Consuming In Response to Loneliness: Bright Side and Dark Side Effects

Elena Fumagalli\textsuperscript{a}
Universidad Torcuato Di Tella

L. J. Shrum\textsuperscript{b}
HEC Paris

Tina M. Lowrey\textsuperscript{b}
HEC Paris

\textsuperscript{a}Escuela de Negocios
Universidad Torcuato Di Tella
Av. Pres. Figueroa Alcorta 7350,
C1428 CABA, Argentina

\textsuperscript{b}Marketing Department
HEC Paris
1 Rue de la Libération,
78350 Jouy-en-Josas, France

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Corresponding Author: L. J. Shrum (shrum@hec.fr)
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This review synthesizes the most recent advances in psychology investigating the link between loneliness and consumption. We structure the review around the motives that loneliness activates, based on the Evolutionary Theory of Loneliness. More specifically, we detail how consumers use consumption experiences to repair perceived deficiencies in their belongingness needs, and how the motive to improve social connections through consumption can have both positive (bright side) and negative (dark side) effects. We also discuss how loneliness can activate a self-preservation motive that can breed interpersonal mistrust and thus potentially impede reconnection. We conclude by reviewing research on the depleting effects of loneliness on self-regulatory resources and the dark side effects of this depletion on self-control.

Keywords: loneliness, social isolation, social exclusion, consumerism, well-being
Long before the COVID-19 pandemic emerged, forcing prolonged social isolation, governments and societies had begun to recognize how alienating modern life was becoming, and loneliness started to be considered a true epidemic [1]; by most accounts, the COVID-19 pandemic has only exacerbated the situation [2]. Even though loneliness cannot be diagnosed with a medical test, the comparison with an infectious disease is particularly fitting given that loneliness has been shown to spread contagiously among individuals within a social network [3], to affect humans’ brain functioning [4–6], and to have numerous physical and psychological downstream consequences compromising human well-being. For example, loneliness is associated with increased mortality, with an effect comparable to the impact of other well-known factors like obesity and smoking [7]. Lonely individuals are also more prone to depression, cognitive decline and dementia, and suicidal thoughts [8].

In the following sections, we review research that links loneliness with consumer behavior. In keeping with the theme of this issue, we highlight both the potentially bright and dark sides of this relation. Although loneliness is an aversive psychological state, in some cases the consumption-related means that individuals use to alleviate feelings of loneliness can have positive (bright side) consequences, at least in the short term. However, as we discuss, these short-term bright side effects may come at a long-term cost that has negative (dark side) effects. In other instances, consistent with the research showing often-times devastating negative effects on individuals’ mental and physical health, loneliness can affect particular psychological processes that result in dark side effects on consumer decision-making.

**Loneliness spurs reconnection motives**

Loneliness is an aversive state that arises from the perception that one’s social relationships are deficient [9,10]. Thus, loneliness is a subjective experience, and is not
synonymous with objective social isolation. Some people may live relatively solitary lives yet not feel lonely. Other people may have many social connections yet nevertheless feel lonely because the social connections are not sufficiently satisfying (e.g., many friendships but not enough close ones). Still other people may have only a few social connections yet not feel lonely (e.g., just a few very close friends). Thus, it is not just about the quantity of social connections, but their quality, and relationship quality is a stronger predictor of loneliness than relationship quantity [11].

Virtually all theories of loneliness posit that loneliness triggers the motive of social reconnection [6,10,12]. Loneliness reflects a deficit in the need to belong, which is considered a fundamental human need that has evolutionary roots in self-preservation [9]. Although there are many avenues for social reconnection, one is through consumption experiences. This process of reconnection through consumption is captured by Rucker, Galinsky, and colleagues’ Compensatory Consumer Behavior Model [13,14], in which consumers compensate for self-discrepancies through consumption, which can have at least short-term bright side effects [15]. In some cases, consumers may seek interpersonal reconnection directly by tailoring their consumer choices to align with preferences of interaction partners. For example, in one study, relative to non-threatened participants, those who had their belongingness needs threatened via social exclusion were willing to pay more for foods their ostensible interaction partner liked even though they themselves found the foods unappealing (Mead, this issue). To the extent that such tailoring of choices restores a sense of affiliation, compensatory consumption can have bright side effects. However, a potential dark side emerges if the tailoring of consumption choices results in harmful behaviors. For example, threatened participants were also willing to consume illegal drugs if they believed it would increase their social connections [16].
Lonely individuals can also use products to signal affiliation and social connection, either to others or to themselves (Pandelaere, this issue). For example, lonely individuals show greater preferences for majority-endorsed products when their preferences are public and they believe their loneliness situation is changeable, even though privately they prefer more distinctive, minority-endorsed products [17,18]. Thus, lonely individuals use products to signal to others that they have preferences in common. Threats to belongingness needs can also have bright side effects by spurring prosocial behaviors (e.g., charitable donations, general helping) as a way of broadly reconnecting with society [19–21; see Whillans, this issue].

