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RESEARCH REVIEW

Choice freedom

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Abstract

Individuals seek and value choice freedom, firms provide consumers ever-increasing opportunities to exercise it, citizens worry about protecting their right to choose freely, and scholars across different disciplines study the topic around the globe. We adopt a consumer psychology perspective to systematize the vast literature on choice freedom, and we present a framework to examine the relationship between choice freedom and personal and societal well-being. We begin by proposing choice freedom as an antecedent of autonomy and personal control and by clarifying the meaning of these interrelated constructs. We then use autonomy and personal control as separate processes to explain benefits and limits of choice freedom for well-being, and we review interventions that mitigate the limits. Finally, we discuss future research questions related to autonomy and personal control. Whereas extant literature focuses on the presence of freedom and on the relationship between choice freedom and the individual, we reflect on the extent to which consumers actually have freedom of choice and on the role of others in the provision and exercise of choice freedom.

KEYWORDS

Choice, happiness and wellbeing, Preference and Choice, public Policy Issues

INTRODUCTION

Every day, in every waking moment, consumers are choosing. There are the big moments of choosing: which job offer to take, which house or apartment to purchase, when (or whether) to marry. Then there are the small choices, the ones that are so routinized that people barely think of them as a choice: which thoughts to entertain, the words to use when speaking a sentence, the route to take to work. At a fundamental level, these are all choices, and choices often have restrictions (Bone et al., 2014; Botti et al., 2008; Cheek et al., 2022): the preferred job offer may be across the country, construction may impede the normal route to work, or a social engagement may demand the use of certain words when speaking.

There are many situations in which these restrictions are frustrating, and consumers become wary of them. It is choice freedom that people seek: the ability to choose the course of action they desire from the multiple options before them (Averill, 1973; von Neumann & Morgenstern, 1944). Choice freedom allows consumers to feel autonomy, to express free will, and to select an option without the pressure of outside influence (Deci & Ryan, 1985; Wertenbroch et al., 2020). Choice freedom also allows consumers to feel that they have personal control: they are the ones who can choose, and they are the ones who can create the outcomes they desire (Bandura, 1977; Rotter, 1966). Thus, consumers are provided ever-increasing opportunities to exercise choice freedom: whether it is the number of options or

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the number of occasions, freedom of choice appears to become increasingly ubiquitous (Mick et al., 2004; Schwartz, 2004).

This ubiquity should not be mistaken for universal acceptance of choice freedom. The most controversial issues in the news—vaccinations, assisted dying, abortion, gun control, legal marriages—are commonly about choice freedom. This vigorous debate essentially considers the extent to which one person's (or group's) choice freedom can affect that of another. Many disciplines have asked this very question, and have extrapolated on the possibilities, limits, and implementation of choice freedom around the globe. The aim of this paper is not only to synthesize this pervasive literature from a consumer psychology perspective but also to develop a systematic, novel framework that can guide the field to move beyond finding phenomena, to addressing the biases within the phenomena (see Figure 1).

The structure of the paper is based on our proposed framework. In the first part, we clarify the definitions of choice freedom, autonomy, and personal control, as well as the ways in which these three different, although often conflated, constructs are interrelated. In our framework, choice freedom is an antecedent of both autonomy and personal control: whereas autonomy mainly concerns the feeling that the choice is self-determined, even if the outcome is partially or wholly unknown, personal control concerns the feeling that one will realize a desired outcome because of making a choice. Central to this distinction is the recognition that choice freedom does not necessarily produce a sense of mastery over the outcomes obtained, especially when consumers do not fully comprehend the consequences of the options presented to them. For example, a contestant on the television game show "Let's Make a Deal" could freely choose door number 1, 2, or 3, which would provide a sense of autonomy, but as they watched the chosen door open to reveal what lay behind, perhaps a car or a goat, they likely felt little control. If the prizes were not concealed behind the doors, a contestant would freely choose the outcome they sought—a car for a commuter, a goat for an aspiring farmer—and feel in control.

In the second part of the paper, we examine the consequences of choice freedom on consumer well-being. We use autonomy and personal control as separate processes to explain benefits and limits of choice freedom, and we review interventions that mitigate the limits and that therefore enhance the benefits.

In the third part of the paper, we reflect on questions that could inform future research. Some of these questions are related more to autonomy, some more to personal control, and others join both autonomy and control. Whereas extant literature concerns mainly the relationship between choice freedom and the individual, in this section we look beyond the focal decision-maker to consider the role of others in the choice. In addition,

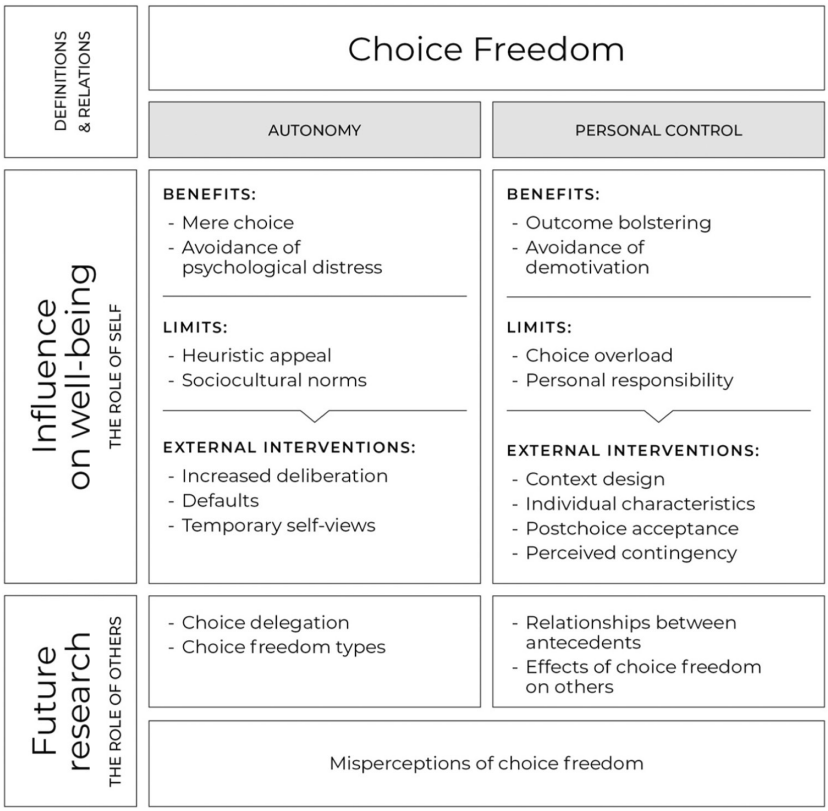

FIGURE 1 A framework for consumer research on choice freedom.

we call for more research on the potential negative consequences of consumers misperceiving the extent to which they or others have freedom of choice. In a world rife with constraints, consumers may ultimately have little autonomy and control, and their decisions may affect outcomes only on a very narrow margin. Nevertheless, as society showcases, and even fetishizes, choice freedom, attributions for outcomes may center too much on the characteristics and actions of decision-makers instead of the situations in which they find themselves, in ways that affect social perceptions and policy choices.

CHOICE FREEDOM, AUTONOMY, AND PERSONAL CONTROL: DEFINITIONS AND RELATIONS

Choice freedom, the independent and intentional selection of a preferred course of action from two or more alternatives (Averill, 1973; von Neumann & Morgenstern, 1944), is instrumental to the perception of autonomy and personal control.

The constructs of autonomy and personal control have been extensively investigated, and various, often related, definitions have been adopted (Skinner, 1996). The common thread through these definitions is the belief that events are determined by one's own deliberate actions and not by fate, circumstances, other people, or any other force external to the self (DeCharms, 1968). However, whereas autonomy refers to the feeling that one's self is the origin of one's own actions, regardless of the self's ability to impact the outcome, personal control refers to the feeling of contingency between the deliberate, autonomous actions originated by the self and the outcome of such actions (Deci & Ryan, 1985; Skinner, 1996; Wertenbroch et al., 2020). Thus, an internal, versus external, locus of control identifies the belief that outcomes can be steered by the self, because they are a function of one's own behavior or personal characteristics, versus external forces, because they are a function of chance, luck, fate, or powerful others (Rotter, 1966). This sense of contingency implies confidence both in agency, that is, the ability to alter events, and in an environment structure that allows willful actions to reliably produce expected events (Burger, 1989; Rothbaum et al., 1982; Seligman, 1975). Accordingly, self-efficacy theory characterizes personal control as the sense of mastering the environment to execute the behaviors required to produce and regulate intended results (Bandura, 1977).

Choice freedom and autonomy

Choice freedom is an antecedent of autonomy because it allows consumers to initiate a behavior. However, the mere act of freely making a choice is not always perceived as autonomous. According to self-determination theory (Deci & Ryan, 1985) individuals are motivated to act as independent and causal agents but feel autonomous only when they engage in intrinsically motivated activities, pursued simply out of interest, and experience an internal locus of causality, or a true sense of choice and volition. By contrast, individuals engaging in extrinsically motivated activities, that is, those pursued to achieve separable outcomes, experience low autonomy and an external locus of causality because they feel pressured to choose in a certain way by forces external to the self (DeCharms, 1968; Moller et al., 2006).

