

Indulge or Reduce? A Cross-Country Investigation of Consumption Patterns Following Pandemic Lockdowns

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Abstract

Pandemic lockdowns in early 2020 disrupted daily life worldwide and created an opportunity for self-reflection and consumption paradigm shifts. However, consumption patterns might take different directions, and opposing views exist about whether consumers (1) prolong reduced consumption after lockdown or (2) compensate for lockdown consumption restrictions through self-indulgence. Drawing from self-determination theory and individual-cultural values frameworks, this article develops a conceptual model of postlockdown consumption patterns related to three factors: consumers' fulfillment of basic psychological needs during lockdowns, individual consumer values, and country-level cultural orientations. Consumer surveys conducted after the first lockdowns in three culturally different European countries (the United Kingdom, Germany, and Romania) show that both satisfaction and dissatisfaction of psychological needs during lockdown impact consumption patterns, at least in the short term. The direction of consumption patterns is driven by hedonism and universalism values at an individual level and differences in postmaterialism and indulgence at a country level. The results provide implications for international marketers and policy makers in postpandemic marketplaces.

Keywords

consumer behavior, psychological needs, voluntary simplicity, cross-country, COVID-19 lockdowns

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Worldwide, 2020 and the years following were marked by periods of so-called lockdowns, where national governments enacted shutdowns of shops, restaurants, hotels, and other facilities aiming at containing the spread of COVID-19. Not only was social contact reduced to a minimum, but possibilities to consume were also heavily constrained. These temporary restrictions changed the lifestyles and daily routines of millions of people. A pandemic represents a disruptive event that leads to profound changes for individual consumers, organizations, industries, and society (Dahlhamer and Tiemey 1998). The World Health Organization (<https://covid19.who.int/>) and the International Monetary Fund (2020), among other institutions, attest that the COVID-19 pandemic, like other prior disruptive events, has significantly impacted human life and the global economy.

At the time of this writing, international marketing has looked at different aspects of the pandemic (for reviews, see Cruz-Cárdenas et al. [2021] and Zwanka and Buff [2021]). These include, for example, research on drivers of different responses to the crisis (Sharma 2021), the role of community resilience in the context of policy interventions (Krasnikov,

Shultz, and Rebiazina 2022), the economic impact of countries' government responses (Guedhami et al. 2023), and the effectiveness of nonpharmaceutical interventions at a country level (Kumar et al. 2021). In addition, there have been investigations of the pandemic's immediate effect on consumer behavior such as stockpiling, hoarding, pent-up demand, or increased online shopping (e.g., Ahmadi et al. 2022; Kim, Sheng, and Ketron 2022; Sheth 2020) at an individual level. Aside from acute measures during the pandemic, disruptive events are also likely to spur the creation of new habits. While habits reduce people's likelihood of thinking elaborately about their decisions, the

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disruption of usual routines induces such thinking, resulting in greater openness to behavioral change (Verplanken and Wood 2006; Wood, Tam, and Witt 2005). At an organizational level, He and Harris (2020) suggest that the pandemic might offer an opportunity for businesses to shift toward more genuine corporate social responsibility. At an individual level, Sheth (2020) proposes that consumers might return to some old habits while modifying other habits (e.g., wearing masks in selected places) and creating new ones (e.g., intensified use of technology).

The present research builds on the idea that the experience of the pandemic might affect individuals' consumption patterns beyond the lockdown periods. We propose that after experiencing a period of constrained consumption opportunities, consumers might embrace different consumption patterns. On the one hand, consumers may deliberately intend to prolong positive experiences of less consumption-oriented lifestyles during the lockdown and move toward voluntary simplicity (i.e., lifestyles characterized by resource conservation and material scarcity; Etzioni 1998). In light of global climate change and resource depletion, climate researchers advocate the importance of such individual consumption reduction as one unavoidable pathway for a sustainable development (e.g., Gossen, Ziesemer, and Schrader 2019). In line with this argument, a global trend survey among marketers shows that executives expect the pandemic to alter marketing strategies in favor of sustainability in the aftermath of the pandemic (WARC 2021). On the other hand, consumers may intend to self-gratify more through increasing indulgent consumption in order to compensate for consumption restrictions experienced during lockdowns. For instance, McKinsey (2021) reports that 51% of U.S. consumers felt the desire to engage in "revenge spending" in indulgent categories such as clothing, travel, and hedonic experiences as they put the pandemic behind them. Similarly, business experts expect an increase in luxury shopping following the pandemic (Rovella 2021).

Against this background, the aim of this research is to explain the emergence of diverging consumption patterns following a disruptive global crisis through a comparative, cross-country lens. Drawing on self-determination theory (Ryan and Deci 2017), Schwartz's (2012) theory of basic values, and cultural theories (Hofstede 2001; Inglehart 2008), we argue that the consumption patterns emerging in response to a global crisis are determined by three factors: (1) consumers' individual experiences with the involuntary consumption change during the lockdown, as reflected in psychological need satisfaction or need frustration (Ryan and Deci 2017); (2) individual higher-order and stable predispositions to act—that is, the values a consumer endorses (Sagiv et al. 2017); and (3) consumption-related country characteristics—that is, the country's location on the materialism–postmaterialism spectrum (Inglehart 2008) as well as its cultural proclivity toward indulgence or restraint (Hofstede 2001). We integrate these predictions in a conceptual model of disruptive consumption patterns driven by psychological need fulfillment during a crisis, personal values, and cultural orientations. We posit that psychological need fulfillment determines whether consumers intend to engage in specific consumption

patterns, whereas personal values and cultural orientations influence the postlockdown consumption habits.

Using survey-based data from three European countries (the United Kingdom, Germany, and Romania) that were all subject to national lockdowns and differ in their indulgence profiles and postmaterialism levels, we test this model and find that (1) consumers who experienced higher positive or negative disruptions in the fulfillment of their basic psychological needs during lockdown are more likely to adopt consumption patterns along any of the two directions, (2) the direction of postlockdown consumption patterns is driven by consumers' basic human values (i.e., hedonism drives indulgent consumption, whereas universalism drives voluntary simplicity), (3) postmaterialism attenuates the effects of needs frustration on consumption patterns, and (4) indulgence boosts the effects of hedonism and attenuates the effects of universalism on consumption patterns.

Our findings contribute to the nascent literature on the consumption implications of global crises and the factors that determine consumer tendencies in a global marketplace constantly reshaped by disruptive events (e.g., wars, health crises, climate change). We also contribute to international consumer behavior literature by identifying and explaining cross-cultural differences in how consumers respond to involuntary consumption restrictions as well as the growing literature on material simplification by discussing how environmental events trigger consumers' voluntary shifts to dematerialized lifestyles. Finally, we contribute to cultural theories in the context of consumption (e.g., postmaterialism theory) by showing that cultural variables interact with both contextual factors and individual traits in determining consumer reactions to disruptive marketplace events.

From a managerial perspective, our findings (1) reveal opportunities, threats, and marketing responses in country-markets undergoing or recovering from crises characterized by restricted consumption opportunities, (2) offer targeting advice to managers of brands that are more likely to be affected by postcrisis consumption patterns (e.g., luxury brands, ecofriendly products), (3) propose cross-cultural adaptations of postcrisis marketing initiatives, and (4) inform decisions on foreign market entry (or exit) as well as marketing strategy reconfiguration in postcrisis marketplaces. From a policy perspective, our findings provide insights about crises that limit consumption opportunities and their potential to promote climate change mitigation strategies at an individual and nonincentivized manner.

Theoretical Background and Hypotheses

Disruptive Experiences and Behavior Change

Consumer behavior, and human behavior in general, is to a large degree driven by habits and routines (Ji and Wood 2007). Habitual behavior is performed with little deliberation and is triggered automatically by environmental cues, which makes changing one's behavior so difficult (Verplanken, Aarts, and Van Knippenberg 1997; Verplanken and Wood 2006). Habits further represent crucial barriers to acting in line with one's values, as they weaken the link between intentions and behavior

(Verplanken and Wood 2006). For instance, an individual may be in favor of protecting the environment by using public transportation but still continue to drive their car because they have been choosing this travel mode for years (Verplanken, Aarts, and Van Knippenberg 1997).

