**Utopian Impulse:
An Individual-differences Approach to Transformative Social Change**

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Abstract

Scholars from a range of disciplines have argued that utopian thinking is an important driver of change in society. In psychology, however, utopia has rarely been investigated, even if understanding processes that underlie social change is among important goals of the discipline. In the present research, we approached utopian thinking from an individual differences perspective and developed the *utopian impulse* as a psychological construct, defined as the propensity to have thoughts and engage in actions whose purpose is to transform the current society into a better one in the future by addressing existing global issues. In thirteen studies ($N=6,290$), six of which were pre-registered, we created a scale to measure this construct and demonstrated its importance to the understanding of social change. The scale was developed in Study 1 in a series of exploratory and confirmatory factor analyses, whereas in Studies 2a-2e we investigated its nomological network and more specifically demonstrated its convergent and discriminant validity. In Studies 3a-3d, we examined the incremental predictive validity of the Utopian Impulse Scale and showed that it predicted a range of behavioral and attitudinal variables relevant to social change above and beyond various competing scales. Finally, in Studies 4-6, we showed that this scale moderated the influence of a range of experimental manipulations on attitudes, intentions, and behavior associated with change in society. Overall, our research showed that the utopian impulse brings a unique perspective to the understanding of social change that goes beyond existing psychological constructs.

Keywords: utopia, transformation, society, social change.

Utopian Impulse: An Individual-differences Approach to Transformative Social Change

The word “Utopia” is Thomas More’s (1516) famous pun in Greek: utopia is a “eutopia” (the good place) and “outopia” (no place). Since then, in colloquial usage, “the good place is no place; utopia is a nice idea but totally unrealistic” (Levitas, 2011, p.179), whose primary characteristic is its “non-existence” (Claeys & Sargent, 1999). “Unrealistic” and “perfect”, and therefore “unrealizable” and “impossible”, are commonly used to talk about “utopia”. However, contrary to common usage, “perfection” has never been a key characteristic of utopia in the literature (Sargent, 1994). Moreover, contemporary publications are increasingly calling for “real utopias” (Wright, 2010), “utopias for realists” (Bregman, 2017), or “nowtopias” (Carlsson & Manning, 2010). They suggest that utopia can be realistic and concrete (Bloch, 1986), and emphasize its social role and intrinsic association with progress.

Along this line of argument, utopia is defined as a fundamental “desire” for a better way of being and living that can inspire and lead to concrete implementation and social change (Levitas, 2011). This is illustrated by numerous examples throughout history. For instance, inspired by Tolstoy, Mahatma Gandhi’s utopian thinking led to his doctrine of passive resistance and his campaign for Indian home rule (Hodgkinson, 2016). In 1964, the Nobel Peace Prize committee awarded Martin Luther King who “dreamt that all inhabitants of the United States would be judged by their personal qualities and not by the color of their skin” (Nobel Committee, 1964). More recently, in 2006, Mohamad Yunus was awarded for his efforts to implement micro-finance and create a “bank for the poor”, which was considered a “utopian idea” (Bornstein, 2013). These examples, along with historic others such as the abolition of slavery or the Suffragette movement, show that countless social transformations that changed our world occurred because of “the essential need to dream of a better life” (Sargent, 1994, p.10), namely the “utopian impulse”.¹ Many publications have pointed out the role of the utopian impulse as a highly important motivator that drives people to tackle various social, economic, and environmental issues (e.g., Fazey et al., 2017; Prescott & Logan, 2018; Wright, 2010).

Whereas scholars from many disciplines have emphasized the importance of utopian thinking for social change, little research has been undertaken to combine the utopian theory with psychology, even if understanding processes that drive this change is one of the discipline’s important goals (e.g., Agronick & Duncan, 1998; Bain, Hornsey, Bongiorno, Kashima, & Crimston, 2013; Blackwood, Livingstone, & Leach, 2013; Thomas, McGarty, & Mavor, 2009;

Turner, Oakes, Haslam, & McGarty, 1994). The few studies conducted thus far operationalized the construct of utopianism in terms of imagining an ideal society (e.g., Fernando et al., 2018). This approach, however, lacks the emphasis on transforming the world by tackling concrete issues that is at the core of contemporary conceptualizations of utopia (Levitas, 2011; Sargent, 2010; Wright, 2010). The present research therefore aims to turn this perspective on utopia into a psychological construct that can enrich theoretical understanding of social change. We label this construct as the “utopian impulse” both to be aligned with the literature (e.g., Sargent, 1994; Levitas, 2011) and to separate it from “utopianism” that has been previously used in psychology to refer to imagining ideal societies (e.g., Fernando et al., 2018; Fernando, O’Brien, Burden, Judge, & Kashima, 2019a).

In the current article, we developed a psychological scale that measures individual differences in the utopian impulse, defined as the propensity to have thoughts and engage in actions whose purpose is to transform the current society into a better one in the future by addressing existing global issues. Importantly, we employed the scale to demonstrate the relevance of the utopian impulse in the context of social change. In the next section, we outline the theoretical background behind this construct.

Characterizing the Utopian Impulse

Many utopian scholars have identified utopian thinking as a human “need” (e.g., Sargent, 1994), “propensity” (e.g., Manuel & Manuel, 1979), “tendency” (e.g., Negley & Patrick, 1971), or more generally an “impulse” (e.g., Claeys & Sargent, 1999). These conceptualizations highlight that utopian thinking expresses a “desire” for a better way of being and living (Levitas, 2011) that is part of human history (Sargent, 2010) and had started long before More’s (1516) book—at least more than two millennia ago with Hesiod’s golden age written in the 8th century B.C (Claeys & Sargent, 1999). Beyond literary references to poems, myths and books, utopian thinking has been identified in architecture, music, dance, cinema or theatre (e.g., Bloch, 1986; Levitas, 2013). Utopian traditions have also been reported all over the world, among the Native American Indians, the Maori, the Australian Aboriginals, the First Nations in Canada, and more largely in Chinese, Japanese, African, Indian, Islamic, Buddhist, and Western cultures (Dutton, 2010; Longxi, 2002; Sargent, 2010). More recently, several economic and social initiatives have been documented as realistic and concrete utopian practices. Examples include participatory

budgeting, universal basic income, and Transition Towns in various countries (e.g., Bregman, 2017; Frantzeskaki et al., 2016; Wright, 2010).