Some products and services are specifically designed to increase social connections. Electronic communication generally, and social media more specifically, is a case in point. The development of electronic communications such as email and messaging apps and social media platforms such as Facebook and Instagram have dramatically increased people’s ability to potentially establish, increase, and nurture social connections. Thus, it seems intuitive that increases in such communications would decrease feelings of loneliness, particularly for younger people, who are voracious users of social media. However, a growing body of research suggests that the opposite may be true. Several pre-pandemic studies of adolescents and young adults have found that social media usage is positively correlated with loneliness [22–24]. A post-pandemic study found similar results, but the effects depended on the type of communication devices used: Social media usage (e.g., Facebook, Instagram) during initial pandemic lockdowns was associated with greater feelings of loneliness, and this effect was mediated by a fear of missing out (FOMO), but the use of messaging apps (e.g., WhatsApp) was associated with decreased feelings of loneliness [25]. These seemingly paradoxical findings may be explained in terms of the quality versus quantity of social connections noted earlier. Even though social media
may increase the quantity of social contacts and interactions, the quality of contacts and interactions may actually decrease. That is, the lower-quality social media interactions may replace or crowd-out more high-quality in-person interactions.

In the aforementioned research, consumption situations and experiences were used to increase interpersonal connections, either directly through interactions with others, or indirectly through signaling to others shared preferences. However, products themselves can be used to assuage feelings of loneliness and restore feelings of social connectedness and belonging. For example, feelings of loneliness can spur individuals to consume certain types of products to increase or restore feelings of belongingness. Loneliness and belongingness deficits are associated with greater feelings of nostalgia [21,26,27], which has a bright side restorative effect of increasing perceptions of social support [28]. Accordingly, consuming nostalgic products can have a bright side effect of restoring feelings of belongingness that have been lowered through social exclusion [29]. Similarly, relative to less lonely consumers, lonelier consumers appear to be drawn to second-hand products because they provide a symbolic connection to previous users [30]. Finally, ritualistic behaviors also appear to alleviate feelings of loneliness. For example, consuming products in a ritualistic manner (e.g., eating a product in a certain, ritualistic manner, such as an Oreo cookie) reduces feelings of loneliness because the ritualistic behavior increases consumers’ feelings that their life has meaning [31].

Products themselves can also serve a social connection function. Although brands and their associated products are of course not human, people often treat them as if they are. Consumers ascribe personality characteristics to brands [32], and develop close relations with them [33], to the point of assigning them names and ascribing nefarious motives to them when they fail to perform [34]. Thus, in the absence of the ability to establish or re-establish social
connections with actual humans, lonely people may compensate by establishing closer relationships with products. This process is readily evident in research showing that increases in loneliness and general threats to belongingness needs increases anthropomorphic tendencies [35,36] and preferences for and attitudes toward anthropomorphized products [37,38]. This process of product anthropomorphism can have bright side effects on loneliness in several ways. First, interacting with anthropomorphized products can at least partially restore feelings of social connection for those whose belongingness needs have been threatened [39,40] and can also reduce psychological pain by increasing feelings of social connection [41]. Second, anthropomorphizing products can affect feelings of vitality and increase self-control for lonely consumers. For example, in one study, participants who were induced to feel lonely and then given the opportunity to anthropomorphize a product reported greater levels of vitality and increased self-control compared to those who were not given the opportunity to anthropomorphize a product [39].