According to the habit discontinuity hypothesis (Verplanken et al. 2008; Wood, Tam, and Witt 2005), changes in the environment disrupt the automatic execution of habits. This opens a window in which individuals are more likely to deliberate about their behavior and establish new behaviors. In addition, the context change is supposed to activate values that an individual endorses, which, according to the self-activation hypothesis, guide the direction of the new behavior (Verplanken et al. 2008). In line with the habit discontinuity hypothesis, we argue that disruptive crises, such as pandemic lockdowns, render changes in consumer behavior more likely. Established consumption routines cannot be performed, and cues that typically trigger habitual consumption patterns, such as passing by one's favorite store and entering it for unplanned purchases, are not available. Consequently, consumers may deliberate about their consumption patterns and try to readjust their behavior based on their current experiences, their persistent values, and the societal meaning of consumption.

Basic Psychological Needs and Consumption Patterns

Basic psychological needs theory (BPNT) is a subtheory of self-determination theory (Ryan and Deci 2017). It postulates three basic psychological needs to be central to human well-being: autonomy, competence, and relatedness. Autonomy refers to the need to be the author of and responsible for one's own behavior. Competence refers to effectively act on one's capacities and talents. Relatedness refers to experiencing connectedness with other people. BPNT takes a two-dimensional perspective on need satisfaction and need frustration, conceptualized as distinct dimensions of experience (Vansteenkiste, Ryan, and Soenens 2020).

Research into the psychology of lockdowns suggests that lockdown experiences and consumers' ability to satisfy their needs during that period encompasses both positive and negative aspects, often comanifested within the same individual. For instance, a study comparing psychological needs fulfillment before and during a lockdown in Germany showed decreases in autonomy and relatedness (Schwinger et al. 2020). Other empirical findings demonstrate that many consumers also had positive experiences during lockdowns, such as more time for family, hobbies, and exercise (Nicolson and Feltt 2020; Williams et al. 2021). In the United Kingdom's largest study investigating adults' feelings toward lockdowns, one in three adults reported to have enjoyed the lockdown and 21% expressed a mix of positive and negative feelings about it (Fancourt, Steptoe, and Bradbury 2022).

Need satisfaction and need frustration do not relate exclusively to consumption-related experience. Lockdowns, however, had a significant impact on individuals' consumption decisions, including what, how, where, and when they consumed (e.g., shifting

from in-store shopping and going to restaurants to alternative activities such as watching Netflix and home cooking), which in turn affected consumers' ability to fulfill their needs. Furthermore, previous research has demonstrated that consumers use consumption as a means to cope with experiences, both with daily experiences (Atalay and Meloy 2011) and live events (Mathur, Moschis, and Lee 2003). In summary, we expect that need satisfaction and frustration during the lockdown impact consumers' consumption patterns after lockdown.

Self-determination theory posits that people seek activities with the potential to satisfy their needs, while they avoid activities that bear the risk of need frustration (Ryan and Deci 2017). In line with BPNT's focus on need satisfaction and frustration as two separate dimensions (Vansteenkiste, Ryan, and Soenens 2020), we predict that both need satisfaction and need frustration influence postlockdown consumption. As such, need satisfaction during lockdowns might motivate consumers to prolong positive experiences, whereas need frustration might motivate consumers to prevent negative experiences. Hence, we posit that the higher the magnitude (irrespective of the direction) of need satisfaction or need frustration, the higher consumers' tendency to adopt simplified or indulgent consumption behavior after the disruptive event.

Beyond these motivational considerations, self-determination theory provides two additional arguments suggesting that need satisfaction and need frustration impact people's postlockdown behavior. First, individuals are more likely to integrate new values and standards into internal values and standards when the context supports needs satisfaction (Ryan and Deci 2017). Second, need frustration may lead to compensatory behavior or to a focus on extrinsic needs as substitutes for basic psychological needs (Vansteenkiste, Ryan, and Soenens 2020). Thus, we hypothesize:

H₁: Satisfaction of psychological needs during a period of lockdown with restricted consumption opportunities positively relates to the tendency to adopt both simplified and indulgent consumption patterns postlockdown.

H₂: Frustration of psychological needs during a period of lockdown with restricted consumption opportunities positively relates to the tendency to adopt both simplified and indulgent consumption patterns postlockdown.

As shown in H₁ and H₂, we look at two basic directions in which individuals may adopt postlockdown consumption behavior, namely their self-reported behavioral tendencies to *reduce* future consumption behavior in the form of voluntary simplicity (Rich, Wright, and Bennett 2019) or *increase* future consumption behavior in the form of indulging (Mukhopadhyay and Johar 2009).¹

¹ It is important to note that while indulging and voluntary simplicity are linked to opposing directions of consumption (i.e., increase vs. reduce), both concepts reflect distinct consumption patterns and not just opposite ends of the very same consumption pattern. Indulgence refers to self-gratification and the idea to treat oneself (Mukhopadhyay and Johar 2009), whereas voluntary simplicity refers to reducing consumption in general and to focus on nonmaterialistic sources of

While we assume that need satisfaction and need frustration both influence the *extent* of new consumption pattern adoption, the *direction* of such adoption cannot unambiguously be linked to either need satisfaction or need frustration. For instance, some consumers may compensate for need frustration by revenge spending and thus consume more, whereas other consumers may rethink their materialized lifestyles in the face of need frustration and thus consume less. We propose that the type of consumption pattern embraced postlockdown is determined by the values the individual endorses and on the societal meaning of consumption at a country level.

Individual Values Directing Consumption Patterns

According to Schwartz (2012), values are stable and higher-order determinants of attitudes and behavior. In his influential theory of basic human values, Schwartz postulated ten different values: universalism, benevolence, conformity, tradition, security, power, achievement, hedonism, stimulation, and self-direction. For the present research, we focus on two of these values—namely, universalism and hedonism—based on their theoretical relevance for voluntary simplicity and indulgent consumption.²

Universalistic individuals pursue goals of “understanding, appreciation, tolerance, and protection for the welfare of all people and for nature” (Schwartz 2012, p. 7). As such, individuals embracing universalism are more likely to hold proenvironmental attitudes (Schultz and Zelezny 1999). Relatedly, literature on voluntary simplicity shows universalism values to support a deliberate reduction of consumption (Balderjahn and Hüttel 2019; Peyer et al. 2017). Against this background, we expect individuals with universalism values to harbor intentions to engage in increased conservation of resources by decreasing their personal consumption beyond the phase of lockdowns.

While universalism focuses on social welfare, hedonism focuses on personal well-being. Hedonism values derive from the pleasure associated with satisfying one’s needs. Individuals scoring high on this value aim for “sensuous gratification for oneself” (Schwartz 2012, p. 5). Hedonism values relate to both self-enhancement and openness to change. In a consumption context, hedonism is reflected in intense shopping activities (Babin, Darden, and Griffin 1994). As such, we expect individuals with hedonism values to show tendencies to consume as a form of

well-being (Rich et al. 2019). Both concepts originate in separate literature streams, tap into different conceptual domains, and are measured through distinct operational instruments. In other words, indulgent consumption and voluntary simplification are distinct, nonsubstitutional behaviors with the potential to be (1) simultaneously absent, (2) comanifested, or (3) idiosyncratically present in the absence of one another within an individual’s postpandemic behavior.

² We further included the values self-direction, stimulation, and conformity as control variables. We did not formulate hypotheses regarding these values because they are not directly related to our target behaviors. However, we wanted to control for their potential influence on consumption change because self-direction and stimulation are related to openness to change (Schwartz 2012), while conformity reflects a willingness to act according to social expectations.

indulgence and increase consumption after a phase of induced consumption reduction. In summary,

H₃: Consumers who endorse hedonism have a higher tendency to indulge after a period of lockdown with restricted consumption opportunities.

H₄: Consumers who endorse universalism have a higher tendency for voluntary simplicity after a period of lockdown with restricted consumption opportunities.

