinant of whether a possession is perceived to be an identity marker and hence liable to elicit strong reactions if lost. Prior research has proposed, but not empirically demonstrated, that such a link is critical to the degree of grief experienced from a possession loss. We demonstrate this relationship and, more importantly, offer and test a framework for understanding how and why possession–self linkages form for some consumer-possession pairs, but not for others. Specifically, we show that a key factor in the formation of the possession–self link is how strongly the possession reflects domains on which a person bases her self-worth. Further, we show that individual differences in the tendency to use

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possessions to define the self moderate the relationship between self-worth reflection and the possession–self link. Finally, we show that the material value of the possession, while affecting other aspects of possession attachment, does not affect the strength of the possession–self link. Thus, we have a specific, narrow focus on the role of possessions in identity construction, just one aspect of the broader construct of possession attachment.

Theoretical development

Possession loss and the possession–self link

Research based on interviews with those who have experienced involuntary possession loss (e.g., natural disaster and theft) shows that people often grieve the loss of possessions, and that experienced grief seems to be derived from, or at least accompanied by, concerns about one's sense of self. For example, burglary victims go through a process of mourning their stolen possessions (Rosenblatt, Walsh, & Jackson, 1976), reporting feelings of anger, invasion or violation, and losing a piece of their lives (Belk, 1988). Burglary victims report that their psychological losses were greater than their financial losses and feel that the event changed the type of person that they were (Maguire, 1980). Sayre and Horne (1996), focusing on replaceable items, found that victims of wildfires viewed the repurchase process as an opportunity to redefine who they were.

Why do people respond so strongly to the loss of certain possessions, especially if those possessions have little monetary or functional value? The value in owning a possession goes beyond its functional benefits; value can be derived from the possession's ability to symbolize important components of self-identity, such as the successes one has accomplished, the important relationships one has, and what one finds meaningful (e.g., Belk, 1988, 1991; Csikszentmihalyi & Rochberg-Halton, 1981; Levy, 1959). When possessions serve this symbolic purpose they become part of the extended self and go from being thought of as “mine” to being thought of as “me” (Belk, 1988). Thus, the loss of a possession means the loss of some aspect of self in addition to the loss of the tangible item.

Similarly, Burris and Rempel (2004) contend that humans have a boundary between the self and not-self and thus between mine and not-mine. An individual's ability to think symbolically about objects allows them to serve as identity markers. Thus, when an identity marker, such as a special possession, is involuntarily lost or destroyed, a part of the self is destroyed, which can be construed as a symbolic form of death, leading to strong negative reactions. Their model suggests that the more a possession symbolically represents the self, the greater the negative reactions experienced if it is lost.

We also argue that the most meaningful possessions are those that help the owner garner and/or strengthen self-identity and thus construct and symbolize the self. We refer to such a relationship as a possession–self link; the stronger the

possession–self link, the greater the grief experienced if the possession is lost (hypothesis 1).

Self-worth and possession–self link formation

Clearly, not all possessions will become linked to the self. A unique contribution of our conceptual framework is that we explore one process by which possessions become part of a consumer's constructed identity. We propose that possession–self linkages develop as a consequence of a possession's ability to represent the important domains upon which a person bases self-worth. Crocker and Wolfe (2001, 594) define a contingency of self-worth “as a domain or category of outcomes on which a person has staked his or her self-esteem.” One's view of her worth depends on perceived successes and failures in important domains, with higher self-worth when there are many perceived successes and few perceived failures. Possessions that are representative of those successes will bolster self-worth. For example, a college diploma represents an academic achievement and a wedding ring represents a strong interpersonal relationship, one or both of which may bolster self-worth depending on which domains are important to an individual consumer. We call the extent to which a possession reflects an important self-worth domain the degree of self-worth match.

Another way to think about self-worth match is to consider these contingencies as reflections of people's values. People build self-esteem by living in a manner that is consistent with and reflective of their values, such as valuing individual achievement or interpersonal relationships. When a possession serves as a symbol of an important value that is central to one's self-concept, thereby creating and bolstering self-worth, a possession–self link may be formed. Thus, self-worth match will have a positive relationship with possession–self link (hypothesis 2).