Although the research just reviewed suggests that establishing close connections with products can have bright side effects by at least momentarily assuaging feelings of loneliness and lack of social connectedness, the bright side effects may come at the expense of longer-term dark side costs. One risk is that the “temporary” substitution of product connections for human interpersonal connections may not be temporary after all, but instead may develop into more generalized chronic, trait-like tendencies. There is ample evidence that this may be the case. Loneliness and social connection deficits are associated with stronger self-brand connections [26], greater love of material possessions [42], and more materialistic value orientations [43–45], the latter of which has well-documented negative effects on well-being [46]. Thus, developing stronger brand and product connections and material value orientations to combat feelings of
loneliness may in effect crowd out human social connections [47], leading to a vicious cycle in which loneliness leads to higher levels of materialism, which in turn lead to even greater loneliness (see Dittmar, this issue). A 6-year longitudinal study of 2789 Dutch consumers documented this vicious cycle, showing that initial levels of loneliness positively predicted scores on the Material Values Scale [48] in subsequent years, but also that initial levels of materialism positively predicted loneliness in subsequent years [45].

**Loneliness spurs self-preservation motives**

As noted earlier, most theories of loneliness posit a social reconnection motive. However, in addition to the approach motive of reconnection, Cacioppo and colleagues’ evolutionary theory of loneliness [6] posits that loneliness also activates an avoidance motive of self-preservation. They view loneliness in terms of its adaptive survival functions, positing that because social connections are critical to survival and reproduction, perceptions of loneliness and social isolation act as a warning signal that social connections are deficient, activating the reconnection motive. However, because social connections are critical for survival, loneliness also signals danger because of inadequate mutual aid and protection, and indiscriminate attempts to form trusting social relationships may expose one to intraspecies aggression. Thus, loneliness can increase the motivation for short-term preservation, resulting in hypervigilance for social threats, increased self-centeredness [49], and a preference for larger interpersonal distance within intimate space [50,51]. The activation of the self-preservation motive is paradoxical because it may actually impede social reconnection.

The activation of the self-preservation motive in response to loneliness can have potentially dark side effects on consumer judgments. For example, in certain instances, threats to belongingness (e.g., through social exclusion) increases self-focused behaviors such as
conspicuous consumption [19,20,52]. Similarly, the self-centeredness effects are consistent with research showing that the effects of loneliness on materialism are particularly strong for subdimensions of the Material Values Scale that are more self-focused (e.g., possession-defined success, acquisition as the pursuit of happiness; [45]). The hypervigilance for social threats resulting from self-preservation motives can also breed distrust that can impede consumer interactions. For example, even though interpersonal touch has been shown to have broad therapeutic value in reducing a variety of psychological problems (e.g., anxiety, depression, aggression; [53]), and thus may seem like an intuitive treatment for loneliness, more chronically lonely individuals actually exhibit less comfort with interpersonal touch compared to those who are less chronically lonely [54], because loneliness reduces interpersonal trust. The negative effect of loneliness on comfort with interpersonal touch in turn affects consumer preferences: Lonelier consumers show lower preferences for consumer-related services (e.g., massage, dance lessons) and service encounters (e.g., interpersonal touch contact with salespersons) compared to less lonely consumers.

**Loneliness is depleting**

In the research discussed thus far, loneliness typically exerts indirect effects on consumer judgments through mediators such as motives. However, loneliness can also affect other psychological and physiological processes that have direct implications for consumer judgments. One example is the effect of loneliness on self-regulatory resources. Threats to belongingness needs, which may be experienced momentarily through social exclusion or more generally through chronic feelings of loneliness, deplete self-regulatory resources [55,56], which impedes the execution of self-control (see Fennis, this issue). Consequently, threats to belongingness needs can have dark side effects on important consumer decisions. For example, threats to
belongingness needs via social exclusion are associated with consuming less healthy foods [55] and making riskier financial decisions [57]. Similarly, consumers who experience essential relationship deficits engage in more impulsive spending and consume more unhealthy foods compared to those who do not experience essential relationship deficits [58]. However, there are boundary conditions to this general dark side effect. When the self-regulation task itself increases prospects for future acceptance, the effects are eliminated [59] and in some cases even reversed [60].

**Conclusions and Future Research**

Loneliness is a growing problem that can have potentially severe consequences for people’s health and well-being, and alleviating feelings of loneliness is a strong human motivation. In this review, we have highlighted the interplay between loneliness and consumer behavior. In some instances, consumer products and services can serve a bright side function of decreasing feelings of loneliness and increasing feelings of social connections. However, we also detail how such use may have potential longer-term dark side effects if consumers come to rely too much on products and services as salves for the pain of loneliness at the expense of higher-quality social interactions and connections that are necessary to truly reduce loneliness.