Country-Level Determinants of Consumption Patterns

Cultural differences that exist between countries affect consumer behavior in many ways and can be conceptualized in multiple forms that have similarities as well as idiosyncrasies (for an overview, see De Mooij [2017]). In the context of the COVID-19 pandemic, literature has looked at the relevance of Hofstede’s value dimensions on stockpiling behavior (Ahmadi et al. 2022) or Schwartz’s values on individuals’ compliance to government guidelines (Wolf et al. 2020). In our model, we combine values of (1) Hofstede’s indulgence/restrained dimension and (2) Inglehart’s postmaterialism value. The underlying rationale for selecting these two constructs relates to their opposing influences on consumption patterns: postmaterialism is linked with willingness to *disengage* from material values, while cultural indulgence is linked with willingness to *enjoy* hedonic consumption. Postmaterialism refers to a country’s shift from material to nonmaterial values as a direct consequence of economic development, which renders material possessions a nonscarce resource whose value is progressively discounted through the course of intergenerational replacement (Inglehart 1971). In contrast, indulgence is a culturally rooted dimension that captures a country’s affinity toward the gratification of human desires and the enjoyment of life (Hofstede 2001). Thus, postmaterialism is an outcome of a country’s intergenerational economic development, whereas indulgence is engraved in a country’s cultural genome. This also explains why some countries can be both postmaterialistic and indulgent (or materialistic and restrained) at the same time.

In our model, we propose that the degree to which a society endorses postmaterialistic (vs. materialistic; Inglehart 2008) and indulgence-oriented (vs. restraint-oriented; Hofstede 2001) cultural values influence the consumption patterns consumers will adopt because they determine the overall meaning of consumption within in a society. As such, we use these two dimensions to explain individuals’ use of consumption as a coping strategy for need frustration or a mechanism able to prolong positive experiences after the lockdown.

Postmaterialistic versus materialistic countries. Postmaterialism is defined as an orientation that shifts the hierarchy of individuals’ values from material goals (e.g., economic security) to nonmaterial goals (e.g., environmental conservation, freedom of expression, protection of human rights; Inglehart 1971).

Although these orientations are commonly manifested at the individual level, they are reflected at the collective sphere and vary across countries. As societies move from materialistic to postmaterialistic orientations, consumers substitute materialistic values such as income and possessions with postmaterialistic values such as an emphasis on quality of life and well-being (Inglehart 2008).

We posit that postmaterialism interacts with consumers' personal lockdown experience and their fulfillment of psychological needs during lockdown disruptions. As previously argued, both need satisfaction and need frustration during lockdown affect consumption patterns in the aftermath and share a common feature: they push consumers to cope with the disruptive experience by using consumption as a vehicle. In postmaterialist countries, though, consumption is valued less than other forms of human behavior such as civic engagement or transformative life experiences (Inglehart 2008). It is thus expected that consumers in postmaterialistic countries do not prioritize consumption patterns (of any kind) as a coping mechanism for a disruptive lockdown experience. In other words, postmaterialism should operate as a buffer for the mechanisms that transmute needs satisfaction/frustration during lockdown into postlockdown consumption patterns. Thus, we hypothesize:

H_{5a}: The relationship between need satisfaction and tendency to adopt simplified or indulgent consumption patterns after a period of lockdown with restricted consumption opportunities is less pronounced in postmaterialistic countries than in materialistic countries.

H_{5b}: The relationship between need frustration and tendency to adopt simplified or indulgent consumption patterns after a period of lockdown with restricted consumption opportunities is less pronounced in postmaterialistic countries than in materialistic countries.

Indulgent versus restrained cultures. Indulgence (vs. restraint) represents one of the six main cultural dimensions proposed by Hofstede (2001) and describes a society's tendency to gratify human desires and enjoyment of life. Prior research has associated indulgence with consumption-related outcomes such as customer experience (Gilboa and Mitchell 2020), luxury brand purchases (Bian and Forsythe 2012), and hedonic attitudes (Heydari et al. 2021).

Cross-country research on the relationship between values and culture has further shown that cultural differences may moderate the influence of values on behavior (Sagiv and Roccas 2021). Cultural values, on the one hand, reinforce certain individual values compatible with collective value orientations through a process of individual value socialization. On the other hand, individual values restrict the ability of cultural values to change individual behavior in ways that are in discord with what the individual deems important (Schwartz 2011). These processes explain the convergence between cultural and individual values within the context of a specific society.

Based on this principle of cultural–individual value convergence, we argue that indulgence, as a cultural value, interacts with both hedonism and universalism, as individual-level values, and moderates their effects in opposing ways. As hedonism and indulgence both promote enjoyment, pleasure, and satisfaction of hedonic needs, hedonists in indulgent cultures should engage in postlockdown indulgent consumption with higher intensity than hedonists in restrained cultures. In contrast, given the divergence of goals dictated by indulgence and an individual's level of universalism, the positive effect of universalism on voluntary simplicity should attenuate in indulgent (compared with restrained) cultures. Thus, we hypothesize:

H_{6a}: The relationship between hedonism and indulgent consumption after a period of lockdown with restricted consumption opportunities is more pronounced in indulgent than in restrained countries.

H_{6b}: The relationship between universalism and simplified consumption after a period of lockdown with restricted consumption opportunities is less pronounced in indulgent than in restrained countries.

Finally, the model includes two controls. First, it assumes that postmaterialistic orientation is associated with lower indulgent consumption and higher tendency for voluntary simplicity. Second, it assumes that consumers of indulgent cultures should exhibit stronger indulgent consumption tendencies to counterbalance pleasures lost during lockdowns (Figure 1).

Empirical Study

Methods

We employed a theoretical sampling approach by selecting exemplary European countries, namely Romania, Germany, and the United Kingdom, which were all affected by COVID-19 and had a national lockdown in spring 2020. The three countries varied in (1) their level of (post)materialism, as measured by Inglehart's framework, and (2) their level of indulgence, as measured by Hofstede scores. Our choice of countries was motivated by our aim to cover different combinations of these two variables. Romania scores low on postmaterialism compared with Germany and the United Kingdom, which have similar scores. All three countries differ in their indulgence score: Germany (40) scores below the midpoint, the United Kingdom (69) scores above the midpoint, and Romania (20) scores lowest. Against this background, we used these three countries as exemplary settings for our research purpose (the United Kingdom as a postmaterialistic and indulgent country, Germany as a rather postmaterialistic country and medium-restrained country, and Romania rather materialistic country and restrained country.) Importantly, the three countries were similar in terms of the pandemic containment strategies they followed and the strictness of the restrictions they had enforced around the time of data collection. This allows for comparability and avoids country-level confounds (see Web

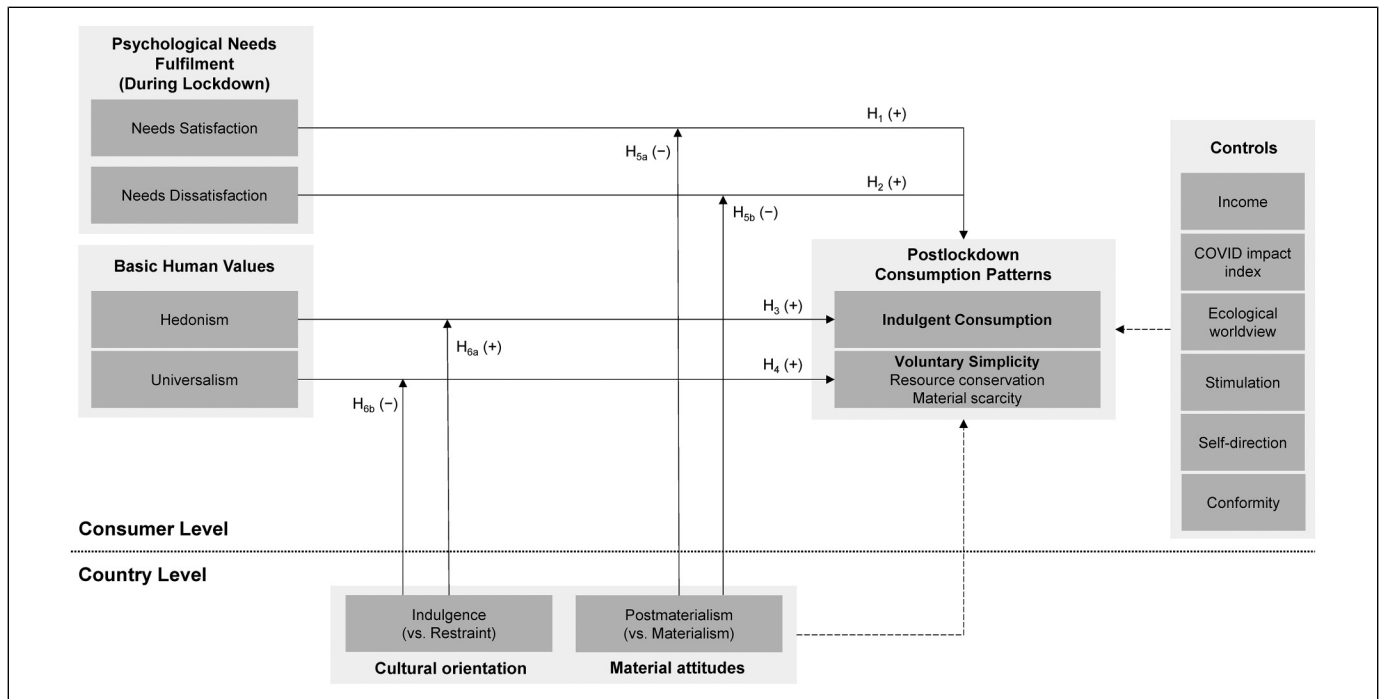


Figure 1. A Conceptual Model of Consumption Patterns in Response to Disruptive Postlockdown Experiences.

Appendix A). We intentionally opted for a cross-cultural survey approach, as we needed to test links between individual-level variables (e.g., individual needs satisfaction/frustration) with consumption change intentions, which could not be captured with country-level, secondary data unable to reflect psychological consumption change dispositions.

Data Collection and Samples

Data were collected in July 2020, after the first wave of the COVID-19 pandemic in Europe and the ensuing lockdown measures. Participants were recruited by a professional market research agency via online access panels. We targeted 500 participants per country using quota sampling for age and gender to ensure cross-national comparability for theory testing (Reynolds, Simintiras, and Diamantopoulos 2003). Because the sampling procedure included oversampling, the final samples consisted of $n_{GER} = 531$, $n_{UK} = 528$, and $n_{RO} = 532$ participants, with only slight deviations from the quota. Table 1 shows sample demographics.

Measurement

We used established measurement scales to assess the variables of the theoretical model. Table 2 shows the English version of the items used in the survey. For the German questionnaire, we used published German scale versions where available, while translating the remaining scales from English to German using back-translation. For the Romanian questionnaire, a professional translator translated the English version of the questionnaire.

First, we assessed self-reported tendencies of consumption reduction using the dimensions of material simplicity and (use of) resources from the Voluntary Simplicity Engagement Scale (Rich, Wright, and Bennett 2019). To measure indulgent consumption, we used the self-indulgence dimension from the New Consumer Impulsiveness Scale (Sharma, Sivakumaran, and Marshall 2011). The instructions made clear that the answers should refer to decisions made in response to the pandemic (“The items below refer to conclusions that you might have drawn from your experiences during the COVID-19 pandemic”).

Second, we measured need satisfaction and need frustration during the lockdown using the Balanced Measure of Psychological Needs (BMPN; Sheldon and Hilpert 2012; German: Neubauer and Voss 2016). In line with BPNT (Vansteenkiste, Ryan, and Soenens 2020), the BMPN scale operationalizes need frustration and need satisfaction as two separate dimensions. The instructions made clear that the answers should refer to the time of lockdown (“Think about your experiences during the peak of the COVID-19 pandemic in [country] when most businesses were closed and social distancing was most extreme”).

Third, we measured the universalism and hedonism using the Portrait Values Questionnaire (Schmidt et al. 2007; Schwartz et al. 2001). As control variables, we measured three additional Schwartz values (stimulation, self-direction, and conformity) and ecological worldview using a short version (Gedeshi, Zurlechner, and Rotman 2008) of the New Environmental Paradigm scale (Dunlop et al. 2000). Finally, we measured the personal impact of the pandemic for our respondents through four items (i.e., infection, loss of job, working short-time, and

Table 1. Sample Description.

| | United Kingdom | Germany | Romania |
|-----------------------------|----------------|-------------|-------------|
| N | 528 | 531 | 532 |
| Mean age in years (SD) | 45.0 (14.4) | 45.5 (14.2) | 43.7 (14.4) |
| Gender | | | |
| Male | 260 (49.2%) | 261 (49.2%) | 264 (49.6%) |
| Female | 268 (50.8%) | 270 (50.8%) | 268 (50.4%) |
| Other/prefer not say | 0 (0%) | 0 (0%) | 0 (0%) |
| Occupation | | | |
| Student | 28 (5.3%) | 59 (11.1%) | 36 (6.7%) |
| Employee | 260 (49.2%) | 306 (57.6%) | 271 (50.9%) |
| Self-employed | 41 (7.8%) | 30 (5.6%) | 46 (8.6%) |
| Unemployed | 51 (9.7%) | 17 (3.2%) | 39 (7.3%) |
| Retirement | 74 (14.0%) | 79 (14.9%) | 95 (17.9%) |
| Other | 74 (14.0%) | 40 (7.5%) | 45 (8.5%) |
| Education | | | |
| No degree | 20 (3.8%) | 6 (1.1%) | 5 (0.9%) |
| High school degree | 244 (46.2%) | 56 (10.5%) | 123 (23.1%) |
| Professional degree | 59 (11.2%) | 188 (35.4%) | 70 (13.2%) |
| Undergraduate degree | 136 (25.8%) | 207 (39.0%) | 205 (38.5%) |
| Postgraduate degree | 68 (12.9%) | 71 (13.4%) | 111 (20.9%) |
| Other | 1 (0.2%) | 3 (0.6%) | 18 (3.4%) |
| Income (monthly) | | | |
| Under £500/€1,000 | 37 (7.0%) | 57 (10.7%) | 180 (33.8%) |
| £500–£1,000/€1,000–€2,000 | 72 (13.6%) | 109 (20.5%) | 184 (34.6%) |
| £1,000–£1,500/€2,000–€3,000 | 92 (17.4%) | 124 (23.4%) | 53 (10.0%) |
| £1,500–£2,000/€3,000–€4,000 | 85 (16.1%) | 96 (18.1%) | 38 (7.1%) |
| £2,000–£2,500/€4,000–€5,000 | 82 (15.5%) | 53 (10.0%) | 19 (3.6%) |
| £2,500+/€5,000+ | 97 (18.4%) | 39 (7.3%) | 8 (1.5%) |
| No answer | 63 (11.9%) | 53 (10.0%) | 50 (9.4%) |
| Mean household size (SD) | 2.6 (1.3) | 2.3 (1.2) | 2.9 (1.3) |

less income) answered on a binary format (0 = not affected, 1 = affected), which we subsequently summed to create the control variable “COVID impact index.”³

Analysis and Results

Measurement Model Assessment

We tested the psychometric properties of the constructs in our conceptual framework using a series of confirmatory factor analyses (CFAs) across country samples. To reduce model complexity and ensure an adequate sample to estimated parameter ratio, we estimated separate CFA models for (1) the needs satisfaction/frustration construct, (2) the basic human values scales, and (3) the consumption change variables and controls across countries.

Due to the multidimensional nature of the need satisfaction construct, previous literature has proposed four alternative construct specifications of the BMPN scale (Neubauer and Voss 2016; Sheldon and Hilpert 2012). Based on our analysis of alternative specifications, we opted for the model

specification (Model 3) in our subsequent structural model because it (1) fits conceptually with the dual nature of the needs satisfaction/dissatisfaction conceptualization and (2) consistently achieves the best possible empirical fit with the data among alternative specifications (for detailed comparisons, see Web Appendix B).

