

# Consumer collecting identity and behaviors: underlying motivations and impact on life satisfaction

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## Abstract

**Purpose** – The purpose of this paper is to understand the role that collector identity salience and collecting behaviors have on life satisfaction. The authors also investigate the role that dispositional motivations play in strengthening an individual's collector identity salience.

**Design/methodology/approach** – An online panel management system was used to recruit and compensate a diverse sample of 215 US consumer collectors. The structural model was tested with partial least squares structural equation modeling.

**Findings** – A partial least squares structural equation model of data collected from a survey of US consumer collectors reveals that creative choice counter conformity and mortality legacy positively enhance collector identity salience, whereas materialism has no effect. Despite not affecting collector identity salience, materialism is found to negatively affect life satisfaction. Crucially, collector identity salience is found to positively affect collector engagement, which, in turn, enhances life satisfaction.

**Originality/value** – This research contributes to consumer behavior literature in three distinct ways. First, the authors build upon extant literature which has revealed creative choice counter conformity and mortality legacy as underlying dispositional motivations that contribute to collector identity salience. Second, while materialism has been tied to collecting behaviors via conceptual studies, the authors also examine the broader impact of materialism on an individual's life satisfaction. Finally, the authors explore how collector identity salience and collector engagement contribute to satisfaction with life.

**Keywords** Life satisfaction, Materialism, Identity theory, Identity salience, Collecting behavior, PLS-SEM, Consumer collecting behavior, Collector identity salience, Social identity theory

**Paper type** Research paper

## Introduction

Collecting is a popular and fulfilling avocation for many consumers. Nearly 40% of US households participate in some type of collecting behavior (Danzinger, 2002) and the worldwide collectibles market is estimated at \$370bn (Heitner, 2016). Given the prevalence of collecting and the economic factors at stake, it is important to understand the reasons why people collect and its effects on the collector. Research has shown that collecting behavior can be viewed as a “medium through which individuals and communities create self-identity” (Pearce, 2006, p. 7). Just as historical societies construct cultural identities with archives and artifacts (Kaplan, 2000), possessions help construct our identities (Belk, 1988). This insight is particularly relevant to advancing consumer behavior theory because consumption is at the heart of a collector's identity. In this study, we will demonstrate how collector identity salience plays a crucial role in linking collectors' dispositional motivating factors to their life satisfaction through collecting behaviors. Understanding the extent to which collecting behaviors impact life satisfaction will

shed light on an area of consumer psychology that has, thus, far gone unexplored.

For this research, we sampled a broad range of consumers ( $n = 215$ ) who identify as collectors and engage in a variety of collecting behaviors. The results contribute to consumer behavior literature in three distinct ways. First, we build upon extant literature which has revealed creative choice counter conformity, mortality legacy and materialism as underlying dispositional motivations that contribute to collector identity salience. Second, we explore the connection between collector identity and collecting behaviors. Finally, we explore how collector identity salience contributes to life satisfaction and also replicate the negative impact that materialism has been shown to have on life satisfaction in previous research.

## Collecting and identity salience

We propose an identity salience model of collecting behavior (Figure 1). Identity salience is a concept derived from identity theory (Stryker, 1968), which asserts that individuals have a number of distinct identities that are organized in a hierarchy of importance. The higher identity is in the hierarchy, the more likely it is that identity will manifest in identity-linked behaviors

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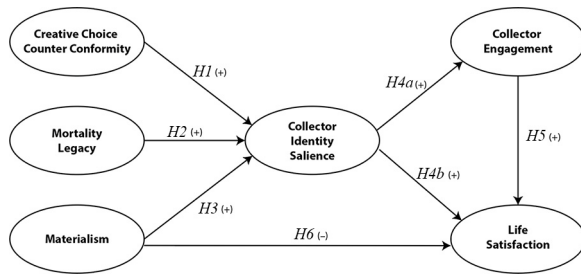


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Figure 1 Hypothesis model



(Stryker and Serpe, 1982). For example, an individual's *parent* identity would likely be more salient to a person and drive more parent identity-linked behaviors than a *jogger* identity.

Our understanding of identity has largely been formed by theories from both social psychology (social identity theory) and sociology (identity theory), occupying what Hogg *et al.* (1995, p. 255) call “parallel but separate universes.” Social identity theory explores how people see themselves relative to members of a group (i.e. in-group vs out-group) – understood as “what one does” (Stets and Burke, 2000, p. 226). Identity theory helps explain individuals' role-related behaviors or how individuals take on a socially relevant role and all of the trappings and responsibilities that come with it – understood as “who one is” (Stets and Burke, 2000, p. 226). Though the theories may be distinct on the surface, many of their concepts overlap (Hogg *et al.*, 1995) and there is a movement to combine them into a “general theory of the self” (Stets and Burke, 2000, p. 224).

We define collector identity salience as the strength of an individual's self-identity as a collector and we use a generalized construct of identity that encompasses both the social and solitary dynamics of collecting behaviors (Spaid, 2018).

### Collecting motives

Because our various identities exist hierarchically, the strength of any particular identity may be influenced by dispositional factors such as motivations. Research has shown that motivations may impact goal and strategy beliefs central to an individual's self-identity (Oyserman *et al.*, 2007). Collecting research has explored general collecting motives (Formanek, 1994; Spaid, 2018), while others are more specific investigations including acquisition motivations in children (Baker and Gentry, 1996); disposition motivations in older consumers (Price *et al.*, 2000); materialistic or profit motivations (Belk, 1998); and collecting as play (Danet and Katriel, 1994). We have incorporated three motivations most likely to have a significant impact on collector self-identity: creative choice counter conformity, mortality legacy and materialism.

Creative choice counter conformity is included in our model as it focuses on individual and social aspects of collecting and is defined as differentness expressed through the creative choices an individual makes. For example, a collector seeking to identify as unique through his or her collecting choices, which can also be seen as a form of artistic expression (Melchionne, 1999). This differentness can also apply to how collectors socialize. Brewer (1991) posited that individuals often identify

with groups of others while maintaining an optimal balance that allows them to individuate. In other words, collectors might join collecting groups, but they balance this with behaviors (e.g. creative collecting choices) that help them avoid acute similarity or dissimilarity to others (Snyder and Fromkin, 1980). Creative choice counter conformity is a dimension of the need for uniqueness scale (Ruvio *et al.*, 2008).

We also integrate the construct of mortality legacy, which is defined as “the need to create a legacy to live beyond death” (Levasseur *et al.*, 2015, p. 323). Mortality legacy is a dimension of the multidimensional mortality awareness measure and model (MMAMM) (Levasseur *et al.*, 2015), which has its origins in terror management theory (Greenberg *et al.*, 1986). Terror management theory suggests that humans ultimately act to either avoid death or to distract themselves from it. Collectors may distract themselves from this inevitability by symbolically immortalizing their self-identity with enduring physical objects (Landau and Sullivan, 2015) and through activities originating in self-expansive motives that are “oriented toward the growth and expansion of the individual's competencies” (Pyszczynski *et al.*, 1997, p. 1). To date, Spaid (2018) is the only attempt to explicitly link mortality awareness to collecting identity or behaviors.