Our review also suggests some fruitful avenues for future research. One potential research question that has yet to be fully addressed is the relation between situational and chronic loneliness and their associated effects. Everyone feels lonely from time to time, and most people are successful in alleviating feelings of loneliness by establishing or re-establishing satisfying social connections. However, for a subset of the population, loneliness can become a chronic state that can have severe mental and physical health consequences. Questions then arise as to what attributes determine whether individuals move from situational to chronic loneliness. These
attributes might include personal trait characteristics (lack of social skills, personality traits, etc.) or external forces (e.g., high residential mobility). Relatedly, is situational versus chronic loneliness associated with the dominance of the two different motivations posited by the evolutionary theory of loneliness (social reconnection vs. self-preservation)? There is some research that suggests that the social reconnection motive is dominant for situational loneliness whereas the self-preservation motive is dominant for chronic loneliness [51]. If so, then situational and chronic loneliness may be differentially related to comfort with interpersonal touch, which has implications for the types of lonely consumers who may benefit from interpersonal touch-related services.

Another related question pertains to research we reported that suggests that chronic loneliness is negatively associated with comfort with interpersonal touch [54]. However, research also shows that interpersonal touch may decrease loneliness [61]. One possibility is that even though chronically lonely individuals report lower preferences for interpersonal touch, interpersonal touch might still have a palliative effect. If so, then interventions might be directed to helping lonely individuals overcome their psychological aversion to interpersonal touch. In sum, understanding the conditions under which solutions (consumer-related or otherwise) to reducing loneliness work, don’t work, or even potentially backfire, is critical to consumer well-being.

References and recommended reading

Papers of particular interest, published within the period of review, have been highlighted as

- of special interest

- of outstanding interest


This review article lays out the theoretical framework of the Evolutionary Theory of Loneliness and its adaptive functions, situates the theory in the context of other theories of loneliness, and reviews research showing the links between loneliness and mortality.


This article reports the results of an experiment that manipulated whether college undergraduates limited (or did not limit) their use of social media (Facebook, Instagram, Snapchat) to 10 minutes per day per platform, over a three-week period. The results indicated that limiting social media usage decreased feelings of loneliness and depression.


This article reports the results of research drawing on two large-scale surveys of adolescents (N = 8.2 million) spanning several decades to investigate the effects of social media usage on in-person social interactions and subjective feelings of loneliness. The results showed that in-person social interaction generally declined since 2010, feelings of loneliness increased sharply after 2011, and those who were low on in-person social interactions but high on
social media usage reported the greatest levels of loneliness.


This article reports the results of a study of the effects of social network app and messaging app usage by Centennials (born after 1995) on loneliness during the initial COVID-19 imposed isolation in March and April 2020 in three different countries (Italy, Argentina, UK). The results showed that only social network app usage increased in the initial stage of confinement, and usage of social network apps was associated with increased feelings of loneliness, and this relation was mediated due to increased fear of missing out (FOMO). In contrast, usage of messaging apps was associated with decreased feelings of loneliness.


This article reports the results of seven studies that demonstrate a causal effect of loneliness on preferences for previously owned products. Both correlational and experimental evidence show that, relative to less lonely consumers, lonelier consumers show greater preferences for previously owned products because the products provide a symbolic connection with previous users.


The paper reports the results of a series of studies that test the proposition that performing ritualistic behaviors decreases feelings of loneliness. The general findings are that performing a ritualistic behavior reduces loneliness for lonely consumers (but not calm or angry consumers). This effect occurs because performing ritualistic behaviors increases consumers’ feelings that their life is meaningful, which in turn reduces feelings of loneliness.

The article provides a comprehensive review of the latest research on psychology of anthropomorphism and its relation to consumer behavior. The authors propose a framework of three dimensions of anthropomorphism (connection, comprehension, and competition), and with respect to the connection dimension, highlight the social connection function of anthropomorphism and its relation with loneliness.


This paper reports the results of a study of the effects of situational vs. chronic loneliness on preferences for interpersonal distance. Chronic loneliness was associated with preferences for greater interpersonal distance, whereas situationally induced loneliness (resulting from COVID-19 restrictions on social interaction) was associated with preferences for smaller interpersonal distances.


Declaration of interests

☒ The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

☐The authors declare the following financial interests/personal relationships which may be considered as potential competing interests: