



# How Anti-consumption Can Lead to Subjective Well-Being: A Closer Look at the Role of Time Orientation

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## Abstract

Existing research shows contrasting evidence on the interconnections between anti-consumption and subjective well-being. Further, scant research exists on how time preferences might interact with anti-consumption and well-being. Using a quantitative survey with 333 UK participants (Study 1), we test hypotheses about how individuals' temporal preferences, including long-term orientation and tendency to spend time meaningfully, impact the interconnection between anti-consumption and well-being. Results determine that spending time meaningfully mediates the relationship between anti-consumption and subjective well-being. Moreover, individuals who are more long-term orientated show lower levels of subjective well-being than individuals who are less long-term orientated. This is a counter-intuitive finding, which we test further (Study 2) using an experimental research design with a sample of 248 US participants. Results confirm that the relationship between anti-consumption and subjective well-being is mediated by spending time meaningfully. However, individuals who score high on frugality (a lifestyle related to both anti-consumption and long-term orientation) have a lower tendency to spend time meaningfully than individuals who score low on frugality. Our research contributes to the anti-consumption literature by clarifying the relationship between anti-consumption and subjective well-being and determining the significance of time preferences in this relationship. These contributions are significant, as they respond to calls for further research on the outcomes of anti-consumption and its interconnections with temporality.

**Keywords** Anti-consumption · Well-being · Temporal orientation · Spending time meaningfully · Long-term orientation

## Introduction

This research examines the interconnections among anti-consumption, time-orientation, and subjective well-being. QueryAnti-consumption has been defined as “an expression of the averseness to the processes of (mass) consumption and/or the acquisition, use, and disposal of certain commoditised goods and services” (Hutter & Hoffmann, 2013, p. 219). More recently, it has been outlined as “intentionally and meaningfully excluding or cutting goods from one’s routine or reusing once-acquired goods with the goal of

avoiding consumption” (Makri et al., 2020, p. 4). Indeed, anti-consumption is addressed in relevant literature as a form of morally driven action involving intentional, volitional behaviors and attitudes against consumption (Chatzidakis & Lee, 2013), and anti-consumers are said to be individuals with “a strong resistance to, distaste of, or even resentment or rejection of” consumption (Zavestoski, 2002, p. 121).

Current research suggests that a reduction in consumption may have positive consequences at micro (i.e., individual), meso (i.e., organizations), and macro (i.e., society) levels (García de Frutos et al., 2018; Hoffmann & Lee, 2016; Lee & Ahn, 2016). At a societal level, anti-consumption helps to alleviate important sustainability-related problems, which are linked to environmental resource depletion caused by over-production systems that seek to satisfy consumers’ (alleged) growing demands. Thus, when individuals voluntarily decide to reduce their consumption levels, they are choosing to reduce the resource intensity of their lifestyles (Culiberg et al., 2022), which can have positive environmental and distributive benefits at the aggregate level. In

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fact, compared with consumers who just have environmental concerns, those who actually adopt anti-consumption lifestyles have been shown to “reduce their personal contribution to harmful impacts on the environment” (Kropfeld et al., 2018, p. 253). Additionally, anti-consumption can involve boycotting behaviors that attempt to pressure companies and countries to stop irresponsible business practices (Iyer & Muncy, 2009). When successful at a collective level, such actions can help reduce irresponsible business practices in the targeted industry sector and bring about an overall benefit to society (García de Frutos et al., 2018). At an individual level, anti-consumption behavior has been positively associated with consumer well-being (Maseeh et al., 2022).

However, contrasting research evidence suggests a more nuanced relationship between efforts to reduce or avoid consumption and the subjective well-being of an individual. For instance, research shows that anti-consumption can have a neutral (Seegebarth et al., 2016), or even negative (Iyer & Muncy, 2016) effect on happiness. Indeed, Oral and Thurner (2019) found that only certain aspects of anti-consumption (i.e., low material desire and intrinsic source of happiness) can affect well-being.

Other research suggests that the link between anti-consumption and subjective well-being may be dependent upon specific conditions (Balderjahn et al., 2023), such as the processes and motives that underlie this relationship. For example, Iyer and Muncy (2016) found that anti-consumption due to personal (micro) reasons has a positive effect on well-being while anti-consumption for societal (macro) reasons is negatively linked with (i.e., has a negative effect on) well-being. Also, anti-consumption requires overcoming daily challenges and the rhythms of well-established social practices (Moraes et al., 2025). It also requires complicated trade-offs between the individual’s self-interest and that of society’s and, hence, significant cognitive efforts. Thus, anti-consumers who have a need for such effortful cognition are more likely to experience a positive relationship between their anti-consumption behavior and subjective well-being (Hüttel et al., 2020).

Essentially, what this contrasting research evidence suggests is that subjective well-being is theorised as one of the most desirable outcomes of anti-consumption at the individual level (Lee & Ahn, 2016). However, extant research on the link between anti-consumption and well-being has not proved a direct relationship between these two constructs. Although this may mean that contingencies and boundary conditions may affect this relationship, currently, scant research tests such mechanisms. This demands further research on the potential moderators and/or mediators of the relationship between anti-consumption and subjective well-being.

In a parallel but resonant stream of research, scholars have examined the way that individuals perceive and prefer

to utilize their time and the impact of these perceptions and preferences on their consumption and related outcomes. For example, having a negative past temporal focus (i.e., having a negative, aversive view of the past) has been associated with materialism (Watson, 2017), while materialistic individuals have been found to be more likely to resist consumption when primed to think about the future (Nepomuceno & Laroche, 2017). Additionally, an experimental study showed that priming consumers to think that time rushes by affected several aspects of food-related shopping and consumption (Sager et al., 2023). Indeed, rushed individuals were more likely to rely on ads or others’ opinions before shopping, more likely to buy energy drinks and frozen foods when shopping, and less likely to cook and eat with others than those who were primed to think that time passes slowly (Sager et al., 2023). Research has also found that, in a services context, time styles such as economic time orientation (i.e., preference for planning and having organized routines) lead to impatience among consumers waiting in line (Durrande-Moreau & Usunier, 1999). Time styles also affect consumer motivations: while present-oriented tourists are motivated to travel to facilitate escapism and pleasure-seeking behaviors, future-oriented travelers are motivated by knowledge enhancement and self-fulfillment (Lu et al., 2016). Thus, previous research shows that the way consumers spend and perceive time influences their consumption behavior.

Yet, scant research exists on how time preferences and perceptions might interact with anti-consumption. An exception is the work of Nepomuceno and Laroche (2017), where long-term orientation was found to help materialistic individuals resist their urge to consume. Another exception is Chen and Wei’s (2023) work, which explores how temporal frameworks, articulated as the start or end of a period, influence the adoption of biospheric or egoistic voluntarily simplified lifestyles. This paucity of research at the intersection of time and anti-consumption is surprising, given that the link between time preferences and anti-consumption makes intuitive sense. This is because ethical and less resource-intensive lifestyles are said to require “time and a certain form of slowness,” but they can also free up time from work-to-consume lifestyle templates (Parkins & Craig, 2013, p. 192), and from the time it takes to maintain possessions (Becker, 2023).

Indeed, freeing up time from a conventional, work-to-consume template is a central motivation for adopting anti-consumption lifestyles such as minimalism (Wilson & Bellezza, 2022) and voluntary simplicity (Soares et al., 2025). Rather than working to acquire more possessions these individuals are characterised by a preference to spend time on more enriching, meaningful activities than shopping and consumption (Wilson & Bellezza, 2022). These meaningful activities include sharing time with others, “working

for the community, adopting healthy habits, living in the moment, and having more time for contemplation” (Soares et al., 2025, p. 6), which can enhance well-being (Bhattacharjee & Mogilner, 2014; Sun et al., 2020). Although these activities may still entail a certain amount of consumption, within anti-consumption lifestyles their resource intensity is indeed reduced (Kropfeld et al., 2018). Therefore, an enhanced understanding of anti-consumers’ time preferences and temporal orientations can contribute not only to the body of literature on anti-consumption and its outcomes but also to the nascent literature on issues of temporality in business ethics research (Kuepers et al., 2023).

In this work, we examine how and when anti-consumption leads to enhanced subjective well-being using a time styles perspective (Usunier & Valette-Florence, 2007). To do so, we develop and test hypotheses about how individuals’ temporal orientations impact the interconnection between anti-consumption and subjective well-being across two main studies. Both studies consider preference for spending time meaningfully as a mediator between anti-consumption and subjective well-being while testing different moderators, namely long-term orientation (Study 1) and frugality (Study 2), a lifestyle quality that has been related to both anti-consumption and long-term orientation. In doing so, we contribute to, and extend, existing bodies of literature on anti-consumption and subjective well-being by testing their interconnections with relevant temporal preferences, and by establishing that anti-consumption impacts subjective well-being according to individuals’ temporal orientations. These contributions are significant, as they respond to calls for further research on the consequences of anti-consumption (Makri et al., 2020), which to date remain under-researched. They are also significant in that they contribute novel insights on the temporal mediators and moderators between anti-consumption and its outcomes (Carrero et al., 2020). In making these contributions, we also offer significant practical implications for consumers who wish to eschew consumption in order to enhance their well-being, as well as for companies and policymakers interested in facilitating enhanced consumer well-being through ethical modes of consumption that are low in material intensity.

