



Reports

Heightened interpersonal security diminishes the monetary value of possessions

Margaret S. Clark^{a,*}, Aaron Greenberg^a, Emily Hill^a, Edward P. Lemay^b, Elizabeth Clark-Polner^c, David Roosth^a^a Yale University, USA^b University of New Hampshire, USA^c Université de Genève, Switzerland

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ABSTRACT

People may value their possessions, in part, because ownership of goods promotes feelings of security. If so, increasing their sense of security should reduce the value they place on possessions. In two studies we tested this prediction. In Study 1, participants who were assigned randomly to write about an instance of receiving social support placed less monetary value on a blanket they owned relative to participants who were assigned randomly to write about a pleasant restaurant experience. In Study 2, participants who were unobtrusively primed with security-related words placed less monetary value on a pen they just received relative to participants who were primed with positive or neutral words. Results suggest that enhancing interpersonal security reduces valuing possessions.

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Introduction

Throughout history, the availability of responsive relationship partners and of possessions such as food, clothing, and housing provided literal protection from harm. Here we suggest that, to some extent, these sources of protection are interchangeable and that people often substitute one source of protection for the other. To test this assumption we examine whether enhancing feelings of interpersonal security reduces the monetary value placed on possessions.

Prior evidence

Extant research generally is consistent with the idea that feelings of security are linked with materialism. Many studies have reported links between unhappiness, negative emotions, worries about death, or anomie (all states likely to be associated with lowered felt security) and heightened materialism (e.g. Belk, 1984; Chang & Arkin, 2002; Christopher, Drummond, Jones, Marek, & Theriault, 2006; Christopher, Kuo, Abraham, Noel, & Linz, 2004; Kashdan & Breen, 2007; Ryan & Dziurawiec, 2001; Schroeder & Dugal, 1995). In addition, the dreams of materialistic people have been found to include more insecurity themes (e.g. falling and death) and concerns about poor relationships relative to the dreams of people who are less materialistic (Kasser & Kasser, 2001).

A small amount of this work is experimental and provides evidence for causal links between interpersonal security and valuing of possessions, materialism, and extrinsic goals. For example, experiments, with adult

participants, have linked experimentally created threats to felt security with greater endorsement of materialism (Allen & Wilson, 2005; Kasser & Sheldon, 2000) as well as with expressing relatively greater desire for extrinsic goals such as financial success, an attractive appearance, or social popularity relative to desire for intrinsic goals such as self-acceptance, affiliation, and community feeling (Sheldon & Kasser, 2008, Studies 1 & 2). In addition, in one experiment, social rejection resulted in increased spending (Baumesiter, DeWall, Mead, & Vohs, 2008). Other experimental work, with children, has provided evidence for a causal link between having a possession and feeling less stressed. For instance, work has demonstrated a calming effect of children having “transition” (security) possessions available during times of normatively high stress such as medical exams (Passman, 1976; Ybarra, Passman, & Eisenberg, 2000).

What the present research adds to prior research

Whereas prior research had focused primarily on examining effects of threats to felt security on heightened materialism, we conducted the present research primarily: a) to demonstrate that enhancing felt security would reduce the value people place on goods, and b) to demonstrate an effect of felt security on the actual monetary value people place on their possessions. In addition, we suspected that the research might, contribute some insight into a one possible explanation for the endowment effect (Kahneman, Knetsch, & Thaler, 1991).

Consider first why demonstrating that *enhancing* security decreases the monetary value of goods is important. Existing findings linking insecurity with greater materialism have involved measuring or manipulating social threat and then examining the value placed on possessions or extrinsic goals. This research can be accounted for by assuming that people who experience increases in social threat cope by acquiring goods or increasing the felt importance of extrinsic goals. That

* Corresponding author.

E-mail address: margaret.clark@yale.edu (M.S. Clark).

is, the acute feeling of social threat may give rise to a felt need to cope and, in turn, this specific coping mechanism. If, however, *enhancing* felt security over a neutral, non-threatening state, is shown to decrease the monetary value placed on existing possessions that would suggest the existence of a more general, pervasive, interchangeability of feelings of interpersonal security and feelings of security afforded by possessions, not necessarily linked to a felt need to cope.