Together, these illustrations demonstrate the universalism and the ubiquity of utopian thinking in various cultures, societies, and activities, thus supporting the idea of *Homo sapiens* as “*Homo utopicus*” (Quarta, 1996). They also reinforce the importance of investigating the utopian impulse from a psychological perspective. Its understanding, however, requires detailing the three functions of utopian thinking that have been identified: criticism, compensation, and change (Levitas, 2011).

First, because utopias are traditionally associated with alternative ways of being and living, utopian thinking can be considered a constructive criticism of the current society in light of a hypothetical world (Goodwin, 1978; Jameson, 2005; Levitas, 2011). Utopias therefore generally fulfil the function of criticism as it is broadly acknowledged that they point out where “something is missing” (Bloch, 1988, p.1) and “what is wrong with the way we now live” (Sargent, 2010, p.5). Contrary to dystopias, utopias usually depict better societies which are generally associated with societal improvement (Sargent, 2010) and “have universal scope and offer benefits to all within this frame of reference” (Goodwin & Taylor, 2009, p.7). In this perspective, the utopian impulse is inspired by humanistic and egalitarian values oriented toward the democratic ideals of economic equality, social justice, universal rights, and concern for others' well-being (e.g., Habermas, 2010; Jameson, 2005; Rorty, 1999; Winter, 2008; Wright, 2010), whose purpose is achieving happiness and dignity and avoiding suffering and degradation (e.g., Bloch, 1986).

In addition to criticism, utopian thinking can serve two other functions—compensation and change. Whereas the change function indicates that engaging in utopian thought can lead to concrete actions to change society, the compensation function is linked to daydreaming and escapism that may actually disengage people from their society and lead to inaction (Fernando et al., 2018; Levitas, 2011). However, evidence shows that, whereas imagining a utopian society is positively correlated with escapism, experimentally manipulating utopian thinking has no effect on escapist thoughts. To the contrary, utopian thinking has been consistently associated with positive attitudes toward change and societal engagement (Fernando et al., 2018).

These results indicate that, in addition to its inherent critical component, the main function of utopian thinking is to be a catalyst of social change rather than a source of escapism.

Interestingly, this perspective challenges the traditional conception of utopian thinking as imagining ideal societies that are located “nowhere” in favor of imagining better societies that are temporally located in the future (Levitas, 2011), which became possible when the concept of progress emerged in the 17th century (Davis, 1981; Hansot, 1974). Since then, utopian thinking is identified as a fundamental source of inspiration for social transformations (e.g., Morton, 1969; Negley & Patrick, 1971), so much so that the change function is considered central to the definition of utopia (e.g., Jovchelovitch & Hawlina, 2018; Levitas, 2013). Utopia is therefore classically opposed to ideology because, rather than being linked to tradition and orientation toward the past, it is oriented toward the future and facilitates change (Buss, 1976; Mannheim, 1979; Marvakis, 2007; Ricoeur, 1986).

Rather than a compensation of the present, utopian thinking is then characterized as an anticipation of a feasible future inspired by the “hope of possible” (Bloch, 1986, p.623), which manifests as an impulse to transform the current society into a better one by adopting realistic and concrete solutions in everyday life (Levitas, 1990, 2013). These solutions may have not yet been adopted or scaled up but they express the unrealized potentialities that are “latent in the present” and indicate “the tendency of the direction and movement of the present into the future” (Kellner, 1997, p.81). For instance, certain solutions that exist at present, but are not well known or widely used, could be adopted or further developed to progress toward the United Nations Sustainable Development Goals and thus contribute to addressing the climate change crisis and social issues (e.g., Bennett et al., 2016).²

Along this line of argument, the utopian impulse is understood as a construct that underpins a concrete utopian thinking which articulates reflection and action: namely, a critical point of view about the current society, which is unfinished and can possibly be improved, and a transformative approach which undertakes actions to actually implement solutions in the real-world that could lead to economic, social, and environmental improvements in the future. In this regard, the concept of utopian impulse helps further develop the growing literature on social change in psychology (e.g., Bain et al., 2013; Fernando et al., 2018).

Overview of the Present Research

We conducted thirteen empirical studies to establish the utopian impulse as a construct of relevance to psychology. In the first study, we developed a scale to measure this construct by devising a pool of items grounded upon the theoretical characteristics that we have overviewed,

and we then identified its factor structure via exploratory and confirmatory factor analyses. In Studies 2a-2e, we then developed the nomological network of this construct by examining its relationship with various personality traits, values, attitudes, and beliefs, and we also probed its convergent and discriminant validity. In Studies 3a-3d, we tested its incremental predictive validity to show that it predicts various self-reported attitudes and behaviors that are relevant to social transformation and change above and beyond the competing scales. Finally, in Studies 4-6, we tested whether the utopian impulse moderates the influence of several theoretically relevant experimental manipulations on intentions, attitudes, and behavior linked to social change.

Study 1: Scale Development

In Study 1, we developed the Utopian Impulse Scale. We first created a set of representative items based on previous theorizing and in consultation with experts, after which we performed exploratory (EFA) and confirmatory factor analyses (CFA) to determine the factor structure. We then tested measurement invariance to ensure that the scale measures the same construct across US and UK, and across male and female genders. Finally, we undertook stringent testing of whether our scale can be scored as a single utopian impulse factor despite having a multi-factor structure and therefore captures an underlying theoretical construct.

Method

Item Development

We developed a pool of 60 items (Table 1) to capture the construct of the utopian impulse that were grounded in theoretical assumptions from the utopian literature overviewed above. First, the items had to fulfill the critical function of utopia by indicating that the world has pressing issues that need to be resolved. In some items, we used general phrases such as “the biggest issues of our age” for respondents to decide what these issues are (e.g., Item 13, Table 1). In other items, we referred to the most pressing global problems (e.g., climate change, economic and social inequality) typically specified in the utopian literature (e.g., Fernando, O’Brien, Judge, & Kashima, 2019b; Jameson, 2005; Wright, 2010) or other scholarly publications (e.g., Piff et al., 2020; Piketty, 2015; Whitmee et al., 2015; Wilkinson & Pikett, 2009).