## Anti-consumption and Subjective Well-Being

Anti-consumption is an umbrella term used for various forms of intentional and volitional approaches to refraining from acquiring, using, and/or disposing of certain products, and to eschewing consumption overall (Balderjahn et al., 2023; Makri et al., 2020). Many phenomena such as voluntary simplicity, frugality, minimalism, and downshifting are conceptually similar to anti-consumption, as they share the underlying motivation to reduce and/or reject consumption

generally (Lee, 2022). However, anti-consumption can also be understood as specific actions and/or lifestyles characterized by a rejection of superfluous consumption or avoidance of selected brands or products due to individual or social concerns (Iyer & Muncy, 2009).

Several anti-consumption antecedents have been examined by existing literature (Makri et al., 2020; Maseeh et al., 2022), which can be categorized into two main groups. The first group encompasses antecedents that help to explain why individuals are willing to avoid and/or reduce consumption across different product categories. Among such antecedents are values, such as collectivism (Kuanr et al., 2021), self-transcendence and self-enhancement (Chen & Wei, 2023), religiosity (Chowdhury, 2018), political ideology (Pecot et al., 2021), as well as environmental and social concerns (Sudbury Riley & Kohbacher, 2018). Also, personal traits such as self-actualization, self-consciousness, and assertiveness (Iyer & Muncy, 2009), normative constructs such as moral foundations (Culiberg et al., 2022), consumer ethnocentrism (Ortega-Egea & García de Frutos, 2021), and emotions such as perceived guilt (Culiberg et al., 2022) can help to explain why individuals avoid or reduce consumption generally. The second group consists of antecedents that explain why consumers reject specific products or brands, such as symbolic incongruence (Islam et al., 2020), perceived risk (Ortega-Egea & García de Frutos, 2021), health concerns (Farah & Shahzad, 2020), and brand hate (Roy et al., 2022).

Comparatively less attention has been paid to the consequences of anti-consumption (Lee, 2022), even though one of its most important consequences is well-being (Maseeh et al., 2022). Well-being is a multifaceted concept that can occur at macro (societal) or micro (individual) levels (Iyer & Muncy, 2016). It has been proposed that anti-consumption can exert a positive impact on macro-level well-being by alleviating the ecological demands of consumerist lifestyles (García-de-Frutos et al., 2018). Anti-consumption has also been found to impact individual-level subjective well-being (Hoffman & Lee, 2016).

In this work, we focus on individual-level subjective well-being, which is understood as the degree to which a person believes or feels that their overall life is going well (Diener et al., 2018). Subjective well-being represents a perceived level of pleasant affect, lack of unpleasant affect, and life satisfaction (Balderjahn et al., 2020; Maseeh et al., 2022). Given that materialism is detrimental to an individual’s subjective well-being (Burroughs & Rindfleisch, 2002), it is reasonable to expect that anti-consumption should enhance it (Lee & Ahn, 2016). For example, Lee and Ahn (2016) identify four key values of anti-consumption that can explain its positive relationship with well-being, namely greater control over consumption, macro-level concerns, low material desire, and intrinsic source of happiness. However, Oral and Thurner’s (2019) empirical research reveals support only for

low material desire and intrinsic source of happiness. Oral and Thurner's (2019) research results mean that the relationship between anti-consumption and subjective well-being is not as straightforward as originally expected.

In fact, existing empirical research on this topic offers inconclusive results (Balderjahn et al., 2023; Iyer & Muncy, 2016). Table 1 presents a review of relevant papers that have tested the anti-consumption-well-being relationship empirically. Some of this research points to a positive relationship (Rich et al., 2017; Maseeh et al., 2022), while other evidence points to a non-significant relationship (Corral-Verdugo et al., 2011), and even to negative results (Chhetri et al., 2009). Table 1 also shows the diversity of methodological approaches used to measure both anti-consumption and subjective well-being, and the mediators and moderators employed to test the relationship between the two constructs.

The evidence available on the relationship between anti-consumption and well-being reflects the wide array of anti-consumption behaviours and lifestyles identified in extant relevant literature. The most common anti-consumption lifestyle examined in relation to well-being is voluntary simplicity (i.e., Boujbel & d'Astous, 2012). This may be a consequence of previous research findings, which suggest that voluntary simplicity is frequently adopted as a means to improve subjective well-being (Brown & Kasser, 2005). However, other anti-consumption lifestyles have also been considered in this review, such as frugality (i.e., Corral-Verdugo et al., 2011), reduced consumption (i.e., Helm et al., 2019), and minimalism (i.e., Shafqat et al., 2023).

For example, Balderjahn et al., (2020, 2023) have examined various anti-consumption lifestyles simultaneously, finding that each of them impacts well-being differently (Balderjahn et al., 2020, 2023; Hüttel et al., 2020). Additionally, other studies have focused on anti-consumption attitudes more specifically, which involve general evaluative beliefs about anti-consumption (Iyer & Muncy, 2016). In line with such works, our research focuses on anti-consumption attitudes and tests their effect on subjective well-being.

More recently, researchers have started to explore the boundary conditions for the relationship between anti-consumption and subjective well-being. Previous attempts to test relevant moderators for this relationship have drawn on desire to control consumption (Shafqat et al., 2023), consumer empowerment (Balderjahn et al., 2023), need for cognition (Hüttel et al., 2020), and age (Sung, 2017). Research on anti-consumption mediators is even more scarce and includes variables such as consumption desire (Boujbel & d'Astous, 2012), social connections (Shafqat et al., 2023), and spirituality (Malik & Ishaq, 2023).

Reviewed together, research in this area suggests that the effect of anti-consumption on well-being is more nuanced than previously anticipated. It is also likely that this effect is contingent upon factors that remain

unexplored (Balderjahn et al., 2023; Boujbel & d'Astous, 2012; Oral & Thurner, 2019). Therefore, our study further examines the effect of anti-consumption on subjective well-being by testing the contingent effects of time preferences on the relationship between anti-consumption and subjective well-being.

## Time Preferences and the Relationship Between Anti-consumption and Well-Being

Time preferences may have an important role in shaping the effect of anti-consumption on well-being (Seegebarth et al., 2016). However, to date, their role in this relationship has not been tested empirically. Time preferences are expressions of subjective time, which acknowledge "the differential experience and perception of time across individuals" (Carlson et al., 2019, p.140). Researchers have developed a wide range of measurement tools, which enable the investigation of different aspects of subjective time perceptions and preferences (Drake et al., 2008). Accordingly, we delve into different time styles and thinking preferences about time (Carlson et al., 2019), and how such subjective time preferences might affect the relationship between anti-consumption and well-being.

It has been proposed that individuals may need to perceive that anti-consumption can offer advantages that compensate for the loss of benefits usually associated with consumption for it to improve subjective well-being (Hüttel et al., 2020). The way that anti-consumers spend their time may represent such an advantage or benefit, as anti-consumption can enable its adopters to spend their time more meaningfully than what is possible to achieve through consumption-related activities. In this way, anti-consumption can be more conducive to enhanced levels of well-being.

Indeed, anti-consumers prefer to use their time in ways that differ from how the average consumer might use theirs. For example, anti-consumers prefer to spend their time engaging in activities that enhance their self-growth and social connections rather than devoting time to material pursuits, such as working more hours to be able to consume more or using their time to go shopping (Alexander & Ussher, 2012).

## The Importance of Spending Time Meaningfully

A relevant dimension of individual time preferences that may be closely related to anti-consumption is whether individuals prefer to spend their time 'meaningfully,' for example, by allocating their available time to activities that enhance purpose (Rudd et al., 2019). Time is a

**Table 1** Studies that empirically tested the relationship between anti-consumption and well-being

Study	Sample/methods	Anti-consumption measure	Wellbeing measure	Mediators	Moderators	Main findings
Balderjahn et al. (2020)	Two samples: - Study 1: 450 students (Germany) - Study 2: 610 (Germany) SEM and latent moderations	Anti-consumption styles: - Collaborative consumption - Debt-free consumption - Voluntary simplicity	Psycho-social well-being Subjective well-being Life satisfaction Financial well-being	-	Perceived empowerment	Positive (or non-significant) links between anti-consumption styles and well-being measures were found. The positive moderating effect of perceived empowerment was not supported
Balderjahn et al. (2023)	A sample of 1,398 (Germany) and latent moderation SEM	Anti-consumption styles: - Collaborative consumption - Debt-free consumption - Voluntary simplicity - Boycott	Psycho-social well-being Subjective well-being Financial well-being	-	Decision-control empowerment Market-control empowerment Materialism	All the anti-consumption types interacted with at least one moderator to affect well-being. All well-being measures were significantly affected by at least one of the moderators
Boujbel and d'Astous (2012)	A sample of 344 self-identified voluntary simplifiers and 267 non-simplifiers (Canada) Statistical mediation analyses with multiple linear regression	Voluntary simplicity	Satisfaction with life	Consumption desires	Financial resources (income)	In the low (but not in the high) financial resources group, voluntary simplicity had both direct and indirect effects on satisfaction with life
Chhetri et al (2009)	A sample of 773 (Australia) MANCOVA and ANCOVA analysis	Downshifting	Life-satisfaction with fourteen aspects (employment, money, housing, city of residence, amount of time, leisure time, social relationships, family life, friends, romantic relationship, health, independence, overall standard of living, and life as a whole)	-	-	Downshifters were less satisfied than non-downshifters on several satisfaction measures (i.e., employment satisfaction, income, and free time). They were as satisfied as the non-downshifters on other satisfaction measures
Corral-Verdugo et al. (2011)	A sample of 606 students (Mexico) SEM	Frugality	Happiness	-	-	Frugality did not show a significant relationship with happiness
Helm et al. (2019)	A sample of 968 (US) students SEM	Reduced consumption	Subjective well-being	-	-	Reduced consumption led to well-being