In this connection, we could locate just one study (Sheldon & Kasser, 2008, Study 3) that included both specific experimental tests of the effects of enhancing felt security (versus leaving it unchanged) on an outcome measure relevant to materialism. That study did link enhanced felt security (relative to leaving felt security unchanged) with placing higher values on intrinsic relative to extrinsic goals. However, in this study the dependent measure tapped the *relative* value that people place on intrinsic compared to extrinsic goals. Moreover, the items used in the extrinsic goal measure dealt with having goals of financial success, physical attractiveness and popularity and did not include items related to valuing possessions. Thus, additional evidence is needed to show that enhancing felt security, per se, can reduce the value people place on their possessions.

Next, consider the fact that no prior study has shown that changes in felt interpersonal security (either drops or rises in felt security) influence the actual monetary value people place on possessions. Knowing how felt security relates to monetary values placed on possessions, per se, is important to understand certain practical issues. How much people will charge for goods they might sell? Will they be realistic in setting prices? Will they be disappointed if a good does not fetch the requested price?

Finally, we felt that demonstrating that interpersonal security is linked to the monetary value people place on possessions might provide new insight into the endowment effect (Kahneman et al., 1991). In particular, support for our hypothesis would suggest that once something is owned it can provide the owner with a sense of security which might be embodied and automatically felt. As a result people may consciously sense distress at the thought of parting with the possession without knowing why. People may not be cognizant that they can attain this sense of security by acquiring new, equivalent, possessions. This could account for why people charge others more to sell something they already possess than they would be willing to pay to acquire the same thing. We hasten to add, however, that we were neither aiming to demonstrate the endowment effect itself nor to nail down felt security as a mediator of the phenomenon. Rather, the possibility of demonstrating the *plausibility* of this idea was another motivation for this work.

Nature of the current studies

We conducted two experimental studies to test our hypothesis. In *Study 1*, we primed people with either: a) a sense of security (by having them recall and record a time they felt supported by another person) or b) a sense of positivity (by having them recall and record a pleasant restaurant experience.) Then they placed a value on the blanket on their bed. We predicted monetary values would be lower in the security primed condition. In a second study we gave people a pen imprinted with their university logo, and then primed them with words related to: a) interpersonal security, b) a sense of positivity, or c) no particular feeling. Finally participants reported on the price they would charge to sell the pen back. We predicted monetary values would be lower in the security primed than in the neutral or positivity primed conditions (which should not differ from one another.)

Study 1

Method

Participants

Participants were recruited from an electronic bulletin board for participation in an internet study. The 185 participants (70 men; 115 women), who ranged in age from 18 to 71 years (mean age = 35.22 -

years), volunteered in exchange for one of several chances to win a \$10 Amazon.com gift certificate.

Procedure

Participants were assigned randomly to either a security or a positivity control condition. Those assigned to the security condition were instructed to think about a time they felt supported and to write a paragraph about it ($n = 92$, 37 men; 55 women). Those assigned to the positivity condition were instructed to think about a pleasant restaurant experience and to write a paragraph about it ($n = 93$, 33 men; 60 women). Next, all participants were asked to picture the blanket on their bed and report the minimum dollar amount for which they would be willing to sell that blanket to us.

Results

Success of the manipulation

People assigned to think about a pleasant restaurant experience included descriptions of food they enjoyed, people who accompanied them, and staff who were attentive and friendly. People assigned to the support condition described many different types of support provided by relationship partners, including encouragement in new endeavors, comfort after failures, and listening and giving advice in the face of bad events. One participant in the support/security condition did not provide a monetary value for his blanket. Rather, he indicated that he would not part with his blanket. This non-numeric response was not included in the primary data analyses reported below. However, it was considered in a supplemental analysis, as explained below.

Effects of priming security on valuing a possession

The mean values placed on people's blankets fell in the predicted pattern, with participants valuing their blankets more in the positive restaurant experience (control) condition ($M = \$173.30$) than in the supportive security prime condition ($M = \$33.38$). However, these means include one outlier in the positive restaurant (control) condition, who assigned a value of \$10,000 to the blanket. (Although this is supportive of the hypothesis, it is \$9,000 more than any other value). Excluding this datum, however, still resulted in a large difference in the predicted direction between conditions, with the positive restaurant experience (control) condition having a mean of \$66.49 and the supportive security condition retaining a mean of \$33.38.