CFAs of the five values measures across country samples, following the exclusion of a few items with low loadings, lead to satisfactory model fit (United Kingdom: $\chi^2 = 214.83$, $df = 55$, $\chi^2/df = 3.91$, root mean square error of approximation [RMSEA] = .074, standardized root mean square residual [SRMR] = .052, comparative fit index [CFI] = .938, goodness-of-fit index [GFI] = .940, Tucker–Lewis index [TLI] = .912; Germany: $\chi^2 = 204.02$, $df = 55$, $\chi^2/df = 3.71$, RMSEA = .071, SRMR = .065, CFI = .936, GFI = .942, TLI = .909; Romania: $\chi^2 = 191.67$, $df = 55$, $\chi^2/df = 3.85$, RMSEA = .068, SRMR = .045, CFI = .958, GFI = .943, TLI = .941). All item loadings, composite reliabilities, and average variances extracted were within conventional thresholds, and discriminant validity according to the Fornell and Larcker criterion was achieved. Finally, CFAs including the consumption change intentions scales across countries also led to satisfactory model fit (United Kingdom: $\chi^2 = 431.36$, $df = 145$, $\chi^2/df = 2.99$, RMSEA = .062, SRMR = .066, CFI = .903, GFI = .918, TLI = .885; Germany: $\chi^2 = 515.56$,

³ We measured related variables that we did not include in the final model: cognitive well-being, affective well-being, the work–life balance subscale from the Voluntary Simplicity Engagement Scale, and participants’ evaluation of the government’s management of the pandemic.

Table 2. Construct Measurement.

| Construct | Item | United Kingdom | Germany | Romania |
|---|-------|----------------|----------------|----------------|
| Needs Satisfaction | | .858/.820/.343 | .863/.828/.354 | .822/.818/.342 |
| I was free to do things my own way. | AUT1+ | .630 | .670 | .710 |
| My choices expressed my "true self." | AUT3+ | .798 | .606 | .726 |
| I was really doing what interests me. | AUT5+ | .642 | .738 | .599 |
| I felt I was in contact with people who were close to me. | REL1+ | .493 | .569 | .499 |
| I felt close and connected with other people who are important to me. | REL2+ | .554 | .564 | .550 |
| I felt a strong sense of intimacy with the people I spent time with. | REL3+ | .462 | .537 | .296 |
| I was successfully completing a difficult task. | COM1+ | .578 | .523 | .594 |
| I took on and mastered hard challenges. | COM3+ | .493 | .429 | .627 |
| I did well even at the hard things. | COM5+ | .548 | .658 | .551 |
| Needs Frustration | | .887/.881/.454 | .898/.891/.479 | .867/.865/.420 |
| I had a lot of pressure I could do without. | AUT2- | .614 | .664 | .521 |
| There were people telling me what I had to do. | AUT4- | .538 | .583 | .474 |
| I had to do things against my will. | AUT6- | .601 | .559 | .613 |
| I was lonely. | REL4- | .662 | .707 | .637 |
| I felt unappreciated by one or more important people. | REL5- | .659 | .702 | .729 |
| I had disagreements or conflicts with people I usually get along with. | REL6- | .663 | .713 | .710 |
| I experienced some kind of failure or was unable to do well at something. | COM2- | .723 | .759 | .688 |
| I felt incompetent. | COM4- | .789 | .779 | .734 |
| I struggled doing something I should be good at. | COM6- | .778 | .731 | .673 |
| Conformity ^a | | .762/.763/.520 | .701/.700/.442 | .793/.799/.572 |
| It is important to him/her always to behave properly. He/She wants to avoid doing anything people would say is wrong. | CFRM1 | .667 | .619 | .677 |
| It is important to him/her to be obedient. He/She believes he/she should always show respect to his parents and to older people. | CFRM2 | .65 | .580 | .750 |
| It is important to him/her to be polite to other people all the time. He/She tries never to disturb or irritate others. | CFRM3 | .833 | .778 | .833 |
| Universalism ^a | | .788/.792/.561 | .744/.747/.497 | .754/.761/.517 |
| He/She thinks it is important that every person in the world be treated equally. He/She wants justice for everybody, even for people he/she doesn't know. | UNIV1 | .781 | .743 | .754 |
| It is important to him/her to listen to people who are different from him. Even when he/she disagrees with them, he/she still wants to understand them. | UNIV2 | .684 | .685 | .611 |
| He/She believes all the worlds' people should live in harmony. Promoting peace among all groups in the world is important to him/her. | UNIV3 | .777 | .685 | .781 |
| Stimulation ^a | | .758/.752/.504 | .785/.792/.562 | .802/.802/.575 |
| He/She likes to take risks. He/She is always looking for adventures. | STML1 | .686 | .760 | .754 |
| He/She likes surprises. It is important to him/her to have an exciting life. | STML2 | .685 | .824 | .757 |
| He/She thinks it is important to do lots of different things in life. He/She always looks for new things to try. | STML3 | .756 | .655 | .763 |
| Self-Direction ^a | | .756/.756/.608 | .687/.689/.526 | .754/.756/.609 |
| It is important to him/her to make his own decisions about what he does. He/She likes to be free to plan and to choose his activities for himself. | SLFD1 | .784 | .692 | .737 |
| It is important to him/her to be independent. He/She likes to rely on himself/herself. | SLFD2 | .775 | .757 | .821 |
| Hedonism ^a | | .811/.812/.685 | .833/.834/.716 | .836/.838/.722 |
| He/She seeks every chance he can to have fun. It is important to him/her to do things that give him/her pleasure. | HEDO1 | .864 | .813 | .803 |
| He/She really wants to enjoy life. Having a good time is very important to him/her. | HEDO2 | .789 | .878 | .894 |
| Indulgence | | .745/.744/.424 | .819/.825/.543 | .684/.686/.362 |
| I enjoy spending money again. | IND1 | .689 | .804 | .609 |
| I like to indulge myself. | IND2 | .709 | .738 | .660 |
| I buy things for pleasure. | IND3 | .676 | .601 | .696 |
| I like good things in life. | IND4 | .511 | .786 | .397 |
| Resources | | .687/.677/.347 | .717/.715/.387 | .699/.705/.381 |
| I repair broken items rather than replace them. | RES1 | .607 | .649 | .669 |
| I will make do with what I have on hand rather than purchase something new. | RES2 | .679 | .680 | .717 |
| I avoid buying products that are designed to be obsolete within a short period of time. | RES3 | .544 | .518 | .456 |
| I am very careful with how much power, water and fuel (including gas or wood) I use. | RES4 | .551 | .630 | .594 |

(continued)

Table 2. (continued)

| Construct | Item | United Kingdom | Germany | Romania |
|---|-------|----------------|----------------|----------------|
| Material Scarcity | | .761/.760/.515 | .747/.747/.497 | .692/.689/.425 |
| I will need less material things to live a fulfilling life. | MTRS1 | .646 | .697 | .641 |
| I will try having less possessions. | MTRS2 | .729 | .722 | .655 |
| In general, I will purchase less. | MTRS3 | .773 | .695 | .659 |
| Ecological Worldview | | .776/.781/.476 | .829/.834/.561 | .716/.724/.402 |
| Humans were meant to rule over the rest of nature. | ECOS1 | .646 | .750 | .624 |
| Human creativity will ensure that the earth remains fit to live in. | ECOS2 | .559 | .577 | .468 |
| The balance of nature is strong enough to cope with the impacts of modern industrial nations. | ECOS3 | .798 | .873 | .758 |
| The so-called ecological crisis is massively exaggerated. | ECOS4 | .732 | .767 | .652 |

^aThe items were tailored dynamically to the gender that participants indicated at the outset of the survey. Female participants received descriptions with the pronouns “she” and “her,” whereas male participants received descriptions with “he” and “him.”

Notes: Item-level entries represent standardized loadings; construct-level entries represent Cronbach’s alphas/composite reliabilities/average variances extracted.

df = 145, $\chi^2/df = 3.56$, RMSEA = .069, SRMR = .066, CFI = .913, GFI = .898, TLI = .898; Romania: $\chi^2 = 500.01$, df = 145, $\chi^2/df = 3.45$, RMSEA = .068, SRMR = .066, CFI = .858, GFI = .903, TLI = .833).⁴ Psychometric properties were largely satisfactory, with reliability and validity metrics reaching values that indicate sound measurement across countries. Thus, our measurement model estimates suggest sound measurement properties.

