

REVIEW



Psychological causes, correlates, and consequences of materialism

L. J. Shrum¹ | Lan Nguyen Chaplin² | Tina M. Lowrey¹

¹Department of Marketing, HEC Paris, Jouy-en-Josas, France

²Department of Marketing, University of Illinois at Chicago, Chicago, Illinois, USA

Correspondence

L. J. Shrum, Department of Marketing, HEC Paris, Jouy-en-Josas, France.
Email: shrum@hec.fr

Funding information

HEC Foundation; Investissements d'Avenir, Grant/Award Number: ANR-11-IDEX-0003/Labex Ecodec/ANR-11-LABX-0047

Abstract

Materialism has a long history in consumer research, and the volume of research continues to expand rapidly. In this article, we review extant research on materialism, with a particular focus on research in the last 10 years. We structure the review around the antecedents and consequences of materialism. We first provide a brief review of the different conceptualizations of materialism. We then discuss antecedents in terms of interpersonal influences (socialization factors—parents, peers, and media) and intrapersonal influences (psychological factors—self-esteem, power, belongingness, and self-concept clarity). Next, we discuss some consequences of materialism, such as well-being, gratitude, and prosocial attitudes and behaviors. Finally, we conclude with suggestions for future research.

KEYWORDS

children, materialism, self-identity, socialization, well-being

1 | INTRODUCTION

Materialism is a central concept in consumer research and is arguably one of the few constructs that is more central to marketing and consumer behavior than other disciplines, with the first serious systematic scientific inquiries pioneered by consumer researchers (e.g., Belk, 1985; Richins & Dawson, 1992; see Kasser, 2016). Materialism is also a construct well known to the general public and a popular media topic. Most people likely have an intuitive feel for what materialism is and can readily give examples of beliefs, attitudes, and behaviors that reflect the general concept of materialism. In other words, they can recognize it when they see it and may even have a strong opinion about it. Although this may be sufficient for laypersons, scientists are expected to define their constructs, and consumer researchers have defined materialism in several ways, which vary widely (e.g., personal values, personality traits, extrinsic motivations, etc.; for reviews, see Ahuvia & Wong, 2002; Rustagi & Shrum, 2018).

The numerous and wide-ranging definitions present a potential conundrum. On the one hand, the diverse conceptualizations may potentially result in an embarrassment of riches, yielding a rich literature that displays both breadth and depth. On the other hand, the

diverse conceptualizations (which typically come with their own measurement scales) pose some challenges for interpreting the research findings, particularly for seemingly conflicting findings in the literature: Are these really conflicts, or are they a result of different operationalizations of the materialism construct? In other words, are the possible conflicts real, or methodological artifacts? Fortunately, as we detail in the next section, the extant literature has reached some consensus in terms of the dominant conceptualizations of materialism, and for the most part, the general findings are consistent across conceptualizations (Dittmar et al., 2014).

This review is organized as follows. First, we begin with a brief discussion of the different conceptualizations and measures of materialism. Next, we provide a selective review of research on materialism. The review is necessarily selective because the research on the antecedents and consequences of materialism is vast, making a comprehensive review untenable for the scope of this article. Instead, we constrained our review to research that loosely met the following criteria: (1) the topic area has received recent attention, (2) the research findings have shown a pattern of replication, and (3) at least some research has provided causal evidence (e.g., longitudinal and experimental manipulations). To organize the review, we develop a



conceptual framework based on the antecedents and consequences of materialism (see Figure 1). We have organized the antecedents around two broad factors: interpersonal influences and intrapersonal influences. Interpersonal influences are ones in which others may influence the development of material values and aspirations, and for the purpose of this review, pertain primarily to consumer socialization factors. Intrapersonal influences are internal dispositions (psychological factors) that influence materialism. The psychological factors primarily focus on deficits in fundamental identity needs or motives¹ (e.g., self-esteem, power, and belongingness; Pandelaere & Shrum, 2020; Shrum et al., 2013; Vignoles et al., 2006). Moreover, as Figure 1 shows, the interpersonal and intrapersonal influences are not necessarily independent, and certain interpersonal influences and socialization factors can impact psychological factors. We review some examples in subsequent sections.

In terms of the consequences, the list is potentially quite large, with most of the research focusing on negative effects of materialism on a host of well-being outcomes such as compulsive and impulsive consumption, anxiety, depression, narcissism, general happiness, and life satisfaction, just to name a small subset. Given that excellent comprehensive reviews and meta-analyses on the relation between materialism and well-being are available (Dittmar et al., 2014; Donnelly et al., 2016; Kasser, 2002, 2016), we focus primarily on the relation between materialism and life satisfaction. In addition, we review research on the relation between materialism and gratitude and the interrelations between materialism, gratitude, and well-being. Finally, we review research on the effects of materialism on prosocial behavior, in particular, the effects of materialism on helping and donation behavior, pro-environmental attitudes and behavior, and unethical beliefs and behaviors.

One important caveat to note about the conceptual framework is that the paths suggest causal relations. However, with a few exceptions, the materialism literature is predominantly correlational, thus making causal inferences difficult. That said, some of the relations are intuitively causal, particularly for the socialization factors that investigate, for example, how parent's materialistic values are passed on to their children. In contrast, the causal relations between materialism and the psychological factors are ambiguous. For example, does low self-esteem result in higher levels of materialism, or does a

materialistic focus lower self-esteem? The same is true for the presumed consequences of materialism. Do materialistic consumers become unhappy over time because of their heightened materialism, or do people that are initially unhappy become more materialistic in an effort to be happier? As we review presently, research shows that many of these relations are bidirectional, and the bidirectional arrows reflect these findings. Thus, we stress that our conceptual framework is only an organizational heuristic and is not meant to provide a strong argument for causality.

2 | CONCEPTUALIZATIONS OF MATERIALISM

The definitions of materialism are numerous. Though only a partial listing, materialism has been defined as a personal value regarding the centrality of possessions in consumer's lives (Richins & Dawson, 1992), a set of personality traits that reflect orientations with possessions (Belk, 1985), an extrinsic motivational focus that emphasizes acquisition of money, beauty, and fame (Kasser & Ryan, 1996), preferences for material goods over experiences (Van Boven & Gilovich, 2003), the use of possessions for self-identity development (Bagozzi et al., 2020; Shrum et al., 2013), and as an escape from self-awareness (Donnelly et al., 2016). Although the range of definitions is daunting, as Dittmar et al.'s (2014) review makes clear, the vast majority of research over the last two decades has involved either the Richins and Dawson (1992) conceptualization or the Kasser and Ryan (1996) conceptualization. Thus, we provide a brief review of these conceptualizations to aid interpretation of the research findings. In addition, we also provide a brief review of the Shrum et al. (2013) conceptualization of materialism. Although this conceptualization has not been extensively tested in the context of traditional materialism research, as we detail in the next section, the definition differs from those of Richins and Kasser by focusing on behavior (and its underlying identity motives) as an indicator of materialism. This motivational and behavioral focus allows us to incorporate other streams of research that typically do not fall under the category of materialism (e.g., compensatory consumption; Mandel et al., 2017).

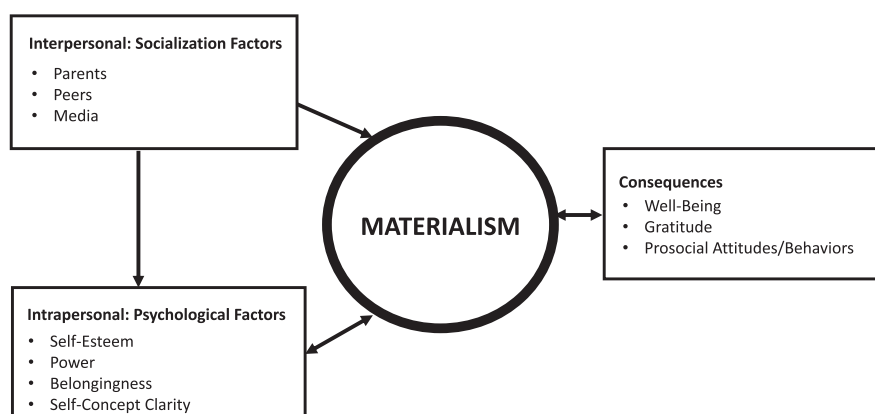


FIGURE 1 Conceptual framework: Antecedents and consequences of materialism

2.1 | Materialism as a personal value

Richins and Dawson (1992) conceptualize materialism as a personal value orientation reflected in the value that individuals place on acquisition and possession as a means to achieve their goals. More specifically, they define materialism as “the importance a person places on possessions and their acquisition as a necessary or desirable form of conduct to reach desired end states, including happiness” (p. 307), and their original 18-item Material Values Scale comprises three facets: *acquisition as the pursuit of happiness* (the belief that acquisition of possessions will increase happiness), *possession-defined success* (the belief that material possessions are indicators of success), and *acquisition centrality* (the importance of possessions in one’s life). Although these three facets are conceptually and empirically distinct, they are generally conceptualized as components or indicators of a general materialism construct and thus are typically aggregated to form a composite measure of materialism (Richins & Dawson, 1992).

2.2 | Materialism as extrinsic goal pursuit

Kasser and Ryan (1993, 1996) conceptualize materialism in terms of the life goals that individuals pursue. In particular, they view materialism in terms of the importance of extrinsic goals (e.g., financial success and social recognition), which are juxtaposed with intrinsic goals (e.g., affiliation and self-acceptance). To measure materialistic orientations, Kasser and Ryan (1996) developed a 32-item Aspiration Index that measured seven dimensions, four of which are associated with extrinsic goals (financial recognition, physical fitness, appealing appearance, and social recognition) and three of which are associated with intrinsic goals (community feeling, self-acceptance, and affiliation). The four extrinsic goal dimensions are typically aggregated to form a composite measure of materialism.

2.3 | Materialism as identity motives

Shrum et al. (2013) view materialism in terms of the extent to which individuals use products and services to bolster their self-identity. They define materialism as “the extent to which individuals attempt to engage in the construction and maintenance of the self through the acquisition and use of products, services, experiences, or relationships that are perceived to provide desirable symbolic value” (p. 1180). This conceptualization differs from those of Richins and Kasser on several dimensions. First, it focuses on behavior (both acquisition and use) rather than mental constructs such as values and goals. Second, it views materialism explicitly in terms of identity motives (construction and maintenance of the self-concept) and how possessions can symbolically signal—whether to the self or to others—important aspects of self-identity. Thus, the motives for possession acquisition and use are the determinants of whether a behavior is materialistic, and not qualities of the possession itself. For example, consider a consumer’s purchase of a large, conspicuous home. If the motive for the acquisition is to symbolically signal

success to oneself or to others, then the behavior is considered an indicator of materialism. However, if the house is purchased because it is more safe and secure than others, then the behavior is not considered materialistic. Similarly, whether the purchase of a luxury product is considered an indicator of materialism depends on whether the motive for the purchase is for its symbolic self-identity signaling (e.g., high status) or for its superior functional value (e.g., superior performance), with the former being indicative of materialistic behavior but the latter not. Thus, materialism is not necessarily a function of whether consumers buy, or what they buy, but a function of why they buy.

2.4 | Summary

Although the three conceptualizations of materialism just reviewed may on the surface appear disparate, they share similarities. Most important, the three are linked either explicitly or implicitly to self-identity motives. Shrum et al. (2013) explicitly define materialism in terms of self-identity motives (maintenance and construction), whereas Richins (2017) implicitly links self-identity motives with the perpetuation of materialism, particularly in terms of self-concept threats. Similarly, Kasser’s conceptualization (Kasser, 2016; Kasser & Ryan, 1996) of materialism as extrinsic motivation also implicitly links to self-concept motives (e.g., appealing image and social recognition). Thus, despite differences in conceptualizations and measures, the common link to self-concept development may explain why the three different conceptualizations often yield converging findings in key domains, as the next sections on the antecedents and consequences of materialism will attest.

3 | ANTECEDENTS OF MATERIALISM

3.1 | Socialization factors

Socialization is the process by which people learn the important norms, values, beliefs, and appropriate behaviors within a particular culture or subculture, thereby developing a sense of self and self-identity, which allows them to potentially become successful members of the group (Clausen, 1968). Consumer socialization pertains to the transmission of consumer-specific norms, values, and behaviors, all of which encompass the different definitions of materialism noted earlier (John, 1999). The transmission process begins with socialization agents, which can be individuals, groups, or institutions. Although there are numerous potential socialization agents, the primary ones that have been investigated in consumer socialization research are parents, peers, and media.