Table 1 about here

Importantly, the items had to fulfill the change (rather than the compensation) function of utopia by addressing people's propensity to engage in thoughts or pursue actions aimed at transforming the world by tackling its current issues. In relation to thoughts, the items assessed to what extent people themselves are inclined to think about ideas to transform the world (e.g., Item 14, Table 1) or motivated to search for such ideas developed by others or react positively when they encounter them (e.g., Item 9, Table 1). In relation to actions, some items referred more generally to actions to change the world (e.g., Item 12, Table 1), and some items to specific actions (e.g., Item 26, Table 1). Regarding specific actions, we focused on the choice of socially conscious products and services that could create a change by tackling the issues the world is currently facing (e.g., exploitation, economic inequality, environment) because promoting "sustainable and equitable patterns of consumption" (p.1974) by supporting "sustainable business models that address social, environmental, and commercial goals" (p.1979) has been identified amongst the essential steps to transform our societies (Whitmee et al., 2015).

As another aspect of the change function of utopia, we went beyond assessing people's own actions that contribute to transforming the world. We probed whether they search for or respond positively to currently existing solutions developed by others that could potentially transform the world (e.g., Item 40, Table 1), or how likely they are to believe that such solutions exist even if they are not widely adopted or easily identified (e.g., Item 53, Table 1). Indeed, various publications concerning utopia emphasize that the solutions that could transform the society may already exist at present (i.e. they are concrete) and could lead to change if they were more widely adopted or scaled up (e.g., Bennett et al., 2016; Frantzeskaki et al., 2016; Levitas, 1990; Wright, 2010).

Finally, all our items had to satisfy the three distinct levels of the utopian impulse: body, time, and the collective dimension (Jameson, 2005). Regarding *body*, all the items involved words linked to motivation, affect, and action (e.g., drive, impulse, urge, feeling, excitement). Concerning *time*, we created items that used past, present, or future tenses, given that the utopian impulse is about taking insights and inspiration from the progress achieved in the past and the solutions or ideas available at present to ultimately transform the future. In this regard, because the utopian impulse ultimately involves a future orientation rather than an orientation toward the past that characterizes ideology, our items did not include the past tense in relation to returning to an idealized past but in relation to being inspired or motivated by ideas that successfully

transformed the world. The final important aspect of our items is that they had to involve the *collective* dimension and thus emphasize or imply that transforming the world benefits people collectively (e.g., Item 2, Table 1) rather than a single individual, in contrast to “personal utopias” (e.g., Scheibe, Freund, & Baltes, 2007).

Initially, we created 59 items based on these criteria and shared them with the following utopian scholars for feedback: Lyman Tower Sargent, Darren Webb, Athanasios Marvakis, Rainer Zimmermann, Peter Thompson, and Douglas Kellner. The final pool of 60 items was developed after incorporating their feedback.

All items were answered on a 7-point Likert scale from 1 (*strongly disagree*) to 7 (*strongly agree*) because this response type is typically used in other scales and yields good psychometric properties (Simms, Zelazny, Williams, & Bernstein, 2019). Although many psychological scales answered using a Likert format use reverse-worded items to minimize acquiescence bias, such items may result in various methodological issues, including contamination of the factor structure, lack of measurement invariance, lower internal consistency, etc. (e.g., Carlson et al., 2011; Wong, Rindfleisch, & Burroughs, 2003). It has also been demonstrated that such items in fact do not prevent response biases such as acquiescence from occurring, and that a more effective way to do this is having a short scale with roughly 10 items posed in the same direction (Van Sonderen, Sanderman, & Coyne, 2013). For this reason, we did not use reverse items and we constructed a scale that is relatively short while having good psychometric properties.

Participants and Procedure

Three samples were collected. Participants' demographics are reported in Table 2. The exclusion criteria and the rationale behind the sample sizes are detailed in Supplementary Materials (pp.4-5). For each sample, participants first completed the consent form, after which they received the utopian impulse items. In Sample 1, they received all 60 items, and in Samples 2 and 3 only the 12 items selected for the Utopian Impulse Scale (Table 1). For each sample, items were presented in a randomized order, and participants subsequently completed a short version (form C) of the Marlowe-Crowne Social Desirability Scale (Reynolds, 1982) to ensure that our items are not susceptible to socially desirable responding. The data for Sample 1 were collected between 8-9 October 2018, for Sample 2 on 15 October 2018, and for sample 3 on 16 October 2018.

Table 2 about here

Results

Exploratory Factor Analysis

The Kaiser-Meyer-Olkin measure of sampling adequacy, which was .99, and Bartlett's test of sphericity, which was significant, $\chi^2(1770) = 37839.86, p < .001$, provided a strong evidence for the suitability of the data for EFA (Beavers et al., 2013). To determine how many factors to retain, we first performed a parallel analysis (Hayton, Allen, & Scarpello, 2004; Horn, 1965; Schmitt, Sass, Chappelle, & Thompson, 2018), which showed that five factors should be retained. We therefore performed a maximum likelihood (ML) EFA (Table 1) with five factors and used an oblique rotation—*promax*—given that we expected the factors to be correlated because they belong to the same theoretical construct and because this rotation typically produces a clean factor structure (Hendrickson & White, 1964; Schmitt & Sass, 2011). Kaiser (1958) normalization was implemented with *promax*.

As can be seen in Table 1, the analysis showed that, in addition to explaining a relatively small proportion of variance, the fifth factor had highest standardized loadings on only two items (.73 and .68), whereas all of its other loadings were relatively small ($\leq .33$). We therefore discarded the fifth factor for several reasons—because factors that have fewer than three variables are generally discouraged (Tabachnick, Fidell, & Ullman, 2007), and because our results suggest that the fifth factor may be a result of overfactoring (Hayton et al., 2004) and may have occurred due to the linguistic similarity between the two items (i.e. these were the only two items referring to technology). It is common that a final scale factor is not retained due to statistical and/or conceptual limitations (e.g., Caviola et al., 2018; Hayton et al., 2004).

We labelled Factor 1 *Propensity for Transformative Utopian Thinking and Action* because it contains items that broadly tackled people's drive to engage in thoughts and actions aimed at transforming society (e.g., Items 12-13). We labelled Factor 2 *Belief in Transformative Utopian Solutions* as it contains items that captured whether people believe that solutions that can transform society already exist even if they are not widely known or adopted (e.g., Items 35 & 53). We labelled Factor 3 *Responsiveness to Transformative Utopian Solutions* because it contains items related to people's affective and motivational reactions when they encounter solutions that have the potential to transform society (e.g., Items 40 & 45). Finally, we labelled

Factor 4 *Choice of Transformative Utopian Products and Services* as it contains items that assessed how frequently people choose products and services that could transform society because they are based on ethical and sustainable practices (e.g., Items 26 & 31). For each of the four retained factors, representative items that were further tested in CFA were selected based on several statistical and conceptual criteria (Supplementary materials, p.5).

Confirmatory Factor Analysis (CFA)

We used the standardized root mean square residual (SRMR), the comparative fit index (CFI), and the root mean square error of approximation (RMSEA) indices to evaluate model fit (Kline, 2005; Worthington & Whittaker, 2006). Conservative cut-off values of these indices were used to indicate a good fit: SRMR < .05; CFI > .95; and RMSEA < .06 (Hu & Bentler, 1999; Jackson, Gillaspay Jr, & Purc-Stephenson, 2009). Model fit was estimated using the MLMV maximum likelihood estimator with robust standard errors (Maydeu-Olivares, 2017) and the robust fit indices computed based on recommendations by Savalei (2018).

The first CFA on Sample 1 showed that the model had a good fit, $\chi^2(48) = 49.678$, $p = .406$, SRMR = .018, CFI = .999, RMSEA = .011, 90% CI [$<.001$, .039]. Standardized loadings of items on factors were also generally high ($\geq .765$). We therefore proceeded with recruiting Samples 2 and 3 to further confirm the factor structure. As can be seen from Figure 1, both samples met the most stringent criteria for model fit, and standardized factor loadings were also generally high. Next to confirming the factor structure, we also showed that the model with four factors is in fact the most appropriate one by comparing it with other possible models (Supplementary Materials, pp.5-6).

Figure 1 about here

Measurement Invariance, Social Desirability, and Testing the General Utopian Impulse Factor

We next established configural, metric, scalar, and residual measurement invariance (Putnick & Bornstein, 2016) of our scale concerning *country* (US vs. UK) and *gender* (male vs. female). Moreover, by employing bifactor statistical indices (Rodriguez, Reise, & Haviland, 2016), we showed that the scale captures an overarching theoretical construct (i.e. the utopian impulse) and can be scored as a single general factor. Finally, we demonstrated that the scale

has a low susceptibility to socially desirable responding. Specifics about these analyses are available in the Supplementary Materials (pp.6-8).

Discussion

In Study 1, we developed the Utopian Impulse Scale (Table 1). A four-factor structure was first extracted using EFA and further confirmed via CFA. We also established that the scale has a low susceptibility to socially desirable responding and measures the same underlying construct across country (US vs. UK) and gender (male vs. female). In addition, as recommended by Rodriguez et al. (2016), we demonstrated that the scale captures a unified theoretical construct of the utopian impulse, in line with our theorizing (e.g., Levitas, 2011), and can also be scored as a single factor despite having a multifactor structure.

Studies 2a-2e: Nomological Network of the Utopian Impulse

Considering that the utopian impulse is a relatively novel construct originating from philosophical theory, we conducted five studies (2a-2e) to map its nomological network and integrate it with psychological theory by investigating its links to various constructs. Our goal was to examine its associations with the theoretically linked constructs outlined below but also to understand its links to a range of other individual differences widely studied in the field. In doing so, we wanted to establish convergent and discriminant validity of the Utopian Impulse Scale by showing that it correlates with but is also distinct from theoretically linked constructs, and that it does not correlate or has relatively low correlations with unrelated constructs.

Correlates of the Utopian Impulse

We argue that the utopian impulse is conceptually related to various constructs ranging from personality traits to economic, social, and political attitudes and beliefs, or values.

Utopian Impulse and Affective Direction

Given that a “desire” for a better way of being and living is assumed to be the primary source of utopian thinking (Levitas, 2011), the utopian impulse should be related to approach temperament—a general sensitivity to positive stimuli, either present or imagined, that captures how easily motivated people are by the prospect of positive outcomes (Elliot & Thrash, 2010). Additionally, the utopian impulse does not necessarily require that people are dissatisfied with their own life in the current society (see Fernando et al., 2018; Sargent, 1994). Thus, we do not expect the utopian impulse to be significantly related, whether positively or negatively, to life satisfaction (Diener, Emmons, Larsen, & Griffin, 1985) or to life orientation, which measures

generalized expectations of good versus bad outcomes in personal life (Scheier, Carver & Bridges, 1994).

Utopian Impulse and Imagination

Because the utopian impulse reflects a desire for an alternative and better world, it may require people to be imaginative, curious, reflective, and creative to find the appropriate solutions leading to improvement (Levine, 2009). As such, it should be positively correlated with personality traits that potentiate imagination and exploration, including openness to experience (Gosling, Rentfrow, & Swann, 2003) and sensation seeking (Zuckerman, 1979). The utopian impulse should also be associated with other constructs such as utopianism, conceptualized as imagining one's ideal society, and negatively correlated with anti-utopianism (Fernando et al., 2018). As "social dreaming", every type of utopian thinking also includes some elements of fantasy (Sargent, 1994, p.4). Interestingly, such a fantasy can take two forms, a self- and a more other-oriented one. On the one hand, the utopian impulse may be associated with grandiose fantasies, which are a tendency to distort reality to achieve an overly positive view of future accomplishments (Glover, Miller, Lynam, Crego, & Widiger, 2012). By extension, it could also be related to narcissism as a predictor of "ego-promoting outcomes" (Jones & Paulhus, 2014), since the utopian impulse can involve expressing one's own vision of a better society. On the other hand, because the utopian impulse is other-oriented as it stems from what can be improved at a societal level (e.g., Nestor, 2016), it requires fantasy together with empathic concern and perspective-taking (Davis, 1983). Given this other-orientation, the construct should also be correlated with agreeableness, defined as being trusting, generous, sympathetic, and cooperative (Gosling et al., 2003), and with group affiliation that captures the desire to belong to groups (Neel, Kenrick, White, & Neuberg, 2015).

Utopian Impulse and Modes of Thought

Since the utopian impulse involves a constructive criticism of the present society in consideration of a hypothetical future that is realistic and possible, it requires a "reasoned justification" (Goodwin, 1978). It should thus entail a rational mode of thinking that is analytic, reason- and justification-based (Epstein, Pacini, Denes-Raj, & Heier, 1996). Importantly, the utopian impulse is also intrinsically related to hope because it is inspired by the perceived possibility that the current world could be improved in the future (Badaan, Jost, Fernando, & Kashima, 2020; Bloch, 1986; Cook, 2018; Webb, 2007). The utopian impulse should therefore

be positively correlated with the two components of hope identified in the literature (Snyder et al., 1991)—successful agency (goal-directed determination; here, toward a better world) and pathways (planning of ways to meet goals which are possible or plausible).

Utopian Impulse and Attitudes, Values, and Beliefs

Importantly, the values attached to the utopian impulse can be mapped out and measured thanks to Schwartz et al.'s (2012) theory of basic individual values. The utopian impulse should be positively correlated with values linked to openness to change, which emphasize readiness for new ideas, actions, and experiences (self-direction and stimulation), and with values linked to the transcendence of self-interest for the sake of others (universalism and benevolence).

Consistently, we expect a positive correlation with alternative scales measuring humanitarian and egalitarian values (Katz & Hass, 1988; Horberg, Kraus & Keltner, 2013).

Conversely, the utopian impulse should be negatively correlated with constructs that predict negative attitudes toward minority groups such as right-wing authoritarianism (Altemeyer, 1988; Crawford, Brandt, Inbar, & Mallinas, 2016), protestant ethic (Katz & Hass, 1988), or social dominance orientation (Ho et al., 2015). We also expect a negative correlation between the utopian impulse and conservatism. Indeed, in contrast with liberals, conservatives stress resistance to change and justification of inequality (Jost, Glaser, Kruglanski & Sulloway, 2003), which leaves little room for utopian thinking as defined in the context of the present article (see also Haidt (2012) and Jost (2019) on John Lennon's utopian song *Imagine*).

By extension, considering the aforementioned classic tension between utopia and ideology (e.g., Mannheim, 1979), we expect that the utopian impulse is negatively correlated with economic system justification which measures the general ideological tendency to legitimize economic inequality (Jost, 2019; Jost & Thompson, 2000), and also with meritocracy (Horberg et al., 2013) and fair market ideology, defined as the tendency to view the free-market system, its processes and outcomes, as inherently efficient, fair, legitimate, and just (Jost, Blount, Pfeffer, & Hunyady, 2003). It is worthwhile to note that utopian thinking is not, by definition, in contradiction with support for the free-market system (Levitas, 2011). However, given that the free-market system is currently underpinning the economic system (especially in Western societies), utopian thinking is generally associated with a criticism of the free-market system (e.g., Albritton, 2012; Jameson, 2005; Wright, 2013).

Although the utopian impulse may express a critical perspective on market-oriented values, we do not suggest that it leads to a complete rejection of every form of consumption (e.g., Bossy, 2014). To the contrary, socially responsible consumers buy products and services that are “perceived to have a positive (or less negative) influence on the environment” or that “attempt to affect related positive social change” (Roberts, 1993, p.140). The utopian impulse should then be positively related to activist consumption values and choices pertaining to corporate social responsibility and environmental concern that intend to protect people and the planet and thus may lead to positive social change (Haws, Winterich & Walker Naylor, 2014; Sudbury-Riley & Kohlbacher, 2014). On a similar basis, the utopian impulse should be associated with a positive attitude toward non-profit organizations that help individuals (Webb, Green & Brashear, 2000) and should translate into activism (Klar & Kasser, 2009).

Method

Determining Sample Size

Sample size for Studies 2a-2e was determined via power analyses (G*Power; Faul, Erdfelder, Lang, & Buchner, 2007) that took into account the FDR correction by Benjamini and Hochberg (1995) that was applied in each study separately depending on the total number of significance tests (i.e. correlation analyses) computed (Supplementary Materials, pp.8-9).

Participants, Procedure, and Measures

Participants demographics are reported in Table 2, and the exclusion criteria are detailed in Supplementary Materials (p.8). In each study, all participants first completed the consent form, after which they filled in the Utopian Impulse Scale and the relevant scales for that study. All the scales were displayed to participants in a random order. Participants completed the Utopian Impulse Scale along with 13 scales/subscales in Study 2a, 16 scales/subscales in Study 2b, 21 scales/subscales in Study 2c, 16 scales/subscales in Study 2d, and 13 scales/subscales in Study 2e. These scales are listed in Table 3 and described in detail in Supplementary Materials (pp.9-17). The data for Study 2a were collected between 5-6 November 2018, for Study 2b on 6-7 November 2018, for Study 2c on 7 November 2018, for Study 2d on 9 November 2018, and for Study 2e on 14 November 2018.

Table 3 about here

Results

Relationship Between the Utopian Impulse Factors and Other Constructs

We computed bivariate correlations between the four factors of the Utopian Impulse Scale and the scales tested in each study (Table 3). In the table, it is indicated which initially significant raw p-values stopped being significant after the FDR correction was applied. Correlations between the general factor and the scales tested in each study are also reported for informative reasons. However, significance tests concerning the general factor were not used in the power analyses to estimate the sample size or to compute the FDR corrections in the correlation analyses, and hence only the raw p-values are reported concerning this factor.

Distinguishing the Utopian Impulse from Highly Correlated Constructs

To show that the utopian impulse is distinct from the constructs with which it was highly correlated (i.e. all constructs from Table 3 with which any of the utopian impulse factors had correlations of .50 or higher), we performed a series of confirmatory factor analyses (e.g., Seuntjens, Zeelenberg, Van de Ven, & Breugelmans, 2015). Overall, these analyses indicate that the four utopian impulse factors are distinct from any other constructs to which they were highly correlated (Supplementary Materials, pp.17-18).

Discussion

Overall, Studies 2a-2e demonstrated convergent and discriminant validity of the Utopian Impulse Scale by showing that its factors were correlated with theoretically linked constructs but uncorrelated with the constructs that were not theoretically relevant, and by showing that the utopian impulse is distinct from constructs that were strongly related to it ($r \geq .50$) via confirmatory factor analyses. Moreover, these studies also contributed to establishing the nomological network of the utopian impulse (further discussed in Supplementary Materials, pp.18-21).

Notably, Studies 2a-2e showed that the Utopian Impulse Scale reflects the individual propensity to actively engage in thoughts and actions oriented toward the betterment of society by tackling some of its biggest issues such as sustainability and economic and social inequality (e.g., green consumption values, ethically minded consumer behavior). These thoughts and actions may be linked to openness to change (e.g., self-directed thought), a critical perspective on the current society (e.g., economic system *non*-justification), concern for others (e.g., empathic

concern, attitudes toward helping others), and a commitment to democratic values (e.g., universalism, humanitarianism, egalitarianism).

It is worthwhile to note that, as expected, the utopian impulse was not significantly correlated with life satisfaction (Study 2a), or with life orientation (Study 2b). Additionally, only F2 was consistently significantly (but weakly) negatively correlated with income satisfaction and personal beliefs in a just world (Study 2e). These results support the idea that people do not necessarily have to be dissatisfied with themselves or their own life, or to be specifically pessimistic (or optimistic) on a personal level, in order to engage in utopian thinking and its related concrete actions. Furthermore, the absence of a significant relationship between the utopian impulse and self-efficacy (Study 2a) suggests that the extent to which a person thinks that they can successfully accomplish their goals does not determine whether they want to engage in thoughts and actions that could lead to social transformation.

Studies 3a-3d: Incremental Predictive Validity

Having probed convergent and discriminant validity of the Utopian Impulse Scale and established its nomological network, we aimed to test its incremental predictive validity and focused on all the scales that were highly correlated ($r \geq .50$) with it to further distinguish them from our scale. Given that we have argued that the utopian impulse is an important construct for understanding social change, we wanted to show that it predicts a range of variables relevant to this change above and beyond the competing scales. We created a series of behavioral (Studies 3a and 3b) and attitudinal constructs (Studies 3c and 3d), measured via self-reports, that capture different aspects of social transformation. These constructs and their relevance to the utopian impulse are outlined in the *Measures* section below.

We specified two hypotheses regarding Studies 3a-3d. According to Hypothesis 1, we expected that, using a hierarchical regression analysis, adding the four utopian impulse factors to a model that contains the covariates (gender and age) as well as a competing scale (or a set of subscales comprising the competing scale) will significantly increase R^2 (e.g., Chen et al., 2016). According to Hypothesis 2, we expected that, in each hierarchical regression computed, one (or more) of the utopian impulse factors would individually predict an increase in a behavioral or attitudinal dependent variable. Given the lack of available literature for a more specific hypothesis in this regard, we did not predict which of the four factors of the Utopian Impulse Scale may be more relevant for which of the dependent variables. For both hypotheses, we used

the FDR correction (Benjamini & Hochberg, 1995) to prevent false positive findings. All the hypotheses and analyses for the present studies were pre-registered (Appendix).

Method

Determining Sample Size

Sample size for Studies 3a-3d was determined via power analyses that used a similar logic as for Studies 2a-2e. A detailed description of these analyses can be seen in the pre-registration document (see Appendix). Overall, we decided to test roughly 600 participants in each study, and we estimated that around 480-510 participants may be included in statistical analyses under the assumption that the data from roughly 15-20% of them may be eliminated after applying the exclusion criteria (see Supplementary Materials, p.21).

Participants and Procedure

Participants demographics are reported in Table 2, and the exclusion criteria are detailed in Supplementary Materials (p.21). In each study, all participants first completed the consent form, after which they filled in the Utopian Impulse Scale, the relevant attitudinal or behavioral questions, and the competing scales (see the *Measures* section below and Tables 4-7). The order in which the Utopian Impulse Scale, the competing scales, and the attitudinal or behavioral questions were presented was randomized across participants. In the end, we assessed the covariates (age and gender). The data for Study 3a were collected between 10-11 June 2019, for Study 3b between 11-12 June 2019, for Study 3c between 12-15 June 2019, and for Study 3d between 13-15 June 2019.

Tables 4-7 about here

Measures

In this section, we outline the behavioral and attitudinal items and the logic behind them, overview the competing scales against which we tested incremental predictive validity, and specify the exclusion criteria.

Behavioral and Attitudinal Items. We created a series of constructs that illustrate the critical and change functions lying at the core of the utopian impulse and are associated with the transformation of society into a better one. These constructs comprised nine self-reported behaviors and ten self-reported attitudes that can be thematically organized into three broad

domains: economic, social, and political. The items, definitions, and references attached to each of the constructs are reported in Supplementary Materials (pp.21-27).

The first set of constructs, linked to the economic domain, involved behaviors oriented toward more ethical products and services (Research) that can “re-localize” the economic activity (Localism) or are motivated by an altruistic orientation rather than self-interest (Sacrifice). Economically related attitudes were illustrated by constructs expressing thoughts in favor of social justice (Life improvement) and a reduction of production and consumption (Degrowth). Another set of constructs, linked to the social domain, exemplified behaviors such as getting informed about concrete initiatives and solutions to tackle global issues (Knowledge), engaging in actions that support individual or collective change (Individual change; Collective change), and collective imagination (Collective imagination). In this perspective, we also developed constructs that measure attitudes in favor of immediate action (Urgency) and bottom-up implementations and solutions (Empowerment), or attitudes inspired by empathy toward others in need (Perspective taking, Refugees). A third set of constructs illustrated politically related behaviors such as arguing in favor of more democratic tolerance (Tolerance) or publicly advocating for a cause (Public). Politically related attitudes expressed feelings (Immersion), emotions (Contempt), or opinions (Commitment, Personal autonomy) that have been associated with utopian thinking and social change.

All the constructs were measured on a scale from 1 (*never*) to 5 (*very often*; e.g., Erbas et al., 2018; Luerssen, Jhita, & Ayduk, 2017; Meleady, Crisp, Dhont, Hopthrow, & Turner, 2019; Reimer et al., 2017).

Competing Scales. In the present set of studies, we used all scales (or subscales of the scales that consist of multiple subscales) that were highly correlated ($r \geq .50$) with the Utopian Impulse Scale in Studies 2a-2e. These scales are listed in Tables 4-7 and referenced in Supplementary Materials (p.28). All the scales were assessed using a response scale from 1 (*strongly disagree*) to 7 (*strongly agree*), except for the subscales of the *Portrait Values Questionnaire* that were assessed on a response scale from 1 (*not at all like me*) to 6 (*very much like me*).