Even with the outlier's datum excluded, the variances within the two conditions were not equal, with that in the positive condition being significantly larger ($SD = 153.835$), than that in the security condition ($SD = 34.87$). Levene's Test for Equality of Variances was significant $F = 7.80$, $p < .01$, indicating the lack of equal variances and the distributions were not normal. Therefore, prior to conducting a *t*-test to test the mean differences, the data (excluding the outlier) were submitted to a logarithmic transformation. This transformation was effective in producing statistically equivalent variances (Levene's Test for Equality of Variances, $F(1,180) = 0.54$, N.S.) As predicted, participants primed to feel secure placed lower values on their blanket (mean for the log-transformed data = 1.27) than did the participants primed to think of a positive restaurant experience (mean = 1.47, $t = 2.52$, $df = 180$, $p < 0.013$).

Recall that one participant in the security primed condition had said he would not part with his blanket. We asked, "What would the results be if he were to be assigned the highest value of any participant included in the analysis and the analysis was redone?" To answer this question, we added a score of \$1,000 to the security primed condition to represent this person, transformed the data in the same manner (given that the distributions of data in each condition remained non-normal), and re-tested the mean difference. Even with this participant represented, the raw means for the two conditions

still fell in the predicted direction (positive $M = \$66.49$; security $M = 43.89$), and a statistical difference between conditions remained, $t = 2.23$, $df = 181$, $p < 0.03$.

Discussion

The first study supported our hypothesis. Participants primed to feel secure by thinking about a partner's supportive act placed significantly lower monetary values on their blanket than did participants in the control, restaurant experience condition.

Whereas the results of [Study 1](#) are predicted and striking, they leave three questions open. First, it is possible (although unlikely in our judgment) that our manipulations affected the particular blanket upon which our participants choose to report.

Second, it is possible that something about the participants' thoughts of a pleasant restaurant experience (that did not overlap with participants' thoughts of support) increased values placed on blankets. If so this, rather than feelings of security decreasing the value placed on blankets in the experimental condition, might have increased the value participants placed on blankets. For instance perhaps participant's thoughts in the pleasant restaurant control condition were more positive than those in the security condition and thus caused control condition participants to see everything, their blanket included, in a more positive light (see [Clark & Isen, 1982](#)) and, in turn, to place a higher monetary value on it.

Finally, it might be questioned whether the effect observed in [Study 1](#) would apply only to objects that, themselves, are closely and literally associated with feelings of warmth and comfort, such as blankets. This possibility called for a replication using a different, not warmth related and not soft, object.

[Study 2](#) was designed to conceptually replicate the findings of [Study 1](#) and to address the three issues. In [Study 2](#) we randomly assigned participants to an experimental condition in which security would be primed or to one of the two control conditions. In the security condition, participants unscrambled 10 sentences, each of which included a security-related word and 20 sentences that were neutral with regard to security and emotion. In the neutral control condition, the 10 security sentences were replaced with additional neutral sentences. In the positive control condition, the 10 security sentences were replaced with sentences containing positive words that were not security-related. Later, in the context of a supposedly separate study, an economics student who earlier had given all participants a pen with the university logo as a gift for participating in the study asked them how much they would charge him to buy that pen back.

Having participants rate a pen rather than a blanket allowed us to assess whether priming security would reduce the monetary value placed on an object that was not directly associated with physical comfort. Controlling the specific object also allowed us to rule out the possibility that our manipulations somehow caused people in different conditions to select different varieties of the objects on which they reported (such as different types of blankets in [Study 1](#)). Including both neutral and positive control condition allowed us to test whether values placed on the object would be higher in both neutral and positive control conditions relative to the security condition, a pattern that cannot be explained by assuming that positive feelings enhance the perceived value of possessions.

In our second study, we also included measures of individual differences in chronic levels of attachment-related security. This permitted us to assess whether our experimental results would apply to people no matter what their chronic levels of security were and to determine whether those chronic levels of security would, themselves, be related to values placed on the pen. The measure we used assessed both attachment-related anxiety (chronic worries about abandonment and rejection by close others) and attachment-related avoidance (discomfort with interpersonal closeness).

Study 2

Method

Participants

Sixty-eight female and thirty male students (mean age = 21.1, 5 Hispanic/Latino, 64 Caucasian, 2 Native American, 20 Asian, 8 African American, 2 multi-racial, 2 unspecified) volunteered. They included students in one business class and in two psychology classes. Participants within each class were assigned randomly to conditions. The security condition included 33 participants (11 males; 22 females), the positivity condition included 33 participants (8 males; 25 females) and the neutral condition included 32 participants (11 males; 21 females).