Common Method Variance

We used the unmeasured common latent factor technique to test for common method variance separately in each country data set. Specifically, we specified all items across constructs measured on the same scale format to load on a common latent factor, set all loadings equal, and constrained the latent factor’s variance to unity (Podsakoff et al. 2003). The value of the squared common unstandardized loading represents the amount of common method variance in each data set. The results suggest that the common method variance is low and way below the threshold of 50%, which would indicate serious common method variance concerns (United Kingdom: $\lambda = .375$, $\lambda^2 = .141$; Germany: $\lambda = .288$, $\lambda^2 = .083$; Romania: $\lambda = .298$, $\lambda^2 = .089$). We thus conclude that common method variance is not a threat to our path estimates.

Cross-Cultural Invariance

We tested the cross-cultural invariance of our measures across the three country samples (Steenkamp and Baumgartner 1998). Having established that Model 3 is the appropriate specification for the BMPN scale across samples (see Web Appendix B), we focused on testing the invariance of the remaining constructs in

two separate invariance analyses, one for the values measures and one for the consumption pattern measures.

Regarding values, the results support configural invariance as shown by satisfactory (and comparable) global fit indices across samples (unconstrained model: $\chi^2 = 610.52$, df = 165, $\chi^2/df = 3.70$, RMSEA = .041, CFI = .945, GFI = .942, TLI = .923). Additionally, setting the measurement weights equal across the three country samples (constrained model: $\chi^2 = 633.95$, df = 181, $\chi^2/df = 3.50$, RMSEA = .040, CFI = .944, GFI = .940, TLI = .928) did not lead to a significant deterioration in model fit compared with the unconstrained model ($\Delta\chi^2 = 23.43$, $\Delta df = 16$, $p = .103$), providing evidence of metric invariance.

Turning to consumption pattern change measures, the unconstrained model demonstrated acceptable model fit statistics (unconstrained model: $\chi^2 = 1,044.62$, df = 252, $\chi^2/df = 4.15$, RMSEA = .045, CFI = .894, GFI = .914, TLI = .864) that were similar across the three country samples, suggesting configural invariance. Regarding metric invariance, comparing the unconstrained model with a model constraining all measurement weights to equality resulted in a significant deterioration in model fit (constrained model: $\chi^2 = 1183.15$, df = 274, $\chi^2/df = 4.32$, RMSEA = .046, CFI = .894, GFI = .914, TLI = .868), implying the lack of full metric invariance across countries. Failure to achieve full metric invariance is common in cross-cultural research, as it represents a frequently unfeasible, ideal goal rather than a pragmatic prerequisite for cross-cultural model testing under realistic conditions. This is especially true for comparisons across more than two countries that inflate the number of parameters to be found invariant (Steenkamp and Baumgartner 1998). Following common practice in cross-cultural research, we subsequently checked for partial metric invariance through follow-up tests that allowed specific parameters to be noninvariant according to conventional statistical thresholds. Indeed, inspecting the items with the biggest discrepancies across countries and allowing four item loadings to be invariant led to a model (partially constrained model: $\chi^2 = 1,054.21$, df = 266, $\chi^2/df = 3.96$, RMSEA = .043, CFI = .895, GFI = .913, TLI = .875) that fit the data equally as well as

⁴ For identification purposes, we specified voluntary simplicity as a second-order construct comprising two reflectively measured dimensions (resource conservation and material scarcity). The paths from the second-order construct to the two dimensions were specified to be equal in size as per the tau-equivalent model (see Oberecker and Diamantopoulos 2011).

Table 3. Pooled Model Estimates.

| | Endogenous Variables | |
|--------------------------------------|---|----------------------|
| | Indulgent Consumption | Voluntary Simplicity |
| Needs Fulfillment | | |
| Needs satisfaction (H ₁) | .231 (.036)*** | .311 (.041)*** |
| Needs frustration (H ₂) | .133 (.026)*** | .219 (.030)*** |
| Basic Human Values | | |
| Hedonism (H ₃) | .345 (.049)*** | -.137 (.052)** |
| Universalism (H ₄) | -.077 (.049) | .199 (.057)*** |
| Country-Level Controls | | |
| Postmaterialistic country | -.271 (.056)*** | .137 (.063)* |
| Indulgent country | .152 (.050)** | .242 (.056)*** |
| Individual-Level Controls | | |
| Income | .015 (.012) | -.038 (.014) |
| COVID impact index | -.045 (.021)* | .037 (.024) |
| Ecological worldview | -.032 (.025) | .111 (.029)*** |
| Conformity | .037 (.047) | -.006 (.054) |
| Stimulation | -.034 (.051) | .034 (.057) |
| Self-direction | .077 (.045) | .000 (.051) |
| R ² | .435 | .252 |
| Model fit | $\chi^2 = 4,713.78$, $df = 1,066$, $\chi^2/df = 4.42$, RMSEA = .046, SRMR = .050, CFI = .881, GFI = .884, TLI = .864 | |

* $p < .05$.** $p < .01$.*** $p < .001$.

Notes: Column entries represent unstandardized parameter estimates (SEs in parentheses).

the unconstrained model ($\Delta\chi^2 = 9.59$, $\Delta df = 14$, $p = .792$). We are thus confident that our scales are partially invariant across countries, allowing us to proceed with testing the structural paths of our model.

Structural Model Estimation

We tested our conceptual framework in two stages. First, following successful cross-cultural invariance tests, we pooled the three country samples ($N = 1,591$) and estimated the overall model to test for the non-country-specific hypotheses (Table 3). Beyond the pooled model, we also estimated country-level models, whose results are largely consistent with the pooled model ones (see Web Appendix C for details). Second, we conducted a series of multigroup analyses to test our moderation hypotheses (Table 4). All models were estimated using covariance-based structural equation modeling in the AMOS environment using maximum likelihood estimation (standardized estimates reported in text; unstandardized estimates and standard errors reported in the tables).

Pooled model results. The pooled sample model showed good overall model fit ($\chi^2 = 4,713.78$, $df = 1,066$, $\chi^2/df = 4.42$, RMSEA = .046, SRMR = .050, CFI = .881, GFI = .884, TLI = .864). Needs satisfaction positively affected both indulgent consumption ($\beta = .260$, $p < .001$) and voluntary simplicity ($\beta = .349$, $p < .001$). Similarly, needs frustration had positive effects on both

indulgent consumption ($\beta = .183$, $p < .001$) and voluntary simplicity ($\beta = .299$, $p < .001$). Thus, H₁ and H₂ are supported. Regarding basic human values, we found a positive effect of hedonism on indulgent consumption ($\beta = .461$, $p < .001$) and a positive effect of universalism on voluntary simplicity ($\beta = .231$, $p < .001$), lending support to both H₃ and H₄. Thus, all our main-effect hypotheses were supported (Table 3).⁵ We discuss the effects of control variables in Web Appendix C.

Multigroup moderation analysis. We conducted a series of multigroup analyses to test our moderation hypotheses (H₅ and H₆). In these analyses, we used the postmaterialism country dummy (1 = United Kingdom, Germany; 0 = Romania) and the indulgence country dummy (1 = United Kingdom; 0 = Germany, Romania) as the moderating binary variable. Specifically, for each hypothesized path to be moderated, we estimated unconstrained (i.e., path is freely estimated) and constrained (i.e., path is fixed to be equal across dummy levels) models and compared the model fit difference using formal chi-square comparisons while allowing free estimation of all the remaining paths.