Table 1 (continued)

Study	Sample/methods	Anti-consumption measure	Wellbeing measure	Mediators	Moderators	Main findings
Hüttel et al. (2020)	A sample of 2,415 (US and Germany) SEM and latent moderation	Anti-consumption types: - Collaborative consumption - Voluntary simplicity	Subjective well-being	-	Need for cognition	A direct positive effect of collaborative consumption was found. This effect was strengthened by need for cognition. No significant effects were found for voluntary simplicity
Iyer and Muncy (2016)	A sample of 871 (US) SEM analysis	Micro and Macro anti-consumption attitudes	Affect (3 measures) Life satisfaction (2 measures)	-	-	A positive relationship was found for micro anti-consumption attitudes and well-being, and a negative relationship was found for macro anti-consumption attitudes
Malik and Ishaq (2023)	A sample of 343 (Pakistan) Mediation and moderation analysis	Minimalism	Financial well-being Happiness	Spirituality	Age	Minimalism led to both financial well-being and happiness. Spirituality mediated the relationship between minimalism and financial well-being. Age moderated the relationship between minimalism and financial well-being
Maseeh et al. (2022)	47 papers, Meta-analysis, SEM	Anti-consumption behavior	Consumer well-being	-	Country of the study Product type Data collection period Research methods Sample type	Anti-consumption behavior positively affected consumer well-being. This relationship was significantly stronger in some cases: - Developed countries - Food products - From 2010 or later - Experimental methods - Non-student samples
Oral and Thurner (2019)	A sample of 153 (multi-country) Regression analysis	Anti-consumption values: - Control over consumption - Broad scope of concerns - Low material desire - Intrinsic source of happiness	Consumer well-being	-	Control over consumption	Low material desire and intrinsic source of happiness had a positive impact on consumer well-being. Control over consumption moderated the relationship between low material desire and well-being

Table 1 (continued)

Study	Sample/methods	Anti-consumption measure	Wellbeing measure	Mediators	Moderators	Main findings
Rich et al. (2017)	4 papers, Meta-analysis	Voluntary simplicity	Life satisfaction	-	-	Voluntary simplicity is related to higher well-being
Seegebarth et al., 2016	A sample of 400 students (Germany) SEM	Anti-consumption types: - Voluntary simplicity - Collaborative consumption - Boycott	Flourishing	-	-	Collaborative consumption leads to well-being, whereas voluntary simplicity and boycott do not
Shafiqat et al. (2023)	A sample of 436 (Pakistan) SEM and PROCESS	Minimalism in fashion consumption	Emotional well-being: - Flourishing - Depression	Life satisfaction Social connectedness	Control of consumption desires	Control of consumption desires moderated the effect of minimalism on life satisfaction and social connectedness mediated the relationship between minimalism and well-being
Sung (2017)	A sample of 719 (Korea) Regression split by age ranges	Frugality	Subjective well-being	-	-	Frugality influenced subjective well-being only for respondents in their 30 s and 40 s

scarce resource, which, in contrast with other resources such as energy or money, cannot be replenished (Rudd et al., 2019). Current Western societies contribute to time deficiency because of saturation—the need to fill every moment with something to do—and acceleration—a tendency to do things faster than previously (Carù & Cova, 2003).

Existing literature suggests that time deficiency and its associated problems can be traced back to the emergence of high-paced consumerism, which is precisely what anti-consumption tends to oppose (Lee & Ahn, 2016). If successfully adopted, anti-consumption can increase an individual's perception of time availability, as time spent on searching for products and shopping is freed from such consumption-related activities (Boström, 2021).

Thus, anti-consumers are expected to prefer using their time in meaningful ways. Rudd et al. (2019) propose that time is spent in meaningful ways when individuals devote it to connecting with the self (i.e., by focusing on personal growth activities), connecting with others (i.e., by developing deep social interactions), and connecting with the world (i.e., by experiencing awe). It is important to acknowledge that these meaningful activities may still involve shopping and consumption, particularly if performed within a work-to-consume framework. However, anti-consumption lifestyles are less resource intensive and necessarily involve reducing shopping and consumption (Kropfeld et al., 2018), including the shopping and consumption that takes place within meaningful activities.

Anti-consumers tend to be intrinsically motivated (Brown & Kasser, 2005), and generally downplay the importance of material possessions (Boujbel & d'Astous, 2012). Therefore, they may be interested in experiences and activities that enhance self-development and that can foster quality time with friends and family (Lee & Ahn, 2016; Zavestoski, 2002). In fact, freeing time for family, friends and for oneself has been acknowledged as one of the reasons for adopting anti-consumption lifestyles (Alexander & Ussher, 2012; Rebouças & Soares, 2021). Further, literature confirms that such kinds of activities are of special interest to anti-consumers (Chowdhury, 2018; Zavestoski, 2002). Therefore, it is hypothesized that.

**H1:** *Anti-consumption attitudes will be positively correlated with individuals' tendency to spend time meaningfully.*

Additionally, the way anti-consumers decide to spend their time is likely to affect their well-being perceptions. Usually, individuals fail to achieve meaning and subjective well-being when time is spent on consumption activities (Mead et al., 2022). Conversely, time spent on experiences (Bhattacharjee & Mogilner, 2014) and social interactions (Sun et al., 2020) tends to be related with improved

well-being. There is evidence that when individuals periodically perform small acts that are positive for them, like exercising or attending religious gatherings, they are likely to achieve high levels of well-being (Mochon et al., 2008). Existing research also demonstrates that enjoying the present and having gratitude for daily blessings can enhance meaningfulness (Bryant & Veroff, 2017). Therefore, if anti-consumers can spend time meaningfully (e.g., relaxing with friends, exercising), it is reasonable to expect that they will perceive high levels of subjective well-being. Thus, the following hypotheses are proposed:

**H2:** *Spending time meaningfully will lead to high subjective well-being and*

**H3:** *The effect of anti-consumption attitudes on subjective well-being will be mediated by spending time meaningfully.*

## The Role of Long-Term Orientation

In addition to how individuals spend their time, their temporal orientations or dispositions can also have important impacts on subjective well-being (Drake et al., 2008). Indeed, future or long-term orientation may be of particular importance to anti-consumption. Long-term orientation refers to perseverance for achieving long-term goals and future success at the expense of present pleasures (Nepomuceno & Laroche, 2017). Future orientation is likely to predict pro-social and pro-environmental behaviors (Bearden et al., 2006; Le & Kieu, 2019), and can be considered a desirable individual trait. However, scant research exists on the potential effects of this temporal orientation on anti-consumption outcomes, such as its effects on the relationship between spending time meaningfully and subjective well-being.

Usually, anti-consumption is articulated in relation to a particular purpose and such a purpose can be directed at either social (macro) or individual (micro) level goals (Iyer & Muncy, 2016). Either way, the aim is to achieve change (e.g., in company policies or individual lifestyles), so individuals engaging in anti-consumption can benefit from the perseverance that manifests from long-term orientation (Le & Kieu, 2019; Nepomuceno & Laroche, 2017). Nevertheless, it is also possible that individuals with long-term orientation who engage in anti-consumption may perceive that spending time meaningfully will be detrimental to their anti-consumption goals. For example, evidence shows that present-orientated individuals are happier and derive more meaning from their activities and goals (Bryant & Veroff, 2017; Killingsworth & Gilbert, 2010). Also, when consumers focus excessively on future outcomes, they can become so future-orientated that they neglect to enjoy present experiences, which in turn can lead to high stress (Drake et al.,

2008). Thus, in the context of anti-consumption, the relationship between spending time meaningfully and subjective well-being is expected to be weak when long-term orientation is high. Consequently, it is proposed that.

**H4:** Long-term orientation will moderate the indirect effect of spending time meaningfully in the relationship between anti-consumption attitudes and subjective well-being so that the indirect effect is weak when long-term orientation is high.

Figure 1 illustrates the proposed model and the relationships between the hypothesized variables.

We test our hypotheses by conducting two complementary studies that differ based on research methodology (i.e., quantitative field survey vs. experimental design), participants' countries of origin (i.e., UK vs. US), the nature of participants' anti-consumption attitudes (i.e., anti-consumers only vs. 'average consumers'), and the moderating variables of the core model (i.e., long-term orientation vs. frugality), where anti-consumption's effect on well-being is mediated by spending time meaningfully.

In Study 1, we analyze 1-week time-lagged survey data from a sample of anti-consumers from the UK, using long-term orientation as moderating variable. In Study 2, we develop a scenario-based experiment to gather data from average US consumers and use frugality as a moderator. The use of frugality in Study 2 is pertinent, given that it reflects a concrete form of long-term orientation (e.g., saving for the future), which aligns with, but differs from, anti-consumption in that it involves materialistic values that are antithetical to anti-consumption. Frugality is also a suitable moderator for average participants with a broad range of anti-consumption attitudes, as those of Study 2.

Together, findings from Studies 1 and 2 support the robustness of our theoretical model (i.e., anti-consumption > spending time meaningfully > well-being) across methodologies and contexts.

## Study 1: Methods

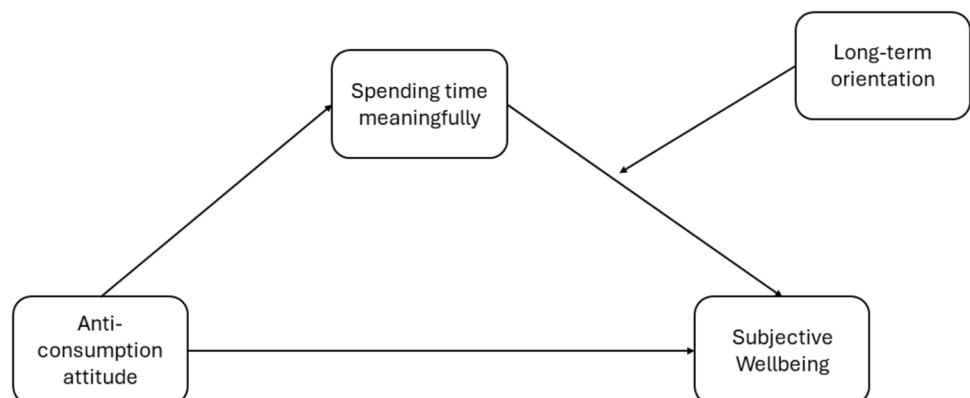
### Sample and Procedures

Upon receiving institutional research ethics approval, we used Qualtrics to design an online survey that could test our hypotheses and proposed model. The survey was then distributed through Prolific.co, an online panel service for data collection. Recruitment criteria for inclusion in the study included UK nationality, full-time employment status, and engagement in anti-consumption. Participants consented to take part in this voluntary study after reading information on the survey including details about confidentiality and participants' rights. Participants were offered compensation of approximately £4 via Prolific for completing the survey at two points in time, 1 week apart. All participants completed the questionnaires anonymously. In keeping with prior studies using online panels (e.g., Yang et al., 2024), we only used data from one website, namely Prolific.co, to ensure sample homogeneity.

We obtained responses from 378 UK consumers over the age of 18. Forty-five participants were removed from the sample because of incomplete responses or due to failed attention checks. After removing these responses, the final sample of 333 participants was 35.4 percent female, with an average age of 35.6 years and a high level of education (45.9% reported having a university education).

To counteract the potential for common method bias, we utilized the technique of proximal separation (Podsakoff et al., 2003, 2012), by introducing a time gap between collecting data for the dependent and independent variables. The seven-day gap was deemed an appropriate time-frame, striking a balance between giving respondents enough time to allow for sufficient psychological separation between constructs but not so much time as to risk introducing confounds (Podsakoff et al., 2012). In addition, Harman's single factor score was 26.45%, which is below the cut-off point of 50% and indicative of a low likelihood of common method bias (Djajadikerta et al., 2015).

**Fig. 1** Study 1—Conceptual model



## Measurements

All variables were assessed using a seven-point Likert type scale, ranging from 1 (strongly disagree) to 7 (strongly agree). Past research shows that supporting anti-consumption at the general or macro level does not necessarily entail engaging with anti-consumption at the individual or micro level (Iyer & Muncy, 2016). Thus, to achieve a better alignment between constructs, we focused on micro anti-consumption attitudes and measured them with the 5-item scale developed by Iyer and Muncy (2016). A sample item is “*The fewer things I own, the better I feel.*” We measured individuals’ tendency to spend time meaningfully with a 9-item scale following Rudd et al. (2019). A sample item is “*I try to spend time on activities that help my personal growth.*” Long-term orientation was measured by adapting the 4-item scale by Bearden et al. (2006). A sample item is “*I don’t mind giving up today’s fun for success in future.*”

Subjective well-being measures consider how individuals evaluate their overall life ‘as it is,’ in contrast to other well-being measures that are either focused on one specific feature of life or susceptible to being affected by individuals’ perceptions of what their life ‘should be like’ (Diener et al., 2018; Iyer & Muncy, 2016). In line with Campbell (1976), we measured subjective well-being by asking participants to reflect on their life overall and answer how often they felt their life is interesting, enjoyable, worthwhile, friendly, full, hopeful, rewarding or that it brings out the best in them (ranging from 1 = not at all, to 7 = always). Consistent with evidence suggesting that sampling emotions or feelings in random moments in the lives of participants may reduce memory bias of retrospective evaluations (Kahneman et al., 1999), we measured subjective well-being at two different points in time, 1 week apart, and calculated a universal score (Diener et al., 1999). The full list of items can be found in Appendix 1.

## Results

### Scale Validation Analysis

Both exploratory and confirmatory factor analyses were performed. These analyses showed the need to consider spending time meaningfully as a second-order factor. In line with its theoretical development (see Rudd et al., 2019), the dimensions of this construct included three factors, one explaining ‘connecting to the self’, a second factor explaining ‘connecting to others’, and a third explaining ‘connecting to the world’. These three first-order factors were reflected into a second-order factor comprising the overall preference for spending time meaningfully. This second-order factor is the one used for performing the subsequent analysis. Two items from spending time meaningfully had to be dropped

due to poor loadings. In addition, one item from the subjective well-being scale also had to be excluded from the analysis for showing high residual correlations with several other variables. All other items’ loadings scored above the recommended threshold of 0.5 (Bagozzi & Yi, 1988).

Cronbach’s alpha values indicated adequate levels of internal consistency for the constructs, which varied between being close (i.e., 0.571) to well above (i.e., 0.955) the recommended 0.6 threshold (Hair et al., 2021). As Table 2 shows, both composite reliability and AVEs met recommended thresholds of 0.7 and 0.5, respectively, for subjective well-being, anti-consumption, long-term orientation, and the second-order factor of spending time meaningfully.

This was not the case for the three subdimensions of spending time meaningfully. Their composite reliabilities were above (i.e., ‘self’ subdimension = 0.673, ‘others’ subdimension = 0.657) or close to (i.e., ‘world’ subdimension = 0.579) the more lenient cut-off of 0.60 (Bagozzi & Yi, 1988). In addition, their AVEs ranged from 0.498 to 0.408, which are below the recommended level of 0.5 (Hair et al., 2021). Considering that the AVEs of the three subdimensions are above 0.4, that composite reliabilities and Cronbach’s alphas are above the recommended levels (Fornell & Larcker, 1981), and that the second order factor and all other factors of the model show adequate consistency values, we consider these values acceptable.

Pairwise correlations between constructs were compared with the square root of AVEs (Fornell & Larcker, 1981). As Table 3 shows, except for the spending time meaningfully subdimensions of ‘connecting with others’ and ‘connecting with the world,’ the inter-construct correlations were below the square root of AVE. The highest inter-construct correlation was equal to 0.645 for these subdimensions, which was slightly higher than the square root of ‘connecting with others’ subdimension (0.639). First order factor inter-construct correlations were below 0.561 (Table 3). To further assess the potential discriminant validity of our scales, especially regarding the ‘other’ and ‘world’ subdimensions of spending time meaningfully, we also performed the HTMT test (Henseler et al., 2015). As Table 4 shows, all HTMT ratios are far below the restrictive cutoff of 0.85 (Henseler et al., 2015), thus discriminant validity is supported.

### The Mediating Role of Spending Time Meaningfully

AMOS software v.28 was used to perform SEM analysis to test the hypothesized relationships among constructs. First, we tested the mediating role of spending time meaningfully in the relationship between anti-consumption attitudes and subjective well-being. The measurement model fit was good (CFI = 0.969; TLI = 0.964; RMSEA = 0.049; SRMR = 0.577). With regards to the hypotheses tested (see Fig. 2), anti-consumption attitudes significantly affected

**Table 2** Convergent validity tests

Constructs and items	Standard loading	Cronbach's alpha	Composite reliability	Average variance extracted
Subjective well-being		0.955	0.952	0.743
SW2	0.871			
SW3	0.906			
SW4	0.725			
SW5	0.898			
SW6	0.859			
SW7	0.885			
SW8	0.878			
Spending time meaningfully (self)		0.667	0.673	0.409
ST.S-1	0.705			
ST.S-2	0.555			
ST.S-3	0.650			
Spending time meaningfully (others)		0.634	0.657	0.498
ST.O-1	0.562			
ST.O-2	0.825			
Spending time meaningfully (world)		0.571	0.579	0.408
ST.W-1	0.655			
ST.W-2	0.622			
Spending time meaningfully (2nd order)		0.768	0.812	0.590
ST.M	0.803			
ST.O	0.725			
ST.G	0.776			
Anti-consumption attitude		0.886	0.889	0.618
AC1	0.792			
AC2	0.824			
AC3	0.756			
AC4	0.659			
AC5	0.881			
Long-term orientation		0.794	0.800	0.500
LTO1	0.669			
LTO2	0.760			
LTO3	0.692			
LTO4	0.705			

SWB subjective well-being, ST.S spending time connecting with myself, ST.O spending time connecting with others, ST.W spending time connecting with the world, AC anti-consumption attitude, LTO long-term orientation

spending time meaningfully ( $\beta=0.270$ ;  $p$  value  $<0.05$ ) and, subsequently, spending time meaningfully was a powerful antecedent of well-being ( $\beta=0.524$ ;  $p$  value  $<0.05$ ). Thus, these results provide support for H1 and H2.