Covariates. We used two essential demographic characteristics—gender (male vs. female) and age—that are known to be linked to many constructs and are typically added as covariates in incremental predictive validity studies (e.g., Chen et al., 2016).

Results

To test Hypotheses 1 and 2, we used hierarchical linear regressions with three steps. In Step 1, only the covariates (gender and age) were included in the model. In Step 2, a competing scale was included. If the competing scale consisted of several subscales, all the subscales were included in this step. Finally, in Step 3, the four factors of the Utopian Impulse Scale were added. Regarding Hypothesis 1, we focused on whether the change in R^2 for Step 3 was significant. Hypothesis 2 was tested by probing which of the four factors of the Utopian Impulse Scale included in Step 3 were significant as predictors. For both hypotheses, Tables 4-7 report the raw p-values and indicate which ones stopped being significant after applying the FDR correction (Benjamini & Hochberg, 1995). For informative purposes, the tables also report whether the general utopian impulse factor that was probed in a different set of hierarchical regression analyses was a significant predictor. However, because the general factor was not used in sample size planning, we report only the raw significance values but do not implement the FDR correction in relation to it.

As can be seen from Tables 4-7, Hypothesis 1 was supported for all dependent variables, given that including the four factors of the Utopian Impulse Scale in the hierarchical regression model significantly increased R^2 . All the results remained significant after applying the FDR correction. Furthermore, Hypothesis 2 was supported in all cases, except for the refugees and perspective taking variables when the Utopian Impulse Scale was combined with the Portrait Values Questionnaire (Schwartz et al., 2012), given that the significant relationship between Factor 3 and either of the dependent variables stopped being significant after the FDR correction was applied.

As can be seen from Tables 4-7, certain factors of the Utopian Impulse Scale were, in few cases, negative predictors of the dependent variables, which is contrary to our predictions. However, given that these factors always had positive (significant or insignificant) relationships with the dependent variables when tested in separate correlation analyses, we concluded that the negative relationships were statistical artefacts that occurred due to high correlations among the four factors and the competing scales tested (Alin, 2010; Farrar & Glauber, 1967; Kraha, Turner, Nimon, Zientek, & Henson, 2012).

Discussion

Overall, Studies 3a-3d generally confirmed our predictions, thus demonstrating incremental predictive validity of the Utopian Impulse Scale. Including the four factors of the Utopian Impulse Scale into hierarchical regression models significantly improved the model fit for all 19 behavioral and attitudinal dependent variables (Hypothesis 1) above and beyond the covariates and the competing scales conceptually linked to these variables (e.g., Ethically Minded Consumer Behavior Scale, Economic System Justification Scale, Activist Identity and Commitment Scale). Indeed, the dependent variables expressed an engagement in thoughts and actions that articulated an openness and readiness to change (e.g., collective imagination, immersion, individual change, knowledge, public, urgency), a critical perspective on the current society and its economic and social organization (e.g., collective change, commitment, contempt, degrowth, life improvement, localism, research), a concern for others and the planet (e.g., perspective taking, refugees, sacrifice), and a strong support for democratic values (e.g., empowerment, personal autonomy, tolerance).

Furthermore, individual utopian impulse factors significantly predicted the dependent variables in all cases, except for the refugees and perspective taking variables when the Utopian Impulse Scale was combined with the Portrait Values Questionnaire (Hypothesis 2). Considering that Hypothesis 1 regarding these variables was supported even against the Portrait Values Questionnaire (Schwartz et al., 2012), and that the general utopian impulse factor was a highly significant predictor regarding these variables when it was used in hierarchical regression analyses instead of the individual factors, it is likely that the failure to support Hypothesis 2 in these few cases may have occurred due to multicollinearity (Alin, 2010; Farrar & Glauber, 1967; Kraha et., 2012). Therefore, when the Utopian Impulse Scale is used as a predictor alongside other scales that contain numerous subscales strongly related to its individual factors, it may be more informative to compute the general factor given that the individual factors may produce less meaningful coefficients.

Study 4: Ethical vs. Unethical Consumption

In the previous studies, we focused on the four factors of the Utopian Impulse Scale to understand the nomological network as well as the attitudinal and behavioral correlates of this psychological construct. However, given that in Study 1 we established that our scale can be scored as a single general factor, we aimed to conduct additional studies that would focus on this factor itself. In this regard, we found it appropriate to investigate whether it moderates the

influence of various relevant experimental manipulations on dependent variables of interest. Indeed, when researchers probe which constructs moderate the influence of their interventions, it is typically more efficient to have one measure per construct rather than testing its multiple components (e.g., Gable, Reis, & Elliot, 2000), which may reduce experimental power, complicate the analyses, and in some cases make the results difficult to interpret. We therefore assumed that showing that the Utopian Impulse Scale, scored as a single general factor, can moderate the impact of a range of manipulations on relevant outcome variables would make this scale useful for researchers aiming to understand how individual differences determine the effectiveness of psychological interventions on intentions and behavior (e.g., Hirsh, Kang, & Bodenhausen, 2012; Matz, Kosinski, Nave, & Stillwell, 2017). In the present study, we focused on the Utopian Impulse Scale as a moderator of purchase intentions in the context of ethical consumption, and more specifically fair-trade products, because fair trade is considered a utopian practice that can contribute to economic, social, and environmental transformation (e.g., Bossy, 2014).

In light of the literature on ethical consumption (e.g., Trudel & Cotte, 2009), we expected that participants in the ethical versus unethical condition would have higher intentions to buy the product (*Hypothesis 1*). Most importantly, however, we expected that the general utopian impulse factor would moderate this influence, which should increase as participants' scores on this factor increase (*Hypothesis 2*). All the predictions, materials, and analyses for this study were pre-registered (Appendix).

Method

Participants and Procedure

Participants' demographics are reported in Table 2. The exclusion criteria and the rationale behind the sample sizes are detailed in Supplementary Materials (p.29). All participants first completed the consent form, after which they were randomly allocated to either the ethical or unethical condition. In the ethical condition, they read a vignette about a product—chocolate—produced by a fictitious company (the Petersen Company) that is known for ethical business practices. In the unethical condition, the vignette followed a similar logic with the difference being that the company was known for unethical business practices. The manipulations were based on Schuldt, Muller, and Schwarz (2012). Thereafter, the dependent variable—participants' intention to buy the product—was measured, after which they completed

the Utopian Impulse Scale and answered several questions assessing covariates as well as the check items (see the *Measures* section below). In the end, all participants were informed that the Petersen Company is a fictitious brand but has been modelled on companies with similar business practices that have been observed in the industry. They were also encouraged to write any comments they may have regarding the study in a text box. The data for Study 4 were collected on 9 July 2019.