Moderation of the relationship between self-worth match and the possession–self link

We also propose that the formation of the possession–self link via self-worth match can be attenuated or enhanced by other factors. Specifically, we propose that people vary in the extent to which they generally use possessions to define the self. We refer to this individual difference as self-extension tendency, which reflects a general tendency not specific to any one possession. This notion was adapted from the Sprott, Czellar, and Spangenberg (2009) construct of brand engagement in self-concept, which is the tendency of consumers to include brands as part of their self-concept.

We postulate that self-extension tendency moderates the relationship between self-worth match and possession–self link such that self-worth match will have a stronger effect on the possession–self link for individuals low in self-extension tendency. People high in self-extension tendency will report strong possession–self linkages with many possessions, regardless of self-worth match, while people low in self-

extension tendency will only report strong possession–self linkages when there is a high self-worth match (hypothesis 3).

The possession–self link within the domain of possession attachment

Our research is clearly related to the concept of attachment, which is a bond between a person and an object (Bowlby, 1969/1982). Kleine and Baker (2004) define possession attachment as “a multi-faceted property of the relationship between an individual...and a specific material object that has been psychologically appropriated, decommmodified, and singularized through person–object interaction.” Possessions with which attachments are created are often ordinary objects that derive their meaning through experiences involving the objects. One facet of this broader attachment construct is often referred to as the degree to which a possession is related to the self (Ball & Tasaki, 1992; Schultz, Kleine, & Kernan, 1989).

While their physical nature, irreplaceability, and ability to carry meaning over time are part of what make possessions distinct from brands, the brand attachment literature also relates to our framework. Building on the Thomson, MacInnis, and Park (2005) scale of emotional attachment, capturing affection, passion, and connection to the brand, Park, Priester, MacInnis, and Wan (2009) define brand attachment as self-brand connections that have both cognitive and affective components (see also Fedorikhin, Park, & Thomson, 2008). This stream of research also clearly identifies a connection between brands and the self, parallel to our notion of the possession–self link.

Because the possession–self link is just one facet of possession attachment, in our empirical analyses we include possession–self link as one of three constructs related to possession attachment, the other two being general importance of the possession and the positive emotions associated with the possession. General importance measures all aspects of meaningfulness not contingent on self-identity, while positive emotions reflect the affective component of brand attachment as postulated by Park and colleagues. We expect that the greater the importance of the possession and the greater the positive emotions for the possession, the greater the grief arising from possession loss. We do not, however, expect importance or positive emotions to be affected by self-worth match as they are not directly related to the self-concept.

The role of monetary value

Finally, one might argue that the monetary value of a possession affects the possession–self link, namely that the greater the value the greater the link. However, Kleine and Baker (2004) argue that attachment can form with mundane everyday items that need not be expensive or exotic in any way. Similarly, we propose that monetary value does not affect the possession–self link. However, the monetary value of an item may lead to positive relationships with the two other attachment components in our model, importance and positive emotions, due to such influences as status, quality, and nostalgia. Thus, the monetary value of a possession will have a positive relationship

with the general importance of a possession and the positive emotions associated with a possession but will not affect the extent to which consumers form a possession–self link (hypothesis 4).

Overview of studies

Fig. 1 shows a graphical representation of our conceptual framework, which we test in two studies. We use two factors to capture our conceptualization of grief. Thomson et al. (2005) provide convergent evidence for their emotional attachment scale by showing that increased emotional attachment is associated with greater emotional distress at imagined separation from the brand. Thus, we conceptualize grief as consisting of separation distress and negative emotions.

In Study 1, participants recall a time when they lost a special possession. We expect that recalling the lost possession and the circumstances surrounding the loss will trigger retrospectively recalled grief reactions similar to those experienced at the time of the actual loss. In Study 2, participants think about a special possession and imagine the loss of this possession. We expect that imagining the loss will lead to anticipatory grief reactions similar to those from actually experiencing the loss. In both studies, we assess the relationship between the possession–self link and grief (H1) and between self-worth match and the possession–self link (H2). In Study 2, we also examine the moderating effect of self-extension tendency (H3) and the effect, or lack thereof, of the monetary value of the possession on the possession–self link (H4). We test the framework using both regression and structural equation modeling (SEM).