3.1.1 | Parents

Parents are arguably the most dominant consumer socialization agent. From birth, children learn lessons from their parents, and numerous studies have shown that materialistic parents tend to produce

materialistic children (Chaplin & John, 2010; Flouri, 1999; Goldberg et al., 2003; Russell & Shrum, 2021). The process by which parents pass on their materialistic values can be either direct or indirect. For example, parents can directly pass on their materialistic values to their children (e.g., encouraging financial aspirations and pursuit of wealth and status). Although the overall correlation between the values of parents and their children is not always large (Roest et al., 2009), it tends to be larger when the parental values are consistent with societal or cultural norms (Chan & Tam, 2016), which is arguably the case for materialism in consumer cultures. Parenting practices can also influence the extent to which children adopt their parent's materialistic values. For example, parents may use material goods to express love or incentivize their children's behavior. In one study, adults who were rewarded and punished with material goods during childhood grew up to be more materialistic than their counterparts who did not receive such rewards, a process Richins and Chaplin (2015, p. 1333) refer to as "material parenting."

The process of parental socialization of materialism may also be indirect. For example, children may infer their parent's materialism by observing their parent's pursuit of higher standards of living and external success (Ahuvia & Wong, 2002; Chaplin & John, 2010), and internalize (model) those values and behaviors (Bandura, 1977). For example, in one study, adolescents (13–16 years) were either primed or not primed with materialistic cues, and the cues were associated with four different socialization agents (mother, father, peers, and media). Priming materialistic cues associated with the role models increased participants' financial aspirations compared with those who were not primed (Zawadzka et al., 2019). Further, parenting styles may indirectly influence child materialism through the type of general parental support provided. For example, cold and controlling parenting styles are associated with children's adoption of extrinsic goals such as material success, whereas warm and democratic parenting styles are associated with the adoption of intrinsic goals (Kasser et al., 1995). In general, supportive parenting styles are associated with lower levels of materialism (Chaplin & John, 2010; Gentina, Shrum, Lowrey, Vitell, et al., 2018; Zawadzka et al., 2021).

Insecure family circumstances

Insecure family circumstances refer to family situations that may impede fulfillment of important psychological needs. Insecure family circumstances include unstable family environments that create disruption in children's lives, and economic insecurity, which can impact children's development and values.

Unstable family environments. Unstable family environments have been linked with materialism. Children whose families have been disrupted through divorce or separation hold more materialistic values as adults compared with children raised in intact families (Rindfleisch et al., 1997), and the effects are particularly strong for those who associate happiness with possessions (Roberts et al., 2003, 2005). The insecurity arising from family disruptions is highly stressful, and children may compensate by using material goods to distract from the stress.

Economic insecurity. Economic insecurity can also contribute to the development of materialistic values. Children from lower SES families are more materialistic than children from higher SES families (Chaplin et al., 2014; Kasser et al., 1995; Nairn & Oprea, 2021), and lower SES children are more influenced by branding and generally more likely to use possessions to signal self-identities and foster affiliations with peers (Chaplin et al., 2014). Similarly, perceived personal relative deprivation (belief that one is unfairly disadvantaged relative to similar others) is positively correlated with materialism (Kim et al., 2017), and priming personal relative deprivation increases materialism (Zhang et al., 2015). Finally, SES can exacerbate the negative effects of family disruptions. In the Rindfleisch et al. (1997) study just mentioned, the negative effects of family disruption on family stress and materialism were greater for lower compared with higher SES participants.

Although objective SES (e.g., actual income) is associated with holding material values and materialistic behaviors, relative income rank may be even more influential (for reviews, see Goya-Tocchetto & Payne, 2022; Payne, 2017). Consider the results of two studies based on a Dutch lottery that seem to perfectly demonstrate the "keeping up with the Joneses" effect. In the Dutch postcode lottery, lottery winners receive both cash prizes and (highly visible) luxury goods (e.g., a new BMW). In one study, neighbors of a lottery winner spent more money on new cars in the year following the lottery win than they did in previous years (Kuhn et al., 2011), and in another study, neighbors of lottery winners were also more likely to incur debt (and go bankrupt) in the next year (Agarwal et al., 2020). Presumably, assuming that residents' incomes remained relatively stable, sudden apparent increases in their neighbors' income made residents feel relatively more financially deprived. Similarly, living in high inequality areas can also increase feelings of relative financial deprivation because the large differences between the "haves" and "have nots" make relative income rank highly salient, which can in turn increase status concerns. For example, people living in higher inequality U.S. states conduct more internet searches for luxury goods (Hannay et al., 2021; Walasek & Brown, 2015) and mention luxury goods more often on Twitter (Walasek et al., 2018) compared with those living in lower inequality states.

3.1.2 | Peers

Peers are also a powerful socialization agent. Children and adolescents often adopt products and brands to gain the approval of their peers and avoid ridicule (Richins, 2017; Wooten, 2006), particularly for the peers they view as role models for appropriate consumer behavior (Churchill & Moschis, 1979). Being "cool" and popular are strong motivations for children and adolescents (Belk, 2015). Across cultures, brands and possessions are strong indicators of coolness and popularity (Banerjee & Dittmar, 2008; Belk, 2015; Belk et al., 2010; Chaplin & Lowrey, 2010). Similarly, susceptibility to peer influence is positively associated with materialism, particularly for children with low self-esteem (Jiang et al., 2015). Thus, similar to the examples noted for parental influence, materialistic adolescents tend to have

materialistic friends (Chaplin & John, 2010; Richins, 2017). However, although peers may exert their influence through negative means, such as ostracizing others for owning the wrong brands, positive peer support can decrease levels of materialism among friends (Chaplin & John, 2010; Gentina, Shrum, Lowrey, Vitell, et al., 2018). Finally, adults are also influenced by their peers. For example, in one large-scale study ($N = 2702$), living in higher SES neighborhoods was associated with holding more materialistic values, and this effect was independent of the participants' own SES, which was actually negatively correlated with materialism (Zhang et al., 2016).

3.1.3 | Media

Mass media

The third primary socialization agent we focus on is media. Although all types of media serve a socialization function, mass media such as entertainment television programming has received the lion's share of attention in socialization research. Entertainment media, although often fictional, nevertheless weave narratives that reflect the norms and values of a culture. In fact, the fictional nature of the stories may disguise the narratives, which makes these media particularly powerful socialization agents (Gerbner & Gross, 1976). In terms of socialization of materialism, media such as television programs and movies often portray markers of materialism (luxury, affluence, and wealth) as desirable end goals. The programs also often weave materialistic narratives that put possessions as central, necessary for happiness, and signals of success (Shrum & Lee, 2012), which roughly capture the three dimensions of the Material Values Scale (Richins & Dawson, 1992).

Just as with the other socialization agents, the messages of mass media affect consumers' normative perceptions, attitudes, and values. For example, frequency of television viewing is positively associated with perceptions of societal and individual wealth. The more people watch television, the higher their estimates of the percentage of Americans who have maids or servants, swimming pools, yachts, or belong to country clubs (O'Guinn & Shrum, 1997; Shrum, 2001; Yang & Oliver, 2010). Media portrayals also cultivate the desire to own these markers of affluence and success. For example, frequency of television viewing is positively associated with scores on the Material Values Scale (Russell & Shrum, 2021; Shrum et al., 2005; Sirgy et al., 1998; Yang & Oliver, 2010) and extrinsic orientations (Sheldon & Kasser, 1995). Experimental (Leyva, 2018; Shrum et al., 2011) and quasi-experimental (Hyll & Schneider, 2013) studies that have manipulated viewing content provide converging evidence that viewing of materialistic media narratives increases materialism.

Advertising

Advertising can also promote materialism, and several studies have linked frequency of ad viewing with materialistic values. Both cross-sectional (Buijzen & Valkenburg, 2003) and longitudinal (Opree et al., 2014) studies have demonstrated positive correlations between children's advertising viewing and materialism. However, the

underlying process by which advertising viewing influences materialism is not clear, and several non-mutually exclusive possibilities seem plausible. One possibility is that the effects are similar to the ones noted for entertainment television effects. Ads often use symbolic narratives to persuade, and these narratives focus on the same cultural norms and values, in particular the importance of material goods in achieving the good life. A second possibility is more direct: The ads may simply make children (and adults) want more, regardless of what they already have (Richins, 2017). A third possibility is that ads may promote upward comparisons (Richins, 1991), which may threaten psychological security such as self-esteem, which may in turn trigger compensatory strategies to reduce the psychological distress (Kasser et al., 2004; Richins, 1995). Finally, it is important to note that for the most part, separating out the effects of advertising and the effects of the program content is difficult if not impossible, thus making the precise causal mechanism even more ambiguous. Regardless, it seems likely that all the effects may work in concert, which may explain why the effect sizes for the TV viewing-materialism relation are usually sizeable (Russell & Shrum, 2021).

Social media

Recent research has also documented a relation between social media usage and materialism. For example, young adults' social media usage is positively correlated with their levels of materialism (Ho et al., 2019; Islam et al., 2018; Sharif & Khanekharab, 2017), and similar relations are observed for adolescents (Islam et al., 2018). The relation appears to occur because social media usage results in more social comparison, which increases materialism (Chan, 2013; for a review, see Richins & Chaplin, 2021).

3.1.4 | Summary

People develop materialistic values and goals in part from other people or institutions. We focused on three socialization factors that have received the most attention to date in materialism research: parents, peers, and the media. Although much of the research we reviewed focused on the development of materialism in children and adolescents, adults are also influenced by external forces, particularly peers and the media. Peers and the media in combination can be a potent force that induces upward comparisons, which can foster the well-known "keeping up with the Joneses" syndrome of using material goods as a benchmark for success or failure (Christen & Morgan, 2005). In the next section, we turn to intrapersonal influences, and discuss how particular psychological factors influence materialism.

3.2 | Psychological factors

The psychological factors pertain primarily to fundamental identity motives, which form the core of self-identity (Chaplin, Shrum, & Lowrey, 2019). A voluminous literature has developed detailing how different aspects of self-identity influence materialistic goal pursuits, and thus an



exhaustive account of this research is beyond the scope of this review. Instead, we focus on four psychological factors that have received the most attention in materialism research, with an emphasis on the most recent findings. The four factors are self-esteem, power, belongingness, and self-concept clarity. We also note that although the concepts are conceptually distinct, they are also often related, with deficits in one factor leading to deficits in other factors.

Identity motives are closely linked to material possessions. People often use possessions to signal important aspects of themselves (Berger & Heath, 2007), particularly when they feel threats to core aspects of their self-identity. Such threats produce what Higgins (1987) terms *self-discrepancies*, which represent a gap between the actual and ideal self. These self-discrepancies can be chronic: Some people may have chronically low self-esteem, may generally feel powerless, or may frequently feel their belongingness needs are not being met. Self-discrepancies can also be temporary, produced by certain situations that momentarily lower self-esteem (failure on a test), feelings of power (laid off from work), or feelings of belonging (socially excluded). However, regardless of the temporal nature of the self-discrepancies, they produce aversive feelings that people are highly motivated to alleviate, and the use of products and services is one way people may attempt to bolster their threatened identities. Rucker, Galinsky, and colleagues refer to this process as *compensatory consumption* (Mandel et al., 2017; Rucker & Galinsky, 2013), and there is correlational evidence that self-discrepancies are positively related to materialism (Carr & Vignoles, 2011). In the next sections, we review research linking materialism and deficits in self-identity motives.

3.2.1 | Self-esteem

Self-esteem refers to a person's general feelings of self-worth (Baumeister, 1998). One common explanation for materialism is that people use possessions to bolster self-worth, and numerous studies confirm a close link between self-esteem and materialism. For example, chronically lower self-esteem is correlated with higher levels of materialism both in adults (Chang & Arkin, 2002; Kim et al., 2017; Reeves et al., 2012; Richins & Dawson, 1992) and children (Chaplin & John, 2007, 2010; Gentina, Shrum, & Lowrey, 2018; Zawadzka et al., 2021). Experimental evidence also supports the causal link between self-esteem and materialism. Priming self-doubt (closely related to self-esteem) increased adults' endorsement of material values (Chang & Arkin, 2002) and desire for status products (Sivanathan & Pettit, 2010), whereas boosting self-esteem decreased children's levels of materialism (Chaplin & John, 2007; Jiang et al., 2015). Finally, the Chaplin and John (2010) and Gentina, Shrum, Lowrey, Vitell, et al. (2018) studies are examples of the relations between the socialization factors and the psychological factors. In those studies, higher levels of both parental support and peer support were associated with higher self-esteem, which in turn was associated with lower levels of materialism. Thus, the psychological factor (self-esteem) mediated the relation between the socialization factors (parental and peer support) and materialism.

3.2.2 | Power

Power is defined as the extent to which people have control over outcomes and resources, including one's own and those of others (Keltner et al., 2003; Rucker & Galinsky, 2008). Although conceptually distinct, power is also closely linked to status, with power pertaining to control of socially valuable resources, and status pertaining to respect, esteem, and admiration from others (Blader & Chen, 2012; Hays & Bendersky, 2015), from which social influence follows (Magee & Galinsky, 2008). Although power and status can be measured as relatively objective constructs (how much control over resources or the degree of respect and admiration one has), they can also be subjective constructs independent of objective levels (i.e., the extent to which individuals perceive their own level of power or status), and both objective and subjective feelings of power can influence decision-making (Rucker & Galinsky, 2017).