Materialism is a logical addition to a model exploring collecting as both are forms of acquisitiveness. Belk, (1985) defines materialism as “the importance a consumer attaches to worldly possessions. At the highest levels of materialism, such possessions assume a central place in a person's life and are believed to provide the greatest sources of satisfaction and dissatisfaction.” Materialism has received a fair amount of attention in the literature, with collecting being referred to as “materialistic luxury consumption *par excellence*” (Belk, 1995, p. 479) and having both a materialistic and anti-materialistic nature (Belk, 1998). Shrum *et al.* (2013, p. 1179) define materialism as the “extent to which people engage in identity maintenance and construction through symbolic consumption.” Collecting, a form of symbolic consumption, imbues objects with special symbolic meaning (Belk, 1998). This symbolic consumption may play an important role in “restoring harmony to an ambiguous, incongruous or unsatisfying self-concept” (Schouten, 1991, p. 422) or signaling identity to others (Sorensen and Thomsen, 2005).

### Collector engagement

Collector engagement is a behavioral measure of the scope of a collector's collecting activities. Spaid (2018) attempts to exhaustively list such activities, showing collecting behaviors broken down into two primary categories (social and solitary) along three process levels (acquisition, possession and disposition). We use this framework as the basis for our understanding of collector engagement and the operationalization of the resulting formative measure designed to capture the dynamic and expansive nature of collecting. While numerous studies have explored collecting motivations, few have explicitly listed the related behaviors in which collectors engage. Research reveals that increasing the salience of identity will increase the likelihood of identity-linked behaviors (Stryker and Serpe, 1982) and as individuals engage in the core of the behavior to their identity, they feel increased life satisfaction (Judge *et al.*, 2005).

### Collecting outcomes

Besides the accumulation of valuable possessions, collectors receive several benefits from collecting. These benefits include providing a sense of purpose (Smith and Apter, 1977); a sense of accomplishment and productivity (Belk et al., 1991; Carey, 2008; Keinan and Kivetz, 2011); and an extension of self (Belk, 1988). Negative effects have also been acknowledged, with Belk (1995) recognizing potential problems for the individual, household and society at large. While no extant research has explicitly connected collecting behaviors with enhanced life satisfaction, numerous studies do link life purpose (Bronk et al., 2009; Diener et al., 2012; Dufton and Perlman, 1986), accomplishment (Khuong et al., 2020) and self- and other-related goals (i.e. productivity) (Blau et al., 2019) with increased life satisfaction. Therefore, there is theoretical support to bridge the outcomes of existing collecting behavior research to life satisfaction through psychological studies of life purpose, accomplishments and productivity. This addresses an important gap in consumer behavior by connecting a pervasive consumer activity (collecting) with a high-level human desire (life satisfaction).

### Hypothesis development

#### Creative choice counter conformity

Fundamentally, collecting is an “unbound creative activity” (Rogan, 1998) that allows consumers to express their interests. As collectors acquire their objects of passion, they simultaneously create a unique curated entity that exists outside the real world (Stewart, 1993). In a sense, the collector’s creative expression both defines and is both defined by his or her collecting behaviors. As such, collections serve as a direct and intentional extension of the collector’s identity (Belk, 1988) that helps to “convey a positive striving for differentness relative to other people” (Snyder and Fromkin, 1977).

Extant literature has shown that this “differentness” or counter conformity is a universal trait and expressing a need for uniqueness through creative consumption choices is inherent to many consumer activities pursued throughout society (Burns and Brady, 1992). Consumer collecting represents one specific, yet the broad manifestation of this form of expression. While many creative forms require fine-tuned skills (e.g. playing guitar, oil painting, ballet, etc.), collecting is accessible to anyone. This approachability results in many people seeking a need for uniqueness through the creative choices inherent in collecting, while also helping to define their collector self-identity. Thus,

*H1.* Creative choice counter conformity is associated with an increase in collector identity salience.

#### Mortality legacy

Mortality is an inevitable realization for all people. Awareness of our own mortality drives our need for and creation of culture, as well as helps us find meaning in our lives (Greenberg et al., 1986). Throughout time, humans have sought to extend life through medicine, technology and other methods. Possessions are also often used by consumers to help fulfill their quest for immortality (Belk, 1998). Collecting an entire set or a very rare item allows collectors to tap into a type of fulfillment that is

bigger than their individual self. Furthermore, by bequeathing collections, collectors believe they are controlling the “future biographies” (Price et al., 2000, p. 184) of their collections. Throughout the collecting processes of acquisition, possession and disposition (Spaid, 2018), collectors can build a legacy around sets of belongings that are filled with personal meaning above and beyond their financial cost. Overall, extant literature suggests that collecting is one way to seek immortality through legacy (Belk, 1998) and as such will strengthen an individual’s self-identity as a collector. Thus,

*H2.* Mortality legacy is associated with an increase in collector identity salience.

#### Materialism

Consumers who exhibit high levels of materialism believe that “acquisition and consumption are necessary to their satisfaction in life and that expanded levels of consumption will make them happier” (Richins et al., 1992, p. 229). The concept of materialism is unique from that of collecting. While consumer collecting is best understood as procuring and possessing sets of interrelated items, materialism includes negative connotations of avariciousness (Belk, 1982). Despite these differences, the two concepts are certainly related. Some argue that individuals who are non-generous, envious and possessive – sub traits of materialism – are most likely to have positive responses to collecting (Belk, 1998). Due to the potential for materialism as a driving force for individual collectors, we argue that materialism is also likely to strengthen an individual’s self-identity as a collector. Thus,

*H3.* Materialism is associated with an increase in collector identity salience.

#### Collector engagement and life satisfaction

Consumer collecting is a multifaceted avocation that includes discreet behaviors within three consumption processes: acquisition, possession and disposition (Spaid, 2018). The collector engagement construct reflects this multi-faceted approach to collecting behaviors by basing the construct on these collecting processes and incorporating the social and solitary dimensions. Solitary behaviors consist of researching and planning (acquisition); displaying and cataloging (possession); and bequeathing (disposition). Social behaviors consist of hunting and trading (acquisition); sharing, consulting and dealing (possession); and selling and trading (disposition). Regardless of the underlying process stage or type of behavior, identity research has shown that individuals tend to engage in behaviors that are consistent with their self-identity (Stryker and Burke, 2000) and salient identities increase the likelihood of identity-linked behaviors (Stryker and Serpe, 1982). In other words, an individual with a highly salient collector identity is more likely to engage in collecting behaviors. Thus,

*H4a.* Collector identity salience is associated with an increase in collector engagement.

Extant literature also reveals a connection between identity and individuals' overall well-being (partially comprising life satisfaction). As individuals take on more roles that reflect their self-identity, they gain greater emotional and bodily well-being (Thoits, 1983). Further, when an identity is more salient to the individual, there exists an increased sense of purpose and meaning in life (Thoits, 2012). Thus,

*H4b.* Collector identity salience is associated with an increase in life satisfaction.

Furthermore, individuals feel increased life satisfaction as they engage in behaviors that are core to their identity (Judge *et al.*, 2005). As collectors are engaging in behaviors that are both consistent with and reinforce their collector identity salience, engagement in collecting activities should result in greater life satisfaction. Thus,

*H5.* Collector engagement is associated with an increase in life satisfaction.

Finally, extant literature suggests that "individuals who were high in materialism were less satisfied with their life as a whole" (Ryan and Dziurawiec, 2001, p. 185). This could be due to the self-serving, greed-oriented focus inherent to materialism that is not a necessary component of collecting. Put differently, those consumer collectors motivated considerably by materialism might be misguided in their efforts and, in turn, miss out on the more organic life satisfaction that occurs through collecting. Thus,

*H6.* Materialism is associated with a decrease in life satisfaction.