Study 1

The goal of this study is to demonstrate the relationships among self-worth match, possession–self link, and grief. We expect that the strength of the possession–self link affects

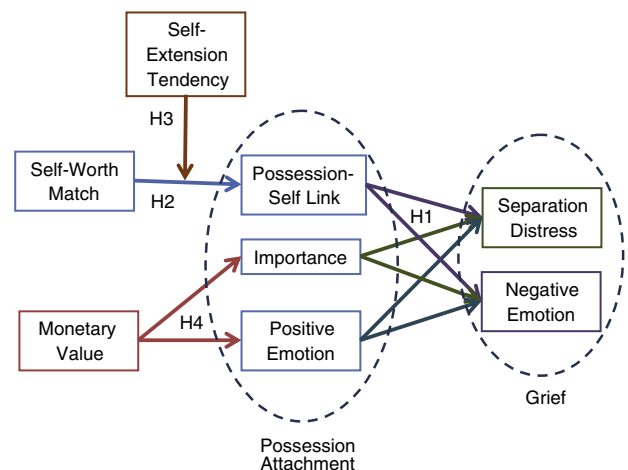


Fig. 1. A framework for understanding the possession–self link and grief upon possession loss.

negative emotions and separation distress experienced when a possession is lost, an empirical demonstration of the relationship between the self and reactions to loss proposed by Belk (1988) and others (H1). Key to our model, we propose that the extent to which a possession is linked to the self depends on how much the possession represents those domains on which a person bases her self-worth. We predict that the greater the self-worth match the greater the possession–self link (H2) and that this relationship will be stronger than the relationships between self-worth match and both possession importance and the positive emotions associated with the possession.

Method

Participants and procedure

The study was administered via a Web-based facility for fielding online research using English-speaking members of an international panel. Up to three e-mail notifications were used to solicit cooperation; the chance to win \$100 served as the incentive. A total of 177 members responded to the study invitation, ultimately yielding a usable sample of 137 participants after 40 were eliminated for incorrectly completing the lost possession memory task (e.g., failing to recall a lost possession or listing a person or pet) or for being in the top or bottom 5% of participants based on the time to complete the study. Completion time ranged from 6 min to over 6 h (median 21 min); the bottom 5% cutoff was 9 min, less than the amount of time required to read the questionnaire, and the top 5% cutoff was 75 min. Respondents were 34% female, 93% Caucasian, 62% United States residents, with an average age of 46.

First, participants rated the importance of each of Crocker, Luhtanen, Cooper, and Bouvrette's (2003) seven domains of self-worth. Next, they completed an unrelated study evaluating an advertising storyboard, which served as a filler task between the self-worth and the remaining measures. Participants then recalled the loss of a special possession and the circumstances surrounding the loss, adapted from Kleine, Kleine, and Allen (1995): "Please remember a time when you permanently lost one of your favorite, cherished material possessions. It does not have to be expensive or worth a lot of money—just something that you once had which was important to you and helped to define who you are (were) and then it was lost (taken from you, destroyed, misplaced, etc.)." Participants described how the possession came to be lost, completed the grief measures, and rated how well the lost possession helped them achieve self-worth in the seven domains. Finally, participants completed the importance measure, positive emotion items, and the possession–self link measure for the lost possession.

Measures

The possession–self link was measured using items adapted from the Sivadas and Venkatesh (1995) scale measuring the extent to which possessions are incorporated into the extended self and the Escalas (2004) self-brand connection scale, modified to reflect a link between the self and possessions, rather than brands (see Appendix A for the scale items). The

measure captures the relationship between the possession and self-identity. These items (and all other scale items across the two studies) were rated on a 0 to 100 sliding scale and averaged ($\alpha = .93$), with a higher value indicating a stronger link.

Our conceptualization of grief is captured by separation distress and negative emotions (see Appendix A; Thomson et al., 2005). Three items adapted from the Core Bereavement Items scale (Burnett, Middleton, Raphael, & Martinek, 1997) were used to capture separation distress ($\alpha = .85$). Three items were used to capture the experience of specific negative emotions at the time of possession loss ($\alpha = .83$). Higher values on these measures indicate higher levels of separation distress and negative emotion, respectively.