Consistent with this argument, research shows that study participants who personally selected an option were more satisfied than those who were externally imposed the same option when the choice was framed as hedonic, but not when it was framed as utilitarian (Botti & McGill, 2011). This effect is explained by the different motivational nature of hedonic and utilitarian choices (Choi & Fishbach, 2011; Pham, 1998). A hedonic choice is intrinsically motivated, inherently rewarding, and pursued as an end in itself, such as expressing one's own taste; by contrast, a utilitarian choice is extrinsically motivated and pursued as a means to achieve a higher-order goal, such as getting something that is needed, which can be seen as constraining of autonomy. Because a utilitarian choice is less about expressing one's preferences and more about "getting it right" as defined externally, participants making this type of choice perceived lower freedom than those making a hedonic choice and derived less benefits from it.

In addition to motivation, sociocultural norms may also influence the extent to which choice feels autonomous because these norms influence how choices are construed (Reutskaja et al., 2022; Savani et al., 2008). When a conjoint model of agency, which is associated with an interdependent self-construal, versus a disjoint model of agency, which is associated with an independent self-construal, is prevalent, free choice serves not only as a less important sociocultural imperative but also as a less accessible category. Consumers are therefore more likely to construe the same behavior as an action than as a choice in contexts where a conjoint model of agency prevails, as in India, relative to those where a disjoint model of agency prevails, as in the United States (Savani et al., 2010).

Choice freedom and personal control

Choice freedom is an antecedent of personal control to the extent that it allows consumers to initiate the behavior that is expected to produce wanted outcomes.

Like autonomy, however, the mere act of freely making a choice does not always result in perception of control. Choice freedom does not affect the sense of personal control when individuals are unable to understand the full implications of exercising each of the

available options (Clee & Wicklund, 1980). As an empirical demonstration of this argument, study participants either chose one option or were given the same option after reading information that either allowed them to appreciate or prevented them from appreciating the relative differences in quality between options (Botti & McGill, 2006). When participants could differentiate among the options, choosing enhanced satisfaction; however, when the options appeared to them as undifferentiated, choosing had the same impact on satisfaction as not choosing. To feel in control, participants needed to perceive themselves as meaningful agents who could determine their own experience, and to attribute that experience to their own actions.

It has been argued that individuals can feel in control even without contingency, such as when religious or political entities effectively operate on behalf of the self by both determining which outcomes are in the self's best interest and mobilizing the necessary resources to obtain them (Kay et al., 2008; Skinner, 1996; Taylor et al., 1984). However, the sense of contingency between actions and outcomes should be preserved if the initial choice to yield agency to a benevolent external proxy is perceived as autonomous (Miller, 1979).

The influence of choice freedom on well-being

According to classic economics models, choice freedom has a positive influence on well-being because it allows individuals to identify the choice-set options that best match their preferences (Baumol & Ide, 1956; Hotelling, 1929; Mussa & Rosen, 1978). Even after considering the cognitive costs involved in the decision-making process, these models estimate that making a free choice always maximizes the utility of rational consumers (Hauser & Wernerfelt, 1990; Malhotra, 1982; Shugan, 1980; Tversky & Shafir, 1992).

In addition to preference matching, psychological models propose that choice freedom positively influences well-being because autonomy and personal control represent basic psychological needs that are essential for personal growth and self-expression, and are therefore highly correlated with life satisfaction (Kim & Drolet, 2003; Markus & Schwartz, 2010; Rotter, 1966; Ryan & Deci, 2000; Seligman, 1975; Taylor & Brown, 1988; Wertenbroch et al., 2020). This inherent value of choice freedom is evident in the effort that individuals exert to seek, reinforce, and preserve both autonomy and personal control (Bear & Knobe, 2016; Landau et al., 2015). For example, consumers avoid rewards or opt for less-preferred options simply to assert their sense of autonomy (Kivetz, 2005; Schrift et al., 2011); similarly, consumers prefer products requiring them to engage in hard work to restore their sense of control when it is threatened (Cutright & Samper, 2014).

Different from economic models, however, psychological models have examined in more depth the costs of choice freedom. Greater choice freedom requires considering a larger number of trade-offs, which not only increases cognitive effort but also enhances the possibility of experiencing regret and dissatisfaction (Brenner et al., 1999; Iyengar & Lepper, 2000). These models therefore challenge the notion that the impact of choice freedom on well-being is necessarily positive by identifying situations in which its cognitive and emotional costs are superior to its benefits (Bettman et al., 1998). At the societal level, a meta-analysis including 63 nations indicates that, although choice freedom is more important than wealth in explaining citizens' subjective well-being, increased choice freedom is associated with greater depression and stress (Fischer & Boer, 2011). At the individual level, research has identified numerous contexts in which choice freedom may hinder consumers' subjective well-being (Botti & Iyengar, 2006; Iyengar, 2010; Mick et al., 2004; Schwartz, 2004). Even situations in which the costs of choice freedom are equivalent to its benefits are problematic, because the provision of choice freedom can be expensive (Berger et al., 2007) and so should be compensated by greater well-being.

In the next sections, we use autonomy and personal control to explain the benefits and limits of choice freedom on consumer welfare. We then review interventions designed to mitigate the limits of choice freedom and to allow consumers to make the most of its benefits.

Benefits from autonomy

Autonomy, the perception of free will in initiating an action, can explain some of the positive consequences stemming from having choice freedom, such as the mere-choice effect, as well as some of the negative consequences stemming from *not* having choice freedom, such as psychological distress.

Mere choice

The mere-choice effect, a positive consequence of having autonomy, refers to the more favorable response that an offer receives simply because it is construed or labeled as a choice. For example, framing a preferred alternative as a part of a consideration set instead of as a stand-alone option increases choice likelihood, purchase intentions, and willingness to pay (Bown et al., 2003; Szrek & Baron, 2007). Similarly, individuals generally prefer an outcome when it is obtained through a self-made choice than when it is predetermined or decided by chance (Beattie et al., 1994).

Indeed, individuals who feel that their decisions are more self-determined report better mental and physical health across different cultural

contexts (Cheek et al., 2022); on that account, personally making a choice, relative to having the same choice externally imposed, usually improves affect, intrinsic motivation, and physiological responses (Cordova & Lepper, 1996; Garg & Lerner, 2013; Haidt & Rodin, 1999; Langer & Rodin, 1976; Taylor & Brown, 1988; Zuckerman et al., 1978). These favorable responses to outcomes framed as choices are relatively automatic, suggesting that making a free choice is rewarding in and of itself (Leotti et al., 2010). Consistent with this argument, and with the finding that decision freedom increases with the size of the choice set (Reibstein et al., 1975), consumers have been shown to derive greater experience utility simply from reviewing larger, versus smaller, assortments (Aydinli et al., 2017; Deci & Ryan, 1985).

Avoidance of psychological distress

As a corollary to the mere-choice effect, various forms of psychological distress stem from *not* having autonomy. Psychological reactance, for instance, is a motivational state to restore a threatened freedom that may lead to contrary attitudes and behaviors toward the source of the threat, as well as to greater interest in the target of the restriction (Brehm, 1966). Thus, limited-quantity promotions instigate incidental aggression toward vending machines (Kristofferson et al., 2017), hard-sell pitches decrease willingness to purchase (Clee & Wicklund, 1980), and assortment stockouts produce lower satisfaction with the supplier and increased store switching, even when the unavailable options are not the most preferred (Fitzsimons, 2000). Outside of consumer psychology, aggressive and prolific hunting of wolves, which have been reintroduced in some U.S. states, has been interpreted as an instance of psychological reactance because "people see protecting wolves as a symbol of everything they hate about the government telling them what they can and can't do" (Richard, 2022).

Physical and systemic restraints also engender psychological distress (Cheek et al., 2022). Imprisoned individuals evidence a heightened sense of alert that may lead to self-blame and isolation (Hill et al., 2015), but even the felt constriction of a crowded space can be enough to elicit aversive emotional reactions (Hui & Bateson, 1991). Restrictions based on factors such as race and ethnicity also threaten individuals' ability to construe a healthy self-concept. For example, study participants who were primed on race before choosing an educational loan, which was subsequently rejected by a financial institution, reported lower implicit self-esteem if they belonged to an ethnic minority than if they were White (Bone et al., 2014).

Similarly, low socioeconomic status (SES) often prevents consumers from accessing mainstream financial services (Mende et al., 2019) or healthy food options (Block et al., 2011). These types of restrictions are distressing both because the mere consideration of suboptimal alternatives causes individuals to feel less free (Botti & Iyengar, 2004) and because of their direct consequences for psychological welfare (Reutskaja et al., 2022). Such consequences were poignantly illustrated by the ordeal of a disabled, low-employed, and uninsured adult and his family navigating a health system that provides low-income individuals very limited freedom in choosing how to manage their health (Tumulty, 2022).

Limits from autonomy

Autonomy can explain not only some of the benefits of choice freedom on well-being but also some of its neutral and negative consequences, such as the heuristic appeal of choice and the impact of sociocultural norms.

Heuristic appeal

Consumers generally prefer more, over less, choice freedom: they favor personally choosing an option compared with having the same option assigned by external forces, and they favor choosing from larger, versus smaller, assortments (Botti & Iyengar, 2006; Broniarczyk & Griffin, 2014; Chernev et al., 2015). This preference is often justified by the fact that both self-made choices and choices made after perusing many, versus fewer, options increase the expectations for, likelihood of, and confidence in finding the alternative that best matches one's tastes; in addition, choices made from larger versus smaller sets hedge against uncertainty about future tastes and satisfy variety-seeking tendencies (Baumol & Ide, 1956; Botti & Iyengar, 2004; Broniarczyk et al., 1998; Diehl & Poynor, 2010; Kahn & Lehmann, 1991).

Nevertheless, the appeal of self-made choices and large assortments operates like a heuristic: consumers prefer more to less choice freedom regardless of whether it makes them better off (Beattie et al., 1994; Bown et al., 2003). Indeed, this preference persists even when consumers are made aware of the costs associated with a self-made versus a random choice, and when they are made to focus on the difficulties of choosing from many versus fewer options (Botti & Hsee, 2010; Chernev, 2006).

This "choice is better" heuristic (Bown et al., 2003) may go as far as reducing well-being because it drives preference for more choice freedom not only when consumers do not benefit from it but also when they end up being worse off as a result (Botti & Iyengar, 2004; Chernev, 2003; Dhar, 1997; Iyengar & Lepper, 2000). In a similar vein, topical political arguments may pit freedom of choice against some other societal good—for example, freedom of choice

(not to vaccinate) against public health; freedom of choice (to own weapons) against school children's lives; freedom of choice (over one's children's education) against a broadly educated citizenry—with freedom of choice triumphing regardless of the impact on social welfare.

Sociocultural norms

Sociocultural norms influence the meaning of autonomy, the extent to which self-determination is valued, and therefore the psychological consequences of being granted or denied choice freedom (Beattie et al., 1994; Reutskaja et al., 2022).

Most research in this domain focuses on the differences between cultural contexts promoting an independent versus an interdependent self-construal (Markus & Schwartz, 2010; Savani et al., 2008). Individuals embracing interdependency are less keen than those embracing independency to exercise self-determination and self-expression, and they are therefore less negatively affected by restrictions to choice freedom (Kim & Drolet, 2003). Similarly, the exercise of choice freedom may undermine well-being when it conflicts with prevalent sociocultural norms (Iyengar & DeVoe, 2003). For example, European American schoolchildren enjoyed themselves less and performed worse when they were assigned a math task than when they chose the same task; however, Asian American schoolchildren experienced lower enjoyment and performance when they chose the task than when they were assigned it by an in-group member (Iyengar & Lepper, 1999).

Although independent versus interdependent self-construals are usually associated with different geopolitical regions, they also characterize different socioeconomic groups within the same region (Snibbe & Markus, 2005). Like individuals with interdependent selves, individuals with lower SES are more attentive, sensitive, and responsive to others; rely more on others; and seek to be more similar to others than their higher-SES counterparts (Mende et al., 2019; Na et al., 2016; Stephens et al., 2007). For example, the same pen was evaluated more negatively when it was assigned than when it was chosen when study participants were middle-class European Americans but not when they were working-class European Americans (Savani et al., 2008; Snibbe & Markus, 2005). Working-class participants also liked a chosen pen more when they observed someone else selecting the same pen versus a different one, but the opposite was true for middle-class participants (Stephens et al., 2007).

External interventions

Choice freedom may not improve, and may even hinder, consumer well-being when the desire for autonomy drives a heuristic appeal for more choice and when sociocultural norms do not value and promote self-determination and self-expression. External interventions to overcome the heuristic appeal of choice include deliberation and the adoption of defaults; external interventions to align sociocultural norms with individual tendencies include temporary influences on self-views.

Increased deliberation

Like most heuristics, the "choice is better" heuristic has likely emerged because it usually leads to the best outcome (Bown et al., 2003; Leotti et al., 2010); also like most heuristics, it may have become an implicit rule that is sometimes overgeneralized and erroneously applied to contexts where it leads instead to less favorable outcomes (Arkes & Ayton, 1999). In similar cases in which attitudes and behaviors are driven by automatic preferences, biases can be rectified by encouraging individuals to adopt a more deliberate information-processing style (Cryder et al., 2017; Epley & Gilovich, 2006; Gu et al., 2018). Thus, interventions that compel consumers to consider the potential inappropriateness of the "choice is better" heuristic could decrease its default application.

Consistent with this argument, an explicit reminder of the greater difficulty of perusing many options caused study participants to prefer smaller to larger assortments for psychologically proximal choices, in which feasibility is weighed more than desirability (Goodman & Malkoc, 2012). Research also shows that factors compelling consumers to focus on the substitutability of the available options increase preference for less choice. Accordingly, study participants with utilitarian motivations, whose preferences were less idiosyncratic than those with hedonic motivations, valued smaller assortments more than larger ones; likewise, participants with hedonic motivations were more likely to opt for smaller over larger assortments after considering how their tastes were similar to those of others (Whitley et al., 2018). Relatedly, participants were indifferent between smaller and larger assortments when the choices pertained to distant locations and times because psychological distance automatically made them focus on the substitutability of the options (Goodman & Malkoc, 2012).

Defaults

Defaults are options considered first and regarded as the status quo (Huh et al., 2014). The presence of defaults does not directly reduce autonomy, because consumers are free to act on their preference for more choice, for example by selecting opt-in alternatives or by customizing the offer. Nevertheless, consumers tend to select the option presented as default mainly because of inertia (Johnson & Goldstein, 2003; Ritov & Baron, 1992;

Thaler & Benartzi, 2004), and the likelihood of selecting the default option increases with choice difficulty (Huh et al., 2014; Levav et al., 2010).

Thus, the deliberate use of defaults in conjunction with large sets preserves autonomy while avoiding some of the major drawbacks of having more choice freedom: consumers are less likely to be cognitively depleted, because defaults facilitate choice; they are also less likely to experience regret and dissatisfaction, because defaults are expected to indicate the recommended option and because the default choice cannot be too suboptimal under the assumption of rationality (Kuksov & Villas-Boas, 2010; Steffel et al., 2016).

Defaults have been criticized for their powerful effect on steering choice, and concerns about whether they can be ethically deployed are often voiced (Steffel et al., 2016). Criticisms about the ethicality of defaults have been counterargued by noting that defaults are implicit in any option presentations and, as an example of libertarian paternalism, have been used to nudge consumers toward more optimal choices (Thaler & Sunstein, 2008). Accordingly, the appropriateness of including defaults in the assortment design should be evaluated after considering whether most consumers have clear preferences that could be harnessed by the default option, whether alternative interventions (e.g., random option presentation or a "one-size-fits-all" approach) are superior, and whether defaults could be personalized (Sunstein, 2015).

Temporary self-views

External interventions are obviously not effective at influencing long-standing sociocultural norms that, by promoting the importance of others in defining one's sense of self, downplay the value of autonomy and the benefits derived from it. Nevertheless, self-views consistent with specific sociocultural norms can be temporarily activated or suppressed to better align individuals' attitudes and behaviors with such norms. For example, priming consumers to think more about others or family obligations versus the self or personal success makes them behave in line with an interdependent or independent self, respectively, regardless of the sociocultural context in which they live (Aaker & Lee, 2001). It is therefore plausible to assume that similar interventions could also have a short-term influence on the value attributed to autonomy above and beyond stable sociocultural norms.

The literature offers indirect evidence in support of this possibility. Promotion-focus strategies (e.g., seeking gains) are more important for individuals with an accessible independent self, whereas prevention-focus strategies (e.g., avoiding losses) are more important for individuals with an accessible interdependent self (Lee et al., 2000). These different self-construals are associated with different ways of searching for alternatives: promotion-focus individuals use a more abstract processing style and prefer larger consideration sets, whereas prevention-focus individuals use a more concrete style and are more indifferent to the size of the consideration set (Pham & Chang, 2010). Thus, interventions that temporarily activate an interdependent, prevention-focus view of the self could counteract the heuristic appeal of more choice even in sociocultural contexts embracing independence.

External interventions could also help individuals focus on the reasons why a behavior is initiated rather than on the type of behavior promoted by a specific sociocultural context. The sense of intrinsic motivation and volition that characterizes autonomy can be seen as orthogonal to whether one's actions take place in independent or interdependent contexts (Deci & Ryan, 1985; Moller et al., 2006). For example, Chinese adolescents who conformed to parental advice did not feel a lack of autonomy to the extent that they valued their parents' input and did not feel forced into complying with it (Chen et al., 2013). Autonomy as self-endorsed functioning could therefore be promoted irrespective of sociocultural expectations and pressures.

Benefits from personal control

Personal control, the perception of contingency between freely chosen actions and their outcomes, can explain positive consequences stemming from having choice freedom, such as subjective bolstering of the choice outcome, and negative consequences stemming from *not* having choice freedom, such as demotivation.

Outcome bolstering

Individuals tend to subjectively bolster the value of a freely chosen outcome relative to that of alternative forgone options, mainly to maintain a positive self-image and to show their effectiveness as decision-makers (Brehm, 1966; Festinger, 1957; Gilbert et al., 1998; Norton et al., 2012; Reibstein et al., 1975; Russo et al., 1998; Shafir et al., 1993). The illusion of control effect represents an instantiation of this phenomenon (Langer, 1975): choosing makes individuals believe they can influence even chance-determined events, therefore irrationally increasing expectancy of personal success in those events; thus, study participants priced a lottery ticket higher when it was personally selected than when it was selected by an external agent.

Similar inflated outcome evaluations have been observed during collaboration between companies and consumers: consumers showed a higher regard for those products they were involved with, even if that involvement was only at a surface level. For example, consumers who helped a company select new products to be marketed showed stronger demand for these products than equivalent ones they did not help select (Fuchs et al., 2010), and consumers who customized products

assigned them a higher value than equivalent ones acquired off the shelf (Franke et al., 2010).

Avoidance of demotivation

Among the aversive consequences stemming from reduced choice freedom that can be attributed to personal control is demotivation. Repeated situations in which free choices do not lead to the expected outcomes cause learned helplessness, a psychological state characterized by emotional withdrawal and impaired detection of actual contingencies (Seligman, 1975). Indeed, older individuals in institutionalized settings and hospitalized patients became more passive and depressed as they internalized the sense of incompetence and powerlessness resulting from having little impact on the progress of their days, regardless of their decisions (Berry et al., 2017; Cheek et al., 2022; Langer & Rodin, 1976; Taylor et al., 1984).

Along the same lines, lower SES appears to be correlated with hopelessness. Individuals with lower SES feel less in control than those with higher SES, as they perceive fewer opportunities to shape their lives in a desired way (Mittal & Griskevicius, 2014; Yoon & Kim, 2018). Indeed, the World Value Survey administered in 51 nations uncovered the sense of hopelessness that characterizes the life of individuals living in extreme poverty (Martin & Hill, 2012). In sociology, the correlation between low SES and low personal control has been used to explain the feeling of alienation experienced by members of the early working class stripped of power by the members of the dominant class through their ownership of the means of production (Haidt & Rodin, 1999). More recently, research has shown that low SES influences perceptions of low personal control especially when individuals feel "economically stuck," or unable to improve their economic condition despite their efforts to do so (Yoon & Kim, 2018).

Limits from personal control

Personal control can also explain a set of neutral and negative effects of choice freedom on consumer well-being, such as choice overload and personal responsibility.

Choice overload

The literature on choice overload examines the downstream consequences of consumers' preference for larger, over smaller, assortments. Relative to a smaller number of options, a larger number of options may negatively affect willingness to purchase and outcome satisfaction (Dhar, 1997; Diehl & Poynor, 2010; Gourville & Soman, 2005; Griffin & Broniarczyk, 2010; Iyengar & Lepper, 2000). Choice overload has been demonstrated in various domains, from the more mundane like chocolates and pens (Berger et al., 2007; Reutskaja & Hogarth, 2009; Shah & Wolford, 2007), to the more relevant like job offers, financial products, and idea generation (Hofstetter et al., 2021; Huberman et al., 2007; Iyengar et al., 2006; Morrin et al., 2012). Choice overload even extends across assortments: the likelihood of making a purchase from a fixed assortment of chocolates is lower when the chocolates are adjacent to a larger, versus a smaller, assortment of magazines, but not when the chocolates and the magazines are displayed separately (Hong et al., 2016).

Although different mechanisms have been proposed to explain the choice-overload effect (Chernev et al., 2015), a common denominator of these mechanisms is a decrease in personal control. The greater cognitive and emotional costs associated with perusing an increasing number of alternatives undermine consumers' perceived ability to obtain the desired outcome (Luce, 1998; Malhotra, 1982; Shugan, 1980). In line with this argument, increased deliberation on the relative pros and cons of the options under consideration has been shown to boost pre and postchoice regret (Beattie et al., 1994; Inbar et al., 2011; Iyengar & Lepper, 2000), diminish confidence in the decision made (Chernev, 2003), and reduce the relative attractiveness of the selected option (Brenner et al., 1999; Carmon et al., 2003; Hafner et al., 2012).

Personal responsibility

Self-selecting an option, versus having the same option externally imposed, may not have a positive impact on well-being. Self-made choices do not enhance outcome satisfaction when consumers cannot meaningfully distinguish between the available alternatives, either because the information about these alternatives is not diagnostic of their relative quality (Botti & McGill, 2006) or because the alternatives look identical (Klusowski et al., 2021). Self-made choices can even hinder well-being: they generate lower satisfaction and more negative affect when the choice set includes all undesirable options, such as bad-tasting foods or aversive medical treatments (Botti et al., 2009; Botti & Iyengar, 2004), and they elicit less creativity in problem-solving when the inputs are selected from a predefined list (Moreau & Dahl, 2005). Similar results have been found over time: repeated self-made choices increased satiation and decreased consumption enjoyment relative to exogenously allocated ones (Redden et al., 2017).

These effects can be explained largely by the intimate connection between choice freedom and personal responsibility: individuals are typically not considered accountable for the results of their actions if these actions were not freely undertaken (Bear & Knobe, 2016; Mick, 2007; Wertenbroch et al., 2008). The greater sense

of contingency and personal responsibility characterizing self-made, relative to externally imposed, choices amplify consumers' affective evaluations of those outcomes (Botti & Iyengar, 2004; Botti & McGill, 2006; Gilovich et al., 1995; Kahneman & Tversky, 1982; Landman, 1987; Spranca et al., 1991; Weiner, 1980).

In the case of relatively undifferentiated options, a personal choice is more similar to a random draw than to a deliberate act, and the outcome is more attributable to luck than to the self's ability to select the best option. Thus, the positive experience of consuming a tasty drink becomes less rewarding because it is perceived as driven by forces external to the self, and the aversive experience of consuming distasteful food or undergoing painful medical procedures becomes more aggravating because it is perceived as driven by the self. In the case of problem-solving, personal responsibility may cause consumers to play safe and use familiar solutions to problems, which constraints their creativity (Moreau & Dahl, 2005). Finally, in the context of repeated choices, the aversiveness of the affective experience is determined by its inherent repetitiveness, which is magnified by reflections that are automatically triggered by the act of choosing (Redden et al., 2017). Although this explanation is based more on cognition than on personal responsibility, it is consistent with the underlying idea that choosing an outcome, versus not, leads to greater personal connection and engagement with that outcome, and to more extreme responses to it (Botti & Iyengar, 2004).

External interventions

The limits of choice freedom on consumer well-being attributable to personal control are mainly determined by the lower sense of agency associated with choice overload and by the enhanced emotional responses associated with personal responsibility. Interventions aimed at decreasing choice overload are based on facilitating choice through the design of the context, the targeting of individual characteristics, or the triggering of postchoice acceptance. Interventions aimed at decreasing personal responsibility are based on weakening the sense of contingency between the act of choosing and the corresponding outcomes.

Context design

A large body of research has investigated interventions that operate at the contextual level to facilitate choice and increase personal control when consumers are faced with larger sets (Broniarczyk & Griffin, 2014; Chernev et al., 2015).

Some contextual interventions relate to the design of the assortment and have as their objective either reducing the search or easing the comparisons and trade-offs between options. For example, ordering options (Diehl, 2005; Diehl et al., 2003), grouping them in categories (Hofstetter et al., 2021; Mogilner et al., 2008; Morrin et al., 2012), or featuring them in more accessible formats (Agnew & Szykman, 2005), reduce choice paralysis and improve outcome satisfaction relative to less structured presentation modes, especially for consumers who are more familiar with the decision. Willingness to buy and happiness with the choice also increase when product information is presented by attributes versus alternatives (Huffman & Kahn, 1998; Valenzuela et al., 2009) or by attributes that vary along a single compensatory dimension versus multiple noncompensatory dimensions (Gourville & Soman, 2005; Griffin & Broniarczyk, 2010). Even the simple alleviation of the subjective experience of decision difficulty, for example by using an easy-to-read versus a difficult-to-read font to describe the same alternatives, is sufficient to decrease choice paralysis (Novemsky et al., 2007). In the case of sequential choices, satisfaction improves if consumers begin by making easier decisions about products with fewer attributes and progressively move to more difficult decisions about products with more attributes, instead of the opposite sequence (Levav et al., 2010).