The results in Table 4 suggest that in postmaterialistic countries, frustration of basic needs had an attenuated (yet still positive) effect on both indulgent consumption ($\Delta\chi^2 = 3.142$, $\Delta(df) = 1$, $p = .076$) and voluntary simplicity ($\Delta\chi^2 = 6.439$, $\Delta(df) = 1$, $p = .011$) compared with materialistic countries. Thus, in support of H_{5b}, need-frustrated consumers in postmaterialistic countries were less likely to adopt simplified or indulgent consumption patterns after lockdown compared with need-frustrated consumers in materialistic countries. However, we do not observe significant moderating effects of postmaterialism on the effects of needs satisfaction on either indulgent consumption or voluntary simplicity, implying that consumers who experienced lockdowns positively were equally likely to adjust postlockdown consumption patterns in both materialistic and postmaterialistic countries. Thus, H_{5a} is not supported.

Regarding the moderation of the effects of basic human values by cultural values, we found the positive effect of hedonism on indulgent consumption in culturally indulgent countries to be stronger than in culturally restrained countries ($\Delta\chi^2 = 6.232$, $\Delta(df) = 1$, $p = .013$). Thus, H_{6a} is supported. Similarly, the positive effect of universalism on voluntary simplicity was stronger in culturally restrained countries than in culturally indulgent ones ($\Delta\chi^2 = 7.132$, $\Delta(df) = 1$, $p = .008$). Thus, H_{6b} is also supported.

General Discussion

Wood (2022, p. 5) underlines that “marketers understood that different people around the world responded to pandemic-created challenges

⁵ We estimated several additional models to test the presence of interactions between needs satisfaction/frustration and basic human values (satisfaction \times universalism, frustration \times hedonism, etc.). No effects were significant, and the corresponding R² increases were marginal, suggesting that the effects of needs and human values do not interact but instead jointly (yet separately) affect consumption pattern change.

Table 4. Multigroup Moderation Analysis.

| Postmaterialism vs. Materialism Moderated Path (Hypothesis) | Unconstrained Model | | | | Constrained Model | | | Model Comparison | | |
|---|---------------------|-------|---------------------------------|----------------------------------|-------------------|-------|--------------------------------|------------------|--------------|----------|
| | χ^2 | df | Path Estimate (Postmaterial) | Path Estimate (Materialistic) | χ^2 | df | Path Estimate (Constrained) | $\Delta(\chi^2)$ | $\Delta(df)$ | <i>p</i> |
| Satisfaction → Indulgent consumption (H _{5a}) | 6,388.75 | 2,030 | .229 (.050)*** | .308 (.067)*** | 6,389.67 | 2,031 | .260 (.039)*** | .931 | 1 | .339 |
| Satisfaction → Voluntary simplicity (H _{5a}) | 6,388.75 | 2,030 | .244 (.047)*** | .260 (.068)*** | 6,388.79 | 2,031 | .250 (.039)*** | .036 | 1 | .849 |
| Frustration → Indulgent consumption (H _{5b}) | 6,388.75 | 2,030 | .116 (.034)*** | .230 (.059)*** | 6,391.89 | 2,031 | .150 (.029)*** | 3.142 | 1 | .076 |
| Frustration → Voluntary simplicity (H _{5b}) | 6,388.75 | 2,030 | .140 (.032)*** | .325 (.065)*** | 6,395.19 | 2,031 | .173 (.030)*** | 6.439 | 1 | .011 |
| Indulgence vs. Restraint Moderated Path (Hypothesis) | Unconstrained Model | | | | Constrained Model | | | Model Comparison | | |
| | χ^2 | df | Path Estimate (Indulgent) | Path Estimate (Restrained) | χ^2 | df | Path Estimate (Constrained) | $\Delta(\chi^2)$ | $\Delta(df)$ | <i>p</i> |
| Hedonism → Indulgent consumption (H _{6a}) | 6,847.67 | 2,030 | .550 (.137)*** | .212 (.053)*** | 6,853.91 | 2,031 | .272 (.049)*** | 6.232 | 1 | .013 |
| Universalism → Voluntary simplicity (H _{6b}) | 6,847.67 | 2,030 | .067 (.069) | .385 (.099)*** | 6,854.81 | 2,031 | .182 (.056)** | 7.132 | 1 | .008 |

p* < .05.*p* < .01.****p* < .001.

based on a plethora of internal (e.g., upbringing, cultural identity, attitudes, psychographics, demographics) and external factors (e.g., choice contexts, persuasion effects, decision triggers, incentives).” The present research examined which factors at the level of the individual consumer (i.e., psychological need fulfillment, basic values) and at the country level (i.e., postmaterialism, indulgence) determine which consumption patterns consumers might adopt in response to a time of consumption restriction (due to COVID-19 lockdowns). We focused on two possible consumption behaviors in response to the lockdown experience: (1) consumption reduction in the form of voluntary simplicity and (2) consumption increase in the form of indulgent consumption. The major contribution of this research is to provide a framework that integrates situational experiences, stable interindividual differences, and cultural differences that influence consumption patterns in response to a crisis that limits consumption opportunities. In addition to providing theoretical contributions to (cross-cultural) consumer research, this framework also provides practical implications for marketers and policy makers.

Theoretical Contributions

Psychological need frustration and need satisfaction increased the intention to adopt both simplified and indulgent consumption

patterns postlockdown. Our results show that psychological needs play a pivotal role for triggering consumption behaviors both when they are fulfilled and when they are frustrated by a disruptive consumption event (see also Rich, Hanna, and Wright 2017). The finding that both need satisfaction and need frustration act as predictors of consumption behavior following the lockdown experience suggests that it is not the direction of the psychological experience during the crisis (i.e., frustration vs. satisfaction) but its intensity that triggers a general preparedness to adopt specific consumption patterns. The finding that both need satisfaction and need frustration act as predictors of consumption patterns is in line with self-determination theory, which posits that need satisfaction and need frustration are not simply antagonistic forces but reflect separate dimensions with independent effects on human behavior (Vansteenkiste, Ryan, and Soenens 2020). Regarding research on behavior change, our results provide support for the assumption that disrupting experiences—be they for the better or for the worse—offer an opportunity to rethink one’s routines and make plans to change one’s behavior (Verplanken et al. 2008; Wood, Tam, and Witt 2005). Notably, the effects of needs satisfaction and frustration show stability across countries, implying that global crises that limit consumption opportunities may trigger changes in global demand in their aftermath.

Personal values determine the directions of consumption patterns after the lockdowns. These relationships are line with Schwartz's (2012) theory of basic human values. As such, universalism is linked to consumption reduction, while hedonism is linked to indulgence. In addition, hedonism is negatively related to consumption reduction. Although we did not explicitly hypothesize this relationship, this finding aligns with our proposed framework: Striving for pleasure and sensuous gratification, as characteristic for hedonism (Schwartz 2012), is contradictory to the intention to reduce consumption.

With regard to country-level differences, we focused on postmaterialism (Inglehart 2008) and indulgence (Hofstede 2001) as cultural values. Both factors had direct as well as moderating effects on consumption patterns. The findings suggest that in postmaterialistic (vs. materialistic) countries, consumption as a coping strategy in response to a negative psychological lockdown experience is less prevalent. Consumers in postmaterialistic countries were more likely to reduce consumption and less likely to indulge postlockdown. Importantly, though, we observe an asymmetrical influence of postmaterialism on its ability to block the translation of needs fulfillment on consumption pattern adoption. While psychological need frustration had less impact on the intention to embrace specific consumption patterns in postmaterialistic countries, this was not the case for need satisfaction, which triggered simplified and indulgent consumption patterns with the same intensity in both materialistic and postmaterialistic country environments. Indulgence (vs. restraint) as a cultural value, by contrast, increased tendencies to use consumption as a vehicle to respond to the lockdown experience: the tendency to indulge was higher, the influence of universalism on consumption reduction was attenuated, and the influence of hedonism on indulgence was more pronounced.