To characterize how well the lost possession reflected important domains of self-worth, we calculated a self-worth match score for each participant. Respondents indicated their agreement with statements assessing the importance of the seven domains of self-worth identified by Crocker et al. (2003): competence in academics, competition, approval from generalized others, family support, appearance, God's love, and virtue. Because the participant population was not limited to university students, items related to competence in academics were adapted to reflect competence in important tasks. Example items include "My self-esteem is influenced by my competence in important tasks" (competence domain) and "It is important to my self-respect that I have a family that cares about me" (family domain). Participants also rated the lost possession with respect to how well it helped them achieve self-worth in the seven domains. Examples include "X demonstrated my competence at an important task" (competence domain) and "X symbolized that I have a family that cares about me" (family domain), where X was replaced by the lost possession. The rating of how important each domain was to the participant was multiplied by how well the possession helped achieve self-worth in that domain and a weighted average across the seven domains was generated.

We measured the importance of the possession and the positive emotions associated with the possession to complement the possession–self link as measures of the broader construct of possession attachment. We used three items to capture importance ("This was one of my most important possessions," "This possession was significant to me," "I placed a lot of value on this possession;" $\alpha = .83$) and two items to capture the positive emotions linked to the possession ("I loved this possession," "This possession made me happy;" $\alpha = .81$).

Results

Examples of the possessions recalled by the participants were a towel, watch, diamond ring, and an umbrella. Possessions came to be lost through theft, misplacement, and fire, and were of both low and high monetary value and reflected various aspects of the self-concept. We tested H1 and H2 using regression followed by SEM, thus allowing for possession–self link to reside within the broader possession attachment construct. The correlations among the variables are presented in Appendix B.

Regression analyses

We expected that the greater the possession–self link, the greater the grief experienced at a loss (H1). To test this hypothesis, we ran two regression equations with separation distress and negative emotions as dependent variables. As expected, there was a positive relationship between possession–self link and separation distress ($\beta=.22$, $t(135)=4.35$, $p<.0001$) and negative emotions experienced ($\beta=.29$, $t(135)=5.77$, $p<.0001$). We also predicted that the greater the self-worth match the greater the possession–self link (H2). As expected, there was a significant positive relationship between self-worth match and possession–self link ($\beta=18.72$, $t(135)=9.86$, $p<.0001$); the more a possession is reflective of important domains of self-worth, the more the possession is linked to the self.

SEM analysis

The test of the model shown in Fig. 1 (less the monetary value and self-extension tendency constructs), was supported by four common goodness of fit measures (GFI=.99, CFI=1.00, RMSEA=.12, SRMR=.01). The chi-square statistic is marginally significant ($\chi^2(1)=2.91$, $p<.09$), which is not unusual given this test statistic's sensitivity to sample size. The significant model parameters are shown in Fig. 2 and reported in Table 1.

Possession–self link has a significant positive effect on negative emotion and on separation distress ($\beta=.39$ and $.30$, respectively; H1). Possession importance and positive emotion associated with the possession are both significantly related to separation distress ($\beta=.18$ and $\beta=.38$, respectively) and negative emotion ($\beta=.23$ and $\beta=.30$, respectively). Importantly, self-worth match has a significant positive effect on possession–self link ($\beta=.65$; H2), and the effect of self-worth match on possession–self link is significantly stronger than the effect of self-worth match on either positive emotion (.65 vs. .28; $\chi^2(1)=24.34$, $p<.0001$) or possession importance (.65 vs. .29; $\chi^2(1)=23.04$, $p<.0001$).

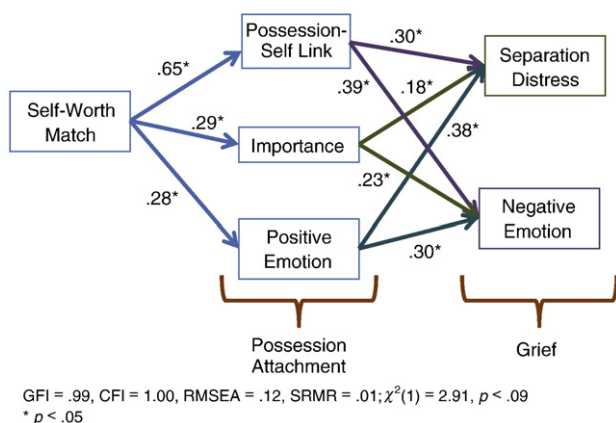


Fig. 2. SEM results from Study 1.

Table 1 Relationships found in SEM analyses.