Other types of contextual interventions relate to the environment external to the assortment. For example, consumers feel more rushed when choosing from a larger than a smaller set of options; as judgments of decision quality are based on the lay theory that "a rushed choice is a bad choice," these consumers experience greater postchoice regret (Inbar et al., 2011). Consumers also feel less overwhelmed by large assortments following the induction of unrelated mild positive affect, which shifts their focus from the difficulty of the choice to the quality of the assortment (Spassova & Isen, 2013). Accordingly, environmental factors such as slower background music or pleasant décor, which reduce the perception of being rushed and improve mood, weaken choice overload.

Individual characteristics

Another way to simplify the decision process is by targeting individual characteristics of the decision-maker. Consumers who better understand their own preferences in the form of ideal combinations of attribute values, or ideal points, also have an easier time identifying a best-matching option when choosing from larger sets than those who are less familiar with those preferences (Chernev, 2003; see also Patall et al., 2014). As a result, consumers who have an ideal point are more confident about their decisions after choosing from larger versus smaller sets, whereas the opposite is true for consumers who do not have an ideal point (see also Agnew & Szykman, 2005; Morrin et al., 2012). Thus, interventions that allow consumers to acquaint themselves with their preferences before engaging in the choice process

facilitate preference matching and enhance personal control. These interventions can take the form of learning tools that help consumers familiarize themselves with the choice set and understand the options' attributes, the links between attributes and benefits, and the trade-offs involved in the decision (Botti & Hsee, 2010; Broniarczyk & Griffin, 2014).

Regardless of their level of expertise and the objective difficulty of the choice, however, some consumers tend to complicate the decision process more than others. Maximizers, for instance, are more likely to experience choice overload than satisficers and to feel worse about their decisions even when they accomplish objectively better outcomes (Iyengar et al., 2006; Schwartz et al., 2002). Whereas satisficers settle for the first "good enough" option they encounter, maximizers engage in exhaustive searches to find the best possible option, an objective that becomes more cognitively and emotionally onerous the larger the number of options to consider (Nenkov et al., 2008; Simon, 1955).

Given that the tendency to maximize versus satisfice can be conceptualized not only as an individual trait but also as a mind-set (Ma & Roese, 2014) and a decision-making strategy (Iyengar et al., 2006), external interventions could weaken it. The most direct interventions involve disincentivizing promotional tactics that motivate upward product and price comparisons (Ma & Roese, 2014). A more pragmatic approach entails structuring the search process in ways that reduce the likelihood of developing a maximizing tendency, for example by favoring simultaneous instead of sequential searches (Mogilner et al., 2013). If sequential searches are required, consumers should be nudged to begin by considering larger assortments, because they are more likely than smaller ones to induce a satisficing mind-set (Levav et al., 2012).

Postchoice acceptance

Whereas the interventions reviewed so far operate either before or during the choice, the costs of choice freedom emerge also after the choice. For example, if information is easily available after a choice has been made, searching for this information increases the likelihood of experiencing postchoice regret (Broniarczyk & Griffin, 2014). Similarly, consumers spend effort and resources trying to engage in dissonance-reducing reappraisal strategies that help them rationalize their previous actions (Averill, 1973; Wicklund & Brehm, 1976).

Research has examined ways to help consumers make peace with their choices. This objective can be attained by constraining consumers' material or cognitive access to the forgone options, therefore reducing the extent to which the decision is perceived as reversible (Gilbert & Ebert, 2002; Hafner et al., 2012; Mogilner et al., 2013).

In addition, consumers can reach psychological closure with their choices by achieving a sense of "pastness" (Beike & Wirth-Beaumont, 2005) via either physical (i.e., closing a menu) or visual (i.e., using "not selected" labels) cues, which limit comparisons between the selected and the forgone options (Gu et al., 2013, 2018; Li et al., 2010). Thus, like most of the interventions mentioned above, choice closure enhances outcome satisfaction because it simplifies choosing; different from previous interventions, this simplification happens a posteriori rather than a priori. It may be argued that choice closure is counterproductive because it prevents the learning that often accompanies making difficult choices and reinforces a pattern of harmful behaviors. However, consumers' common tendency to question a chosen path could be similarly harmful. In the case of more mundane choices, revisiting the past may not be worth the effort, as the options under consideration are often of similar quality (Beattie et al., 1994). In the case of more consequential choices, failing to reach closure could haunt decision-makers and derail forward progress, whereas taking stock of these decisions could fuel a commitment to make the best of them (Gollwitzer et al., 1990; Mogilner et al., 2013; Wilson & Gilbert, 2005).

Perceived contingency

Perceived contingency between free choices and experienced outcomes elicits personal responsibility, which exacerbates emotional responses to such outcomes (Botti & McGill, 2006). Accordingly, the desire to reduce responsibility and eschew regret motivates consumers to forgo difficult choices and delegate them to others (Steffel & Williams, 2018; see also Janis & Mann, 1977). In medical decision-making, for example, a model in which responsibility is shared between clinicians and patients is advocated because choice freedom often results in suboptimal decisions and lower patient satisfaction (Berry et al., 2017; Botti et al., 2009; Gurdamar-Okutur et al., 2022; Schneider, 1998). Thus, if the acts of choosing were deprived of a sense of responsibility, potential negative consequences would be mitigated.

Choice freedom can be stripped of responsibility in a direct way, by framing a specific option not as a personal choice but as the only viable course of action (Kouchaki et al., 2018). To illustrate, a series of studies investigating the highly aversive decision of continuing or withdrawing life-support treatments from severely ill newborn children showed that personally making this choice caused greater emotional distress to the children's parents than having the same choice made by doctors; however, framing the same choice as "there is nothing else to be done but" decreased parents' perceived personal responsibility and emotional distress (Botti et al., 2009).

Choice freedom can be rid of responsibility also in a more indirect way, for example, by increasing the similarity of the options in the assortment and therefore undermining consumers' perceived ability to choose

in accordance with their values and interests (Botti & McGill, 2006; Klusowski et al., 2021; Ryan & Deci, 2000).

FUTURE RESEARCH

The review of the choice freedom literature conducted so far lays the groundwork for proposing a few broad topics that could be of interest to consumer psychology scholars, summarized in the Table 1. Some topics, such as delegation and typologies of choice freedom, are more related to autonomy; other topics, such as relationships between antecedents and impact of choice freedom on third parties, are more related to personal control. We also propose future research on a topic that spans the two dimensions of choice freedom that we have so far kept separate: the possible negative consequences of a misperception regarding how much choice freedom consumers actually experience, in terms of both autonomy and personal control. Whereas existing research has focused mainly on the benefits and costs of choice freedom for individual consumers, the topics proposed in this section include consideration of the benefits and costs of choice freedom for others and even for overall societal well-being.

Autonomy

A focus on the link between choice freedom and autonomy raises research questions about delegation of choices to others, including intelligent machines, as well as about the importance of adopting a more nuanced view of choice freedom.

Choice delegation

In the previous sections, we introduced the idea that consumers' need and desire for autonomy could lead to a "mere choice" effect, such that having the freedom to choose is valued in and of itself. It is therefore not surprising that most consumers are wary of delegating choices to external agents, even though delegation spares them the cognitive and emotional costs often associated with

TABLE 1 Future research questions on choice freedom.

Construct	Questions
Autonomy	
Choice delegation	Why are technological products and automated services replacing humans in decision-making processes successful despite consumers' desire for autonomy? What factors may facilitate delegation by preserving perception of autonomy (e.g., focus on purchase decision, self-identity, uniqueness, anthropomorphic features)? How does trust favor, versus hinder, delegation to technology over humans? What is the importance of autonomy relative to personal control in influencing consumers' willingness to delegate and satisfaction with the outcome of the delegation decision?
Choice freedom types	Does a recognition of different types of choice freedom (e.g., positive and negative freedom) deepen our understanding of the concept and consequences of choice freedom? Does freely engaging in acts of omission (not making a choice) versus commission (making an active choice), elicit a different sense of freedom? Is freedom of choice in domains which involve "sacred values" (e.g., life-or-death) experienced in fundamentally different ways than freedom of choice in mundane domains? How do consumers construe their choices and are some choices more free than others (e.g., positive versus negative outcome, mundane versus consequential)?
Personal control	
Relationships between antecedents	To what extent do control-restoring actions compensate for a loss of personal control? How would consumers compensate for an initial gain, rather than a loss, of personal control? What other antecedents of personal control are potentially relevant in consumer research (e.g., information) and what is the relationship between these antecedents and choice freedom?
Effects of choice freedom on others	Do moral considerations threaten donors' perception of personal control and do these considerations lead to dysfunctional consequences in prosocial choices? Does choice freedom enhance a focus on the self, at the expense of benefits to others? What are the negative externalities of choice freedom?
Autonomy and personal control	
Misperceptions of choice freedom	Does the fundamental attribution error harm our understanding of the relationship between choice freedom and well-being? How much actual freedom of choice do consumers in different segments (e.g., low-SES, minorities, at-risk and vulnerable groups) perceive and exercise? Does research focus on choice freedom blind us to other opportunities to improve consumers' and societal well-being? How can consumers learn to exert their choice freedom within given personal, legal, normative, and societal constraints?

choice freedom (Steffel & Williams, 2018). For example, delegating decisions to surrogates has been shown to deplete self-regulatory resources, as these resources are spent on coping with the self-esteem threats that result from relinquishing choices (Usta & Häubl, 2011). Consistent with the idea that delegating decisions may be more psychologically costly than deciding autonomously, research shows that most study participants avoided passing choices on others, although less so when these choices were perceived as difficult (Steffel & Williams, 2018).