The direct effect of anti-consumption attitudes on well-being was not supported ( $\beta=0.048$ ;  $p$  value  $>0.05$ ). To account for the mediation hypothesis, we employed bootstrapping with ML for 1000 subsamples with a confidence interval of 95%. Results show that the indirect effect of anti-consumption on subjective well-being was 0.109 and the CI did not include zero [0.039, 0.283;  $p$  value  $<0.05$ ]. In line with the previous results, the total effect was also

significant (0.146), given that the CI did not include zero [0.061, 0.241;  $p$  value  $<0.05$ ]. Such findings provide evidence of a full mediation of spending time meaningfully in the relationship between anti-consumption attitudes and subjective well-being, thus lending support for H3.

### The Moderating Role of Long-Term Orientation

To test the moderated mediation model, the same software (i.e., AMOS v.28) and settings (i.e., bootstrapping with ML method and 1000 samples) were selected. Prior to the analysis, all predictors and moderating variables were

**Table 3** Study 1. Bivariate correlations (square root of AVE in bold)

	STM	ST.O	ST.S	ST.W	AC	SWB	LTO
STM	<b>0.769</b>						
ST.O		<b>0.706</b>					
ST.S		0.586**	<b>0.640</b>				
ST.W		0.645**	0.591**	<b>0.639</b>			
AC	0.302**	0.066	0.331**	0.331**	<b>0.786</b>		
SWB	0.529**	0.481**	0.347**	0.347**	0.19**	<b>0.862</b>	
LTO	0.561**	0.234**	0.498**	0.541**	0.133**	0.316**	<b>0.707</b>

SWB subjective well-being, STM spending time meaningfully, ST.S spending time connecting with myself, ST.O spending time connecting with others, ST.W spending time connecting with the world, AC anti-consumption attitude, LTO long-term orientation

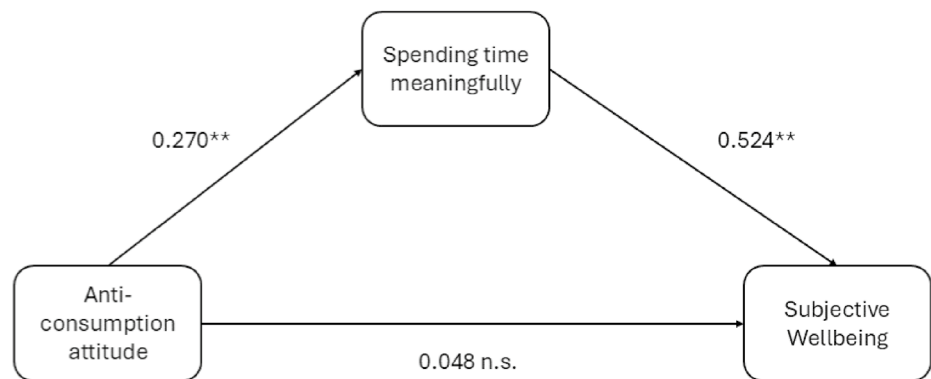
\*p < 0.05, \*\*p < 0.01

**Table 4** Study 1 Heterotrait–monotrait ratio of correlations (HTMT)

	ST.O	ST.M	ST.G	AC	SWB	LTO
ST.O						
ST.M	0.56					
ST.G	0.61	0.65				
AC	0.22	0.23	0.25			
SWB	0.38	0.41	0.44	0.19		
LTO	0.39	0.61	0.46	0.13	0.31	

SWB subjective well-being, ST.S spending time connecting with myself, ST.O spending time connecting with others, ST.W spending time connecting with the world, AC anti-consumption attitude, LTO long-term orientation

**Fig. 2** Study 1—SEM results for the mediation analysis. \*\*p value < 0.05; n.s. p value > 0.1



Note: \*\*=p-value<0.05; n.s.=p-value>0.1

mean-centered (Aiken & West, 1991). We created the latent interaction variable using product indicators (Pieters et al., 2022). We averaged the variables of the construct with more indicators (i.e., spending time meaningfully) and multiplied it by all the indicators of the construct with less variables (i.e., long-term orientation). The measurement model with the four constructs and the interaction factor showed

an acceptable fit to the data (CFI = 0.927; TLI = 0.917; RMSEA = 0.060; SRMR = 0.595). The structural model, depicted in Fig. 3, confirmed the effect of anti-consumption attitudes on spending time meaningfully ( $\beta = 0.271$ ; p value < 0.05), and the effect of spending time meaningfully on subjective well-being ( $\beta = 0.481$ ; p value < 0.05).

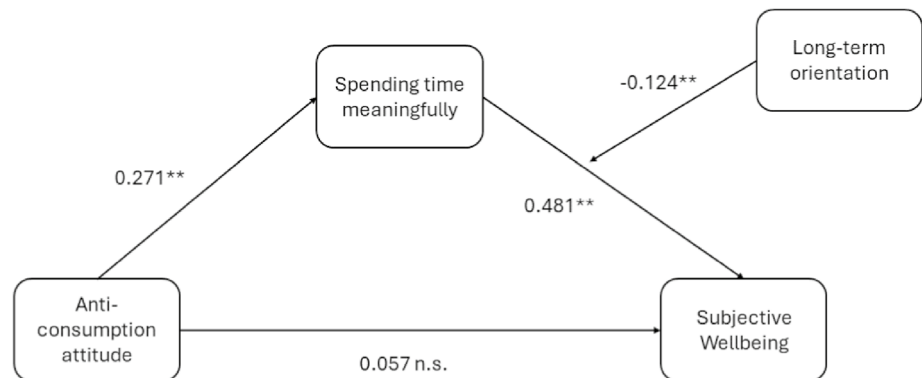
In addition, the effect of anti-consumption attitudes on subjective well-being was not significant once again ( $\beta=0.057$ ;  $p$  value  $>0.05$ ). Also, in line with the previous model, the indirect effects of anti-consumption attitude on subjective well-being were supported by the bootstrapping analysis (0.099), where the CI did not include zero [0.041, 0.169;  $p$  value  $<0.05$ ]. Thus, this further reinforced H3.

Finally, the interaction between spending time meaningfully and long-term orientation significantly and negatively impacted subjective well-being ( $\beta=-0.124$ ;  $p$  value  $<0.05$ ). In line with hypothesis H4, and as the line plot shows (see Fig. 4), when individuals score higher on long-term orientation, the impact of spending time meaningfully on well-being becomes more attenuated than when the score of long-term orientation is low.

### Robustness Check

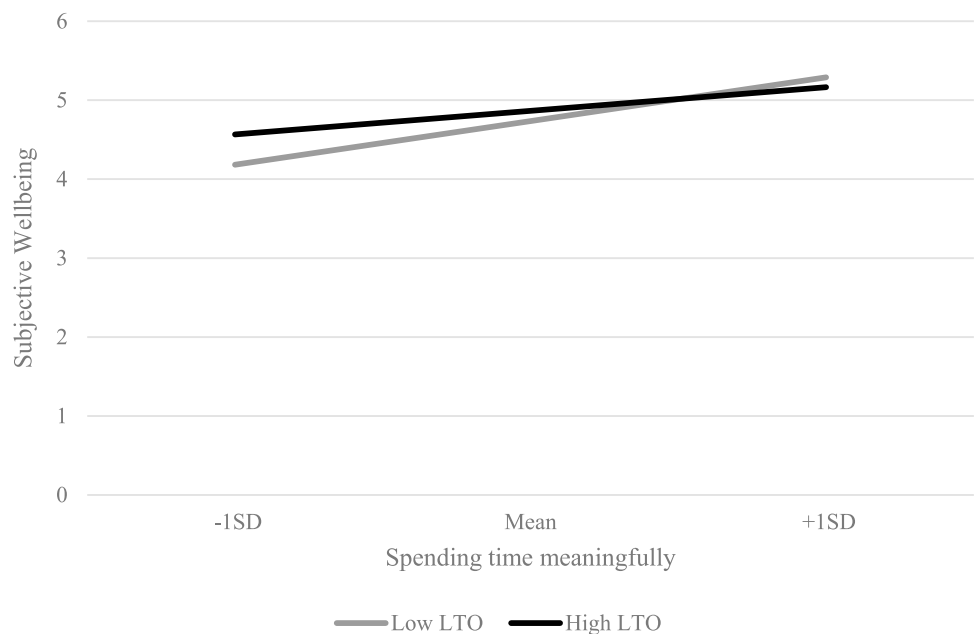
We replicated the moderated-mediation analysis using Hayes (2017) PROCESS macro in SPSS. We used Model 14 with 5000 bootstraps. In line with the SEM analysis, we found support for the positive relationship between anti-consumption attitudes ( $\beta=0.160$ ;  $p$  value  $<0.05$ , CI [0.087, 0.233]) and spending time meaningfully, but not for the effect of anti-consumption attitudes on subjective well-being ( $\beta=0.051$ ;  $p$  value  $>0.05$ , CI [-0.030, 0.132]). The positive effect of spending time meaningfully on subjective well-being ( $\beta=0.472$ ;  $p$  value  $<0.05$ , CI [0.346, 0.598]) was also replicated. In addition, the effect of the moderation between long-term orientation and spending time meaningfully on well-being was significant and negative ( $\beta=-0.140$ ;  $p$  value  $<0.05$ , CI [-0.247, -0.034]). Finally,

**Fig. 3** Study 1—SEM results for the moderated mediation analysis. \*\* $p$  value  $<0.05$ ; *n.s.*  $p$  value  $>0.1$



Note: \*\*= $p$ -value $<0.05$ ; *n.s.*= $p$ -value $>0.1$

**Fig. 4** Study 1—Interaction effect between spending time meaningfully and long-term orientation on subjective well-being



the moderated-mediation test was significant (Index =  $-0.023$ ; CI [ $-0.047, -0.006$ ]).