## Method

### Sample

The CloudResearch panel management system (Litman *et al.*, 2017) was used to recruit and compensate an online panel of respondents sourced from the Amazon MTurk panel system – a commonly used system for consumer research. The MTurk panel system has been shown to be an effective source for research respondents that is characterized as providing high-quality data (Goodman and Paolacci, 2017; Smith *et al.*, 2016). MTurk respondents provide study responses equivalent to in-lab study participants (Casler *et al.*, 2013), are more attentive to instructions than subject pool respondents (Hauser and Schwarz, 2016) and are more representative than in-person convenience samples (Berinsky *et al.*, 2012). The panel represented a demographically diverse sample of US consumer collectors (Table 1).

### Respondent screening

A screening survey was created to ensure that respondents were consumer collectors and those who successfully completed the screening survey were invited to the full survey. On the screener survey, four unrelated questions were posed. A question related to collecting was included to capture actual collectors so that they could be invited to the full survey and two other questions were included simply to mask the intent of the survey. The final question asked about a fictional South American sport –

Table 1 Demographic information

Demographic dimension	<i>n</i> = 215	
	Total	(%)
<b>Gender</b>		
Female	117	54.4
Male	98	45.6
<b>Age</b>		
18–24	23	10.7
25–34	85	39.5
35–44	40	18.6
45–54	34	15.8
55–64	21	9.8
65–74	10	4.7
75+	2	0.9
<b>Education</b>		
Some high school, no diploma	1	0.5
High school graduate or equivalent	31	14.4
Some college credit, no degree	55	25.6
Trade, technical, or vocational training	6	2.8
Associate degree	17	7.9
Bachelor's degree	64	29.8
Master's degree	30	14.0
Professional degree (e.g. JD, MD and DDS)	6	2.8
Doctorate (e.g. PhD)	5	2.3
<b>Income/year</b>		
Less than \$24,999	41	19.1
\$25,000 to \$34,999	29	13.5
\$35,000 to \$49,999	35	16.3
\$50,000 to \$74,999	47	21.9
\$75,000 to \$99,999	32	14.9
\$100,000 to \$149,999	21	9.8
\$150,000 to \$199,999	5	2.3
\$200,000 or more	5	2.3
<b>Years collecting</b>		
Less than a year	5	2.3
1–2 years	24	11.2
3–5 years	40	18.6
5–10 years	48	22.3
More than 10 years	98	45.6

"Brasto is a sport in South America gaining popularity. Have you ever heard about or seen this sport played before?" – to gauge the honesty of the respondents. Those that answered positively were not invited to the full survey. The screener survey was completed by 1,245 respondents, of whom, 721 responded positively to the collecting question. Of those, 40 answered the final question positively, which left a total of 681 responses. The 681 screened respondents were then invited to the full survey, of which 283 participated for a response rate of 41.5%.

### Survey design

The survey instrument was distributed via the Qualtrics survey management tool. Screened respondents began the survey by answering collecting-specific questions including what type of collectible they collect and the length of time they have been

collecting. These questions served as another screening mechanism by guarding against flippant responses and to help participants keep their collections in mind as they completed the survey.

After providing collecting-specific information, participants were presented measures for collector identity salience, creative choice counter conformity, materialism, life satisfaction, mortality salience and finally, demographics. Respondent data collection was designed to be completed in approximately 5 min. Upon completion of the survey, respondents were provided a code that would validate their contribution to the CloudResearch system. They were compensated \$0.50 for their participation, a rate largely commensurate with US Federal minimum wage (Silberman *et al.*, 2018).

### Data screening

The survey received a total of 283 responses. To ensure the quality of responses, the data were aggressively screened using a comprehensive multi-step procedure. First, as a consistency check, the same screener questions asked on the initial screener survey were repeated at the beginning of the full survey. Those respondents who provided responses that were inconsistent with the earlier screening survey were excluded. Second, any incomplete, abandoned or flippant responses (e.g. sarcastic responses to the collection type query) were removed. Third, we checked for careless responses with a response bias check (Meade and Craig, 2012). All responses with “straight line” selections were removed. Fourth, responses that were logged from the same IP address or the same IP address block within a few minutes of other responses were removed (Teitcher *et al.*, 2015). This was used in conjunction with the online survey management tool (Qualtrics), which automatically excluded repeat survey submissions from the same computer through a web browser cookie implementation. Finally, responses were discarded if they were completed in under 3 min, which is less than half the average survey completion time and demonstrates that the respondent was not taking the time necessary to thoroughly read and respond to all survey questions. After data screening, 215 responses were available to analyze.

### Measures

#### *Creative choice counter conformity*

We measured creative choice counter conformity using the short-form consumer need for uniqueness scale developed by Ruvio *et al.* (2008) adapted from the full scale by Tian *et al.* (2001). The need for uniqueness scale (both full and short-form) is a second-order construct consisting of three first-order constructs: creative choice counter conformity, unpopular choice counter conformity and avoidance of similarity. This research is concerned with the creative choice counter conformity to construct as it captures using one’s own personal style to represent the self through material goods. This defines the very nature of collectors: using the objects collected to reflect personal interests, tastes and sense of uniqueness. The measure consists of four items on a seven-point Likert scale. Measurement items may be found in the appendix.

#### *Mortality legacy*

Mortality legacy captures the action-oriented behaviors related to doing things or creating things that will have a lasting impact

on the individual. For this study, we draw on the MMAMM (Levasseur *et al.*, 2015). The MMAMM scale is a second-order construct consisting of five first-order constructs: legacy, fearfulness, acceptance, disempowerment and disengagement. Our theory only establishes a connection between mortality legacy and collector identity salience, so only the legacy construct is used from the MMAMM scale. The measure consists of four items on a seven-point Likert scale.

#### *Materialism*

Materialism was measured with the nine-item version of the material values scale (MVS) (Richins, 2004). Richins (2004) refined the MVS Likert scale from its original 18 items to four short-form versions: 15-, 9-, 6- and 3-item variations. In Richins’ (2004) scale refinement study, the 9-item variant was deemed most favorable, which is the version used in this study. All items are on a seven-point Likert scale.

#### *Collector identity salience*

Collector identity salience was measured by a scale adapted from Kleine *et al.* (1993), which was based on a modified version of Callero’s (1985) scale. The measure consists of four items on a seven-point Likert scale.

#### *Collector engagement*

Collector engagement was created as a measure of the level of engagement in collecting-related activities by collectors. Spaid (2018) identified 13 unique social and solitary collecting-related behaviors that occur during the three processes of collecting activities: acquisition, possession and disposition. Each item was measured on a 6-item scale measuring the frequency with which the respondent engaged in the specific collecting-related activity (never, very infrequently, infrequently, somewhat frequently, frequently and very frequently).

This novel construct was formed by indicators representing a spectrum of collecting-related behaviors and was operationalized as a formative measure. We used four decision criteria (Jarvis *et al.*, 2003) to make this determination. One, the causal direction of the construct indicators points from the indicators to the construct (i.e. the construct is formed by its indicators). Two, the measures are not interchangeable. Removing or substituting a measure changes the nature of the construct. Three, measurement items do not covary; its items do not measure the same underlying concepts. For example, while a collector might hunt for collectibles, that may not have an impact on whether that collector decides to show the collection to others. Finally, the nomological net of the measures is inconsistent; the measures do not derive from the same source, nor do they individually lead to the same outcome.