This general reluctance to delegate choice extends to nonhuman others. For example, despite decision aids' ability to reduce search efforts, consumers experience greater difficulty when choosing from many options if these decision aids provide recommendations that contradict their existing preferences (Dellaert & Häubl, 2012; Goodman et al., 2013; Häubl & Trifts, 2000). Even in the case of saving automation, in which money is automatically moved into savings accounts under conditions prespecified by the consumers, only a subset of users enjoy lower cognitive and emotional costs—those who already think of themselves as savers (Newmeyer et al., 2021).

In a similar fashion, delegation to devices powered by artificial intelligence (AI) offers consumers the unprecedented opportunity to access customized services that guarantee an effortless and effective match between revealed preferences and available options, in both mundane and consequential domains (André et al., 2018). Even so, consumers are not keen on yielding decision power to AI devices (Puntoni et al., 2021; Wertenbroch et al., 2020). For example, patients are more reluctant to follow a recommendation for a medical procedure when it is provided by a computer instead of by a physician, despite the greater accuracy of decisions based on AI (Longoni et al., 2019). More generally, decision-makers are less likely to use the superior forecasts produced by algorithms than those produced by humans after learning that these forecasts are imperfect, a bias known as algorithm aversion (Dietvorst et al., 2015). Consumers are similarly reluctant to delegate moral decisions to algorithms because they are understood to follow a consequentialist approach instead of one based on underlying values (Dietvorst & Bartels, 2022).

Nevertheless, market trends show that consumers increasingly rely on technology in their daily decisions; for example, it is estimated that in 2025, 130 million Amazon Echo will be sold globally (Statista, 2022a), and, as of the first quarter of 2022, Spotify had 182 million premium subscribers worldwide (Statista, 2022b). A similar trend involves "set it and forget it" marketplace interactions, in which consumers configure systems (e.g., "autoship" at Chewy or Google's Nest) to automatically engage in certain transactions on a regular basis, so that they do not have to worry about running out of necessary items or honoring commitments.

Perceived autonomy could explain this apparent contradiction between delegation aversion and market success of products that are designed not only to assist but also to replace consumers in their decision processes (de Bellis & Johar, 2020): by making the independent and deliberate decision of subscribing to Spotify or buying a smart fridge, consumers may maintain the perception that their experiences are self-determined rather than dictated by the technology. This mechanism is similar to students' self-imposition of early deadlines (Ariely & Wertenbroch, 2002) and employees' precommitment of savings (Thaler & Benartzi, 2004): as long as the delegation, like the restriction, is perceived as conveying one's own volition, consumers may not feel a threat to their autonomy.

Future research could investigate what factors help maintain the perception of autonomy when consumers effectively delegate decisions to others, including AI-powered devices. Research has shown that the degree to which a task expresses self-identity and uniqueness (Granulo et al., 2020; Leung et al., 2018) explains whether consumers are willing to replace human labor with machines. Can the same factors account for consumers' willingness to delegate choices to machines, as well as for their satisfaction with the outcome of these choices? In a similar vein, research discourages anthropomorphizing digital assistants in computer games to preserve the players' sense of autonomy (Kim et al., 2016). What role do anthropomorphic decision aids and surrogates play in the context of delegation? And, in the case of "set it and forget it" marketplace interactions, might this form of delegation help assuage the negative consequences on consumption enjoyment of repeating the same choices over time (Redden et al., 2017)?

Another factor that may explain perceptions of autonomy in the context of delegation is trust, both in the expertise of the agent to which the decision is delegated and in its willingness to act in the principal's best interest (Botti et al., 2009). Recent societal trends appear to undermine both elements of trust in human beings. On one hand, the rise of social media and user-generated ratings on websites has weakened both the need for human expert advice and the ability to assess the quality of such advice (De Langhe et al., 2016). On the other hand, the current political climate reveals a general skepticism toward experts' and institutions' intentions to serve the public (Economist, 2016). AI-powered surrogates may therefore have a trust advantage over humans given that their expertise is based on consumers' revealed preferences and their recommendations are not perceived as self-serving. For these reasons, consumers could trust technology even more than they trust themselves whenever self-control is involved, for example by letting AI limit online exposure and material access to less healthy but tempting food options. On the contrary, AI can be as biased as human beings, as it may reflect the distorted views and self-interests of human creators, including firms' willingness to market products that are

not virtuous (Puntoni et al., 2021). Future research can examine which factors are likely to increase or decrease trust in humans versus machines, to what extent these trust judgments reflect (un)biased and selfless decision-making processes, and how these factors can lead to a more optimal choice delegation.

Whereas delegating relates mainly to the link between choice freedom and autonomy, the relationship between autonomy, personal control, and decision to delegate is also worthy of future research. The need for control has been identified as a powerful barrier for the adoption of new products because the uncertainty associated with these products reduces consumers' sense of mastery (Faraji-Rad et al., 2017). In line with this argument, it has been proposed that autonomous vehicles should allow for the customization of peripheral features to reinforce consumers' perceptions of being in control (André et al., 2018). As another example, offering users the possibility to correct an algorithm's output, even if only slightly, appears to be sufficient to reestablish their sense of control and increase their likelihood of using the superior, although imperfect algorithm, over the preferred, inferior human forecast (Dietvorst et al., 2016). Do autonomy and personal control play equally important roles in explaining consumers' willingness to delegate and their satisfaction with the outcome? Or do they play different roles having different weights?

Choice freedom types

Choice freedom has been examined mainly as a unidimensional concept that differs in amount but not type. By contrast, it could be argued that consumers experience distinct types of choice freedom, and that this experience varies not only in intensity but also in salience (Wertenbroch et al., 2020).

Research in economics and philosophy proposed two types of freedom: freedom to and freedom from (Berlin, 1958; Fromm, 1941). Freedom to, or positive freedom, identifies the feeling of being free to pursue opportunities, of being one's own master, and of achieving self-actualization. Freedom from, or negative freedom, identifies the feeling of being free from external interferences stemming from interactions with others and of distancing oneself from obstacles (Fritze et al., 2022). Freedom to is in line with the conceptualization of choice freedom adopted in this paper: self-efficacy theory, for instance, claims that freedom is not conceived negatively as the absence of external coercion but positively in terms of the exercise of self-influence (Bandura, 1989). Freedom from, by contrast, is more similar to the conceptualization adopted by economists and political scientists and reflects their interest in the extent of government interventions in domains like market exchanges, information, individual and legal rights (Gwartney & Lawson, 2003).

Recent research suggests that freedom from and freedom to may have different influences on consumer well-being (Fritze et al., 2022). Accordingly, freedom from fosters more hedonic happiness, whereas freedom to fosters more eudemonic happiness (Gaston-Breton et al., 2020). It has also been argued that reframing freedom restrictions put in place for security concerns as an increase in freedom from, for example freedom from disasters and threats, could reduce reactance and improve the effectiveness of the restrictive measures (Cheek et al., 2022). Can this more nuanced conceptualization of freedom help researchers deepen their understanding of choice freedom and its consequences?

A different typology of choice freedom relates to whether a choice is seen more as an act of commission than as an act of omission (Ritov & Baron, 1992; Spranca et al., 1991). Arguably, a decision not to choose, as well as a decision to choose a passive course of action, is as much an expression of self-determination as a decision to choose, and to choose an active path (Mick, 2007; Sunstein, 2015). For example, the decision not to buy from firms that have gender pay gaps represents a powerful way to express one's condemnation of gender inequality, and it is more likely to be observed among women than men (Schlager et al., 2021). However, consumers can assign different values to active versus passive choices, and their desire for choice freedom can change accordingly. The debate around assisted suicide is a poignant illustration of this issue: in the Western world, where freedom to choose according to one's preferences is considered a fundamental need and right, the freedom to choose how and when to end one's own life is still contested (Economist, 2021). Is this resistance due to a fundamental difference between commission (actively choosing) and omission (not making a choice)? Do they each elicit a different sense of freedom?