Relationship	Study 1		Study 2	
	Standardized Estimate	Z-value	Standardized Estimate	Z-value
Self-worth match → possession–self link	.65	9.89 *	.53	11.52 *
Self-worth match → possession importance	.29	3.56 *	.14	2.75 *
Self-worth match → positive emotions	.28	3.42 *	.22	4.19 *
Monetary value → possession–self link			.06	1.40
Monetary value → possession importance			.19	3.65 *
Monetary value → positive emotions			.14	2.65 *
Possession–self link → separation distress	.30	2.56 *	.46	4.34 *
Possession–self link → negative emotions	.39	3.28 *	.46	4.32 *
Importance → separation distress	.18	1.99 *	.29	4.48 *
Importance → negative emotions	.23	2.61 *	.30	4.53 *
Positive emotions → separation distress	.38	4.26 *	.02	.028
Positive emotions → negative emotions	.30	3.40 *	-.02	-.023

* $p < .05$.

Study 2

In Study 1, self-worth was assessed using self-worth domains developed for a population of college students (Crocker et al., 2003). Our Web-based sample includes adults outside the college population, so it is possible that the domains are not relevant for the participants participating in our studies. In this study we measure self-worth in domains developed on a general adult population (aged 22 to 31 years): work, romantic relationship, parenting, intellectual ability, material wealth, physical appearance, and appraisals by others (Cooper, 2000). We also build on Study 1 by testing the moderating role of self-extension tendency and the relationships between monetary value and the possession–self link, possession importance, and positive emotions associated with the possession.

We also examine whether the type of possession recalled by the participant affects the degree of possession–self link attachment. We limit the type of possession that the participants think about by asking them to recall a special possession that was a gift given to them by another person or was purchased for oneself. Gifts coming from another person are likely to be reflective of important relationships, while gifts coming from oneself are likely to be reflective of important achievements (Kleine et al., 1995). Additionally, in this study, we ask participants to recall a special possession and then imagine losing that possession, which should broaden the range of possessions that can be considered beyond possessions which were actually lost.

Method

The experiment used the same Web-based facility as in Study 1. A total of 432 members of the panel responded to a study invitation, ultimately yielding a usable sample of 361 participants after 71 were eliminated for failing to complete the possession memory task or for being in the top or bottom 5% of participants based on the time to complete the study. Completion time ranged from 5 min to 3.5 h (median 19 min). The bottom 5% cutoff was 8.8 min and the top 5% cutoff was 64 min. Respondents were 76% female, 87% Caucasian, 79% United States residents, with an average age of 45.

First, respondents completed the self-extension tendency scale, followed by statements assessing the importance of the self-worth domains. The self-extension tendency measure was adapted from the Brand Engagement in Self-Concept Scale (Sprott et al., 2009) and is shown in Appendix A. After some filler scales, participants were asked to think about a gift that was received from the self or another person. In the self-gift [other gift] condition, participants were asked to think about a “gift you bought for yourself” [“gift someone else bought for you”] where that gift is “one of the most favorite, most cherished, most difficult to part with material possessions you own.” Participants then completed the grief measure (separation distress ($\alpha = .86$) and negative emotions experienced ($\alpha = .87$)), followed by the importance ($\alpha = .89$), positive emotions ($\alpha = .81$), and possession–self link ($\alpha = .92$) measures. Next, participants rated how well the lost possession helped them achieve self-worth in the various domains. Finally, participants rated their perception of the monetary value of the possession (0 = not at all expensive, 100 = extremely expensive).

The self-worth match score was constructed from the items of the self-worth domains related to (1) achievement (i.e., job, intellectual ability, and material wealth) and (2) personal relationships (i.e., romantic relationship, parenting, and others), corresponding to the self versus other gift manipulation. First, the mean importance rating for each subdomain was multiplied by how well the possession reflected that subdomain. These individual subdomain scores were then averaged to form the overall score for the achievement and relationship domains. Because some participants were not parents, they did not respond to the parenting items so their relationship domain scores were based on only the romantic relationship and others items. The score on the achievement domain was used to represent self-worth match in the self-gift condition, while the personal relationship score was used in the other gift condition.

Results

Recalled possessions included a wedding dress, handmade cards, and a motorcycle in the gift from others condition, and a computer, a pearl necklace, and a pots and pans set in the self-gift condition. We first analyze H1–H3 using regression and then confirm our results using the three components of possession attachment in a complete SEM analysis. Due to the multiple pathways predicted, we test H4 in the SEM analysis only. Correlations among the variables are presented in Appendix B.

Regression analyses

To test H1, separation distress and negative emotions experienced were separately regressed on possession–self link. There was a significant positive relationship between the possession–self link and separation distress ($\beta = .39$, $t(359) = 9.00$, $p < .0001$) and negative emotions ($\beta = .35$, $t(359) = 8.14$, $p < .0001$), supporting our hypothesis that the stronger the possession–self link, the greater the grief experienced with a possession loss.

To test H2 and H3, possession–self link was regressed on self-worth match, self-extension tendency, and their interaction, including covariates for whether the possession was a gift from the self or another person and monetary value. The continuous independent variables were standardized. Whether the possession was a gift from oneself or another person did not affect the possession–self link ($\beta = 2.72$, $t(355) = 1.22$, *NS*). We found a significant positive effect of self-worth match on possession–self link ($\beta = 13.22$, $t(355) = 9.57$, $p < .0001$), supporting H2. In support of H3, there was a significant interaction effect of self-worth match and self-extension tendency on possession–self link ($\beta = -3.19$, $t(355) = -2.88$, $p < .01$); self-extension tendency also had an independent significant positive effect ($\beta = 5.99$, $t(355) = 4.90$, $p < .0001$).

We used the estimated regression equation to plot the strength of the possession–self link at different levels of self-worth match and self-extension tendency, using one standard deviation below the mean, at the mean, and at one standard deviation above the mean for both variables, while keeping the covariates at their mean levels (Irwin & McClelland, 2001; see Fig. 3). When self-worth match is low, the possession–self link is highest (although absolutely only moderate) for those consumers who have high self-extension tendencies, consistent with the notion that these individuals form connections to many

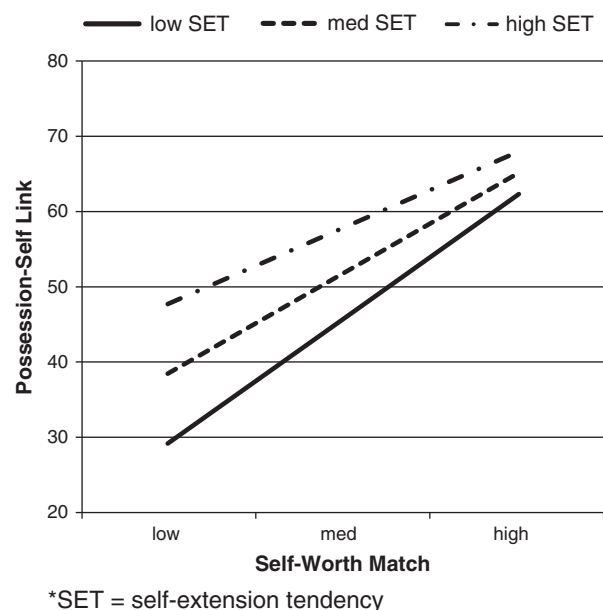


Fig. 3. Possession–self link by self-worth match and self-extension tendency (Study 2).

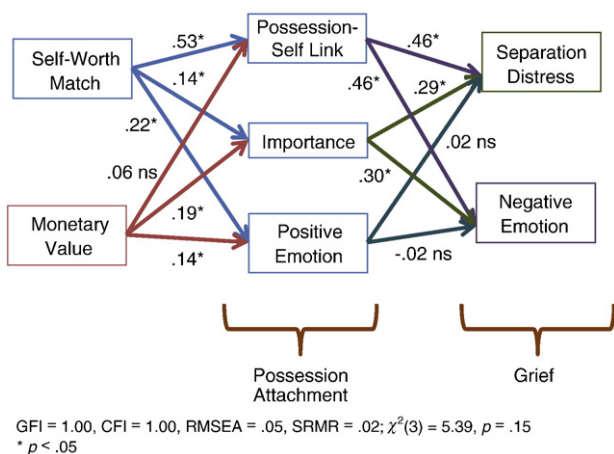


Fig. 4. SEM results from Study 2.

possessions. In contrast, when self-worth match is high, possession–self linkages are high across all levels of self-extension tendency, because all consumers, including those with low self-extension tendencies, form high possession–self links when the possession expresses an important domain of self-worth.

Finally, consistent with H4, the monetary value of the possession did not have a significant relationship with the possession–self link ($\beta = .39, t(355) = .34, NS$).

SEM analysis

The proposed model is supported by four common goodness of fit measures (GFI=1.00, CFI=1.00, RMSEA=.05, SRMR=.02). The chi-square statistic is also not significant ($\chi^2(3)=5.39, p=.15$). Model parameters are shown in Fig. 4 and presented in Table 1.

Possession–self link has a significant positive effect on negative emotion and separation distress ($\beta = .46$ and $.46$, respectively; H1), and self-worth match has a significant effect on possession–self link ($\beta = .53$; H2). The effect of self-worth match on possession–self link is significantly stronger than the effect of self-worth match on either positive emotion (.53 vs. .22; $\chi^2(1)=38.44, p<.0001$) or possession importance (.53 vs. .14; $\chi^2(1)=60.84, p<.0001$). In support of H4, monetary value does not have an effect on possession–self link ($\beta = .06, NS$), but does have an effect on both importance and positive emotions ($\beta = .19$ and $.14$, respectively). Possession importance is significantly related to both separation distress ($\beta = .29$) and negative emotions ($\beta = .30$), but in this study, positive emotion associated with the possession is not significantly related to separation distress or negative emotion upon loss.

General discussion

Summary and implications

The strong reactions consumers have to the loss of items such as baby teeth or a dingy tablecloth may seem difficult to

understand. We argue that consumers do not grieve for just any possessions; they grieve for possessions that are linked to self, a notion that is based on more than just the importance of the possession. In this research, we show that the extent to which a possession is able to represent the self is a critical component of possession attachment and affects how consumers respond to possession loss. We find that recalling a lost possession and imagining the loss of a possession with a strong link to self lead to greater separation distress and negative emotions. Our contribution, however, goes beyond demonstrating the relationship between the link to the self and grief upon possession loss. We offer and test a framework for understanding special possessions by identifying two sources of heterogeneity in how people respond to the loss of possessions.

First, we propose and find empirical support for the idea that consumers form possession–self linkages when they are able to derive self-worth from the possession; that is, they use the possession to reflect important values. As a result, the types of possessions people use for self-extension differ depending on where the owners derive their self-worth. One person may feel distressed about the loss of a family photograph, but not at the loss of a sports trophy, because that consumer may value family relationships more than individual achievement, with the reverse true for another person deriving self-worth from competence but not relationships. While prior literature has focused on possessions as extensions of self, we show that the extent to which a possession provides self-worth is an important mechanism by which possessions become linked to the self. These results shed light on what makes possessions identity relevant, an issue of great importance to consumer research (Berger & Heath, 2007).

Second, not all consumers incorporate possessions into the self to an equal extent, irrespective of self-worth match. Some people find great meaning in many possessions while others find little meaning in possessions. This self-extension tendency moderates the extent to which the self-worth match leads to a stronger possession–self link. Self-worth match matters more for building possession–self linkages for those consumers low in self-extension tendency, because those high in self-extension tendency become connected to many possessions.

Relation to possession attachment

Although our primary research focus is on the possession–self link, this concept is part of a more global notion of possession attachment. The significance of the possession–self link measure in the SEM analyses indicates that how closely linked the possession is to the self affects the response to possession loss above and beyond any effects due to possession importance or positive emotions associated with the possession. Self-worth match also affects two additional components of possession attachment, positive emotions and possession importance, although those effects are significantly weaker than the relationship between self-worth match and possession–self link. This indicates that the degree to which a possession reflects self-worth has its primary impact on possession

attachment through the possession–self link, but also affects other aspects of possession attachment.

The relative effects of the three components of possession attachment on our multi-dimensional grief measure also differed. The possession–self link always leads to more separation distress and negative emotions upon loss, as does possession importance. However, the effect of positive emotion on grief is inconsistent across studies. In *Study 1*, positive emotion has a significant positive relationship with the two components of grief, but in *Study 2*, the positive emotion associated with the special possession is not significantly related to separation distress or negative emotion upon loss.

Finally, we analyze the impact of the monetary value of the possession. We propose that monetary value does not affect the extent to which a possession is linked to self but that it could affect the importance and the positive emotions associated with the possession. Our results are consistent with our expectations. Monetary value affects the importance and positive emotions attached to that possession but does not determine how much that possession is linked to the self. Thus, how much a possession is linked to the self comes from its ability to reflect self-worth rather than its monetary value.

Limitations and directions for future research

Not all possession–self links are based exclusively on a self-worth domain matching process. We chose our approach because it covers a wide number of potential goals that a special possession could help one meet in order to build self-worth. However, one might imagine that a special possession could become linked to the self due to memories and nostalgia for a time in one's childhood (Loveland, Smeesters, & Mandel, 2010). This type of connection is not easily captured by Crocker et al.'s (2003) or Cooper's (2000) domains of self-worth. Future research should broaden our framework, exploring other mechanisms that may lead to possession–self linkages.

Additionally, we utilized a measure of possession–self link that focuses on constructed identity, that is, how a person sees themselves as an individual. The types of possessions recalled by participants ran the gamut from possessions that related to the person as an individual (e.g., diploma), a participant in a relationship (e.g., wedding ring), and a member of a group (e.g., class ring). While the possessions spanned a wide range, the degree of connection to the self may have been limited because of the nature of identity operationalized by the possession–self link measure used. A broader conceptualization of identity explicitly focusing on social or cultural identity or past identity may have resulted in varying degrees of possession–self link. Also, we may have limited the degree of connection observed by not including certain types of possessions (e.g., pets and money). Future research should utilize a broader conceptualization and measure of identity and a broader range of possession types.

A methodological limitation of the research is the correlational design, which limits our ability to test for cause-and-effect relationships and to rule out alternative explanations. The use of the design, however, is beneficial as it allows us to examine connections to actual possessions that have formed

over time. Both self-worth match and the possession–self link are chronic entities that develop over time and as such are not easily manipulated in a lab environment. Future work, however, might need to move to the lab environment where the constructs could be manipulated and their resulting impact measured. This type of research could validate our findings that possessions that reflect consumers' self-worth become linked to their self-concepts, which in turn leads to feelings of grief upon possession loss.

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Appendix A. Scale items for the possession–self link, grief, and self-extension tendency measures

Possession–self link scale

1. This possession and I had a lot in common.
2. This possession helped me achieve the identity I wished to have.
3. This possession helped me narrow the gap between what I am and what I try to be.
4. This possession was central to my identity.
5. This possession was part of who I am.
6. I derived some of my identity from this possession.

Separation distress scale (X was replaced by the possession recalled by the participant)

1. After losing X, did your thoughts of X make you feel distressed?
2. After losing X, did you find yourself missing X?
3. After losing X, did you find yourself pining for/yearning for X?

Negative emotions at a loss scale (X was replaced by the possession recalled by the participant)

1. After losing X, did you feel upset?
2. After losing X, did you feel sad?
3. After losing X, did you feel depressed?

Self-extension tendency scale

1. I have a special bond with my favorite possessions.
2. I consider my favorite possessions to be a part of myself.
3. I often feel a personal connection between my special possessions and me.
4. Part of me is defined by the special possessions in my life.
5. I feel as if I have a close personal connection with the possessions I most prefer.
6. I can identify with important possessions in my life.
7. There are links between my special possessions and how I view myself.
8. My favorite possessions are an important indication of who I am.

Appendix B. Correlations among the measured variables (studies 1 and 2)

Study 1							
	Self-worth match	Possession–self link	Importance	Positive emotions	Negative emotions	Separation distress	
Self-worth match	1.00	.65*	.29*	.28*	.39*	.38*	
Possession–self link		1.00	.35*	.37*	.44*	.35*	
Importance			1.00	.64*	.56*	.53*	
Positive emotions				1.00	.59*	.61*	
Negative emotions					1.00	.74*	
Separation distress						1.00	
Study 2							
	Self-worth match	Possession–self link	Importance	Positive emotions	Negative emotions	Separation distress	Monetary value
Self-worth match	1.00	.54*	.19*	.25*	.31*	.30*	.26*
Possession–self link		1.00	.44*	.51*	.39*	.43*	.18*
Importance			1.00	.69*	.49*	.51*	.23*
Positive emotions				1.00	.42*	.45*	.20*
Negative emotions					1.00	.76*	.22*
Separation distress						1.00	.23*
Monetary value							1.00

* $p < .05$.

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