Material goods, particularly status goods, are useful for signaling both qualities: Owning expensive products signals high levels of economic resources, and status brands can signal social standing (Sundie et al., 2011; Wang & Griskevicius, 2014). Thus, people who feel deficits to their feelings of personal power may use products to signal—either to themselves or others—high levels of power and status. Both correlational and experimental studies support this reasoning. Chronically low levels of power are associated with higher levels of materialism in adults (Kashdan & Breen, 2007; Kim et al., 2017) and children (Gentina, Shrum, Lowrey, Vitell, & Rose, 2018). Experimentally manipulating power produces similar effects. Power-threatened participants were willing to pay more for status products (Rucker et al., 2014; Rucker & Galinsky, 2008; Rustagi & Shrum, 2019) and engage in more conspicuous consumption (Rucker & Galinsky, 2009), compared with non-threatened participants, but these effects were eliminated when power was boosted (Lee et al., 2017; Lee & Shrum, 2012).

Although most of the research on the effects of power on conspicuous and status consumption pertains to the effects of power deficits, there are instances in which feelings of heightened personal power also influence materialistic consumption. For example, in a series of studies, Rucker et al. (2014) differentiated between experiences of power (or lack of it) and expectations of power. Consistent with previous research, when participants were primed to think about the experience of power, power threats increased status consumption compared with power boosts. However, when participants were primed to think about expectations of power, the reverse was true, with power boosts increasing status consumption compared with power threats. Thus, materialistic consumption can be driven by norms and expectations as well as deficits to the self-concept.

3.2.3 | Belongingness

The need to belong is one of the most fundamental human motives, which likely has evolutionary roots. Social connections and support

are critical for survival (mutual protection, sharing resources) and for mental well-being (Baumeister & Leary, 1995; Williams, 2007). When people feel like their belongingness needs are not being met, and their social relationships are deficient, they feel lonely (Hawkey & Cacioppo, 2010; Perlman & Peplau, 1981), which like the other threats to fundamental needs, creates an aversive psychological state from which people are highly motivated to escape. One escape avenue is through consumption. At the most general level, materialism has been consistently shown to be positively correlated with loneliness and feelings of lack of belongingness (Ang et al., 2014; Gentina, Shrum, & Lowrey, 2018; Kashdan & Breen, 2007; Loh et al., 2021; Norris et al., 2012; Pieters, 2013; Rose & DeJesus, 2007).

In most of these studies, loneliness is considered the cause of increased materialism. However, given the correlational nature of the research, the causal direction is ambiguous. It may be that feelings of loneliness cause people to turn to material goods to alleviate the pain of loneliness, but it is also plausible that placing a higher value on material goods may increase feelings of loneliness. Prioritizing extrinsic goals such as materialism may crowd out intrinsic goals such as social relations, leading to loneliness (Kasser, 2016; Lane, 2000; Pieters, 2013). Pieters (2013) addressed this issue in a longitudinal study of over 2500 Dutch consumers across a 6-year period. The results of that study showed support for both possibilities: Loneliness at Time 1 was positively correlated with materialism at Time 2 (across the 6 years), and materialism at Time 1 was also positively correlated with loneliness at Time 2, indicating that the relation between loneliness and materialism is indeed bidirectional. However, the results also suggested that the effect of loneliness on materialism was greater than the reverse effect.

Experimental research also supports the link between belongingness needs and materialism, in particular, using material goods to compensate for threats to belongingness. For example, socially excluded consumers showed increased preferences for anthropomorphized brands compared with non-excluded consumers, and this effect was mediated by consumers' need for social affiliation (Chen et al., 2017). Presumably, threats to belongingness made consumers more likely to establish a relationship with a brand, and the anthropomorphizing of the brand facilitated this connection. Similarly, interacting with anthropomorphic (vs. nonanthropomorphic) products can restore feelings of belongingness (Mourey et al., 2017).

Consumers also use products to facilitate social connection, and particularly so when belongingness needs are threatened. In one study, socially excluded participants were willing to pay more than non-excluded participants for a food item they disliked that was ostensibly liked by their partner in the study (Mead et al., 2011). In another study, social exclusion increased preferences for nostalgic products because they facilitated reconnection with the past, and consumption of a nostalgic product (cookie) restored feelings of belongingness (Loveland et al., 2010). Finally, the reverse is also true: Heightened interpersonal security reduces the value that people place on possessions (Clark et al., 2011).

3.2.4 | Self-concept clarity

Self-concept clarity is the extent to which the self-concept is clearly defined and stable (Campbell, 1990). Self-concept clarity, and instability in the self-concept more generally, is central to Richins' (2017) model of materialism pathways. In early identity development, children can use either intangible, internal resources such as skills and knowledge to forge a self-identity, whereas others who may not be as confident about their abilities will gravitate to possessions for identity development. For these latter children, the greater reliance on external, tangible possessions for identity development can foster a less stable self-concept, in part because the external, tangible possessions are not really a part of the self to the degree that the internal resources are. In addition, even when the links between possessions and the self-concept may be initially clear for individuals, the meanings of the possessions are constantly changing across time. Thus, individuals with less stable concepts are more likely to develop fundamental material values.

A growing literature supports this proposition. For example, buying products more for their impression management function was associated with lower self-concept clarity and higher materialism in teens (Gil et al., 2012). This relation between self-concept clarity and materialism also persists into adulthood, with those holding more materialistic values scoring lower on self-concept clarity (Gountas et al., 2012; Mittal, 2015; Reeves et al., 2012) and related constructs such as self-concept certainty (Noguti & Bokeyar, 2014). Further, Martin et al. (2019) showed that the relation between self-concept certainty and materialism can explain why materialism tends to decline with age: Age is positively associated with greater self-concept certainty, which in turn results in lower levels of materialism. Finally, discrepancies between explicit and implicit self-esteem (which may reflect degree of self-concept clarity) influence materialism. Both measures and manipulations of self-esteem discrepancies are associated with higher levels of materialism (Park & John, 2011).

3.2.5 | Summary

The primary take-away from the research reviewed on the relations between fundamental psychological needs and materialistic orientations is that deficits in psychological needs such as self-esteem, power, belongingness, and self-concept clarity appear to drive materialistic values and behaviors. This proposition is consistent with conceptualizations of materialism as the use of possessions to repair deficits in psychological needs (Shrum et al., 2013). Chronic deficits in important psychological needs are associated with chronic levels of materialism (i.e., material values, aspirations), and situationally induced deficits result in materialistic behaviors. However, some important limitations are worth noting. First, as noted earlier, much of the research demonstrating relations between psychological needs deficits and materialism is correlational, which raises causality concerns. Thus, it may be that materialistic values and behaviors may also

impact psychological needs. Second, even though studies that experimentally manipulate the psychological needs threats can address issues of causal direction, threats to internal validity are still present. For example, even though most of the experimental studies use well-established manipulations that have been validated through manipulation checks, few if any of the studies also include confound checks (this criticism also applies to our own research).

Manipulation checks are used to show that the manipulation is manipulating what it is supposed to manipulate, whereas confound checks are used to make sure that the manipulation is not also affecting other psychological needs (Perdue & Summers, 1986). The construct validity concern arises because numerous studies show that threats to specific psychological needs can also impact other psychological needs. For example, threats to power also threaten belongingness needs (power threats increase loneliness; Waytz et al., 2015). Manipulations of social exclusion, which presumably threaten belongingness needs, also affect other psychological needs such as self-esteem, power, and feelings of a meaningful existence (Williams, 2007), and which needs are threatened by social exclusion can also depend on the type of social exclusion (e.g., being ignored vs. being rejected; Lee & Shrum, 2012; Lee et al., 2017). Thus, inferences regarding true causal effects should be made with caution.

Finally, although we have focused primarily on the effects of deficits to the self-concept on materialistic consumption, products and services can also be used to signal self-identity in the absence of self-threats. For example, consumers may use products to communicate either distinctiveness, particularly for avoidance groups (Berger & Heath, 2007, 2008; Chaplin & Lowrey, 2010; Lowrey et al., 2001), or conformity and affiliation (Han et al., 2010), without feeling any threat to their self-concept.

4 | CONSEQUENCES OF MATERIALISM

As this review has made clear thus far, research on the potential causes of materialism is voluminous. However, that volume pales in comparison to research on the consequences of materialism. Moreover, virtually all the research suggests that holding materialistic values or aspirations is remarkably bad for personal well-being across multiple measures of well-being (Shrum et al., 2014). Compared with non-materialists, materialists are less happy and less satisfied with their lives, consume more compulsively and impulsively, are more prone to anxiety and depression, and have lower levels of vitality (Kasser, 2016). Given that recent excellent meta-analyses (Dittmar et al., 2014) and comprehensive reviews (Donnelly et al., 2016) are available, and the volume of studies investigating the materialism–well-being link (the Dittmar et al. meta-analysis was based on 259 independent samples, through 2014), we will not delve deeply into specific studies on well-being, but instead discuss recent developments that may provide nuance regarding the relations between materialism and well-being. In addition, we review some non-well-being-related consequences of materialism, with a focus on the constructs that have received the most attention in prior research.

4.1 | Well-being

The Dittmar et al. (2014) meta-analysis provides a relatively recent comprehensive assessment of the relation between materialism and well-being. In compiling their database, they cast the net widely in terms of operationalizations of both materialism and well-being. A few details of the results are worth noting. First, although the overall results (collapsing across all materialism measures, and across all well-being measures) clearly show a negative relation between materialism and well-being, the relation is actually very modest (reliability-corrected correlation of .19). Second, the effect sizes differed substantially between different types of well-being. The effect sizes were lowest for measures of life satisfaction ($r = -.13$) and highest for measures of negative self-appraisals ($r = -.28$), risk behaviors ($r = -.29$), and compulsive buying ($r = -.44$). Third, the majority of studies measured materialism with the Material Values Scale, and the most common measure of well-being used was life satisfaction.

The relatively modest correlation between materialism and well-being raises the question of just how detrimental holding material values, goals, and beliefs really is. Reports of the presumed negative effect of materialism and personal well-being often seem to paint a pretty dire picture of unhappy, impulsive, poor-performing materialists. However, recent research has decomposed the Material Values Scale into its three facets (happiness, success, and centrality) and examined the effects of each paint a much more nuanced picture. For example, in the longitudinal study on materialism and loneliness discussed earlier (Pieters, 2013), although an overall positive effect of materialism on loneliness was observed (albeit $p = .056$), the effects differed substantially across the three facets of the Material Values Scale, with the success and happiness facets increasing loneliness over time, but the centrality facet decreasing loneliness over time.

Another large-scale study that looked specifically at the effect of materialism on life satisfaction found similar differential effects across facets (Jaspers et al., 2021). Both cross-sectional ($N = 1821$) and longitudinal ($N = 5307$) data revealed a negative association between materialism and life satisfaction only for the happiness facet, whereas the success and centrality facets were positively correlated with life satisfaction. Moreover, the longitudinal data revealed that the effects were bidirectional: Higher levels of the happiness facet led to lower levels of life satisfaction across time, and lower levels of life satisfaction lead to higher levels of the happiness facet over time. The positive relation between success and life satisfaction was also bidirectional, but life satisfaction did not affect the centrality facet. Similar bidirectional effects of materialism (measured by the Kasser Aspiration Index) on life satisfaction were also reported by Kasser et al. (2014).

Studies showing that only the happiness facet negatively impacts life satisfaction, and that the success and centrality facets *increase* life satisfaction, suggest that not all aspects of materialism are detrimental to well-being. Although believing one would be happier if one had more and better things (happiness facet) understandably results in lower life satisfaction, the mere love of possessions (centrality facet) and believing possessions are signals of success (success facet)

apparently do not adversely affect life satisfaction and may even increase it. Other research suggests that the negative effects of materialism on well-being may depend on other factors. For example, in a large-scale study of college students ($N = 10,659$), higher financial aspirations were negatively related to life satisfaction, but this effect was moderated by household income. The negative effects were strongest for those with lower levels of income, but the negative effect diminished as household income increased, to the point that there was little effect for those at the highest income levels (Nickerson et al., 2003). Thus, it appears that financial aspirations negatively affect life satisfaction when those financial aspirations have not been met.

The correlational findings on the materialism–well-being link are suggestive, and the longitudinal findings provide a bit more confidence in the causal direction. Recently, there has been a surge of studies that have manipulated materialism (for a review and meta-analysis, see Moldes & Ku, 2020). The manipulations often take the form of exposing (or not) participants to luxury products in some form (visuals, ads, and walking past luxury stores). Although how these manipulations map onto constructs such as those measured by the Material Values Scale or the Kasser Aspiration Index are not immediately clear, manipulation checks suggest that the manipulations do cue materialistic thoughts and increase materialistic aspirations (Bauer et al., 2012; for a review, see Moldes & Ku, 2020). Moreover, the general findings converge well with the correlational research. Situationally priming materialism increased negative affect, self-dissatisfaction, and personal relative deprivation and decreased life satisfaction and self-esteem (cf. Ashikali & Dittmar, 2012; Bauer et al., 2012; Jiang et al., 2014; Liang et al., 2016; Zhang & Zhang, 2016). In contrast to these negative effects, some experimental research suggests that engaging in materialistic behavior can have positive effects, at least in the short term. For example, compensating for self-threats through the acquisition or use of products symbolic of mastery or success on the threatened self-domain can alleviate self-discrepancies (Gao et al., 2009; Loveland et al., 2010; Rustagi & Shrum, 2019; for a review, see Mandel et al., 2017) and provide a sense of security (Richins & Chaplin, 2021).

The effect of materialism on subjective well-being may depend on the underlying motives for materialism (Shrum et al., 2013). For example, in a series of studies, Srivastava et al. (2001) measured both the importance that participants placed on making money and their motives for making money. Overall, they found that the importance of money was negatively related to subjective well-being, consistent with extant research. However, they also showed that this negative relation depended on the motives for making money. When the motives were positive (e.g., security, family support, and even simple self-pride), money importance was either unrelated to subjective well-being, or in some cases, positively related. Carver and Baird (1998) reported similar findings. In their study, when the motives for financial success were more extrinsic (e.g., gain rewards and social approval), negative relations between financial success aspirations and subjective well-being (self-actualization) were observed, consistent with previous research. However, when the financial aspirations motives were more intrinsic (reflection of one's values, mere pleasure), they were

positively related to subjective well-being. Finally, Sheldon et al. (2004) also found that both the types of goals that people pursue (extrinsic vs. intrinsic) and their underlying motives for pursuing those goals (controlled vs. autonomous) had independent effects on well-being.

Although the research just reviewed suggests that the negative effects of materialism may not be that severe in terms of general life satisfaction, we want to be clear that we are not suggesting the negative effects of materialism are trivial. In particular, the Dittmar et al. (2014) meta-analysis showed very strong relations between materialism and compulsive/impulsive² consumption and moderate relations with risk behaviors (see Estévez et al., 2021, for evidence of the bidirectional relation between materialism and compulsive consumption). Higher levels of materialism are also associated with poor money management (Donnelly et al., 2012; Zhang et al., 2016), higher levels of debt (Richins, 2011; Watson, 2003), and pathological gambling (Netermeyer et al., 1998). Thus, in some cases, the effects of materialism may be severe.

Collectively, these effects are typically explained as self-control failures of materialists. For example, in one study (Kim, 2013), priming materialistic cues (thoughts about entering a lottery) reduced self-control on a subsequent task (see also Ku et al., 2014), and the effects were more pronounced for those scoring higher on the Kasser Aspirational Index. A subsequent study showed that these effects occur because materialistic thoughts induce more concrete, lower level constructs (Trope & Liberman, 2010), which undermines self-control (Fujita et al., 2006).

Although the positive relation between materialism and impulsivity is well documented, there are circumstances when materialists may override the impulsive spending urge. Although the effect of materialism on self-control is typically explained by materialists holding the short-term goal of seeking pleasure through possessions (Richins & Dawson, 1992), materialists also aspire to the long-term goal of financial success. Materialists place a high value on wealth (Fournier & Richins, 1991), pursue higher paying jobs (Richins & Rudmin, 1994), and, paradoxically (in terms of impulsivity), can be tight with their money (Tatzel, 2002). Thus, materialists appear to hold conflicting goals. In a series of studies, Yoon and Kim (2016) tested the proposition that for materialists, perceived economic mobility (the belief that one can move up the economic ladder) may be associated with the dominance of the long-term goal of saving over the short-term goal of spending impulsively. They found that when participants were led to perceive their economic mobility to be low, they displayed the usual positive correlation between materialism and impulsive consumption. However, when participants were primed with high economic mobility, the effect of materialism on impulsive spending was eliminated.

4.2 | Gratitude

Recently, researchers have addressed the relation between materialism and gratitude and in particular the interrelations between materialism, gratitude, and well-being. Both experimental and correlational



studies suggest that increasing gratitude has a positive effect on multiple aspects of well-being (Froh et al., 2011; for a review, see Polak & McCullough, 2006). There is also accumulating evidence that those higher in materialism tend to be less grateful than those lower in materialism (Chaplin, John, Rindfleisch, et al., 2019; Froh et al., 2011; Lambert et al., 2009; McCullough et al., 2002; Tsang et al., 2014) and that gratitude mediates the effect of materialism on various measures of well-being (Lambert et al., 2009; Tsang et al., 2014). To address causality issues, Chaplin, John, Rindfleisch, et al. (2019) conducted a study with U.S. adolescents in which they manipulated gratitude. Some participants kept a daily journal in which they recorded what they were thankful for each day (gratitude condition) whereas other participants kept a journal in which they simply recorded their daily activities (control condition). Those in the gratitude condition reported lower levels of materialism compared with those in the control condition, and they also demonstrated greater generosity, donating 60% more of their earnings for participating in the study compared with those in the control condition. These findings suggest that causing individuals to focus on their good fortunes (what they are thankful for) can reduce materialism and increase well-being.

4.3 | Prosocial attitudes and behavior

Prosocial broadly refers to helping others, whether at the individual or societal level. Examples of prosocial attitudes, behaviors, and dispositions include general helping and generosity, charitable donations, and pro-environmental attitudes and behaviors. We also include unethical attitudes and behaviors, because making unethical decisions is typically motivated by the desire to take advantage of others. At a high level, it is hardly surprising that materialism is associated with less prosocial orientations. Materialism is generally associated with a self-focus (Kasser, 2002; Richins & Dawson, 1992) and treating others in self-serving ways (Kasser, 2016). Indeed, one of the dimensions of the Belk (1985) materialism scale is nongenerosity, making the association tautological. That said, the Material Values Scale correlates very highly with scores on the nongenerosity dimension of the Belk scale, suggesting that lack of generosity is an integral part of a materialistic mindset. In the next sections, we review research linking materialism and prosocial behavior, and spotlight some research that suggests ways in which materialists can be nudged to be more prosocial.

4.3.1 | Helping behavior and charitable donations

It is hardly surprising that materialists are less generous and willing to help others than nonmaterialists. Materialists are more self- than other-focused (Kasser, 2016), and priming materialism increases competitiveness and desire to outdo others (Bauer et al., 2012). Materialism is negatively correlated with various measures of generosity and helping behavior (Kasser, 2005), and priming materialism reduces desire for volunteering and feelings of obligation (Bauer et al., 2012).

In one study, across three quasi-experimental field studies, Lamy et al. (2016) stopped passersby who were either coming out of or were near luxury stores or non-luxury stores and, through the use of confederates, gave the passersby the opportunity to help a needy person (confederate on crutches who dropped a water bottle, lend their phone to confederate to call mother). Participants in the luxury store condition were significantly less likely to help compared with those in the non-luxury condition.

Materialists are particularly unlikely to be generous with their money. Materialism is associated with wealth accumulation (Kasser & Ryan, 1993, 1996), and thus giving one's money away is diametrically opposed to that goal. Indeed, materialism is negatively correlated with willingness to donate to charities (Bennett, 2003; Richins & Dawson, 1992). Similarly, priming materialism decreases pro-environmental donations (Ku & Zaroff, 2014), prosocial spending choices (Moldes, 2018), amount of money allocated in a dictator game, and increases favorable attitudes toward greed (Chen, 2015). However, there are situations in which materialists are willing to part with their money by giving it to others, and these typically involve situations that relate to status and self-enhancement. For example, in a study of online tipping in live-streaming platforms, materialism was positively correlated with both the likelihood and amount of online tipping, and self-enhancement motives mediated this effect (Wu et al., 2021). In another study that both measured and manipulated materialism, compared with nonmaterialists, materialists were more likely to contribute to a charitable cause when it involved spending more on a limited edition luxury product whose proceeds would be donated to charity than when it involved spending less on a regular edition product and donating directly to the charity, and this effect was mediated by the status-conferring properties of the limited edition product (Kim et al., 2021).

4.3.2 | Pro-environmental attitudes and behavior

Materialists not only are less generous than nonmaterialists at the individual level, they also are less generous at the societal level and exhibit less positive pro-environmental attitudes and behaviors (for a review and meta-analysis, see Hurst et al., 2013). Pro-environmental behaviors and economic self-interest are often framed as in opposition to one another, and thus, it follows that materialists would not be keen on supporting pro-environmental issues at the expense of their economic well-being. Materialism based on the Material Values Scale is negatively associated with pro-environmental beliefs, attitudes, intentions, and behaviors (Alzubaidi et al., 2021; Kilbourne & Pickett, 2008; Richins & Dawson, 1992), and endorsing materialistic goals (as measured by the Kasser Aspiration Index) is associated with behaving more greedily and less sustainably in resource dilemma games (Sheldon & McGregor, 2000), having larger ecological footprints, and engaging in fewer ecologically responsible behaviors (Brown & Kasser, 2005). In a study that manipulated situational materialism, priming materialism increased climate change skepticism in men (but not women; Vázquez et al., 2021).

Although the research just reviewed is very conclusive in establishing that materialists tend to be less pro-environmental in their actions and beliefs than nonmaterialists, some research suggests that certain characteristics of materialists may be leveraged to increase pro-environmental attitudes and behaviors. For example, when “being green” is considered socially desirable and potentially status-enhancing, materialists engage in more pro-environmental behaviors. In one study, priming status motives decreased preferences for green over non-green products when the shopping was private (online), consistent with previous research. However, when the shopping context was public (at a grocery store), priming status motives increased the attractiveness of green products over non-green products (Griskevicius et al., 2010). Similarly, priming materialism caused participants to show more greed and engage in less sustainable behaviors, consistent with Sheldon and McGregor (2000), but the effect was eliminated when participants’ behaviors were public (made in the presence of an experimenter; Wang et al., 2019).

4.3.3 | Unethical attitudes and behaviors

In the research we have reviewed thus far, it is clear that materialism is associated with concepts such as relative rank and status, power, wealth accumulation, and greed (Belk, 1985; Krekels & Pandelaere, 2015). Given these motivations, more materialistic individuals may be more likely to compromise ethical rules to achieve their power and wealth goals. Indeed, both social class and power motives predict unethical behavior. For example, those higher in social class behave more unethically than those with lower social class, but only for unethical behaviors that are self-beneficial, and this effect is mediated by higher social class members feeling a greater sense of personal power (Dubois et al., 2015).

Several studies show that materialism is positively correlated with unethical beliefs and behaviors. For example, dispositional materialism is positively associated with holding more unethical consumer beliefs, and this relation has been demonstrated across many cultures (cf. Chowdhury & Fernando, 2013; Gentina, Shrum, Lowrey, Vitell, et al., 2018; Lu & Lu, 2010; Muncy & Eastman, 1998). Materialism is also positively associated with the commission of unethical consumer behaviors (e.g., underage drinking; Gentina, Shrum, & Lowrey, 2018) and with corrupt intentions (Liang et al., 2016). In the latter study, materialism served as a mediator of the effect of lower self-esteem on greater corruption intentions.

4.4 | Summary

Research on the links between materialism and well-being is vast, with the majority showing that materialism has negative effects across many measures of well-being. Although interpreting the relation and establishing the validity of the link has long been hampered by the correlational nature of much of the research, more recent longitudinal and experimental studies have greatly increased confidence in the

notion that holding more materialistic values, goals, or aspirations reduces well-being. The research that has situationally primed materialism is particularly provocative for its implications. It appears that merely priming thoughts about luxury, for example, just by having people view luxury products, seems to cause people to be less happy. This finding is somewhat disconcerting, given that consumer cultures, particularly ones like the United States, provide constant images of luxury, and the media generally portray it as a logical aspiration. One particularly interesting finding in the meta-analysis of situational materialism primes was that the priming effects tended to be larger in samples from Eastern countries (e.g., China and Singapore) than from Western countries (e.g., the United States, the United Kingdom, and Germany; Moldes & Ku, 2020). This perhaps makes sense given that the Western countries may be more materialistic than Eastern countries (based on scores on standard materialism scales), and thus, priming luxury may not have as strong an effect for those who are more frequently exposed to it.

Although most of the materialism research shows negative effects on well-being, there are recent notable exceptions. In particular, the research that looks at the effects of materialism as a function of the different dimensions of the Material Values Scale suggests that certain types of materialism (reflected in the happiness dimension) have very negative effects, but the effects of the other two dimensions (success and centrality) may be positive. In addition, whether materialism has negative effects on well-being also depends on the motives underlying the material values and financial aspirations. Finally, in some instances, compensating for self-identity threats with products symbolic of mastery or success in the self-threat domain can successfully restore the damaged self.

The research findings we reviewed on the links between materialism and prosocial behavior are intuitive. Materialists are more self-focused than other-focused, more inclined to pursue their own self-interests, are interested in accumulating wealth, and are more competitive than nonmaterialists. Further, given that prosocial behaviors are other-focused, and often viewed as costs to the self (a zero-sum game), materialists are less motivated by prosocial concerns than nonmaterialists. Thus, compared with nonmaterialists, materialists donate less of their money and time, are less pro-environmental in their actions and behaviors, and are less ethical. However, emerging research suggests that the very characteristics of materialists that contribute to their lower prosocial orientations—in particular, their need for status—can be leveraged to nudge materialists toward more prosocial behaviors such as contributing to charities and buying more sustainable products.

5 | FUTURE DIRECTIONS FOR MATERIALISM RESEARCH

In the concluding sections, we provide some suggestions for potentially fruitful future research questions. Normally, this is not a difficult task. However, for mature research fields such as materialism, it can present some challenges: The question is not simply whether there



are unanswered research questions (there always are), but which ones are worth investigating. Put differently, in mature fields, research can devolve into minor refinements or reframing of concepts that may not represent sufficiently large contributions. That said, based on our review, we have identified three areas that we think have potential for making important advances for materialism research.

5.1 | Greater focus on causal methods

As we noted, a large majority of materialism research is correlational, and understandably so. Although there are many conceptualizations of materialism, all view materialism as a stable individual trait or personal value, reflecting a general chronic mindset or worldview. Consequently, the measures developed to operationalize materialism are often difficult to change (when materialism is the dependent variable). Similarly, personal values and traits are difficult to manipulate situationally, and it is often not clear whether the manipulations have construct validity (i.e., whether the manipulation captures, for example, materialistic values, financial aspirations, or dispositional traits). Nevertheless, recent research that primes materialism appears to provide results that converge with the correlational findings, and thus future research would benefit from the inclusion of experimental manipulations in a research package (with the stipulation that the manipulations are validated with manipulation and confound checks).

Longitudinal research also provides some advancements in terms of establishing causality. Although falling short of the gold standard of randomized control trials (longitudinal research often cannot address other-variable explanations), longitudinal research can address questions of causal direction and can also address questions of whether the relations between materialism and presumed outcome variables might be bidirectional (e.g., subjective well-being, loneliness; Kasser et al., 2014; Jaspers et al., 2021; Pieters, 2013), as many researchers have suggested. Moreover, the bidirectionality question is important in its own right: Is it a vicious cycle, or virtuous cycle? Of course, calling for longitudinal research is easy to do, but actually doing longitudinal research, well, not so much. Well-designed longitudinal studies are expensive, difficult to design and implement, and carry many uncertainties (how many waves, how long between waves, which measures). That said, the recent developments of crowdsourcing research platforms such as MTurk and Prolific have made it possible to conduct less expensive longitudinal studies, and thus longitudinal research is potentially available even with scarce resources.

5.2 | Bad or good materialism?

Another promising direction for future research is better understanding when and why materialism may have negative or positive effects. For example, several studies we reviewed found that the relations between materialism and aspects of well-being differed as a function of the different dimensions of the Material Values Scale. Generally, only the happiness dimension of the scale was negatively associated

with well-being, whereas the success and centrality dimensions were positively associated with well-being, and these relations held for both cross-sectional and longitudinal research, and across cultures (Jaspers et al., 2021; Kasser et al., 2014). The finding is provocative, given the generally negative effects of materialism, but lacks any underlying explanation. Why do the different dimensions at times produce such different outcomes? One possibility is that they are measuring fundamentally different aspects of the self; another is that they are measuring different underlying motives, consistent with the findings of Srivastava et al. (2001). Finally, we noted that some studies show that using products to reduce self-discrepancies can at times have beneficial effects, at least in the short term. Unresolved questions are how long these beneficial effects last, and under what conditions do they produce positive effects? Clearly, in some cases, compensatory consumption can backfire, and result in lower self-control (Lisjak et al., 2015). Thus, understanding the underlying processes that can facilitate, inhibit, or even worsen self-repair is crucial.

5.3 | The role of self-concept clarity

Research on the role of self-concept clarity in relatively nascent. Most of the early materialism research focused on specific psychological deficits, and has continued to do so since. Although these specific effects of different psychological needs deficits (self-esteem, power, belongingness, etc.) are important, it may be that the stability of the self-concept can capture many of these individual effects. In fact, viewed broadly, it seems that pretty much any self-threat can increase materialistic mindsets and behaviors, and oftentimes individual studies do not simultaneously account for multiple need deficits. Thus, it may be that maintaining a stable sense of self (presumably positive) may reduce the need for material goods as compensatory strategies, whereas a generally unstable self (low self-concept clarity) may foster a general sense of insecurity that fosters a materialistic worldview. Indeed, one theme underlying many of the causes of materialism can be subsumed under the category of insecurity (insecure family circumstances, insecure peer attachments, insecurities arising from media-driven social comparisons, insecure self-concept, insecurities arising from needs deficits, etc.; for a review, see Richins, 2017; Richins & Chaplin, 2021).

In conclusion, materialism research, although robust, and perhaps mature, still has some worthy research questions to answer. The questions are important to researchers, but they are also important to consumers, the consumers' friends and family, and society at large. The general notion of materialism is inescapable in consumer cultures. Despite the negative philosophical connotations and associations with shallowness and self-centeredness, all consumers are materialistic to some degree. The question is how to avoid the detrimental effects and leverage the positive effects.

ACKNOWLEDGMENTS

The writing of the article was supported by research grants from the HEC Foundation of HEC Paris and Investissements d'Avenir

(ANR-11-IDEX-0003/Labex Ecodec/ANR-11-LABX-0047) awarded to the first and third authors. The authors thank Tianyi Li for her research assistance and Elena Fumagalli, Jim Burroughs, and Aric Rindfleisch for their helpful input in the writing of this article.

ORCID

L. J. Shrum  <https://orcid.org/0000-0001-7112-6418>

Tina M. Lowrey  <https://orcid.org/0000-0002-2185-6313>

ENDNOTES

¹Fundamental identity motives have also been referred to as fundamental psychological needs (Williams, 2007), fundamental needs (Kenrick, Grisevicius, et al., 2010), and fundamental motives (Kenrick, Neuberg, et al., 2010). For the purpose of this review, we use the terms interchangeably.

²We use the term compulsive/impulsive because the Dittmar et al. meta-analysis included effects measuring both into their composite compulsive buying category, research on compulsive consumption often conflates the two constructs (Moschis, 2017).

REFERENCES

- Agarwal, S., Mikhed, V., & Scholnick, B. (2020). Peers' income and financial distress: Evidence from lottery winners and neighboring bankruptcies. *The Review of Financial Studies*, 33, 433–472. <https://doi.org/10.1093/rfs/hhz047>
- Ahuvia, A., & Wong, N. (2002). Personality and values based materialism: Their relationship and origins. *Journal of Consumer Psychology*, 12, 389–402. https://doi.org/10.1207/S15327663JCP1204_10
- Alzubaidi, H., Slade, E. L., & Dwivedi, Y. K. (2021). Examining antecedents of consumers' pro-environmental behaviours: TPD extended with materialism and innovativeness. *Journal of Business Research*, 122, 685–699. <https://doi.org/10.1016/j.jbusres.2020.01.017>
- Ang, C.-S., Mansor, A. T., & Tan, K.-A. (2014). Pangs of loneliness breed material lifestyle but don't power up life satisfaction of young people: The moderating role of gender. *Social Indicators Research*, 117, 353–365. <https://doi.org/10.1007/s11205-013-0349-0>
- Ashikali, E., & Dittmar, H. (2012). The effect of priming materialism on women's responses to thin-ideal media. *British Journal of Social Psychology*, 51, 514–533. <https://doi.org/10.1111/j.2044-8309.2011.02020.x>
- Bagozzi, R. P., Ruvio, A. A., & Xie, C. (2020). The material self. *International Journal of Research in Marketing*, 37, 661–677. <https://doi.org/10.1016/j.ijresmar.2020.03.002>
- Bandura, A. (1977). *Social learning theory*. Prentice Hall.
- Banerjee, R., & Dittmar, H. (2008). Individual differences in children's materialism: The role of peer relations. *Personality and Social Psychology Bulletin*, 34, 17–31. <https://doi.org/10.1177/0146167207309196>
- Bauer, M. A., Wilkie, J. E. B., Kim, J. K., & Bodenhausen, G. V. (2012). Cuing consumerism: Situational materialism undermines personal and social well-being. *Psychological Science*, 23, 517–523. <https://doi.org/10.1177/0956797611429579>
- Baumeister, R. F. (1998). The self. In D. Gilbert, S. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (pp. 680–740). Random House.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497–529. <https://doi.org/10.1037/0033-2909.117.3.497>
- Belk, R. W. (1985). Materialism: Trait aspects of living in the material world. *Journal of Consumer Research*, 12(3), 265–280. <https://doi.org/10.1086/208515>
- Belk, R. W. (2015). Culture and materialism. In S. Ng & A. Y. Lee (Eds.), *Handbook of culture and consumer behavior* (pp. 299–323). Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199388516.003.0014>
- Belk, R. W., Tian, K., & Paavola, H. (2010). Consuming cool: Behind the emotional mask. *Research in Consumer Behavior*, 12, 183–208. [https://doi.org/10.1108/S0885-2111\(2010\)0000012010](https://doi.org/10.1108/S0885-2111(2010)0000012010)
- Bennett, R. (2003). Factors underlying the inclination to donate to particular types of charities. *International Journal of Nonprofit and Voluntary Sector Marketing*, 8, 12–29. <https://doi.org/10.1002/nvsm.198>
- Berger, J., & Heath, C. (2007). Where consumers diverge from others: Identity signaling and product domains. *Journal of Consumer Research*, 34, 121–134. <https://doi.org/10.1086/519142>
- Berger, J., & Heath, C. (2008). Who drives divergence? Identity signaling, outgroup dissimilarity, and the abandonment of cultural tastes. *Journal of Personality and Social Psychology*, 95, 593–607. <https://doi.org/10.1037/0022-3514.95.3.593>
- Blader, S. L., & Chen, Y.-R. (2012). Differentiating the effects of status and power: A justice perspective. *Journal of Personality and Social Psychology*, 102, 994–1014. <https://doi.org/10.1037/a0026651>
- Brown, K. W., & Kasser, T. (2005). Are psychological and ecological well-being compatible? The role of values, mindfulness, and lifestyle. *Social Indicators Research*, 74, 349–368. <https://doi.org/10.1007/s11205-004-8207-8>
- Buijzen, M., & Valkenburg, P. M. (2003). The effects of television advertising on materialism, parent-child conflict, and unhappiness: A review of research. *Journal of Applied Developmental Psychology*, 24, 437–456. [https://doi.org/10.1016/S0193-3973\(03\)00072-8](https://doi.org/10.1016/S0193-3973(03)00072-8)
- Campbell, J. D. (1990). Self-esteem and clarity of the self-concept. *Journal of Personality and Social Psychology*, 59, 538–549. <https://doi.org/10.1037/0022-3514.59.3.538>
- Carr, H. L., & Vignoles, V. L. (2011). Keeping up with the joneses: Status projection as symbolic self-completion. *European Journal of Social Psychology*, 41, 518–527. <https://doi.org/10.1002/ejsp.812>
- Carver, C. S., & Baird, E. (1998). The American dream revisited: Is it what you want or why you want it that matters? *Psychological Science*, 9, 289–292. <https://doi.org/10.1111/1467-9280.00057>
- Chan, H.-W., & Tam, K.-P. (2016). Understanding the lack of parent-child value similarity: The role of perceived norms in value socialization in immigrant families. *Journal of Cross-Cultural Psychology*, 47, 651–669. <https://doi.org/10.1177/0022022116635744>
- Chan, K. (2013). Development of materialistic values among children and adolescents. *Young Consumers*, 14, 244–257. <https://doi.org/10.1108/YC-01-2013-00339>
- Chang, L., & Arkin, R. M. (2002). Materialism as an attempt to cope with uncertainty. *Psychology and Marketing*, 19, 389–406. <https://doi.org/10.1002/mar.10016>
- Chaplin, L., Shrum, L. J., & Lowrey, T. M. (2019). Children's materialism and identity development. In A. Reed, II & M. Forehand (Eds.), *Handbook of research on identity theory in marketing* (pp. 434–447). Edward Elgar Publishing. <https://doi.org/10.4337/9781788117739.00042>
- Chaplin, L. N., Hill, R. P., & John, D. J. (2014). Poverty and materialism: A look at impoverished versus affluent children. *Journal of Public Policy & Marketing*, 33, 78–92. <https://doi.org/10.1509/jppm.13.050>
- Chaplin, L. N., & John, D. R. (2007). Growing up in a material world: Age differences in materialism in children and adolescents. *Journal of Consumer Research*, 34, 480–493. <https://doi.org/10.1086/518546>
- Chaplin, L. N., & John, D. R. (2010). Interpersonal influences on adolescent materialism: A new look at the role of parents and peers. *Journal of Consumer Psychology*, 20, 176–184. <https://doi.org/10.1016/j.jcps.2010.02.002>
- Chaplin, L. N., John, D. R., Rindfleisch, A., & Froh, J. J. (2019). The impact of gratitude on adolescent materialism and generosity. *The Journal of Positive Psychology*, 14, 502–511. <https://doi.org/10.1080/17439760.2018.1497688>

- Chaplin, L. N., & Lowrey, T. M. (2010). The development of consumer-based consumption constellations in children. *Journal of Consumer Research*, 36, 757–777. <https://doi.org/10.1086/605365>
- Chen, A. (2015). The implicit link of luxury and self-interest: The influence of luxury objects on social motivation and cooperative behaviours. [Unpublished doctoral dissertation]. University of Victoria.
- Chen, R. P., Wan, E. W., & Levy, E. (2017). The effect of social exclusion on consumer preference for anthropomorphized brands. *Journal of Consumer Psychology*, 27, 23–34. <https://doi.org/10.1016/j.jcps.2016.05.004>
- Chowdhury, R. M. M. I., & Fernando, M. (2013). The role of spiritual well-being and materialism in determining consumers' ethical beliefs: An empirical study with Australian consumers. *Journal of Business Ethics*, 113, 61–99. <https://doi.org/10.1007/s10551-012-1282-x>
- Christen, M., & Morgan, R. M. (2005). Keeping up with the joneses: Analyzing the effect of income inequality on consumer borrowing. *Quantitative Marketing and Economics*, 3, 145–173. <https://doi.org/10.1007/s11129-005-0351-1>
- Churchill, G. A. Jr., & Moschis, G. P. (1979). Television and interpersonal influences on adolescent consumer learning. *Journal of Consumer Research*, 6, 23–35. <https://doi.org/10.1086/208745>
- Clark, M. S., Greenberg, A., Hill, E., Lemay, E. P., Clark-Polner, E., & Roosth, D. (2011). Heightened interpersonal security diminishes the monetary value of possessions. *Journal of Experimental Social Psychology*, 47, 359–364. <https://doi.org/10.1016/j.jesp.2010.08.001>
- Clausen, J. A. (Ed.) (1968). *Socialization and society*. Little, Brown and Co.
- Dittmar, H., Bond, R., Hurst, M., & Kasser, T. (2014). The relationship between materialism and personal well-being: A meta-analysis. *Journal of Personality and Social Psychology*, 107, 879–924. <https://doi.org/10.1037/a0037409>
- Donnelly, G., Iyer, R., & Howell, R. T. (2012). The big five personality traits, material values, and financial well-being of self-described money managers. *Journal of Economic Psychology*, 33, 1129–1142. <https://doi.org/10.1016/j.joep.2012.08.001>
- Donnelly, G. E., Ksendzova, M., Howell, R. T., Vohs, K. D., & Baumeister, R. F. (2016). Buying to blunt negative feelings: Materialistic escape from the self. *Review of General Psychology*, 20, 272–316. <https://doi.org/10.1037/gpr0000078>
- Dubois, D., Rucker, D. D., & Galinsky, A. D. (2015). Social class, power, and selfishness: When and why upper and lower class individuals behave unethically. *Journal of Personality and Social Psychology*, 108, 436–449. <https://doi.org/10.1037/pspi0000008>
- Estévez, A., Jauregui, P., Momeñe, J., Macia, L., López-González, H., Iruarizaga, I., Riquelme-Ortiz, C., Granero, R., Fernández-Aranda, F., Vintró-Alcaraz, C., Mestre-Bach, G., Munguía, L., Solé-Morata, N., & Jiménez-Murcia, S. (2021). Longitudinal changes in gambling, buying and materialism in adolescents: A population-based study. *International Journal of Environmental Research and Public Health*, 18, 2811. <https://doi.org/10.3390/ijerph18062811>
- Flouri, E. (1999). An integrated model of consumer materialism: Can economic socialization and maternal values predict materialistic attitudes in adolescents? *The Journal of Socio-Economics*, 28, 707–724. [https://doi.org/10.1016/S1053-5357\(99\)00053-0](https://doi.org/10.1016/S1053-5357(99)00053-0)
- Fournier, S., & Richins, M. L. (1991). Some theoretical and popular notions concerning materialism. *Journal of Social Behavior and Personality*, 6, 403–414.
- Froh, J. J., Emmons, R., Card, N., Bono, G., & Wilson, J. (2011). Gratitude and the reduced costs of materialism in adolescents. *Journal of Happiness Studies*, 12, 289–302. <https://doi.org/10.1007/s10902-010-9195-9>
- Fujita, K., Trope, Y., Liberman, N., & Levin-Sagi, M. (2006). Construal levels and self-control. *Journal of Personality and Social Psychology*, 90, 351–367. <https://doi.org/10.1037/0022-3514.90.3.351>
- Gao, L., Wheeler, S. C., & Shiv, B. (2009). The “Shaken Self”: Product choices as a means of restoring self-view confidence. *Journal of Consumer Research*, 36(1), 29–38. <https://doi.org/10.1086/596028>
- Gentina, E., Shrum, L. J., & Lowrey, T. M. (2018). Coping with loneliness through materialism: Strategies matter for adolescent development of unethical behaviors. *Journal of Business Ethics*, 152, 103–122. <https://doi.org/10.1007/s10551-016-3329-x>
- Gentina, E., Shrum, L. J., Lowrey, T. M., Vitell, S. J., & Rose, G. M. (2018). An integrative model of the influence of parental and peer support on consumer ethical beliefs: The mediating role of self-esteem, power, and materialism. *Journal of Business Ethics*, 150, 1173–1186. <https://doi.org/10.1007/s10551-016-3137-3>
- Gerbner, G., & Gross, L. (1976). Living with television: The violence profile. *Journal of Communication*, 26, 173–199. <https://doi.org/10.1111/j.1460-2466.1976.tb01397.x>
- Gil, L. A., Kwon, K. N., Good, L. K., & Johnson, L. W. (2012). Impact of self on attitudes toward luxury brands among teens. *Journal of Business Research*, 65, 1425–1433. <https://doi.org/10.1016/j.jbusres.2011.10.008>
- Goldberg, M. E., Gorn, G. J., Peracchio, L. A., & Bamossy, G. (2003). Understanding materialism among youth. *Journal of Consumer Psychology*, 13, 278–288. https://doi.org/10.1207/S15327663JCP1303_09
- Gountas, J., Gountas, S., Reeves, R. A., & Moran, L. (2012). Desire for fame: Scale development and association with personal goals and aspirations. *Psychology & Marketing*, 29, 680–689. <https://doi.org/10.1002/mar.20554>
- Goya-Tocchetto, D., & Payne, K. (2022). How economic inequality shapes thought and action. *Journal of Consumer Psychology*, 32(1).
- Griskevicius, V., Tybur, J. M., & Van den Bergh, B. (2010). Going green to be seen: Status, reputation, and conspicuous consumption. *Journal of Personality and Social Psychology*, 98, 392–404. <https://doi.org/10.1037/a0017346>
- Han, Y. J., Nunes, J. C., & Drèze, X. (2010). Signaling status with luxury goods: The role of brand prominence. *Journal of Marketing*, 74(4), 15–30. <https://doi.org/10.1509/jmkg.74.4.015>
- Hannay, J. W., Payne, B. K., & Brown-Iannuzzi, J. (2021). Economic inequality and the pursuit of pleasure. *Social Psychological and Personality Science*, 12, 1254–1263. <https://doi.org/10.1177/19485506211015049>
- Hawkey, L. C., & Cacioppo, J. T. (2010). Loneliness matters: A theoretical and empirical review of consequences and mechanisms. *Annals of Behavioral Medicine: A Publication of the Society of Behavioral Medicine*, 40, 218–227. <https://doi.org/10.1007/s12160-010-9210-8>
- Hays, N. A., & Bendersky, C. (2015). Not all inequality is created equal: Effects of status versus power hierarchies on competition for upward mobility. *Journal of Personality and Social Psychology*, 108, 867–882. <https://doi.org/10.1037/pspi0000017>
- Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review*, 94, 319–340. <https://doi.org/10.1037/0033-295X.94.3.319>
- Ho, H., Shin, W., & Lwin, M. O. (2019). Social networking site use and materialistic values among youth: The safeguarding role of the parent-child relationship and self-regulation. *Communication Research*, 46, 1119–1144. <https://doi.org/10.1177/0093650216683775>
- Hurst, M., Dittmar, H., Bond, R., & Kasser, T. (2013). The relationship between materialistic values and environmental attitudes and behaviors: A meta-analysis. *Journal of Environmental Psychology*, 36, 257–269. <https://doi.org/10.1016/j.jenvp.2013.09.003>
- Hyll, W., & Schneider, L. (2013). The causal effect of watching TV on material aspirations: Evidence from the “valley of the innocent”. *Journal of Economic Behavior & Organization*, 86, 37–51. <https://doi.org/10.1016/j.jebo.2012.12.030>

- Islam, Z. S., Hameed, S., Khan, I. U., & Azam, R. I. (2018). Social comparison, materialism, and compulsive buying based on stimulus-response model: A comparative study among adolescents and young adults. *Young Consumers*, 19, 19–37. <https://doi.org/10.1108/YC-07-2017-00713>
- Jaspers, E., Pandelaere, M., Shrum, L. J., & Pieters, R. (2021). The relationship between material values and subjective well-being varies systematically between the facets of the material values scale. Manuscript under review.
- Jiang, J., Zhang, Y., Ke, Y., Hawk, S. T., & Qiu, H. (2015). Can't buy me friendship? Peer rejection and adolescent materialism: Implicit self-esteem as mediator. *Journal of Experimental Social Psychology*, 58, 48–55. <https://doi.org/10.1016/j.jesp.2015.01.001>
- Jiang, M., Gao, D. G., Huang, R., DeWall, C. N., & Zhou, X. (2014). The devil wears Prada: Advertisements of luxury brands evoke feelings of social exclusion. *Asian Journal of Social Psychology*, 17, 245–254. <https://doi.org/10.1111/ajsp.12069>
- John, D. R. (1999). Consumer socialization of children: A retrospective look at twenty-five years of research. *Journal of Consumer Research*, 26, 183–213. <https://doi.org/10.1086/209559>
- Kashdan, T. B., & Breen, W. E. (2007). Materialism and diminished well-being: Experiential avoidance as a mediating mechanism. *Journal of Social and Clinical Psychology*, 26, 521–539. <https://doi.org/10.1521/jscp.2007.26.5.521>
- Kasser, T. (2002). *The high price of materialism*. The MIT Press. <https://doi.org/10.7551/mitpress/3501.001.0001>
- Kasser, T. (2005). Frugality, generosity, and materialism in children and adolescents. In K. A. Moore & L. H. Lippman (Eds.), *What do children need to flourish? Conceptualizing and measuring indicators of positive development* (pp. 357–373). Springer. https://doi.org/10.1007/0-387-23823-9_22
- Kasser, T. (2016). Materialistic values and goals. *Annual Review of Psychology*, 67, 489–514. <https://doi.org/10.1146/annurev-psych-122414-033344>
- Kasser, T., Rosenblum, K. L., Sameroff, A. J., Deci, E. L., Niemiec, C. P., Ryan, R. M., Árnadóttir, O., Bond, R., Dittmar, H., Dungan, N., & Hawks, S. (2014). Changes in materialism, changes in psychological well-being: Evidence from three longitudinal studies and an intervention experiment. *Motivation and Emotion*, 38, 1–22. <https://doi.org/10.1007/s11031-013-9371-4>
- Kasser, T., & Ryan, R. M. (1993). A dark side of the American dream: Correlates of financial success as a central life aspiration. *Journal of Personality and Social Psychology*, 65(2), 410–422. <https://doi.org/10.1037/0022-3514.65.2.410>
- Kasser, T., & Ryan, R. M. (1996). Further examining the American dream: Differential correlates of intrinsic and extrinsic goals. *Personality and Social Psychology Bulletin*, 22, 280–287. <https://doi.org/10.1177/0146167296223006>
- Kasser, T., Ryan, R. M., Couchman, C. E., & Sheldon, K. M. (2004). Materialistic values: Their causes and consequences. In T. Kasser & A. D. Kanner (Eds.), *Psychology and consumer culture: The struggle for a good life in a materialistic world* (pp. 11–28). American Psychological Association. <https://doi.org/10.1037/10658-002>
- Kasser, T., Ryan, R. M., Zax, M., & Sameroff, A. J. (1995). The relations of maternal and social environments to late adolescents' materialistic and prosocial values. *Developmental Psychology*, 31, 907–914. <https://doi.org/10.1037/0012-1649.31.6.907>
- Keltner, D., Gruenfeld, D. H., & Anderson, C. (2003). Power, approach, and inhibition. *Psychological Review*, 110, 265–284. <https://doi.org/10.1037/0033-295X.110.2.265>
- Kenrick, D. T., Griskevicius, V., Neuberg, S. L., & Schaller, M. (2010). Renovating the pyramid of needs: Contemporary extensions built upon ancient foundations. *Perspectives on Psychological Science*, 5, 292–314. <https://doi.org/10.1177/1745691610369469>
- Kenrick, D. T., Neuberg, S. L., Griskevicius, V., Becker, D. V., & Schaller, M. (2010). Goal-driven cognition and functional behavior: The fundamental-motives framework. *Current Directions in Psychological Science*, 19, 63–67. <https://doi.org/10.1177/0963721409359281>
- Kilbourne, W. E., & Pickett, G. (2008). How materialism affects environmental beliefs, concern, and environmentally responsible behavior. *Journal of Business Research*, 61, 885–893. <https://doi.org/10.1016/j.jbusres.2007.09.016>
- Kim, H. (2013). Situational materialism: How entering a lottery may undermine self-control. *Journal of Consumer Research*, 40, 759–772. <https://doi.org/10.1086/673191>
- Kim, H., Callan, M. J., Gheorghiu, A. I., & Matthews, W. J. (2017). Social comparison, personal relative deprivation, and materialism. *British Journal of Social Psychology*, 56, 373–392. <https://doi.org/10.1111/bjso.12176>
- Kim, S., Park, K., & Shrum, L. J. (2021). Cause-related marketing of luxury brands: Nudging materialists to act prosocially. Manuscript under review.
- Krekels, G., & Pandelaere, M. (2015). Dispositional greed. *Personality and Individual Differences*, 74, 225–230. <https://doi.org/10.1016/j.paid.2014.10.036>
- Ku, L., Dittmar, H., & Banerjee, R. (2014). To have or to learn? The effects of materialism on British and Chinese children's learning. *Journal of Personality and Social Psychology*, 106, 803–821. <https://doi.org/10.1037/a0036038>
- Ku, L., & Zaroff, C. (2014). How far is your money from your mouth? The effects of intrinsic relative to extrinsic values on willingness to pay and protect the environment. *Journal of Environmental Psychology*, 40, 472–483. <https://doi.org/10.1016/j.jenvp.2014.10.008>
- Kuhn, P., Kooreman, P., Soeteven, A., & Kapteyn, A. (2011). The effects of lottery prizes on winners and their neighbors: Evidence from the Dutch postcode lottery. *American Economic Review*, 101, 2226–2247. <https://doi.org/10.1257/aer.101.5.2226>
- Lambert, N. M., Fincham, F. D., Stillman, T. F., & Dean, L. R. (2009). More gratitude, less materialism: The mediating role of life satisfaction. *Journal of Positive Psychology*, 4, 32–42. <https://doi.org/10.1080/17439760802216311>
- Lamy, L., Guéguen, N., Fischer-Lokou, J., & Guegan, J. (2016). “Wrong place to get help”: A field experiment on luxury stores and helping behavior. *Social Influence*, 11, 130–139. <https://doi.org/10.1080/15534510.2016.1160839>
- Lane, R. E. (2000). *The loss of happiness in market democracies*. Yale University Press.
- Lee, J., & Shrum, L. J. (2012). Conspicuous consumption versus charitable behavior in response to social exclusion: A differential needs explanation. *Journal of Consumer Research*, 39, 530–544. <https://doi.org/10.1086/664039>
- Lee, J., Shrum, L. J., & Yi, Y. J. (2017). The role of communication norms in social exclusion effects. *Journal of Consumer Psychology*, 27, 108–116. <https://doi.org/10.1016/j.jcps.2016.05.006>
- Leyva, R. (2018). Experimental insights into the socio-cognitive effects of viewing materialistic media messages on welfare support. *Media Psychology*, 22, 601–625. <https://doi.org/10.1080/15213269.2018.1484769>
- Liang, Y., Liu, L., Tan, X., Huang, Z., Dang, J., & Zheng, W. (2016). The effect of self-esteem on corrupt intention: The mediating role of materialism. *Frontiers in Psychology*, 7, 1063. <https://doi.org/10.3389/fpsyg.2016.01063>
- Lisjak, M., Bonezzi, A., Kim, S., & Rucker, D. D. (2015). Perils of compensatory consumption: Within-domain compensation undermines subsequent self-regulation. *Journal of Consumer Research*, 41, 1186–1203. <https://doi.org/10.1086/678902>
- Loh, H. S., Gaur, S. S., & Sharma, P. (2021). Demystifying the link between emotional loneliness and brand loyalty: Mediating roles of nostalgia,

- materialism, and self-brand connections. *Psychology & Marketing*, 38, 537–552. <https://doi.org/10.1002/mar.21452>
- Loveland, K. E., Smeesters, D., & Mandel, N. (2010). Still preoccupied with 1995: The need to belong and preference for nostalgic products. *Journal of Consumer Research*, 37(3), 393–408. <https://doi.org/10.1086/653043>
- Lowrey, T. M., Englis, B. G., Shavitt, S., & Solomon, M. R. (2001). Response latency verification of consumption constellations: Implications for advertising strategy. *Journal of Advertising*, 30(1), 29–39. <https://doi.org/10.1080/00913367.2001.10673629>
- Lu, L.-C., & Lu, C.-J. (2010). Moral philosophy, materialism, and consumer ethics: An exploratory study in Indonesia. *Journal of Business Ethics*, 94, 193–210. <https://doi.org/10.1007/s10551-009-0256-0>
- Magee, J. C., & Galinsky, A. D. (2008). Social hierarchy: The self-reinforcing nature of power and status. *The Academy of Management Annals*, 2, 351–398. <https://doi.org/10.5465/19416520802211628>
- Mandel, N., Rucker, D. D., Levav, J., & Galinsky, A. D. (2017). The compensatory consumer behavior model: How self-discrepancies drive consumer behavior. *Journal of Consumer Psychology*, 27, 133–146. <https://doi.org/10.1016/j.jcps.2016.05.003>
- Martin, C., Czellar, S., & Pandelaere, M. (2019). Age-related changes in materialism in adults—A self-uncertainty perspective. *Journal of Research in Personality*, 78, 16–24. <https://doi.org/10.1016/j.jrp.2018.09.007>
- McCullough, M. E., Emmons, R. A., & Tsang, J.-A. (2002). The grateful disposition: A conceptual and empirical topography. *Journal of Personality and Social Psychology*, 82, 112–127. <https://doi.org/10.1037/0022-3514.82.1.112>
- Mead, N. L., Baumeister, R. F., Stillman, T. F., Rawn, C. D., & Vohs, K. D. (2011). Social exclusion causes people to spend and consume strategically in the service of affiliation. *Journal of Consumer Research*, 37, 902–919. <https://doi.org/10.1086/656667>
- Mittal, B. (2015). Self-concept clarity: Exploring its role in consumer behavior. *Journal of Economic Psychology*, 46, 98–110. <https://doi.org/10.1016/j.joep.2014.11.003>
- Moldes, O. (2018). Spending money on well-being: Identity and motivation processes involved in the association of well-being with material and experiential consumer products (Doctoral thesis [PhD]). University of Sussex.
- Moldes, O., & Ku, L. (2020). Materialistic cues make us miserable: A meta-analysis of the experimental evidence for the effects of materialism on individual and societal well-being. *Psychology & Marketing*, 37, 1396–1419. <https://doi.org/10.1002/mar.21387>
- Moschis, G. P. (2017). Research frontiers on the dark side of consumer behaviour: The case of materialism and compulsive buying. *Journal of Marketing Management*, 33, 1384–1401. <https://doi.org/10.1080/0267257X.2017.1347341>
- Mourey, J. A., Olson, J. G., & Yoon, C. (2017). Products as pals: Engaging with anthropomorphic products mitigates the effects of social exclusion. *Journal of Consumer Research*, 44, 413–441. <https://doi.org/10.1093/jcr/ucx038>
- Muncy, J., & Eastman, J. (1998). Materialism and consumer ethics: An exploratory study. *Journal of Business Ethics*, 17, 137–145. <https://doi.org/10.1023/A:1005723832576>
- Nairn, A., & Oprea, S. J. (2021). TV adverts, materialism, and children's self-esteem: The role of socio-economic status. *International Journal of Market Research*, 63, 161–176. <https://doi.org/10.1177/1470785320970462>
- Netermeyer, R. G., Burton, S., Cole, L. K., Williamson, D. A., Zucker, N., Bertman, L., & Diefenbach, G. (1998). Characteristics and beliefs associated with probable pathological gambling: A pilot study with implications for the national gambling impact and policy commission. *Journal of Public Policy & Marketing*, 17, 147–160. <https://doi.org/10.1177/074391569801700201>
- Nickerson, C., Schwarz, N., Diener, E., & Kahneman, D. (2003). Zeroing in on the dark side of the American dream: A closer look at the negative consequences of the goal for financial success. *Psychological Science*, 14, 531–536. <https://doi.org/10.1046/j.0956-7976.2003.psci.1461.x>
- Noguti, V., & Bokeyar, A. L. (2014). Who am I? The relationship between self-concept uncertainty and materialism. *International Journal of Psychology*, 49, 323–333. <https://doi.org/10.1002/ijop.12031>
- Norris, J. I., Lambert, N. M., DeWall, C. N., & Fincham, F. D. (2012). Can't buy me love?: Anxious attachment and materialistic values. *Personality and Individual Differences*, 53, 666–669. <https://doi.org/10.1016/j.paid.2012.05.009>
- O'Guinn, T. C., & Shrum, L. J. (1997). The role of television in the construction of consumer reality. *Journal of Consumer Research*, 23, 278–294. <https://doi.org/10.1086/209483>
- Oprea, S. J., Buijzen, M., van Reijmersdal, E. A., & Valkenburg, P. M. (2014). Children's advertising exposure, advertised product desire, and materialism: A longitudinal study. *Communication Research*, 41, 717–735. <https://doi.org/10.1177/0093650213479129>
- Pandelaere, M., & Shrum, L. J. (2020). Fulfilling identity motives through luxury consumption. In F. Morhart, K. Wilcox, & S. Czellar (Eds.), *Research handbook on luxury branding* (pp. 57–74). Edward Elgar Publishing. <https://doi.org/10.4337/9781786436351.00014>
- Park, J. K., & John, D. R. (2011). More than meets the eye: The influence of implicit and explicit self-esteem on materialism. *Journal of Consumer Psychology*, 21, 73–87. <https://doi.org/10.1016/j.jcps.2010.09.001>
- Payne, K. (2017). *The broken ladder: How inequality affects the way we think, live, and die*. Viking.
- Perdue, B. C., & Summers, J. O. (1986). Checking the success of manipulations in marketing experiments. *Journal of Marketing Research*, 23, 317–326. <https://doi.org/10.1177/002224378602300401>
- Perlman, D., & Peplau, L. A. (1981). Toward a social psychology of loneliness. In R. Gilmour & S. Duck (Eds.), *Relationships in disorder* (Vol. 3, pp. 31–56). Academic Press.
- Pieters, R. (2013). Bidirectional dynamics of materialism and loneliness: Not just a vicious cycle. *Journal of Consumer Research*, 40, 615–631. <https://doi.org/10.1086/671564>
- Polak, E. L., & McCullough, M. E. (2006). Is gratitude an alternative to materialism? *Journal of Happiness Studies*, 7, 343–360. <https://doi.org/10.1007/s10902-005-3649-5>
- Reeves, R. A., Baker, G. A., & Truluck, C. S. (2012). Celebrity worship, materialism, compulsive buying, and the empty self. *Psychology & Marketing*, 29, 674–679. <https://doi.org/10.1002/mar.20553>
- Richins, M. L. (1991). Social comparison and the idealized images of advertising. *Journal of Consumer Research*, 18, 71–83. <https://doi.org/10.1086/209242>
- Richins, M. L. (1995). Social comparison, advertising, and consumer discontent. *American Behavioral Scientist*, 38, 593–607. <https://doi.org/10.1177/0002764295038004009>
- Richins, M. L. (2011). Materialism, transformation expectations, and spending: Implications for credit use. *Journal of Public Policy & Marketing*, 30, 141–156. <https://doi.org/10.1509/jppm.30.2.141>
- Richins, M. L. (2017). Materialism pathways: The processes that create and perpetuate materialism. *Journal of Consumer Psychology*, 27, 480–499. <https://doi.org/10.1016/j.jcps.2017.07.006>
- Richins, M. L., & Chaplin, L. N. (2015). Material parenting: How the use of goods in parenting fosters materialism in the next generation. *Journal of Consumer Research*, 41, 1333–1357. <https://doi.org/10.1086/680087>
- Richins, M. L., & Chaplin, L. N. (2021). Object attachment, transitory attachment, and materialism in childhood. *Current Opinion in Psychology*, 39, 20–25. <https://doi.org/10.1016/j.copsyc.2020.07.020>
- Richins, M. L., & Dawson, S. (1992). A consumer values orientation for materialism and its measurement: Scale development and validation.