Alternatively, resistance to granting choice freedom in certain domains could be due to the "sacred values" that regulate such domains (Cheek et al., 2022; Tetlock et al., 2000), which may transcend the concept of choice as intended in more mundane contexts. For example, the creation of advance care plans (ACPs), which document personal preferences to guide critical health care decisions when individuals cannot speak for themselves, remains remarkably low across the world, despite the many benefits they provide to patients, their families, and society at large. In addition, common nudging techniques that proved successful in influencing the adoption of other public policies do not seem to be equally effective with respect to ACPs (Gurdamar-Okutur et al., 2022). Tragic choices like those related to assisted suicide, end-of-life care, and withdrawal of life support emotionally condemn decision-makers despite the decision outcome and its objective superiority. Indeed, when directly asked about whether a life-or-death choice should be personally made or made by the doctor, study participants revealed their ambivalence toward autonomy: they wanted to make the choice yet simultaneously wished to relinquish it (Botti et al., 2009).

Another related question is how consumers construe their choice freedom. Individuals are particularly skilled at construing an action as a choice, and therefore at experiencing freedom, especially when they operate within a sociocultural context that promotes independence (Markus & Schwartz, 2010; Reutskaja et al., 2022; Savani et al., 2010). However, individuals also experience some of their actions, as well as actions of third parties, as "more free" than others (Baumeister et al., 2008). What factors influence such construal? Could this construal depend on the outcome of the choice? For example, might consumers a posteriori perceive the same investment outcome or health condition more as the result of a free choice when they gain money and improve their health, rather than the opposite?

Some research suggests that not all free choices bring about the same level of autonomy, or the same level of psychological reactance when threatened (Clee & Wicklund, 1980). In particular, choices that express marketplace defiance and consumer ingenuity are considered by some scholars to be more free than choices between product options (Mick, 2007). Other research suggests the opposite: that all choices, no matter how small, are equally important because they allow consumers to express a preference and assert the self (Leotti et al., 2010). Indeed, individuals generally perceive themselves as free even though the vast majority of choices they report making are short-term and mundane instead of long-term and consequential (Ratner et al., 2008). If all free choices are equally valued, consumers may find themselves entangled in making too many inconsequential choices, which not only prevents them from devoting cognitive resources to important decisions but also deprives them of the motivation to engage in such decisions. Relatedly, it has been proposed that choice freedom shifts one's focus to trivial, versus meaningful, pursuits and that consumers should therefore be encouraged to think carefully about when it is worth choosing and when it is not (Schwartz & Cheek, 2017). Although consumers should be able to differentiate between more and less relevant choices, delegate the less relevant, and focus their cognitive and emotional resources on the more relevant, the "mere choice" effect may make them insensitive to difference in relevance as they value choice as an end in itself rather than a means to achieving desired outcomes (Botti & Iyengar, 2004). Future research could study whether making a trivial choice is perceived as just as self-determining as making an important choice, or whether consumers instead need to make many trivial choices either to experience the same level of autonomy granted by fewer important choices or to compensate for their inability to make important choices.

Personal control

A focus on the link between choice freedom and personal control suggests research questions about the relationship between different sources of personal control and the balance between one's own freedom and the freedom of others.

Relationships between antecedents

Choice freedom is only one of the antecedents of personal control. Other antecedents of control have been investigated in the literature, including mastery, predictability, involvement, and performance feedback (Averill, 1973; Langer, 1975; Miller, 1979; Thompson, 1981). More recently, the compensatory control model (CCM) has identified several ways in which individuals can restore control when it is threatened or undermined and several sources of control that can be activated across domains to compensate for a loss of control in one domain (Landau et al., 2015; see also Rothbaum et al., 1982). For example, a perceived reduction in personal control due to economic uncertainty has been shown to increase support for a dominant and more agentic, versus a prestigious but less agentic, leader (Kakkar & Sivanathan, 2017).

The existence of a hydraulic relationship between control antecedents has been extensively supported by research in consumer psychology. Several papers examined how consumers who experience low control compensate by engaging in different control-restoring strategies, such as developing a preference for more structured or bounded product designs (Cutright, 2012); more agentic and self-expressive leader brands (Beck et al., 2020); utilitarian products that are easier to justify and have a stronger association with problem-solving than hedonic ones (Chen et al., 2017; Sela et al., 2009); products perceived as lucky (Hamerman & Johar, 2013); brand extensions that exhibit a greater fit with the parent brand (Cutright et al., 2013); more varied sets of options (Levav & Zhu, 2009; Yoon & Kim, 2018); multitasking (Han & Broniarczyk, 2021); and donating time over money (Costello & Malkoc, forthcoming).

Future research can study relationships between antecedents of personal control in a more nuanced way. First, studies that use the CCM as a process mechanism only rarely measure whether and how much personal control is experienced after the selected restoring strategy has been put in place (Greenaway et al., 2013). Do the control-restoring actions work only partially, do they entirely make up for the initial loss of control, or do they overcompensate for it?

Second, the CCM framework focuses on situations in which personal control derived from a specific antecedent is decreased and consumers compensate by gaining control from a different antecedent. However, how would consumers react to an initial increase, instead of a decrease, of personal control? This question is explored by research examining the interrelation between choice freedom and power as two separate sources of control (Fast et al., 2009; Inesi et al., 2011). This research shows

that the substitutability of choice and power operates in two ways: in line with the CCM, participants deprived of one source of control (i.e., power) sought out the other source (i.e., choice) to restore control and increase outcome satisfaction; contributing to the CCM, however, participants who were provided one source (e.g., power) did not seek out the other (e.g., choice). These results suggest that there exists an ideal level of control, or a threshold, that can be reached through either source. Thus, when participants' control was initially increased through one source, either choice or power, the addition of the other source produced neither further motivation to obtain control nor further outcome satisfaction (Inesi et al., 2011).

A specific antecedent of personal control that future research can delve deeper into is information. Information is an antecedent of control because it allows better predicting and anticipating how a future event will unfold, thereby giving individuals the possibility to steer that event toward desired outcomes (Burger, 1989; Greenaway et al., 2013; Langer, 1975). Predictability increases the sense of self-efficacy, which is central to the experience of personal control (Lefcourt, 1973), and choice freedom and predictability are often confounded in studies of personal control. For example, nursing home residents enjoyed the same psychological benefits from being visited when they could choose the visit schedule and when they were just informed about it, and in both cases these benefits were greater than when the schedule was random or they were not visited (Schulz, 1976). Does information have effects on consumer well-being similar to those of choice freedom? Research in progress indicates that this may be the case (Botti et al., 2022). In a series of studies, participants were asked to assess their preference for knowing in advance, versus not, about an undesirable, unavoidable future (e.g., taking a genetic test to know of an untreatable genetic disease). In line with the heuristic appeal of choice, participants preferred to know in advance even if this knowledge did not improve their well-being; however, whereas previous research showed that consumers mispredict the relative benefits and costs of choice freedom (Botti & Hsee, 2010), participants were mostly accurate in their predictions but gave more weight to future, more uncertain, benefits than to present, more certain costs of advance knowledge. Making participants focus on the present costs reduced, although did not reverse, their preference for knowing in advance.

Effects of choice freedom on others

Most research in consumer psychology has focused on the consequences of choice freedom for the self, even though the exercise of choice freedom often affects others. There are some notable exceptions. Research has shown, for example, that the reversal of choice overload is experienced when the choice is made for others versus the self (Polman, 2012). Choosing for others is also felt in general as less self-depleting than choosing for the self (Polman & Vohs, 2016).

Future research could investigate in greater depth the consequences of choice freedom on others. One domain in which this investigation could be particularly interesting is that of moral decision-making. The elicitation of personal control through choice freedom has been shown to indirectly promote donation of time and money. When study participants chose, versus randomly received, a pen or a survey to complete, they were more likely to be receptive to an unrelated charitable appeal because choice freedom improved their ability to withstand the negative emotions generated by these appeals (Xu et al., 2020). Would choice freedom similarly promote prosocial behavior if the choice were relevant to the charitable appeal? The provision of choice freedom may be counterproductive in this case, as suggested by findings showing that choice overload is observed even in the context of organizations to volunteer for: as the number of organizations considered by potential volunteers increased, the likelihood of deferring the decision to volunteer also increased (Carroll et al., 2011).

Two arguments support the possibility of a negative effect of choice freedom in the domain of prosocial decisions. First, morality is perceived as a factor that constrains choice freedom because it highlights what people ought (not) to do. The presence of a moral option in a set therefore deprives the act of choosing from a sense of control: because that option is construed as the only acceptable one, decision-makers feel not only obliged to select it but also unable to experience contingency between their choice and the eventual outcome (Botti et al., 2009; Kouchaki et al., 2018). This constraining effect could lead to dysfunctional consequences if potential donors saw moral options as a threat to their personal control. In line with this prediction, research has shown that personally selecting a self-interested option (e.g., spending money on themselves) over a prosocial option (e.g., donating money to a charity) makes individuals less happy with the outcome than having the same self-interested option imposed (Berman & Small, 2012). In addition, donors who are asked to choose between similar donation recipients are more likely to opt out of donating altogether than both those who are not asked to choose a recipient and those who are asked to donate to a single recipient (Ein-Gar et al., 2021).