## Study 1 Discussion

The results of this study confirm the mediating role of spending time meaningfully between anti-consumption attitudes and subjective well-being. In addition, they also show how the relationship between spending time meaningfully and well-being is moderated by long-term orientation. That is, individuals who have positive anti-consumption attitudes and spend time meaningfully experience reduced levels of subjective well-being if they are too long-term oriented. This result is interesting, since long-term orientation is an antecedent of important ethical behaviours (Bearden et al., 2006; Nepomuceno & Laroche, 2017). However, this study suffers from some limitations such as relying on correlational data for testing the relationship between anti-consumption, spending time meaningfully and subjective well-being. In addition, it employs a sample comprised of individuals who self-identify as anti-consumers. Finally, the study focuses on a single country setting. Beyond that, the findings suggesting that long-term orientation can be detrimental to anti-consumers warrants further research to investigate its potential causes.

## Study 2: Overview

Study 2 addresses the limitations identified in Study 1 by a) providing additional evidence of the role of anti-consumption in shaping time preferences and subjective well-being; b) manipulating participants' anti-consumption attitudes; c) testing whether the relationships between anti-consumption, temporal orientations and subjective well-being could be replicated among average consumers who do not engage in anti-consumption; and d) replicating our research model in a different country context (US instead of UK). We selected the US as a context for several reasons. First, it is a highly consumption-orientated country, therefore participants will perceive arguments about 'reducing consumption' but also those about 'consuming more sustainable products' as realistic. Second, the country it is neither too long- nor too short-term oriented according to Hofstede's (1983) cultural dimensions, which prevents the distortion of results. Finally, the US shares the same language with the UK, which allows for a more accurate replication of construct measurement without the need for translation.

In addition, this study expands Study 1 by exploring an alternative boundary condition that could affect the relationship between anti-consumption attitudes and spending time meaningfully. The negative interaction between long-term orientation and spending time meaningfully on subjective

well-being (Study 1) suggested that individuals who engage in anti-consumption and who are too long-term focused may not enjoy the full benefits of spending time in meaningful ways. To delve more deeply into this proposition, we extend the research model of Study 1 by drawing on frugality as a potential moderator in this relationship because of frugality's existing conceptual alignment with anti-consumption.

## Examining Frugality as Moderator

Frugality is a lifestyle characterized by restrained acquisition of new products and/or services as well as resourcefulness in terms of how one's existing possessions are used (Lastovicka et al., 1999). Although frugal lifestyles can be a consequence of external constraints, they can also be a result of internal motivations, such as values (i.e., low or ecological forms of materialism), and personality traits, such as high independence from social norms (Goldsmith et al., 2014). Under the latter conditions, frugality is related to anti-consumption (Kropfeld et al., 2018; Nepomuceno & Laroche, 2017). Research on frugality shows that this lifestyle is related to market mavenism and shopping antipathy concurrently (Bove et al., 2009). Existing relevant research also shows that frugality leads to limited decrease in environmental impact, which may be due to frugal consumers' propensity to use goods resourcefully (e.g., by bulk buying or buying second-hand goods), without necessarily reducing the resource intensity of their shopping and/or consumption (Kropfeld et al., 2018).

Frugality is also connected to long-term orientation (Bearden et al., 2006). This is not because of thriftiness per se; rather, frugal consumers prefer to save their money in order to access high-quality products that they can use and reuse with care over time, and to avoid waste in the long term (Kropfeld et al., 2018; Lastovicka et al., 1999). Further, similar to other anti-consumption related lifestyles, frugality has been positively linked to a desire to spend quality (i.e., meaningful) time (Goldsmith et al., 2014). It has also been linked to well-being (Corral-Verdugo et al., 2011). However, existing empirical evidence does not fully corroborate these results (i.e., Corral-Verdugo et al., 2011; Sung, 2017). A potential explanation for these inconclusive results is that frugality involves paying attention to existing possessions and how they are used, finding ways to make them last a long time, and making careful evaluations prior to future purchases, which require time. Therefore, it is likely that the relationship between anti-consumption attitudes and spending time meaningfully will be moderated by frugality. Based on these arguments, we propose that:

**H5:** Spending time meaningfully mediates the relationship between anti-consumption and well-being. This indirect effect is moderated by frugality such that the positive

effect of anti-consumption on spending time meaningfully is stronger at lower levels of frugality and weaker at higher levels of frugality.

## Sample and Procedures

We designed a  $2 \times 1$  factorial experiment by manipulating high versus low anti-consumption attitudes in relation to sustainable consumption. Participants were randomly assigned to either a high or low anti-consumption condition. They all read the message below from LifeLux, a non-profit organization aiming to enable citizens to live their lives to the fullest and more sustainably:

*“We would like to invite you to rethink your approach to consumption. Many people choose to reduce [vs. increase] their shopping and consumption. Buying less [vs. more] and reducing [vs. increasing] consumption can help the environment and society in future. For example, when you buy less [vs. more sustainable, durable goods], you can help conserve natural resources and reduce waste in the long term and create a more sustainable world by year 2050. Think about how your choices like reusing what you already have or refraining from buying something you don’t really need [vs. shopping for sustainable, durable goods] can pay-off years later.”*

## Study 2a: Scenario Validation

To validate the effectiveness of the scenarios mentioned above, we conducted a pretest with 120 consumers based in the US. We recruited participants via an online panel (Prolific.co) for a small fee (\$1). After reading either the high or low anti consumption scenario, participants completed a 5-item scale designed to capture whether the message made them intend to reduce their consumption ( $\alpha = .929$ ). Sample items included: “*I feel I should reduce my overall consumption*”, “*I consider cutting back on purchases that are non-essential*,” and “*I am more open to buying less when possible*.”

The manipulation check worked in the theorized direction and confirmed an immediate increase in intention to reduce consumption for participants in the high anti-consumption condition ( $M = 5.73$ ,  $SD = 1.18$ ), compared with those in the low anti-consumption condition ( $M = 5.38$ ,  $SD = 1.30$ ),  $t(118) = 1.52$ ,  $p = .065$ . Further, consistent with our conceptual distinction between present intention to reduce consumption versus overall anti-consumption attitudes, exposure to the anti-consumption scenario did not influence overall anti-consumption attitudes, which were measured with the same 5-item scale as in Study 1, following Iyer and Muncy (2016) with sample items such as “*If I don’t need*

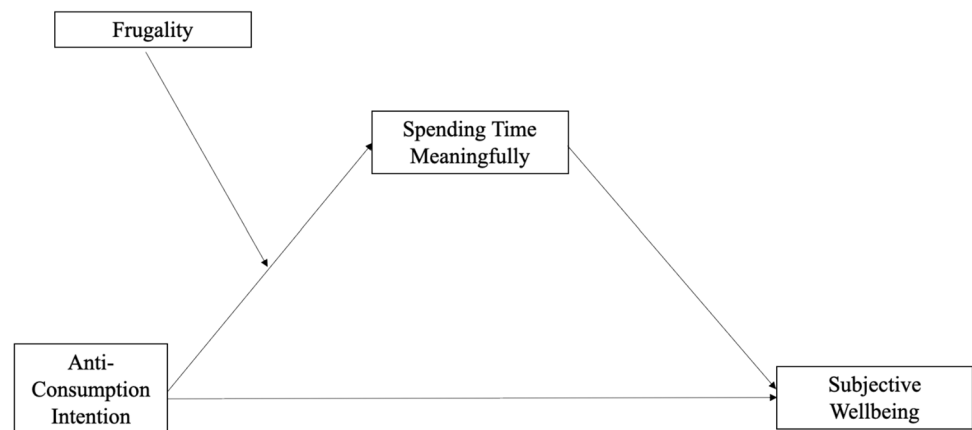
*it, I don’t buy it*;  $M$  High AC = 5.55 vs  $M$  Low AC = 5.66,  $t(118) = .57$ ,  $p = .57$ . The manipulation did not affect frugality either, which was measured with the 8-item scale from Lastovicka et al. (1999), with sample items such as “*If I can re-use an item I already have, there’s no sense in buying something new*”;  $M$  High AC = 6.15 vs  $M$  Low AC = 6.29,  $t(50) = .97$ ,  $p = .33$ . These results confirm that the scenarios alter the intention to change consumption practices at the moment of reading them but they do not change overall attitude toward anti-consumption or overall frugality.

## Study 2b: Model Testing

The next step involved examining the effects of the anti-consumption manipulation on well-being, with spending time meaningfully as a mediator and frugality as a moderator, as seen in our conceptual model for study 2 (Fig. 5).