Procedure

In three separate classes, the instructor introduced two ostensibly unrelated researchers, each of whom had come to the class to request research volunteers. After obtaining informed consent, the first researcher accurately introduced herself as a psychology professor and said that she was developing new measures. The second researcher accurately introduced himself as an economics student and said that he was interested in assessing the value people placed on products. He commented that he was able to give students a gift for participating in his study, that it was a pen with the university logo and that each student would find a pen on his or her desk. The two experimenters did not talk with one another although the professor joked that her department, unlike the economics department, did not have funds to supply gifts for participation.

Following the introductions, the professor noted that her own materials had been distributed to each desk in the room and asked the participants to complete two questionnaires in front of them. The first questionnaire was a measure of dispositional attachment anxiety and avoidance (The Experiences in Close Relationships scale ECR-R). The second was supposedly a new measure involving unscrambling words to make sentences (30 in all). Each student had one of three versions of the unscrambling task, which had been distributed in a random order to desks within each of the classes in which testing took place. (Thus, class was not confounded with condition.)

In each condition, twenty sentences were neutral in affective connotation and irrelevant to feelings of security. The remaining ten sentences contained a set of ten words that differed by condition. In a "secure" condition, the relevant words were: depends, hug, love, reassuring, shares, support, the phrase "turns to", closeness, commitment, and comfort. In a positive control condition, the relevant words were: accomplishes, cheerful, entertaining, enthusiastic, happy, laughter, festive, merry, triumphant and victory. In a no-affect control condition, the relevant words were boat, book, circle, cup, fence, food, plate, stripes, table and shoes. After these tasks were complete, the professor collected her materials, thanked the participants, and left.

The economics undergraduate then reiterated that he was assessing how people value objects. As noted, participants had been given a pen with the university logo to keep, and, on their desks, were sheets on which values ranging from \$0.25 to \$9.75 in \$0.50 increments were displayed. Participants checked whether they would prefer to keep the pen or sell it for the amount of money indicated on each line ("At a price of \$2.25 I will keep _____ I will sell _____"). The highest price at which participants would keep the pen comprised an index of "pen valuation". After all participants filled out the valuation sheet, the economics student asked them to record their thoughts about the research on a sheet of paper.

After the students did so, the first experimenter returned, debriefed all participants, and answered questions. No participant recorded suspicions about the two parts of the study being connected.

Results

We conducted regression analyses predicting valuation scores from two orthogonal contrasts. The first contrast, central to our prediction, compared pen valuation in the security condition with valuation in the two (neutral and positivity prime) control conditions ($2/3$ =security prime condition; $-1/3$ =other conditions). The second contrast compared valuation in the positivity prime condition with valuation in the neutral prime condition ($1/2$ =positivity prime condition; 0 =secure prime condition; $-1/2$ =neutral prime condition).

Average pen valuation as a function of condition appears in Fig. 1. As anticipated, pen valuation was lower in the secure ($M = \$3.23$, $n = 33$) relative to the control conditions (Positive control $M = \$4.11$, $n = 32$; Neutral control $M = \$4.18$, $n = 33$), $b = -0.92$, $t = -2.09$, $p < 0.05$. As expected, the two control conditions did not differ from one another, $p = 0.88$.

Next an index of a dispositional attachment orientation (anxiety or avoidance) was included as a predictor in the analysis to see if analogous patterns of results emerged between people who are chronically secure versus chronically insecure (anxious or avoidant). Two outliers on the avoidance measure (scores over 1 SD above the next highest score) were eliminated from these analyses. Attachment avoidance tended to predict increased pen valuation, $\beta = 0.18$, $t = 1.79$, $p = 0.076$, such that those lower in avoidance placed lower monetary values on the pen.¹ The effect of security prime condition (versus the two control conditions) also continued to predict pen valuation in this model, $p < 0.05$. These results suggest that dispositional security (i.e., low attachment avoidance) and situational security (i.e., security priming) likely had independent effects on reducing valuing of the pen. In another analysis that entered attachment anxiety instead of attachment avoidance, no significant effect of anxiety was found, $p = 0.33$ yet, again, the effect of security prime condition continued to predict pen valuation, $p < 0.05$.

In additional analyses we explored interactions involving attachment orientations and gender by entering product terms representing the interactions of the manipulation contrasts with dispositional attachment anxiety, dispositional attachment avoidance, or gender. None of these interactions were significant, $ps > 0.30$.