Second, the act of choosing may enhance a focus on personal preferences, awareness, and concerns that exacerbate the motivation to achieve benefits to the self at the expense of benefits to others (Mick et al., 2004). This possibility is consistent with the argument that, relative to an interdependent self-construal, an independent self-construal, which assigns greater value to choice freedom, is less altruistic (Labroo & Goldsmith, 2021), as well as with the finding that agentic choices increase

self-referencing and narcissism (Kokkoris et al., 2019). For example, individuals generally agree that if a person chooses to sponsor someone in a charitable way, this choice should be based on relative neediness (Singer, 2009). However, research shows that the majority of donors asked to choose a recipient to sponsor selected the recipient that was perceived as most beautiful but least needy. This "charity beauty premium" effect was not observed when the choice of recipient was framed as inconsequential for the self: donors who were told that the selected recipient would be sponsored not by themselves but by random others behaved more in line with their stated moral compass and chose the neediest, although least beautiful, recipient (Cryder et al., 2017). These findings suggest that the free choice of a beneficiary is driven more by the desire to increase the advantages to the self, such as the positive halo generated by being associated with a more beautiful person, than to the donation recipient. By contrast, decreasing the focus on the self by weakening the contingency between choice and outcome increased attention to others and their needs. Future research can help shed light on this potential aversive effect of choice freedom and examine whether limiting choice freedom in the context of moral decisions leads to greater social benefits.

A related issue pertains to the negative externalities of choice freedom. The COVID pandemic has put this concern at the center of the public debate, as people invoked choice freedom and clung to it when it came to decisions like whether to wear masks, vaccinate, or show proof of immunity to have access to the workplace. These are all decisions on which consumers have no expertise, and yet they deliberately wanted to preserve freedom of choice even when the very act of preserving this freedom might have increased others' risks of engaging in ordinary day-to-day activities. Is a choice truly individual when it changes the calculation others must make about shopping, attending class, or going to work? According to Stiglitz (2021), this focus on personal choice testifies to a deep misinterpretation of liberty: by invoking infringements on personal freedom as a reason for refusing to wear a mask or get vaccinated, individuals deny others their freedom. Like the case in which individuals ignore or undervalue the unintended aversive consequences of prosocial acts (Labroo & Goldsmith, 2021), an emphasis on freedom of choice can blind consumers to some of the outcomes that a choice entails.

Future research could study in a more structured manner situations in which the presence of negative externalities requires regulations to restrict individual freedom that produces socially harmful behaviors, and therefore to protect the well-being of society. This research could examine when and how support for choice freedom and aversion toward deciding for others is overgeneralized to settings in which paternalism could be justified and choice freedom could be abused or misused (Beattie et al., 1994).

Autonomy and personal control: misperceptions of choice freedom

Research has uncovered the value that consumers place on choice freedom, the benefits it may provide, and some of its limitations. We note more generally, however, that the extensive focus on choice freedom by consumers themselves and by researchers might inadvertently exacerbate a core failing in social judgment: the fundamental attribution error (Ross, 1977). Whereas behavior is a function of the person and the situation, people who fall prey to the fundamental attribution error tend to attribute behavior to personal characteristics while diminishing the impact of situational context, pressures, limitations, and constraints. This error might lead to attributing people's good health to their leading "good lives," implying that ill health is a consequence of people's poor choices, a view that could affect health care policy decisions (Kliff, 2017). People, especially those living in Western countries, value freedom of choice and believe that they and others have it. It is worth pondering whether that belief reflects wishful thinking and can ultimately harm our understanding of what really drives consumers' well-being.

The prevalence of choice freedom in consumer research might especially preclude understanding the narrowed options produced by low SES. Some options are simply unavailable to low-SES consumers; others might be available to both high- and low-SES consumers, but the quality of their consequences can differ significantly across the two groups. In risky choices, for example, a negative outcome might be irksome for someone of high SES but potentially catastrophic for someone of low SES, suggesting that the decision is less about the person and more about their circumstances. Low-SES college students, for example, may find even the smallest unexpected expense, something inconsequential to someone of greater means, a barrier to continuing their education (Wees, 2022). Greater wealth has been found to have a positive influence on well-being at the societal level because it allows citizens to experience more freedom in their daily life (Fischer & Boer, 2011). Further, conditions around early upbringing might shape people's approach to decisions that are not within personal control (Griskevicius et al., 2013).

Men and women, too, might face very different levels of freedom in their choices, as recognized by Linda Scott (2020):

> [W]omen, as a class, have severely constrained choices, have important information withheld from them, and are punished for showing anything like self-interest. Indeed, when it comes to economic choices, women […] are often coerced into acting irrationally—that is, against their own best interests […] And the only explanation

> the prevailing philosophy can offer is that (a) women are biologically inferior when it comes to any kind of economic engagement or (b) they have *chosen* to put themselves in an underprivileged position in *every* country and *every* domain in the world economy, a proposition that is as bigoted as it is implausible. (pp. 7–8)

The combination of SES and gender has especially powerful consequences for choice freedom in regions where reproductive choices are limited by laws against abortion or contraception, including most of the United States subsequent to a recent Supreme Court decision (*Dobbs v. Jackson Women's Health Organization*). Forced to give birth against their will, women may suffer immediate and long-term health issues and financial hardship leading to further, potentially profound restrictions of their choices (Economist, 2022). Even giving up a child poses all the health risks of carrying a pregnancy to term as well as the agonizing emotional burden of worrying that the child will later feel abandoned. The denial of decision autonomy and of personal control over their bodies, as well as over the shape and purpose of their lives, may severely diminish the well-being of all women, including those who may never face an unwanted pregnancy.

In short, although we applaud (and have participated in) the extensive efforts to understand the effects of freedom of choice on consumers' well-being, we also worry that emphasis on freedom of choice might be obscuring how little choice people really have. This is true of whole classes of people, including low-SES individuals and women but also minorities, low-literacy consumers, consumers with addictions or disabilities, older consumers, and, more generally, at-risk and vulnerable consumers who are unable to take full advantage of marketplace opportunities because they are restricted in their access to and control over resources (Hill & Sharma, 2020; Pechmann et al., 2011; Reutskaja et al., 2022). This emphasis on freedom can therefore blind us to numerous other possibilities to improve consumer and societal well-being by focusing on situational characteristics. To the extreme, this view is in line with the principle of causal determinism put forward in philosophy and physics, which precludes free will because it recognizes that every event is determined by antecedent conditions together with the laws of nature (Wertenbroch et al., 2008).

Thus, a potential path for future research is to investigate in greater depth how consumers may be able to find their freedom either by challenging systematic constraints to improve societies or by accepting legal constraints that allow the functioning of these societies. Once again, classic research on autonomy and personal control can offer precious guidance: the highest level of autonomy is attained when an individual not only internalizes external constraints but integrates them into one's own sense of self (Ryan & Deci, 2000); and personal control can be attained not only by attempting to change the world to fit the self's needs, or by "being in control of things," but also by attempting to fit in with the world, or by feeling that "things are under control" (Rothbaum et al., 1982; Skinner, 1996).

CONCLUSIONS

The present review highlights the sheer magnitude of the literature from many domains on freedom of choice and systematizes it from the perspective of consumer psychology. In doing so, it clarifies the meaning of distinct constructs related to choice freedom—autonomy and personal control—and proposes a framework that illustrates the relationship between these variables.

Like any framework, this too represents a simplification of a complex nomological network and in some cases forces distinctions between overlapping concepts and findings. Nevertheless, this framework proposes choice freedom as an antecedent of both autonomy and personal control, although we acknowledge that it is not the only antecedent. Autonomy and personal control represent separate processes that can both help explain the benefits and limits of choice freedom on consumer well-being and justify external interventions that mitigate these limits. Autonomy and personal control can also be useful in organizing potential future research themes. Whereas most existing research centers on individual liberty, future research could extend into understanding both the role of others in choice and the potential limiting effects of choice freedom on the liberty of others. This future research might also examine the extent to which consumers truly experience choice freedom and the effect of misperceived outcome attributions on societal perceptions and policy choices.

An examination of choice freedom that goes beyond the selection and evaluation of options from a choice set to acknowledge the existence of different levels of freedom could open the door to a powerful idea: freedom is not only about discerning an option but about construing, and even creating, a new one altogether. This possibility well resonates with the assertion of Averill (1973) that still rings true today: "it is not the objective range of choice which determines whether or not a person experiences [choice freedom]; rather, it is the degree to which he agrees or identifies with the choices he does have, no matter how limited" (p. 300).

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