Implications for International Marketers

Our findings have implications for managers responsible for navigating their brands after a pandemic and, more generally, in a postcrisis global marketplace. First, although the effects of needs satisfaction/frustration are quite strong and stable in the pooled model estimates, our findings suggest that the effects of needs satisfaction/frustration are not equally strong (or even significant) in the three countries we considered. For instance, the effect of needs frustration on voluntary simplicity is nonsignificant in the U.K. sample, while its effect on indulgent consumption is not significant in the German sample. This is also in line with the moderating roles of postmaterialism and indulgence (vs. restrained consumption). Relatedly, some countries have experienced the pandemic more negatively than others, leading to differences in life satisfaction and consumer well-being (Davvetas, Ulqinaku, and Sarial Abi 2022). Similarly, the impact of lockdowns on individuals' mental health has been found to exhibit significant variation across countries (Ding et al. 2021). Thus, international marketers should be aware that countries where lockdowns had stronger psychological impact on consumers (i.e., exhibiting more

extreme changes in needs satisfaction/frustration) should expect bigger shifts in consumption patterns than those who psychologically underwent lockdowns more mildly. Given that the direction of consumption pattern adoption is largely dictated by a country's level of postmaterialism and cultural indulgence, our findings imply that marketers should closely monitor each country's materialistic and cultural profile to predict cross-country differences in consumption patterns emerging following the pandemic or other future crises.

Second, an important implication of our findings is that specific markets or industries are more likely to be affected by shifts in consumption patterns post-COVID-19 than others. One the one hand, global luxury products, hedonic service brands, or other goods/services that fall outside the domain of necessities are expected to see postpandemic gains in materialistic countries (i.e., countries scoring high on indulgence and markets with a large share of hedonic consumer segments). Indeed, data indicate that, in 2022, luxury sales grew fast enough to exceed prepandemic levels; yet this resurgence is mostly attributed to materialistic Eastern markets such as China and Korea and less to postmaterialistic markets such as Europe and Japan, which lag far behind (*Financial Times* 2022). Such brands should thus target materialistic and indulgent countries to recover from the losses faced during the pandemic and grow their global market shares. On the other hand, international companies should consider investing in sustainable strategies and the development of products that promote or facilitate a voluntarily simplified lifestyle (e.g., alternative modes of transport, secondhand products, repair services, sharing platforms). Such investments are expected to pay off in the aftermath of the pandemic, particularly in countries with restrained cultures, postmaterialist attitudes, and universalist consumers who saw the pandemic as an opportunity to shift to more simplified consumption lifestyles. In these countries, marketers should also expect to see delays in consumers' product upgrade decisions (e.g., buying the new version of a smartphone vs. keeping the older one) or even prolonged product life cycles due to consumers' situational skepticism toward excessive consumption. Finally, marketers should consider capitalizing on the recent trend of sustainable luxury brands that combine hedonic/indulgence benefits with environmental protection. Sustainable luxury is a novel phenomenon in the global marketplace, with scholars calling for a deeper investigation of its cross-cultural determinants and manifestations (Athwal et al. 2019). Our findings show that indulgent consumption and voluntary simplification coexist as purchase motives in postpandemic markets. Thus, global marketers should consider the development of ecoluxury brands as a promising strategy to target international consumer segments who desire to counterbalance hedonic consumption with sustainable and resource-efficient innovations (e.g., use of recyclable materials in production, vintage fashion brands).

Third, the pandemic forced international marketers to make hard decisions about which foreign markets to enter, reenter, or abandon altogether (Vissak 2022). The evidence of significant cross-country variation in postlockdown consumption patterns

observed in our findings implies that managers should avoid blanket approaches and strictly linear internationalization strategies when deciding which foreign markets to enter or exit during their postpandemic recovery. As cultural and individual values interact in shaping consumption preferences in the aftermath of COVID-19, international marketers should consider not only cultural country profiles but also microsegments within each country that have psychographic profiles promoting certain values (e.g., universalists, hedonists). For instance, new product launches or hedonic advertising appeals are expected to work more effectively in materialistic and indulgent countries craving hedonic “revenge spending.” In contrast, postmaterialistic and culturally restrained countries should be more receptive to utilitarian advertising appeals or products promising lifestyle simplification to consumers.

Implications for Policy Makers

Beyond relevance for marketers, the results of this study are also relevant to public policy makers aiming to (1) forecast consumer behavior as a reaction to crises and (2) shift consumer behavior in a particular direction after a crisis. For the first purpose, it appears useful to initially consider dominant cultural values in a target country with regard to postmaterialism (vs. materialism) and indulgence (vs. restraint), as they impact directions of consumption patterns. In a second step, governments might use primary data on personal values within the target country for identifying the size of consumer segments that tend toward different types of reactions for a more fine-grained forecasting.

Regarding shifting consumer behavior, governments may consider using the crisis as an opportunity to foster individual behavior that assists in reaching the sustainable development goals in the U.N. Agenda 2020 (United Nations 2015). It has been repeatedly debated whether the COVID-19 pandemic offers a window of opportunity for more sustainable consumption or harms sustainable consumption (e.g., Hüttel and Balderjahn 2021; Tonne 2021). The present research contributes to this debate by showing that the answer is not simple. Our results suggest that the pandemic does provide such a window of opportunity, but not for all consumers. In general, consumers who endorse universalism are more likely to adopt simplified consumption patterns as a response to the crisis, whereas consumers with hedonistic values are less prone to reduce their consumption of materials and resources. Hence, public policy initiatives (e.g., nudging) aiming to promote reduced consumption should take these differences into account. For universalist consumers, public policy measures can build on their greater readiness to adopt voluntary simplified lifestyles after the crisis. The challenge is to support these consumers by translating their readiness into action (Bamberg 2013). These consumers may particularly benefit from providing an environment that makes taking action easier, such as increasing car-sharing offers or providing reduced fees for public transportation. In addition, communication campaigns should integrate psychological techniques that

support translating intentions into action (Fennis et al. 2011). Persuasive appeals could refer to positive experiences with simplified lifestyles during the pandemic (e.g., simple pleasures such as discovering local parks or other nearby destinations). For segments with hedonist values, by contrast, persuasive appeals should avoid any reference to the experiences with reduced consumption during the pandemic. The major goal for these segments would be to establish positive intentions toward consumption reduction before supporting action.

Limitations and Further Research

Our study is subject to limitations that offer valuable future research directions. First, we tested our model in the context of COVID-19 lockdowns. Although we assume that the mechanisms outlined in our framework also generalize to other crises characterized by consumption restrictions, this assumption warrants further contextual replication. The ongoing Russo-Ukrainian War is a sad example that global crises are not rare. The impact of the war on global supply chains shows that consumption restrictions may also affect countries that are not directly involved in such conflicts. Relatedly, the effects of and the measures to fight the global climate change crisis may also lead to large-scale consumption restrictions. Thus, future researchers should consider a more diverse range of global crises to test whether this model generalizes across different crisis contexts.

Second, as our study focused on the psychological determinants driving postlockdown consumption patterns, we used consumer surveys to detect consumer beliefs, attitudes, and experiences of the pandemic. However, our findings should be complemented with secondary data that show how key metrics relating to the proposed consumption patterns have been developing as the world emerges from the pandemic. For instance, sales of luxury brands, energy consumption reductions, or market shares of sustainable products could be used as proxies of our dependent variables when observing cross-country consumption behavior over time. Relatedly, future research should employ longitudinal models of consumption indices to test whether the postlockdown consumption patterns observed in our study persist or change over time.

Third, despite our choice of countries being guided by the literature and a careful comparison of postmaterialism and cultural value scores, any replication in a new set of countries is desirable. Having focused only on European countries to minimize cross-country differences, we were unable to consider other relevant country distinctions (e.g., emerging vs. developed countries), which could offer a more generalizable picture of postpandemic consumption trends. Moreover, although we selected countries that followed pandemic containment strategies of similar strictness, length and type, we expect that differences in policy responses to the pandemic would influence our effects by affecting the level of needs satisfaction/frustration experienced by local citizens during lockdown periods. Additionally, we used certain cultural values to assess country differences while downplaying others, which offers future researchers the opportunity to further

investigate cross-cultural differences in consumers' responses to global crises. Although we did not find significant interactions between basic human values and situational satisfaction/frustration of psychological needs in our model estimates, future researchers should delve deeper into the interplay between enduring and contextual factors when predicting consumption trends following global crises.

Finally, we assessed consumption patterns at a general level. As such, our findings are not indicative for specific industries or product categories. Future research investigating industry-specific boundary conditions would be helpful.

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