Given the relatively subtle scenario-based manipulation of anti-consumption, there was a potential risk of detecting treatment effects due to possible floor or ceiling effects—i.e., where participants were already at very high or very low well-being levels and therefore unlikely to be affected by our experimental manipulations. Therefore, to minimize potential floor or ceiling effects in the measurement of well-being, we implemented a two-stage screening process, in line with Gadeikis et al. (2017). Specifically, we collected subjective well-being scores from 500 online participants located in the US via Prolific, using the same subjective well-being measure as in Study 1 (Campbell, 1976). At least 48 h later, we invited back the 300 participants who were closest to the mean; that is, we excluded the 100 participants who reported the highest and the 100 participants who reported the lowest subjective well-being scores. With this strategy, we aimed to increase sensitivity to our design by ensuring variability in our dependent variable. This is because a small variability range in the dependent variable can obscure true relationships (Cheung & Lau, 2017). After reading the randomly assigned (high or low anti-consumption) scenario, participants were prompted to imagine their life as if they were to adopt the suggestions described (following a similar process by Escalas, 2004) and were asked to write what changes they would make in their consumption practices.

Participants then answered questions on their subjective well-being at the moment of completing the questionnaire (i.e., *Thinking about your life currently, how often do you think it is enjoyable, worthwhile, full, etc.*), following Campbell, (1976) ( $\alpha = 0.922$ ). As in Study 1, we captured their tendency to spend time meaningfully following Rudd et al., 2019 ( $\alpha = 0.931$ ). We then measured their frugality using the 8-item scale by Lastovicka et al. (1999). A sample item is “*I discipline myself to get the most from my money*.” Cronbach’s alpha for this scale was  $\alpha = 0.881$  and the full list of items can be found in Appendix 2. In line with the pre-test,

**Fig. 5** Study 2—Proposed model

participants also answered questions regarding the manipulation (i.e., *The scenario I have just read encourages me to reduce my consumption*”), and the realism of the scenarios (*“The scenario I have just read is realistic”*) and completed the questionnaire for a small cash incentive.

From the 300 participants invited to participate in the study, 267 took part. We excluded 19 participants who failed an attention check question from the analysis, leaving us with a sample of 248 participants (53% female, average age of 43). After ensuring that participants’ perceptions of their respective scenarios significantly differed across conditions in terms of whether the scenario they had just read *“encouraged me to reduce my consumption”* (high anti-consumption scenario = 5.76, low anti-consumption scenario = 4.25,  $p < 0.05$ ), we continued with the analysis. To assess the moderated mediation and test H5, we used PROCESS macro (Hayes, 2017). As we expected our moderator to affect only the first-stage relationship, we used Model 7 (Hayes, 2017) with 5,000 bootstrap samples and a confidence level at 95%.

The regression model predicting the mediator (i.e., spending time meaningfully) was significant,  $F(3, 244) = 22.79$ ,  $p$  value  $< 0.001$ ,  $R^2 = 0.219$ . Anti-consumption significantly predicted preference for spending time meaningfully ( $\beta = 3.28$ ,  $p$  value  $< 0.001$ ). The interaction between anti-consumption and frugality was also significant ( $\beta = -0.545$ ,  $p < 0.001$ ), indicating that frugality moderated the effect of anti-consumption on preference for spending time meaningfully.

Conditional effects analysis showed that anti-consumption attitudes significantly increased preference for spending time meaningfully at low levels of frugality ( $-1$  SD;  $\beta = 0.59$ ,  $p$  value = 0.001, 95% CI [0.24, 0.94]); it had no effect at the mean level of frugality ( $\beta = 0.10$ ,  $p$  value = 0.404) and significantly decreased preference for spending time meaningfully at high levels of frugality ( $+1$  SD;  $\beta = -0.40$ ,  $p$ -value = 0.016, 95% CI [-0.72, -0.08]).

Regarding our dependent variable, the direct effect of anti-consumption on subjective well-being was not

significant ( $\beta = 0.116$ ,  $p$  value  $> 0.1$ ) while preference for spending time meaningfully significantly predicted well-being ( $\beta = 0.586$ ,  $p$  value  $< 0.001$ ). This suggests that the relationship between anti-consumption and subjective well-being is indirect, operating through preference for spending time meaningfully (full mediation). The indirect effect of anti-consumption on well-being through spending time meaningfully was significantly positive at low frugality (Effect = 0.34, 95% CI [0.13, 0.55]), non-significant at the mean (Effect = 0.06, CI [-0.07, 0.19]) and significantly negative on high levels of frugality (Effect = -0.23, 95% CI [-0.46, -0.006]). Finally, the index of moderated mediation was significant (Index = -0.32, 95% CI [-0.52, -0.12]), suggesting that the indirect effect of anti-consumption on individuals’ subjective well-being through spending time meaningfully is indeed contingent upon low levels of frugality, supporting H5. The results of this analysis are presented in Table 5 and Fig. 6 (Table 6).

## Study 2 Discussion

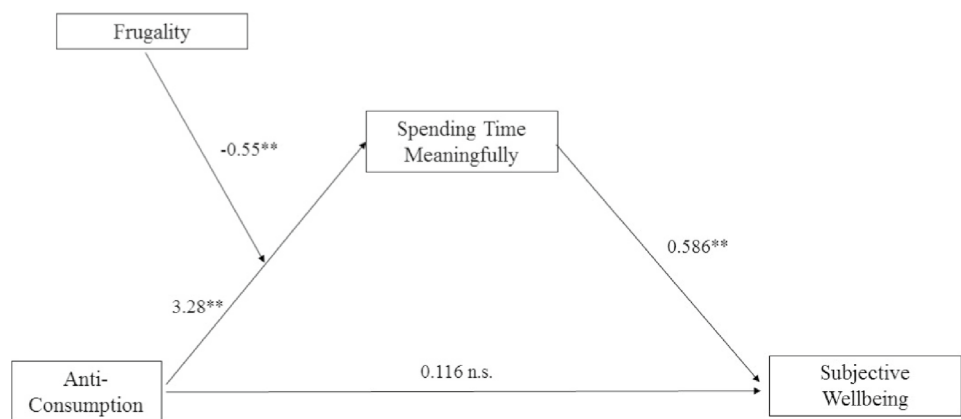
The results of this study offer additional evidence to support the mediating role of spending time meaningfully between anti-consumption and subjective well-being in a different context and with a different population group. Extending the findings of Study 1, the findings of Study 2 also show how the relationship between anti-consumption and spending time meaningfully is moderated by frugality. That is, even if individuals have anti-consumption intentions in the present moment, their willingness to spend time meaningfully decreases if they are too frugal, which in turn affects their subjective well-being.

**Table 5** Study 2—results for the proposed model

	B	SE	t	p	95% CI
First-stage-dependent variable = spending time meaningfully					
Anti-consumption intentions	3.28	0.85	3.88	0.00	[1.62, 4.95]
Frugality	0.59	0.07	8.12	0.00	[.447, .734]
Anti-consumption intentions × frugality	- 0.55	0.14	- 3.85	0.00	[- 0.824, - 0.266]
F	22.788**				
R <sup>2</sup>	0.219				
Second-stage-dependent variable = subjective well-being					
Anti-consumption Intentions	0.116	0.095	1.22	0.22	[- 0.071, 0.303]
Spending time meaningfully	0.59	0.05	12.21	0.00	[0.492, 0.681]
F	77.087**				
R <sup>2</sup>	0.386				

N = 248, CI = Confidence Interval

**Fig. 6** Study 2b—Observed model. \*\*p value < 0.05; n.s. p value > 0.1



Note: \*\*=p-value<0.05; n.s.=p-value>0.1

**Table 6** Study 2b Bivariate correlations

	HAC	FRU	STM	SWB
HAC				
FRU	0.144*			
STM	0.083	0.423**		
SWB	0.083	0.418**	0.611**	

SWB subjective well-being, STM spending time meaningfully, FRU frugality, HAC high anti-consumption

\*p < 0.05, \*\*p < 0.01

### General Discussion

Theoretically, our work extends the literature on anti-consumption by adding evidence of the interconnection between anti-consumption and subjective well-being. Our results establish anti-consumption as an enhancer of individual

well-being rather than just a political and/or environmental stance. Our results align with Balderjahn et al.’s (2023) recent findings demonstrating that anti-consumption does not diminish well-being, despite being a more materialistically restrictive way of living.

However, anti-consumption attitudes alone are insufficient for enhancing individual well-being, which explains the non-significant or contradicting results of prior research in this area (i.e., Seegebarth et al., 2016). By further investigating how anti-consumption can improve subjective well-being, we establish the boundary conditions of this relationship. One of these conditions is that anti-consumers need to spend time meaningfully for anti-consumption to enhance subjective well-being, as our results determine. These results are confirmed by two complementary studies, which varied in methodology (i.e., a survey vs. an experiment), respondent profiles (i.e., anti-consumers vs. average consumers) and contexts (i.e., the UK vs. the US).

Further, our work responds to recent calls for research on the temporal dimensions affecting ethical consumption

(Kuepers et al., 2023). Specifically, our research contributes to the literature on time preferences by confirming that individuals' preference for spending time meaningfully is an important mediator of the relationship between anti-consumption and subjective well-being. To the best of our knowledge, and despite making intuitive sense, the relationship between anti-consumption and the preference for spending time meaningfully has never been tested empirically, which makes this research original. Our results confirm that anti-consumers dislike mainstream modes of consumption, seeking more experiential and meaningful practices (Zavestoski, 2002), such as devoting time to connect with themselves and relevant others. Although these meaningful activities may still involve some degree of shopping and consumption, anti-consumption necessarily involves consuming less (Kropfeld et al., 2018), including during meaningful activities. Further, although anti-consumption attitudes are inherently present in individuals who already engage in anti-consumption (Study 1), our results establish that considering anti-consumption lifestyles also affects preferences for spending time meaningfully and, in turn, subjective well-being among average consumers who do not normally engage in anti-consumption (Study 2).

Importantly, we delved into how different time preferences affect the relationship between anti-consumption attitudes and well-being. In Study 1, the preference for spending time meaningfully interacted with long-term orientation such that it diminished subjective well-being. This result can be explained by the fact that spending time meaningfully represents concrete actions performed in the present, while long-term orientation addresses a temporality preference that is orientated toward the future, which relates to abstract and more distant goals than spending time meaningfully. Indeed, prior research suggests that giving too much attention to future goals is related to higher levels of stress (Drake et al., 2008), which can hinder subjective well-being in the present.

Correspondingly, Study 1 shows that well-being is reduced when long-term orientated individuals perceive they are accomplishing short-term objectives (i.e., spending time meaningfully). Individuals may, thus, perceive that devoting their time to present-focused activities such as spending time meaningfully, and achieving future-oriented goals such as those involved in anti-consumption, are conflicting objectives. This is an important result because, often, long-term orientation is considered an important antecedent of ethical and environmental consumer behaviors (Bearden et al., 2006; Polonski et al., 2014). Yet, our results show that this orientation can be detrimental to consumer well-being, warning that long-term oriented anti-consumers are making trade-offs between their future goals and present actions (i.e., spending time meaningfully).

Our second study extends these insights into the relationship between anti-consumption and spending time meaningfully. It does so by showing how frugality (related to both anti-consumption and long-term orientation) also decreases the effect of anti-consumption on spending time meaningfully. This means that if individuals are too focused on frugality, this requires time—i.e., for taking care of their possessions and using them resourcefully, for finding ways to make them last a long time, and for carefully considering the best purchase options for the long term (Bove et al., 2009; Lastovicka et al., 1999). This is time that is spent to the detriment of spending time meaningfully, and which further explains the boundary conditions for spending time in meaningful ways (or not) as an outcome of the interaction between anti-consumption and frugality. Our findings show that future orientation, either as a more general disposition (i.e., long-term orientation) or as reflected in a specific lifestyle (i.e., frugality) harms the relationships between anti-consumption, spending time meaningfully and subjective well-being.

Overall, our study has important implications for consumers, firms, and policymakers. Our findings can prompt individuals with anti-consumption attitudes to reflect on how they spend their time and whether they engage in actions that are meaningful to them, such as engaging with significant others, practicing mindfulness and gratitude, or volunteering. These actions can be beneficial for their subjective well-being, but only if they are not strongly orientated toward the long-term.

Further, our findings can help guide ethical and sustainability-oriented companies that appeal to individuals interested in purpose-driven lifestyles and experiences. By tailoring their communication strategies to incorporate messages and visual cues relating to the importance of spending time meaningfully in the present, such companies can further connect their existing brand values to their audiences' time preferences.

Our findings can also be of interest to policymakers and non-profit anti-consumption campaigners, as they highlight the importance of time preferences for subjective well-being. Our results confirm that the way in which individuals spend their time will affect their subjective well-being, so they can leverage the well-being benefits of spending time meaningfully to influence people to consume less. Educational campaigns or interventions that seek to raise awareness about how people can devote their free time in the present to activities such as self-development and spending time with family and friends while also finding strategies to work toward their long-term objectives can help individuals achieve their goals without sacrificing their well-being. This can also help alleviate anxieties and life dissatisfaction at the individual level to improve well-being at the societal level.

Our studies are not without their limitations, but these offer opportunities for future research. Although our studies drew on participants from different countries (i.e., the UK vs. the US), greater cultural variability could be considered in future studies. Additional research is needed to confirm the interconnections among anti-consumption, time preferences and subjective well-being across diverse settings and cultures, including non-Western countries with slow-paced lifestyles that are less focused on consumption (Sager et al., 2023). Another limitation of our work is that it relies on quantitative data collection methods. While these methods are useful for establishing the links among anti-consumption, temporal orientations and subjective well-being, they cannot offer deep explanations for the moderation effects of long-term orientation and frugality. Thus, future studies can explore other methods for researching these complex interconnections, such as alternative experimental designs or netnographic studies of popular blogs and/or relevant social media groups. Finally, future research can test the relationships among anti-consumption, time preferences and subjective well-being in relation to more specific behavioral manifestations of anti-consumption. This is because some anti-consumption behaviors require significant time and planning, for example, cooking from scratch to avoid food waste, while others free up time, such as avoiding the use of makeup (Moraes et al., 2025). Additional well-being measures can also be examined in future studies. An example is financial well-being, as existing literature indicates that different types of well-being can relate to anti-consumption in different ways (Carrero et al., 2020; Seegebarth et al., 2016).

## Conclusion

In this work, we answer recent calls to advance knowledge on the consequences of anti-consumption (e.g., Balderjahn, et al., 2023; Lee, 2022). We do so by examining individuals'

temporal preferences to understand the interconnections between anti-consumption and subjective well-being. While existing literature assumes individuals adopt anti-consumption to free up time and improve their lives (Lee & Ahn, 2016), scant empirical evidence exists to support this assumption.

The results from our two different studies consistently reveal that anti-consumption can lead to enhanced well-being when anti-consumers spend time meaningfully. In addition, we account for the moderating role of long-term orientation in the relationship between spending time meaningfully and subjective well-being (Study 1) and the moderating role of frugality between anti-consumption attitudes and spending time meaningfully (Study 2). While prior research has signaled long-term orientation as a desirable trait, and frugality as a suitable lifestyle to attain reduced levels of consumption and related environmental goals (Nepomuceno & Laroche, 2017), our results determine that they can be detrimental to subjective well-being. This finding may be a consequence of the tension between one's time preferences and a goal that is future-oriented.

Therefore, our research contributes to anti-consumption theory by clarifying the relationship between anti-consumption and well-being and determining the role of time preferences in this relationship. This work also highlights significant implications for anti-consumers, firms, and policymakers, including the actions that these stakeholders can take to enact and/or foster anti-consumption, marketing communications and policy intervention goals, respectively, without neglecting individual well-being.

## Appendix

See Tables 7 and 8

**Table 7** Study 1—Measurement items

Anti-consumption Attitude (Source: Iyer & Muncy, 2016)	
AC-1	I love living a life free from the clutter of too many material things
AC-2	If I don't need it, I don't buy it
AC-3	I avoid having too many things that will clutter up my life
AC-4	I like a simpler life, not one filled with material things
AC-5	The fewer things I own, the better I feel
Spending Time Meaningfully (Source: Rudd et al., 2019)	
Spending time connecting to the self	
ST.S-1	I try to spend time on activities that help my personal growth
ST.S-2	I try to collect experiences for the future
ST.S-3	I seek activities that make me feel awe (e.g., spend time in nature)
Spending time connecting to others	
ST.O-1	I try to spend as much time as possible with close others
ST.O-2	I try to develop deep social interactions with others (e.g., helping, forgiving, deep conversations, giving)
ST.O-3	<i>I spend time volunteering (dropped)</i>
Spending time connecting to the world	
ST.W-1	I spend time making sacrifices for the greater good
ST.W-2	I chose a career that helps me dedicate time to the greater good
ST.W-3	<i>I like to set goals, measure my progress and focus on accomplishment (dropped)</i>
Long-Term Orientation (Sources: Bearden et al., 2006)	
LTO-1	I plan for the long term
LTO-2	I work hard for success in future
LTO-3	I don't mind giving up today's fun for success in future
LTO-4	Persistence is important to me
Subjective Wellbeing (Source: Campbell, 1976)	
Thinking about your life overall, how often have you felt that is has been (1 not at all; 7 always):	
SWB-1	<i>Interesting (dropped)</i>
SWB-2	Enjoyable
SWB-3	Worthwhile
SWB-4	Friendly
SWB-5	Full
SWB-6	Hopeful
SWB-7	Rewarding
SWB-8	Bringing out the best in you

**Table 8** Study 2—Measurement items for frugality

Frugality (Source: Lastovicka et al., 1999)

Please mark your level of agreement or disagreement with the following sentences (1 strongly disagree; 7 strongly agree):

FRU-1	If I take good care of my possessions, I will definitely save money in the long run
FRU-2	There are many things that are normally thrown away that are still quite useful
FRU-3	Making better use of my resources makes me feel good
FRU-4	If I can re-use an item I already have, there's no sense in buying something new
FRU-5	I believe in being careful in how I spend my money
FRU-6	I discipline myself to get the most from my money
FRU-7	I am willing to wait on a purchase I want so that I can save money
FRU-8	There are things I resist buying today so I can save for tomorrow

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**Data availability** Data is available upon reasonable request.

## Declarations

**Conflict of interest** The authors have no conflicts of interest.

**Ethical Approval** This research received institutional research ethics approval.

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