Discussion

The results of Study 2 conceptually replicated those of Study 1. Again a security prime resulted in lower monetary values being placed on a possession relative to primes unrelated to security. The results of Study 2 extend our findings to possessions that are not, themselves, physically comforting. Importantly, the results of Study 2 are not subject to the possibility that the primes somehow influenced the particular possession selected or to the possibility that positive feelings enhancing the value of a possession can explain the overall patterning of results.

General discussion

Our results are consistent with people valuing possessions in part because they afford a sense of protection, insurance, and comfort. They also provide clear evidence for our hypothesis that, when people experience increases in felt interpersonal security, they place lower monetary values on their possessions. Participants in Study 1, who had just thought about a supportive experience, placed lower monetary values on their blanket than did those who had just thought of a pleasant restaurant experience. Participants in Study 2, who were primed with interpersonal security-related words, placed

¹ The effect of attachment avoidance was not significant when the avoidance outliers were included in the analysis, $\beta = 0.09$, $t = 0.94$, $p = 0.35$.

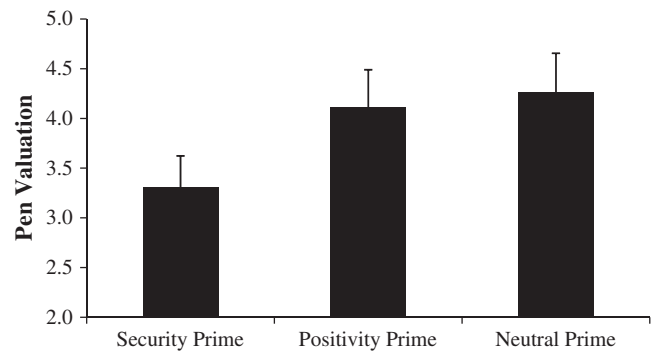


Fig. 1. Pen valuation scores as a function of experimental condition.

lower values on a pen with their university logo than did those who were primed with positive or with neutral words.

Will the monetary value of all goods be influenced by felt interpersonal security?

Here we have demonstrated that feelings of security decrease the monetary value that people place on two possessions: a blanket, and a pen with participants' university logo. One is closely associated with warmth and comfort (the blanket); the other is associated with belonging to a valued group (the pen). Many possessions fit into these two broad categories. Articles of clothing, coffee mugs, housing, and many pieces of furniture and bedding are associated physically or symbolically with warmth and comfort. So too are many possessions linked with membership in valued groups (e.g. a school or club, the rich, the fashionable, the intellectual, etc.). For this reason, and based on the larger literature documenting links between security and many indices of materialism, we suspect that the results observed here will generalize to many possessions. Yet, we acknowledge that there are goods to which the results may not generalize and that such boundary conditions ought to be explored. For instance, felt interpersonal security may not influence the value placed on goods not related to warmth, comfort or group membership (e.g. a plastic trashcan). The results also may not generalize to possessions of uncertain future value, such as lottery tickets. Indeed, the perceived current value of objects having uncertain value may relate more closely to felt optimism which itself is likely to be higher among secure rather than insecure persons.

Why value one's possessions over money (in the face of relatively lower interpersonal security)?

It is noteworthy that the results of both studies suggest that low security is associated with valuing a possession over the money one might get for that possession. Thus, it is of importance to ask why participants in our insecure group did not appear to value money more than a good in their possession. Indeed, this may seem surprising given that prior research has shown that money provides a secondary buffer against the pain of rejection (Zhou & Ding-Guo, 2008).

In this regard we have a few speculations. First, money is a very recent invention evolutionarily speaking (Bugoyne & Lea, 2006). In and of itself, money serves little function for a person. It must be exchanged for something else to enhance well-being. Thus, even though Zhou and Ding-Guo (2008) have shown that money provides a secondary sense of security, and even though we do not question that finding, on an intuitive, non-logical level owned goods may serve a more proximal and potent source of security than money because, in our evolutionary history, it was possession of goods (food, clothing, shelter) rather than money that afforded security. Blankets do provide literal warmth which itself has been shown to be metaphorically associated with interpersonal warmth (Williams & Bargh, 2008). Pens with university logos link one with membership in one's own university and, perhaps, with intellectuals more generally.