- Journal of Consumer Research*, 19, 303–316. <https://doi.org/10.1086/209304>
- Richins, M. L., & Rudmin, F. L. (1994). Materialism and economic psychology. *Journal of Economic Psychology*, 15, 217–231. [https://doi.org/10.1016/0167-4870\(94\)90001-9](https://doi.org/10.1016/0167-4870(94)90001-9)
- Rindfleisch, A., Burroughs, J. E., & Denton, F. (1997). Family structure, materialism, and compulsive consumption. *Journal of Consumer Research*, 23(4), 312–325. <https://doi.org/10.1086/209486>
- Roberts, J. A., Manolis, C., & Tanner, J. F. (2003). Family structure, materialism, and compulsive buying: A reinquiry and extension. *Journal of the Academy of Marketing Science*, 31, 300–311. <https://doi.org/10.1177/0092070303031003007>
- Roberts, J. A., Tanner, J. F., & Manolis, C. (2005). Materialism and the family structure-stress relation. *Journal of Consumer Psychology*, 15, 183–190. https://doi.org/10.1207/s15327663jcp1502_10
- Roest, A., Dubas, J. S., Gerris, J. R., & Engels, R. C. (2009). Value similarities among fathers, mothers, and adolescents and the role of a cultural stereotype: Different measurement strategies reconsidered. *Journal of Research on Adolescence*, 19, 812–833. <https://doi.org/10.1111/j.1532-7795.2009.00621.x>
- Rose, P., & DeJesus, S. P. (2007). A model of motivated cognition to account for the link between self-monitoring and materialism. *Psychology & Marketing*, 24, 93–115. <https://doi.org/10.1002/mar.20154>
- Rucker, D. D., & Galinsky, A. D. (2008). Desire to acquire: Powerlessness and compensatory consumption. *Journal of Consumer Research*, 35, 257–267. <https://doi.org/10.1086/588569>
- Rucker, D. D., & Galinsky, A. D. (2009). Conspicuous consumption versus utilitarian ideals: How different levels of power shape consumer behavior. *Journal of Experimental Social Psychology*, 45(3), 549–555. <https://doi.org/10.1016/j.jesp.2009.01.005>
- Rucker, D. D., & Galinsky, A. D. (2013). Compensatory consumption. In A. A. Ruvio & R. W. Belk (Eds.), *The Routledge companion to identity and consumption* (pp. 207–215). Routledge.
- Rucker, D. D., & Galinsky, A. D. (2017). Social power and social class: Conceptualization, consequences, and current challenges. *Current Opinion in Psychology*, 18, 26–30. <https://doi.org/10.1016/j.copsyc.2017.07.028>
- Rucker, D. D., Hu, M., & Galinsky, A. D. (2014). The experience versus expectations of power: A recipe for altering the effects of power on behavior. *Journal of Consumer Research*, 41, 381–396. <https://doi.org/10.1086/676598>
- Russell, C. A., & Shrum, L. J. (2021). The cultivation of parent and child materialism: A parent-child dyadic study. *Human Communication Research*, 47, 284–308. <https://doi.org/10.1093/hcr/hqab004>
- Rustagi, N., & Shrum, L. J. (2018). Materialism: Conceptualizations, antecedents, and consequences. In M. R. Solomon & T. M. Lowrey (Eds.), *The Routledge companion to consumer behavior* (pp. 21–37). Routledge.
- Rustagi, N., & Shrum, L. J. (2019). Undermining the potential of compensatory consumption: A product's explicit identity connection inhibits self-repair. *Journal of Consumer Research*, 46, 119–139. <https://doi.org/10.1093/jcr/ucy064>
- Sharif, S. P., & Khanekharab, J. (2017). Identity confusion and materialism mediate the relationship between excessive social network site usage and online compulsive buying. *Cyberpsychology, Behavior and Social Networking*, 20, 494–500. <https://doi.org/10.1089/cyber.2017.0162>
- Sheldon, K. M., & Kasser, T. (1995). Coherence and congruence: Two aspects of personality integration. *Journal of Personality and Social Psychology*, 68, 531–543. <https://doi.org/10.1037/0022-3514.68.3.531>
- Sheldon, K. M., & McGregor, H. (2000). Extrinsic value orientation and the tragedy of the commons. *Journal of Personality*, 68, 383–411. <https://doi.org/10.1111/1467-6494.00101>
- Sheldon, K. M., Ryan, R. M., Deci, E. L., & Kasser, T. (2004). The independent effects of goal contents and motives on well-being: It's both what you pursue and why you pursue it. *Personality and Social Psychology Bulletin*, 30, 475–486. <https://doi.org/10.1177/0146167203261883>
- Shrum, L. J. (2001). Processing strategy moderates the cultivation effect. *Human Communication Research*, 27, 94–120. <https://doi.org/10.1093/hcr/27.1.94>
- Shrum, L. J., Burroughs, J. E., & Rindfleisch, A. (2005). Television's cultivation of material values. *Journal of Consumer Research*, 32, 473–479. <https://doi.org/10.1086/497559>
- Shrum, L. J., & Lee, J. (2012). Television's persuasive narratives: How television influences values, attitudes, and beliefs. In L. J. Shrum (Ed.), *The psychology of entertainment media: Blurring the lines between entertainment and persuasion* (2nd ed.) (pp. 147–167). Routledge. <https://doi.org/10.4324/9780203828588>
- Shrum, L. J., Lee, J., Burroughs, J. E., & Rindfleisch, A. (2011). An online process model of second-order cultivation effects: How television cultivates materialism and its consequences for life satisfaction. *Human Communication Research*, 37, 34–57. <https://doi.org/10.1111/j.1468-2958.2010.01392.x>
- Shrum, L. J., Lowrey, T. M., Pandelaere, M., Ruvio, A. A., Gentina, E., Furchheim, P., Herbert, M., Hudders, L., Lens, I., Mandel, N., Nairn, A., Samper, A., Soscia, I., & Steinfeld, L. (2014). Materialism: The good, the bad, and the ugly. *Journal of Marketing Management*, 30(17–18), 1858–1881. <https://doi.org/10.1080/0267257X.2014.959985>
- Shrum, L. J., Wong, N., Arif, F., Chugani, S. K., Gunz, A., Lowrey, T. M., Nairn, A., Pandelaere, M., Ross, S. M., Ruvio, A., Scott, K., & Sundie, J. (2013). Reconceptualizing materialism as identity goal pursuits: Functions, processes, and consequences. *Journal of Business Research*, 66, 1179–1185. <https://doi.org/10.1016/j.jbusres.2012.08.010>
- Sirgy, M. J., Lee, D.-J., Kosenko, R., Meadow, H. L., Rahtz, D., Cicic, M., Jin, G. X., Yarsuvat, D., Blenkhorn, D. L., & Wright, N. (1998). Does television viewership play a role in the perception of quality of life? *Journal of Advertising*, 27, 125–142. <https://doi.org/10.1080/00913367.1998.10673547>
- Sivanathan, N., & Pettit, N. C. (2010). Protecting the self through consumption: Status goods as affirmational commodities. *Journal of Experimental Social Psychology*, 46, 564–570. <https://doi.org/10.1016/j.jesp.2010.01.006>
- Srivastava, A., Locke, E., & Bartol, K. (2001). Money and subjective well-being: It's not the money, it's the motives. *Journal of Personality and Social Psychology*, 80, 959–971. <https://doi.org/10.1037/0022-3514.80.6.959>
- Sundie, J. M., Kenrick, D. T., Griskevicius, V., Tybur, J. M., Vohs, K. D., & Beal, D. J. (2011). Peacocks, Porsches, and Thorstein Veblen: Conspicuous consumption as a sexual signaling system. *Journal of Personality and Social Psychology*, 100, 664–680. <https://doi.org/10.1037/a0021669>
- Tatzel, M. (2002). Money worlds and well-being: An integration of money dispositions, materialism and price-related behavior. *Journal of Economic Psychology*, 23, 103–126. [https://doi.org/10.1016/S0167-4870\(01\)00069-1](https://doi.org/10.1016/S0167-4870(01)00069-1)
- Trope, Y., & Liberman, N. (2010). Construal-level theory of psychological distance. *Psychological Review*, 117, 440–463. <https://doi.org/10.1037/a0018963>
- Tsang, J.-A., Carpenter, T. P., Roberts, J. A., Frisch, M. B., & Carlisle, R. D. (2014). Why are materialists less happy? The role of gratitude and need satisfaction in the relationship between materialism and life satisfaction. *Personality and Individual Differences*, 64, 62–66. <https://doi.org/10.1016/j.paid.2014.02.009>
- Van Boven, L., & Gilovich, T. (2003). To do or to have? That is the question. *Journal of Personality and Social Psychology*, 85, 1193–1202. <https://doi.org/10.1037/0022-3514.85.6.1193>

- Vázquez, A., Lazabal-Fernández, A., & Lois, D. (2021). Situational materialism increases climate change skepticism in men compared to women. *Journal of Experimental Social Psychology*, 96, 104163. <https://doi.org/10.1016/j.jesp.2021.104163>
- Vignoles, V. L., Regalia, C., Manzi, C., Gollidge, J., & Scabini, E. (2006). Beyond self-esteem: Influence of multiple motives on identity construction. *Journal of Personality and Social Psychology*, 90, 308–333. <https://doi.org/10.1037/0022-3514.90.2.308>
- Walasek, L., Bhatia, S., & Brown, G. D. (2018). Positional goods and the social rank hypothesis: Income inequality affects online chatter about high-and low-status brands on twitter. *Journal of Consumer Psychology*, 28, 138–148. <https://doi.org/10.1002/jcpy.1012>
- Walasek, L., & Brown, G. D. (2015). Income inequality and status seeking: Searching for positional goods in unequal US states. *Psychological Science*, 26, 527–533. <https://doi.org/10.1177/0956797614567511>
- Wang, L., Gu, D., Jiang, J., & Sun, Y. (2019). The not-so-dark side of materialism: Can public versus private contexts make materialists less eco-unfriendly? *Frontiers in Psychology*, 10, 790. <https://doi.org/10.3389/fpsyg.2019.00790>
- Wang, Y., & Griskevicius, V. (2014). Conspicuous consumption, relationships, and rivals: Women's luxury products as signals to other women. *Journal of Consumer Research*, 40, 834–854. <https://doi.org/10.1086/673256>
- Watson, J. J. (2003). The relationship of materialism to spending tendencies, saving, and debt. *Journal of Economic Psychology*, 24, 723–739. <https://doi.org/10.1016/j.joep.2003.06.001>
- Waytz, A., Chou, E. Y., Magee, J. C., & Galinsky, A. D. (2015). Not so lonely at the top: The relationship between power and loneliness. *Organizational Behavior and Human Decision Processes*, 130, 69–78. <https://doi.org/10.1016/j.obhdp.2015.06.002>
- Williams, K. D. (2007). Ostracism. *Annual Review of Psychology*, 58, 425–452. <https://doi.org/10.1146/annurev.psych.58.110405.085641>
- Wooten, D. B. (2006). From labeling possessions to possessing labels: Ridicule and socialization among adolescents. *Journal of Consumer Research*, 33, 188–198. <https://doi.org/10.1086/506300>
- Wu, Y., Niu, G., Chen, Z., & Zhang, D. (2021). Purchasing social attention by tipping: Materialism predicts online tipping in live-streaming platform through self-enhancement motive. *Journal of Consumer Behaviour*. <https://doi.org/10.1002/cb.1973>
- Yang, H., & Oliver, M. B. (2010). Exploring the effects of television viewing on perceived life quality: A combined perspective of material value and social comparison. *Mass Communication and Society*, 13, 118–138. <https://doi.org/10.1080/15205430903180685>
- Yoon, S., & Kim, H. C. (2016). Keeping the American dream alive: The interactive effect of perceived economic mobility and materialism on impulsive spending. *Journal of Marketing Research*, 53, 759–772. <https://doi.org/10.1509/jmr.15.0053>
- Zawadzka, A. M., Kasser, T., Borchet, J., Iwanowska, M., & Lewandowska-Walter, A. (2019). The effect of materialistic role models on teenagers' materialistic aspirations: Results from priming experiments. *Current Psychology*, 40, 5958–5971. <https://doi.org/10.1007/s12144-019-00531-3>
- Zawadzka, A. M., Nairn, A., Lowrey, T. M., Hudders, L., Bakir, A., Rogers, A., Verolien, C., Gentina, E., Li, H., & Spotswood, F. (2021). Can the youth materialism scale be used across different countries and cultures? *International Journal of Market Research*, 63, 317–334. <https://doi.org/10.1177/1470785320956794>
- Zhang, H., Tian, Y., Lei, B., Yu, S., & Liu, M. (2015). Personal relative deprivation boosts materialism. *Basic and Applied Social Psychology*, 37, 247–259. <https://doi.org/10.1080/01973533.2015.1072090>
- Zhang, H., & Zhang, W. (2016). Materialistic cues boosts personal relative deprivation. *Frontiers in Psychology*, 7, 1236. <https://doi.org/10.3389/fpsyg.2016.01236>
- Zhang, J. W., Howell, R. T., & Howell, C. J. (2016). Living in wealthy neighborhoods increases material desires and maladaptive consumption. *Journal of Consumer Culture*, 16, 297–316. <https://doi.org/10.1177/1469540514521085>

How to cite this article: Shrum, L. J., Chaplin, L. N., & Lowrey, T. M. (2021). Psychological causes, correlates, and consequences of materialism. *Consumer Psychology Review*, 1–18. <https://doi.org/10.1002/arcp.1077>