#### *Life satisfaction*

Life satisfaction was captured with the satisfaction with life scale (SWLS) developed by Diener *et al.* (1985). The focus of the SWLS is to assess global life satisfaction without tapping into related constructs such as positive affect or loneliness. The measure consists of five items on a seven-point Likert scale.

## Results

This research features several structural and theoretical factors specific to our study that must be considered when determining which statistical method is most appropriate. These factors include a focus on identifying key driver constructs, a

formatively measured construct (collector engagement) and the theory development nature of this research. Considering these factors and the guidance of statistical literature (Hair *et al.*, 2012), we determined that partial least squares structural equation modeling (PLS-SEM) is the best method for providing accurate analysis. Specifically, we used the application SmartPLS for the PLS-SEM analysis.

### Evaluation of measurement model

We begin by assessing the internal consistency reliability of the constructs. Cronbach's  $\alpha$  and composite reliabilities are shown in Table 2. Given that Cronbach's  $\alpha$  tends to underestimate internal consistency reliability and composite reliability tends to overestimate it, the true value of internal consistency reliability should fall somewhere in-between (Hair *et al.*, 2016). All constructs demonstrate acceptable internal consistency reliability levels within these bounds.

Next, we assessed the convergent validity of the measures. Examining the outer loadings for all items revealed three items within the materialism scale (MAT\_2, MAT\_4 and MAT\_8) that needed to be discarded due to unsuitably low outer loading scores. All factor loading scores can be found in Table 2. The average variance extracted was also calculated and found to be above the minimum threshold of 0.5 for all constructs.

Discriminant validity was assessed with the Fornell-Larcker Criterion and heterotrait-monotrait (HTMT) ratio. The Fornell-Larcker Criterion compares the latent variable correlations with the square root of average variance extracted values. As the square root of the AVE is higher than the highest correlation for each construct, we meet this criterion (Table 3). HTMT is the ratio of within-trait to between-trait correlations. As our reflective measures are conceptually unrelated, a value of less than 0.85 is a conservative threshold (Henseler *et al.*, 2015). All scores were within acceptable levels (Table 3).

Because the validation of formative measures is determined differently than reflective measures, we took a different approach with collector engagement. Significance scores of the outer loading weights of each item were measured by running a bootstrap procedure with 5,000 subsamples. Because formative items are expected to measure separate dimensions of the construct domain and be largely independent, we tested for an absence of multicollinearity by ensuring that the variance inflation factor (VIF) of items did not exceed 3.3 (Diamantopoulos and Sigauw, 2006) (Table 2). Hair *et al.* (2016) state that items with a significant indicator weight in addition to high outer loading weight (i.e.  $>0.5$ ) are acceptable measure items for a formative construct. Despite cautions that removal of non-significant items should be approached conservatively because the items may represent some important aspect of the measured domain (Diamantopoulos and Winklhofer, 2001), the bootstrapping procedure revealed two indicators that were removed due to their weak outer loading weights, insignificance and unacceptable VIF scores (CE\_10 and CE\_12). These items correspond to "admiring your collection" and "selling objects from your collection." The former may be worded too vaguely and not universally understood by participants, thus calling its usefulness into question. The latter may be a concept unfamiliar to many collectors. Because many collections are comprising a set of items that must all be retained to be considered a complete set,

many collectors may have no desire nor the financial requirement to sell off parts of their collection. The remaining indicators form a core of collecting experience that most collectors would be familiar with, and thus are acceptable candidates for this formative measure.

### Evaluation of structural model

To evaluate the structural model, we start by ensuring that VIF scores show no signs of collinearity by falling beneath the threshold of 5 (Hair *et al.*, 2016) (Table 2). All constructs display passable VIF scores except for the life satisfaction construct. As such, we dropped the highest inflated item (LS\_3), leaving all remaining items with acceptable VIF scores. We also used VIF to guard against common method bias (CMB). Given the single instrument nature of our data collection, there exists a risk of CMB distorting the observed variance in our constructs. We used the process established by Kock (2015) to avoid CMB by ensuring that no VIF score is larger than 3.3. This new threshold for VIF necessitated the removal of an additional life satisfaction item (LS\_1). Given this change, CMB should not be an influencing factor within our data.

After the removal of the last problematic items, we examined the significance of the path coefficients (Table 4). Creative choice counter conformity had a significant positive influence (beta = 0.333,  $p < 0.000$ ) on collector identity salience. Mortality legacy had a significant positive influence (beta = 0.150,  $p = 0.014$ ) on collector identity salience. Materialism had a non-significant influence (beta = 0.127) on collector identity salience and a significant negative influence (beta =  $-0.204$ ,  $p = 0.021$ ) on life satisfaction. Collector identity salience had a significant positive influence (beta = 0.679,  $p < 0.000$ ) on collector engagement and a non-significant (beta =  $-0.080$ ) influence on life satisfaction. Finally, collector engagement had a significant positive influence (beta = 0.390,  $p < 0.000$ ) on life satisfaction.

Next, we assessed the model's predictive power and effect size on the endogenous variables with the coefficient of determination ( $R^2$ ) (Table 4). Given the many potential drivers of collector identity salience, the level of explained variance ( $R^2 = 0.225$ ) is relatively strong within consumer behavior studies (Hair *et al.*, 2016). We also see a high level of explained variance in collector engagement ( $R^2 = 0.461$ ) as an outcome of collector identity salience. Finally, though life satisfaction displayed a modest level of explained variance ( $R^2 = 0.131$ ), the comprehensive nature of the construct underscores the outsized impact that collector engagement had on our sample. See Figure 2 for the PLS-SEM results model.

Next, we calculated  $f^2$ , which represents the effect size ( $R^2$  change) of an exogenous variable on its dependent variable. Cohen (1988) provides threshold levels of small (0.02), moderate (0.15) and large (0.35) for interpreting the  $f^2$  values. Among the collecting motivations, creative choice counter conformity has a borderline moderate effect on collector identity salience ( $f^2 = 0.113$ ) while mortality legacy has a small effect size on collector identity salience ( $f^2 = 0.025$ ). Materialism on collector identity salience was non-significant; however, materialism was significant with a small effect size on life satisfaction ( $f^2 = 0.044$ ). Collector identity salience had a large effect ( $f^2 = 0.856$ ) on collector

Table 2 Construct reliabilities and item measures

Measures and items	Cronbach's $\alpha$	Composite reliability (CR)	Outer loadings <sup>b</sup>	Outer weight $p$ -values	Variance inflation factor (VIF)
<i>Creative choice counter conformity</i>	0.872	0.911			
CEX_1			0.808	0.000	1.611
CEX_2			0.811	0.000	2.288
CEX_3			0.885	0.000	2.595
CEX_4			0.886	0.000	2.898
<i>Mortality legacy</i>	0.850	0.895			
ML_1			0.754	0.012	1.809
ML_2			0.839	0.000	2.284
ML_3			0.844	0.000	1.650
ML_4			0.862	0.000	2.623
<i>Materialism</i>	0.869	0.901			
MAT_1			0.769	0.002	2.014
MAT_2a			–	–	–
MAT_3			0.800	0.001	2.187
MAT_4a			–	–	–
MAT_5			0.740	0.003	1.804
MAT_6			0.788	0.001	2.186
MAT_7			0.809	0.006	2.400
MAT_8a			–	–	–
MAT_9			0.752	0.022	2.081
<i>Collector identity salience</i>	0.852	0.899			
IS_1			0.847	0.000	1.933
IS_2			0.808	0.000	1.947
IS_3			0.765	0.000	1.728
IS_4			0.901	0.000	2.767
<i>Life satisfaction</i>	0.847	0.907			
LS_1a			–	–	–
LS_2			0.848	0.000	2.033
LS_3a			–	–	–
LS_4			0.909	0.000	2.717
LS_5			0.867	0.000	1.934
<i>Collector engagement</i>	n/a	n/a			
CE_1			0.772	0.002	1.778
CE_2			0.728	0.401	2.868
CE_3			0.700	0.089	2.915
CE_4			0.800	0.001	2.033
CE_5			0.714	0.047	2.030
CE_6			0.606	0.003	1.468
CE_7			0.732	0.178	2.857
CE_8			0.699	0.083	2.623
CE_9			0.530	0.410	1.597
CE_10a			–	–	–
CE_11			0.571	0.094	2.014
CE_12a			–	–	–
CE_13			0.684	0.274	2.132