Second, recent research has shown that thoughts of money prime thoughts of independence and separateness from others (Vohs, Mead, & Goode, 2006, 2008), that thoughts of money are associated with decreased prosocial behavior (Pollmann & Meade, 2010; Twenge, Baumeister, DeWall, Ciarocco, & Bartels, 2007) and that people avoid talking about money in close relationships (Pollmann & Meade, 2010). Indeed, money was developed for use in exchange relationships and ought to prime thoughts of exchange relationships which involve receiving support only on a contingent basis, and ought to provide a lower sense of security than being reminded of responsive, non-contingent, communal relationships (cf. Clark & Mills, 2011). Thus, goods may offer a greater sense of security than money because thoughts of money may undermine the sense of closeness people have with others and the security that derives from that sense.

Of course, one might argue that whatever is actually in one's possession, be it a good or money, can provide a sense of embodied security that is not consciously understood and that no matter which is possessed, one will be reluctant to give it up for the other. Such an explanation cannot be refuted by the results of the present studies. Yet we do not favor this explanation because it does not easily explain the existing literature more generally, which demonstrates links between insecurity and materialism. The first two explanations expressed above are consistent with the results of the present studies and the wider literature.

Importance of our findings

Showing a link between enhanced feelings of security and the monetary value that people place on goods has both theoretical and applied implications. Theoretically, along with prior research, it suggests a clear tie between feelings of interpersonal security and a sense of security produced by holding onto possessions. It goes beyond prior findings by demonstrating that security links to the actual monetary value people place on goods. In addition, and perhaps most importantly, the current research shows that increasing felt security over a neutral state decreases the value placed on goods. As already noted, almost all prior research supporting a link between felt security and materialism can be construed as evidence that valuing or acquiring possessions is something people do to cope with stress. The present work suggests the existence of a more general, not always coping-related, link between higher felt security and lower value placed on possessions. Finally, this research combined with the related work cited in our introduction suggests, but does not prove, one possible explanation for the well-known endowment effect (Kahneman et al., 1991). People may be reluctant to part with possessions for money because existing ownership of a good affords a sense of implicit and perhaps embodied interpersonal security. People who have this sense may experience distress as a result of considering parting with the possession without necessarily knowing why. Furthermore, people are likely not consciously nor implicitly aware that this feeling can be obtained by buying the same object. This may account for why people request more money to sell an owned object than they would pay to acquire that object. Of course, the question of whether interpersonal security mediates the endowment effect must await additional research.

Practically, people suffering from problems of hoarding or inability to get rid of clutter might benefit from a boost in felt interpersonal security before tackling such issues. So too might people who have issues with excessive shopping benefit by therapy directed at enhancing felt security. Finally, partners of people with hoarding or shopping issues might be taught to respond not with criticism (which the present analysis suggests should exacerbate the problem) but rather with social support and inclusion in the form of alternative activities (which the present analysis suggests will help).

Individual differences in chronic security

Our experimental manipulations produced effects over and above chronic levels of insecurity tapped by measures of attachment-related

anxiety and avoidance and did not interact with those levels of attachment security to influence the valuing of possessions. This suggests that managing felt interpersonal security by turning to other sources of security is, likely, a fluid and universal process that fluctuates day to day for most people rather than a process that applies just to some, insecure, people. At the same time, we did observe some evidence that higher avoidance was associated with valuing the pen more in Study 2 and this, especially when taken together with the wider literature suggests that valuing goods may also be a chronic "solution" to interpersonal security. Still, the fact that chronic anxiety did not show a significant link to valuing goods in the present study and the presence of two outliers high in avoidance in Study 2 who, we note, did not place high values on their pens suggests a need for further research on the issue of how chronic individual differences in attachment-related insecurity relate to valuing possessions.

Concluding comments

The present findings seem particularly relevant to understanding why people may hang onto goods that are no longer useful. They also may be relevant to understanding why family members often fight over items from estates that they feel are rightfully theirs and/or to which they are already attached. Indeed, the present research suggests that inherited items may be especially valued because the associated death threatens felt interpersonal security. The present results also suggest a possible limitation on findings that "giving" to others induces happiness (Brown, Nesse, Vinokur, & Smith, 2003; Williamson & Clark, 1989; Dunn, Aknin, & Norton, 2008). That such an effect exists does make good theoretical sense in that giving benefits without expectation of receiving benefits in return can build and strengthen communal relationships (Clark & Mills, in press). On the other hand, it is worth noting that these effects have been obtained for giving services to and for spending money on others, not for giving away possessions. For many people giving away possessions may threaten security and thus prove more stressful than holding onto those possessions with a possible exception occurring when the person to whom gifts are given is experienced as being a part of oneself (see Aron, Aron, Tudor, & Nelson, 1991).

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