Notes: <sup>a</sup>Removed from final model; <sup>b</sup>All loadings are significant at  $p < 0.001$  and <sup>c</sup>Formative measure

engagement, but a non-significant effect on life satisfaction. Finally, collector engagement had a small effect ( $f^2 = 0.094$ ) on life satisfaction.

Our final structural model statistic is  $Q^2$ , a measure of predictive relevance applied to reflective and single-item

measures (Table 4). The results show that both collector identity salience and life satisfaction have a positive (i.e.  $>0$ )  $Q^2$  statistic, which suggests that each construct has predictive relevance to the model. Collector engagement, being a formative measure, is excluded from the results.

Table 3 Discriminant validity of constructs

Latent variables	1	2	3	4	5
1. Creative choice need for uniqueness	0.848 <sup>a</sup>				
2. Mortality legacy	0.379 (0.409) <sup>b</sup>	0.826			
3. Materialism	0.337 (0.378)	0.236 (0.259)	0.777		
4. Collector identity salience	0.432 (0.470)	0.306 (0.320)	0.275 (0.315)	0.832	
5. Life satisfaction	0.166 (0.192)	0.199 (0.227)	-0.138 (0.169)	0.129 (0.155)	0.875

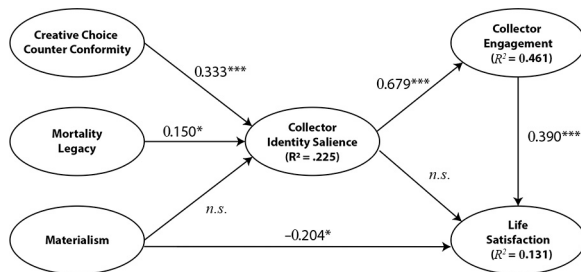
Notes: <sup>a</sup>Square root of average variance extracted on diagonal; <sup>b</sup>Heterotrait-Monotrait (HTMT) in parentheses

Table 4 Standardized coefficients and effects of the structural model

Parameter	Standard estimates	t-value	Confidence intervals (5%/95%)	f <sup>2</sup>
Creative choice counter conformity → collector identity salience	0.333***	4.947	0.220/0.441	0.113
Mortality legacy → collector identity salience	0.150*	2.238	0.044/0.264	0.025
Materialism → collector identity salience	0.127 n.s.	1.644	0.008/0.262	0.018
Collector identity salience → collector engagement	0.679***	13.793	0.606/0.765	0.856
Collector identity salience → life satisfaction	-0.080 n.s.	0.805	-0.271/0.052	0.004
Collector engagement → life satisfaction	0.390***	3.411	0.220/0.594	0.094
Materialism → life satisfaction	-0.204*	2.037	-0.346/-0.022	0.044
			<b>R<sup>2</sup></b>	<b>Q<sup>2</sup></b>
Collector identity salience			0.225	0.138
Life satisfaction			0.131	0.084
Collector engagement			0.461	-

Notes: \*Significant at  $p < 0.05$ ; \*\*\* Significant at  $p < 0.001$

Figure 2 PLS-SEM results model



As expected, creative choice counter conformity and mortality legacy have a positive effect on collector identity salience, confirming both *H1* and *H2* (Table 5). Despite the theoretical evidence, we did not find support for the effect of materialism on collector identity salience, disconfirming *H3*. Collector identity salience has a positive effect on collector engagement, confirming *H4a*; however, it did not have a significant effect on life satisfaction, disconfirming *H4b*. Finally, collector engagement has a positive significant effect on life satisfaction, confirming *H5*, although materialism has a significant negative effect on life satisfaction, confirming *H6*.

Discussion

While creative choice counter conformity and mortality legacy may amplify an individual’s collector identity salience, enhanced life satisfaction is realized through increased collector

engagement (i.e. engaging in collecting behaviors). This validates earlier research that suggests that individuals who engage in behaviors that are core to their identity experience heightened life satisfaction (Judge, 2005). The lack of any significant connection between collector identity salience and life satisfaction is intriguing. We contend that while collector identity salience may be crucial to an individual’s sense of self and likely confers benefits to the individual, it is only the exposure to positive experiences from the collector engaging in social and solitary collecting processes that will lead to increased life satisfaction. This makes some intuitive sense. An individual may have a strong identity as a collector, but it is only when the collector behaves as a collector – hunting for a collectible; sharing a collection with others; admiring a collection – that life satisfaction is realized.

Theoretical implications

Several theoretical implications have emerged from this research. First, we show that both creative choice counter conformity and mortality legacy are critical drivers of collector identity salience. Establishing the link between creative choice counter conformity and collector identity salience is important because collections act as intentional extensions of the collector that convey a prideful uniqueness (Belk, 1988; Snyder and Fromkin, 1977) and collecting does not require the development of complex skills, thus making it accessible to all types of consumers. Establishing the link between mortality legacy and collector identity salience is important because collections may provide a sense of self-extension beyond the collector’s mortality (Belk, 1998), as well as an attainable path



Table 5 Hypothesis testing results

Hypothesis	Finding
H1: Creative choice counter conformity → collector identity salience	Supported
H2: Mortality legacy → collector identity salience	Supported
H3: Materialism → collector identity salience	Not supported
H4a: Collector identity salience → collector engagement	Supported
H4b: Collector identity salience → life satisfaction	Not supported
H5: Collector engagement → life satisfaction	Supported
H6: Materialism → life satisfaction	Supported

for building a legacy filled with personal meaning that allows collectors at least partial control over how they are remembered (Price *et al.*, 2000).

Second, we find that collector engagement directly and life satisfaction indirectly, is important outcomes of collector identity salience that should be considered when investigating the collecting phenomenon. The positive relationship between collector identity salience and collector engagement provides valuable guidance to researchers because it reveals – in a more sophisticated and empirical manner than previous research – the role that self-identity has in driving associated behaviors. The importance of this theoretical insight is magnified given the positive influence these behaviors (i.e. collector engagement) have on an individual's life satisfaction.

Finally, there is a counterintuitive finding that also provides theoretical implications. Given research that strongly links materialism to collecting (Belk, 1985; Belk, 1998), it is surprising that materialism is not a significant driver of collector identity salience. That many individuals internalize collecting into their self-identity and collecting being more than simply a materialistic pursuit provides some explanation. Engaging in collecting activities serves to give meaning to possessions and elevate them above their mundane, utilitarian role and in doing so provides meaningful satisfaction to the collector. As such, our research provides a more sophisticated understanding of materialism and the role it plays.

### Managerial implications

Several managerial implications arise from this research. Brands and their marketers can use this consumer collecting model as a guide. Specifically, consumer products in collectible sets or with limited availability should be communicated in a way that appeals to the creative choice counter conformity and mortality legacy of the consumer. To appeal to collectors' creative choice counter conformity, firms should emphasize the role that their products or brands play in helping the consumer realize and foster a sense of creative expression and uniqueness through ownership. Examples of this include handmade items, limited or premium editions and uniquely customized or celebrity-signed products. To appeal to consumers' sense of mortality legacy, companies should focus on the intentional and self-selected story that ownership and eventual bequeathing signals to the collector's friends and loved ones. Firms can pursue this strategy by focusing product development and positioning communications around high-quality and long-lasting features that are reinforced through lifetime warranties (For example, Patek Philippe's "Generations" campaign). Furthermore, encouraging

engagement through virtual brand communities and social exchange events will lead to greater collector identity salience and subsequent collector engagement, likely resulting in greater overall sales, word-of-mouth and brand loyalty in both primary and secondary markets (Adjei *et al.*, 2010; Kozinets *et al.*, 2010).

Finally, marketers of collectibles should avoid messaging that might seemingly promote materialism. By focusing less on mere ownership and more on the potential benefits of collecting (e.g. increased social engagement, investments, etc.), marketers might be able to overcome negative associations related to overly materialistic products and, in doing so, help customers increase their life satisfaction. This could prove more difficult to enact – and less likely for upper management to accept – for firms operating in countries where materialism is more engrained in societal norms or traditional advertising practices.

### Limitations and future research

This study examined several first-order personal dispositional variables that were extracted from larger second-order constructs (*creative choice counter conformity* from the need for uniqueness scale and *mortality legacy* from the MMAMM). Future studies could test the complete second-order constructs. This might show that the additional dimensions have more predictive power than the individual first-order constructs alone. Conversely, further research might show that collectors are a unique variety of consumers who do not show the same patterns of support for the larger constructs. Additionally, while our survey phrasing was tilted more toward the collecting of objects, we do not explicitly exclude experiences as a reasonable form of collecting worth investigating. Finally, our sample contained only US consumer collectors. It would be interesting to replicate this study in an international setting to see if the results change or if instead of collecting behaviors transcend cultures and national boundaries.

Another possible avenue to explore is the impact of materialism's effect on collectors during the three collecting-related processes: acquisition, possession and disposition. For example, does materialism play a larger role during acquisition or would aversion to loss (Kahneman and Tversky, 1979) suggest that materialism might exude a stronger influence during disposition? Given the positive associations with collector identity salience and the lack of materialistic connections this study has revealed, future research could also investigate collecting as a potential therapeutic intervention for

individuals struggling with isolation, confidence or any number of other conditions where collecting processes might help.

### Conclusion

As we have shown, collector engagement leads to increased satisfaction with life. While collectors could potentially be viewed – or view themselves – as materialistic, compulsive or obsessed with their collections, this research suggests a more positive set of drivers and outcomes associated with collecting. We have also shown that this research provides new theoretical insight into an area of consumer behavior that has seen little empirical investigation in the past. Finally, the careful examination of collecting drivers has exposed additional opportunities for future research of this important and fundamental process in many consumers' lives.

### References

- Adjei, M.T., Noble, S.M. and Noble, C.H. (2010), "The influence of C2C communications in online Brand communities on customer purchase behavior", *Journal of the Academy of Marketing Science*, Vol. 38 No. 5, pp. 634-653.
- Baker, S.M. and Gentry, J.W. (1996), "Kids as collectors: a phenomenological study of first and fifth graders", *ACR North American Advances*.
- Belk, R.W. (1982), "Acquiring, possessing, and collecting: fundamental processes in consumer behavior", *Marketing Theory: Philosophy of Science Perspectives*, pp. 185-190.
- Belk, R.W. (1985), "Materialism: trait aspects of living in the material world", *Journal of Consumer Research*, Vol. 12 No. 3, pp. 265-280.
- Belk, R.W. (1988), "Possessions and the extended self", *Journal of Consumer Research*, Vol. 15 No. 2, pp. 139-168.
- Belk, R.W. (1995), "Collecting as luxury consumption: effects on individuals and households", *Journal of Economic Psychology*, Vol. 16 No. 3, pp. 477-490.
- Belk, R.W. (1998), "The double nature of collecting: materialism and anti-materialism", *Etnofoor*, Vol. 11 No. 1, pp. 7-20.
- Belk, R.W., Wallendorf, M., Sherry, J.F., Jr. and Holbrook, M. B. (1991), "Collecting in a consumer culture", in Belk, R. (Ed.), *SV - Highways and Buyways: Naturalistic Research from the Consumer Behavior Odyssey*, Association for Consumer Research, Provo, UT, pp. 178-215.
- Berinsky, A.J., Huber, G.A. and Lenz, G.S. (2012), "Evaluating online labor markets for experimental research: amazon.com's mechanical turk", *Political Analysis*, Vol. 20 No. 3, pp. 351-368.
- Blau, I., Goldberg, S. and Benolol, N. (2019), "Purpose and life satisfaction during adolescence: the role of meaning in life, social support, and problematic digital use", *Journal of Youth Studies*, Vol. 22 No. 7, pp. 907-925.
- Brewer, M.B. (1991), "The social self: on being the same and different at the same time", *Personality and Social Psychology Bulletin*, Vol. 17 No. 5, pp. 475-482.
- Bronk, K.C., Hill, P.L., Lapsley, D.K., Talib, T.L. and Finch, H. (2009), "Purpose, hope, and life satisfaction in three age groups", *The Journal of Positive Psychology*, Vol. 4 No. 6, pp. 500-510.
- Burns, D.J. and Brady, J. (1992), "A cross-cultural comparison of the need for uniqueness in Malaysia and the United States", *The Journal of Social Psychology*, Vol. 132 No. 4, pp. 487-495.
- Callero, P.L. (1985), "Role-identity salience", *Social Psychology Quarterly*, pp. 203-215.
- Carey, C. (2008), "Modeling collecting behavior: the role of set completion", *Journal of Economic Psychology*, Vol. 29 No. 3, pp. 336-347.
- Casler, K., Bickel, L. and Hackett, E. (2013), "Separate but equal? A comparison of participants and data gathered via amazon's MTurk, social media, and face-to-face behavioral testing", *Computers in Human Behavior*, Vol. 29 No. 6, pp. 2156-2160.
- Cohen, J. (1988), *Statistical Power Analysis for the Behavioral Sciences*, 2nd ed., Lawrence Earlbaum Associates, Hillsdale, NJ.
- Danet, B. and Katriel, T. (1994), "No two alike: play and aesthetics in collecting", in Pearce S.M. (Ed.) *Interpreting Objects and Collections*, New York, NY, Routledge, pp. 220-239.
- Danzinger, P.N. (2002), "Collectibles industry in the doldrums", available at: [www.unitymarketingonline.com/reports2/toys/cms\\_static\\_pages/pr1c.php](http://www.unitymarketingonline.com/reports2/toys/cms_static_pages/pr1c.php) (accessed 12 November 2019).
- Diamantopoulos, A. and Siguaw, J.A. (2006), "Formative versus reflective indicators in organizational measure development: a comparison and empirical illustration", *British Journal of Management*, Vol. 17 No. 4, pp. 263-282.
- Diamantopoulos, A. and Winklhofer, H.M. (2001), "Index construction with formative indicators: an alternative to scale development", *Journal of Marketing Research*, Vol. 38 No. 2, pp. 269-277.
- Diener, E.D., Emmons, R.A., Larsen, R.J. and Griffin, S. (1985), "The satisfaction with life scale", *Journal of Personality Assessment*, Vol. 49 No. 1, pp. 71-75.
- Diener, E., Fujita, F., Tay, L. and Biswas-Diener, R. (2012), "Purpose, mood, and pleasure in predicting satisfaction judgments", *Social Indicators Research*, Vol. 105 No. 3, pp. 333-341.
- Duften, B.D. and Perlman, D. (1986), "The association between religiosity and the purpose-in-life test: does it reflect purpose or satisfaction?", *Journal of Psychology and Theology*, Vol. 14 No. 1, pp. 42-48.
- Goodman, J.K. and Paolacci, G. (2017), "Crowdsourcing consumer research", *Journal of Consumer Research*, Vol. 44 No. 1, pp. 196-210.
- Greenberg, J., Pyszczynski, T. and Solomon, S. (1986), "The causes and consequences of a need for self-esteem: a terror management theory", in *Public Self and Private Self*, Springer, pp. 189-212.
- Hair, J.F., Jr, Hult, G.T.M., Ringle, C. and Sarstedt, M. (2016), *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, Sage publications.
- Hair, J.F., Jr, Sarstedt, M., Ringle, C.M. and Mena, J.A. (2012), "An assessment of the use of partial least squares structural equation modeling in marketing research", *Journal of the Academy of Marketing Science*, Vol. 40 No. 3, pp. 414-433.

- Hauser, D.J. and Schwarz, N. (2016), "Attentive turkers: MTurk participants perform better on online attention checks than do subject Pool participants", *Behavior Research Methods*, Vol. 48 No. 1, pp. 400-407.
- Heitner, D. (2016), "Playing ball in the Multi-Billion dollar sports collectible market", *Forbes*, available at: [www.forbes.com/sites/darrenheitner/2016/04/11/playing-ball-in-the-multi-billion-dollar-sports-collectible-market/?sh=7f5c6d3114e3](http://www.forbes.com/sites/darrenheitner/2016/04/11/playing-ball-in-the-multi-billion-dollar-sports-collectible-market/?sh=7f5c6d3114e3)
- Henseler, J., Ringle, C.M. and Sarstedt, M. (2015), "A new criterion for assessing discriminant validity in variance-based structural equation modeling", *Journal of the Academy of Marketing Science*, Vol. 43 No. 1, pp. 115-135.
- Hogg, M.A., Terry, D.J. and White, K.M. (1995), "A tale of two theories: a critical comparison of identity theory with social identity theory", *Social Psychology Quarterly*, Vol. 58 No. 4, pp. 255-269.
- Jarvis, C.B., MacKenzie, S.B. and Podsakoff, P.M. (2003), "A critical review of construct indicators and measurement model misspecification in marketing and consumer research", *Journal of Consumer Research*, Vol. 30 No. 2, pp. 199-218.
- Judge, T.A., Bono, J.E., Erez, A. and Locke, E.A. (2005), "Core self-evaluations and job and life satisfaction: the role of self-concordance and goal attainment", *Journal of Applied Psychology*, Vol. 90 No. 2, pp. 257.
- Kahneman, D. and Tversky, A. (1979), "Prospect theory: an analysis of decision under risk", *Econometrica*, Vol. 47 No. 2, pp. 263-292.
- Kaplan, E. (2000), "We are what we collect, we collect what we are: archives and the construction of identity", *The American Archivist*, Vol. 63 No. 1, pp. 126-151.
- Keinan, A. and Kivetz, R. (2011), "Productivity orientation and the consumption of collectable experiences", *Journal of Consumer Research*, Vol. 37 No. 6, pp. 935-950.
- Khuong, M., Ai, P. and Giang, B. (2020), "Drivers of life satisfaction and happiness: evidence from Can Tho city, vietnam", *Management Science Letters*, Vol. 10 No. 15, pp. 3597-3604.
- Kleine, R.E., Kleine, S.S. and Kernan, J.B. (1993), "Mundane consumption and the self: a social-identity perspective", *Journal of Consumer Psychology*, Vol. 2 No. 3, pp. 209-235.
- Kock, N. (2015), "Common method bias in PLS-SEM: a full collinearity assessment approach", *International Journal of e-Collaboration*, Vol. 11 No. 4, pp. 1-10.
- Kozinets, R.V., De Valck, K., Wojnicki, A.C. and Wilner, S.J. (2010), "Networked narratives: understanding word-of-mouth marketing in online communities", *Journal of Marketing*, Vol. 74 No. 2, pp. 71-89.
- Landau, M.J. and Sullivan, D. (2015), "Terror management motivation at the core of personality", in Mikulincer, M., Shaver, P.R., Cooper, M.L. and Larsen, R.J. (Eds), *APA Handbooks in Psychology®. APA Handbook of Personality and Social Psychology, Vol. 4. Personality Processes and Individual Differences*, American Psychological Association, pp. 209-230.
- Levasseur, O., McDermott, M.R. and Lafreniere, K.D. (2015), "The multidimensional mortality awareness measure and model: development and validation of a new Self-Report questionnaire and psychological framework", *Omega - Journal of Death and Dying*, Vol. 70 No. 3, pp. 317-341.
- Litman, L., Robinson, J. and Abberbock, T. (2017), "TurkPrime.com: a versatile crowdsourcing data acquisition platform for the behavioral sciences", *Behavior Research Methods*, Vol. 49 No. 2, pp. 433-442.
- Meade, A.W. and Craig, S.B. (2012), "Identifying careless responses in survey data", *Psychological Methods*, Vol. 17 No. 3, pp. 437.
- Melchionne, K. (1999), "Collecting as an art", *Philosophy and Literature*, Vol. 23 No. 1, pp. 148-156.
- Oyserman, D., Fryberg, S.A. and Yoder, N. (2007), "Identity-based motivation and health", *Journal of Personality and Social Psychology*, Vol. 93 No. 6, p. 1011.
- Pearce, S. (2006), "General preface to the series", In Arnold, K. *Cabinets for the Curious: looking Back at Early English Museums*, Pearce, S (Ed.), Aldershot, Ashgate Publishing, Ltd., 7.
- Price, L.L., Arnould, E.J. and Curasi, C.F. (2000), "Older consumers' disposition of special possessions", *Journal of Consumer Research*, Vol. 27 No. 2, pp. 179-201.
- Pyszczynski, T., Greenberg, J. and Solomon, S. (1997), "Why do we need what we need? A terror management perspective on the roots of human social motivation", *Psychological Inquiry*, Vol. 8 No. 1, pp. 1-20.
- Richins, M.L., McKeage, K.K. and Najjar, D. (1992), "An exploration of materialism and consumption-related affect", *ACR North American Advances*, Vol. 19, pp. 229-236.
- Richins, M.L. (2004), "The material values scale: Measurement properties and development of a short form", *Journal of Consumer Research*, Vol. 31 No. 1, pp. 209-219.
- Rogan, B. (1998), "On collecting as play, creativity and aesthetic practice", *Etnofoor*, Vol. 11 No. 1, pp. 40-54.
- Ruvio, A., Shoham, A. and Makovec Brenčič, M. (2008), "Consumers' need for uniqueness: short-form scale development and cross-cultural validation", *International Marketing Review*, Vol. 25 No. 1, pp. 33-53.
- Ryan, L. and Dziurawiec, S. (2001), "Materialism and its relationship to life satisfaction", *Social Indicators Research*, Vol. 55 No. 2, pp. 185-197.
- Schouten, J.W. (1991), "Selves in transition: symbolic consumption in personal rites of passage and identity reconstruction", *Journal of Consumer Research*, Vol. 17 No. 4, pp. 412-425.
- Shrum, L.J., Wong, N., Arif, F., Chugani, S.K., Gunz, A., Lowrey, T.M. and Sundie, J. (2013), "Reconceptualizing materialism as identity goal pursuits: functions, processes, and consequences", *Journal of Business Research*, Vol. 66 No. 8, pp. 1179-1185.
- Silberman, M.S., Tomlinson, B., LaPlante, R., Ross, J., Irani, L. and Zaldivar, A. (2018), "Responsible research with crowds: pay crowdworkers at least minimum wage", *Communications of the ACM*, Vol. 61 No. 3, pp. 39-41.
- Smith, K. and Apter, M.J. (1977), "Collecting antiques: a psychological interpretation", *Antique Collector*, Vol. 48 No. 7, pp. 64-66.

- Smith, S.M., Roster, C.A., Golden, L.L. and Albaum, G.S. (2016), "A multi-group analysis of online survey respondent data quality: comparing a regular USA consumer panel to MTurk samples", *Journal of Business Research*, Vol. 69 No. 8, pp. 3139-3148.
- Snyder, C.R. and Fromkin, H.L. (1980), *Uniqueness: The Human Pursuit of Difference*, Plenum, New York, NY.
- Snyder, C.R. and Fromkin, H.L. (1977), "Abnormality as a positive characteristic: the development and validation of a scale measuring need for uniqueness", *Journal of Abnormal Psychology*, Vol. 86 No. 5, pp. 518.
- Sørensen, E.B. and Thomsen, T.U. (2005), *The Lived Meaning of Symbolic Consumption and Identity Construction in Stable and Transitional Phases: Towards an Analytical Framework*, ACR European Advances.
- Spaid, B. (2018), "Exploring consumer collecting behavior: a conceptual model and research agenda", *Journal of Consumer Marketing*, Vol. 35 No. 6, pp. 653-662.
- Stets, J.E. and Burke, P.J. (2000), "Identity theory and social identity theory", *Social Psychology Quarterly*, Vol. 63 No. 3, pp. 224-237.
- Stewart, S. (1993), *On Longing: Narratives of the Miniature, the Gigantic, the Souvenir, the Collection*, Duke University Press, Durham, NC.
- Stryker, S. and Burke, P.J. (2000), "The past, present, and future of an identity theory", *Social Psychology Quarterly*, Vol. 63 No. 4, pp. 284-297.
- Stryker, S. and Serpe, R.T. (1982), "Commitment, identity salience, and role behavior: Theory and research example", in *Personality, Roles, and Social Behavior*, Springer, New York, NY, pp. 199-218.

- Teitcher, J.E., Bocking, W.O., Bauermeister, J.A., Hofer, C.J., Miner, M.H. and Klitzman, R.L. (2015), "Detecting, preventing, and responding to "fraudsters" in internet research: ethics and tradeoffs. The journal of law", *The Journal of Law, Medicine & Ethics: a Journal of the American Society of Law, Medicine & Ethics*, Vol. 43 No. 1, pp. 116-133.
- Thoits, P.A. (1983), "Multiple identities and psychological well-being: a reformulation and test of the social isolation hypothesis", *American Sociological Review*, Vol. 48 No. 2, pp. 174-187.
- Thoits, P.A. (2012), "Role-identity salience, purpose and meaning in life, and well-being among volunteers", *Social Psychology Quarterly*, Vol. 75 No. 4, pp. 360-384.
- Tian, K.T., Bearden, W.O. and Hunter, G.L. (2001), "Consumers' need for uniqueness: scale development and validation", *Journal of Consumer Research*, Vol. 28 No. 1, pp. 50-66.

### Further reading

- Bianchi, M. (1997), "Collecting as a paradigm of consumption", *Journal of Cultural Economics*, Vol. 21 No. 4, pp. 275-289.
- Formanek, R. (2012), "Why they collect: Collectors reveal their motivations", in Pearce S. (Ed.) *Interpreting Objects and Collections*, Routledge, New York, NY, pp. 327-335.
- Stryker, S. (1968), "Identity salience and role performance: the relevance of symbolic interaction theory for family research", *Journal of Marriage and the Family*, Vol. 30 No. 4, pp. 558-564.

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## Appendix

### Measurement items

**Creative expression** (adapted from short-form measures of Tian *et al.* (2001), developed by Ruvio *et al.* (2008); seven-point scale: “strongly disagree” to “strongly agree”).

- I often combine possessions in such a way that I create a personal image for myself that cannot be duplicated.
- I often try to find a more interesting version of run-of-the-mill products because I enjoy being original.
- I actively seek to develop my personal uniqueness by buying special products or brands.
- Having an eye for products that are interesting and unusual assists me in establishing a distinctive image.

**Personal legacy** (adapted from multidimensional mortality awareness measure and model, Levasseur (2015); seven-point scale: “strongly disagree” to “strongly agree”).

- I want to be remembered for doing great things for the world when I am no longer alive.
- I would like to create something that will outlive me.
- I want to do things in an original way so I am valued and feel further away from death.
- When I think about the fact that we are only on earth for a short period of time, I feel that I want to create something to leave behind.

**Materialism** (short-form measures of Richins (2004); seven-point scale: “strongly disagree” to “strongly agree”).

- I admire people who own expensive homes, cars and clothes.
- The things I own say a lot about how well I am doing in life.\*
- I like to own things that impress people.
- I try to keep my life simple, as far as possessions are concerned.\*
- Buying things gives me a lot of pleasure.
- I like a lot of luxury in my life.
- My life would be better if I owned certain things I do not have.

- I would be happier if I could afford to buy more things.\*
- It sometimes bothers me quite a bit that I cannot afford to buy all the things I would like.

**Collector identity salience** (adapted from Callero (1985) and Kleine *et al.* (1993); seven-point scale: “strongly disagree” to “strongly agree”).

- Collecting is something I constantly think about.
- I would feel at a loss if I were forced to give up collecting.
- I have strong positive feelings about collecting.
- Collecting is an important part of who I am.

**Satisfaction with life** (Diener *et al.* (1985); seven-point scale: “strongly disagree” to “strongly agree”).

- In most ways my life is close to my ideals.\*
- The conditions of my life are excellent.
- I am satisfied with my life.\*
- So far I have gotten the important things I want in life.
- If I could live my life over, I would change almost nothing.

**Collecting engagement** (new formative scale derived from Spaid (2018); six-point scale: never, very infrequently, infrequently, somewhat frequently, frequently and very frequently).

- Hunting for new objects to add to your collection.
- Networking with fellow collectors.
- Trading objects with other collectors.
- Researching collectibles.
- Planning for new objects to add to your collection.
- Showing your collection to others.
- Providing advice to other collectors.
- Dealing in collectibles.
- Changing/arranging display of the collection.
- Admiring your collection.\*
- Cataloging the objects in your collection.
- Selling objects from your collection.\*
- Planning for the long-term future of your collection.

\*Items removed from the model after measurement refinement.