Measures

The dependent variable (*intention to buy the chocolate*) was measured via four items (e.g., White & Peloza, 2009), answered on a 7-point Likert scale from 1 (*strongly disagree*) to 7 (*strongly agree*), in which participants had to indicate to what extent they would be likely to purchase the product, they would be willing to buy the product, they would make the product one of their first choices in this product category, and they would exert a great deal of effort to purchase the product ($\alpha = .970$). The 12-item *Utopian Impulse Scale* was assessed on a Likert scale from 1 (*strongly disagree*) to 7 (*strongly agree*), and scored as a single factor to be used as a moderator. As covariates, we assessed participants' *age*, *gender* (male vs. female vs. other), *body mass index* (BMI, which was computed from participants' self-reported weight and height using the formula by Frankel & Staeheli, 1992), and *frequency of eating chocolate per week* on a scale from 0 (*no days*) to 7 (*7 days per week*). The check items are available under *Exclusion Criteria* in Supplementary Materials (p.29).

Results

To test Hypothesis 1, we performed an independent samples t-test (two-tailed). As predicted, participants in the ethical condition ($M = 5.57$; $SD = 1.03$) had higher intentions to buy the chocolate compared to participants in the unethical condition ($M = 2.38$; $SD = 1.63$), $t(322) = 21.025$, $p < .001$, $d = 2.336$, 95% CI [2.053, 2.620].

Figure 2 about here

To test Hypothesis 2, we computed an interaction between the ethical versus unethical condition and the general utopian impulse factor as a moderator. The pattern of the interaction was probed using the Johnson-Neyman technique (Johnson & Fay, 1950) implemented via the *interactions* package in R (Long, 2019). Considering that this technique is analogue to making

multiple comparisons, a false discovery rate correction developed by Esarey & Sumner (2018) was applied. As predicted, the condition interacted with the moderator (*Multiple R*² = .63) in influencing the intentions to buy the chocolate, $t(320) = 6.241$, $b = 0.879$, 95% CI [0.602, 1.156], $p < .001$, *Cohen's f*² = 0.122. As can be seen in Figure 2, after the cut-off value of the utopian impulse equal to 2.296, ethical versus unethical condition increased the intention to buy the product, whereas below the cut-off point there was no effect. The interaction between the condition and the moderator (*Multiple R*² = .65) remained significant after controlling for the covariates, $t(316) = 6.227$, $b = 0.856$, 95% CI [0.585, 1.126], $p < .001$, *Cohen's f*² = 0.123. The cut-off value of the utopian impulse after which the ethical versus unethical condition increased the intention to buy the product remained similar (2.198). Overall, these results indicated that the support for Hypothesis 2 was robust.

Discussion

Overall, the findings supported both predictions. Participants in the ethical condition had higher intentions to buy the product than those in the unethical condition (Hypothesis 1). Importantly, the Utopian Impulse Scale moderated this influence, which increased as participants' scores on this scale increased and was not significant for those with low scores (< 2.296). All the findings were robust, given that they remained significant after controlling for the covariates (age, gender, BMI, and the weekly frequency of eating chocolate).

Study 5: Socially Conscious vs. Fashionable Consumption

Whereas the previous study was specifically about a fairly traded product, in the present study we wanted to focus on a manipulation based around a product that helps tackle a wider range of global issues. This study was inspired by a concrete utopian initiative, *Conscious Step*, a sock brand created in 2012 whose purpose is to foster positive social change. More specifically, it aims to “create a tangible impact in making the world a better place” (<https://consciousstep.com/>), and to meet the United Nations Sustainable Development Goals (Rendell, 2016) by tackling various social issues ranging from fighting poverty and hunger to preventing transmission of HIV/AIDS and protecting the rainforests and the oceans, to name but a few.

Considering that addressing a variety of existing global issues to transform the current society is at the core of the utopian impulse, and that Empathic Concern (Davis, 1983), Attitudes toward Helping Others (Webb et al., 2000), Humanitarianism-Egalitarianism (Katz & Hass,

1988), Universalism (Schwartz et al., 2012), Activism (Klar & Kasser, 2009), and Green Consumption Values (Haws et al., 2014) are strongly correlated with the Utopian Impulse Scale (Studies 2b-2e), in this study we focused on a “utopian” sock brand that supports a variety of different nonprofit organizations, from those helping to preserve the rainforests such as *Conservation International* to those helping to end poverty such as *Global Citizen*. This “utopian” sock brand was contrasted with a fashionable sock brand that has the primary mission to be a fashion leader and collaborates with fashion suppliers that work on international runway shows to produce high-quality socks with different patterns that can be worn on every occasion. Similar to Study 4, the goal of Study 5 was to probe whether the general utopian impulse factor moderates the impact of these two conditions on the intentions to purchase the product.

If the utopian (vs. fashion) socks condition indeed activates the construct of transforming society by addressing a range of different issues, then the impact of this condition on purchase intentions should be moderated by the Utopian Impulse Scale scored as a general factor. The higher the participants’ scores on this scale, the more positive the influence of the utopian (vs. fashion) condition on purchase intentions should be. In the present study, we did not have a specific hypothesis regarding the main effect given that this could not be clearly predicted based on previous literature. All the predictions, materials, and analyses for this study were pre-registered (Appendix).

Method

Participants and Procedure

Participants demographics are reported in Table 2. The exclusion criteria and the rationale behind the sample sizes are detailed in Supplementary Materials (p.30). All participants first completed the consent form, after which they were randomly allocated to either the utopian or fashionable socks condition. In the utopian condition, they read a vignette about a sock brand—Step Up—whose primary mission is to serve a social purpose by bringing more awareness to the problems faced by the world today and collaborating with nonprofit organizations that fight these problems. In the vignette, it was indicated that each pair of socks sold supports a different nonprofit organization, and five examples of socks accompanied by images were shown (e.g., “These tribal patterned socks help protect 20 rainforest trees through Conservation International”). The vignette for the fashion condition was identical in the structure and content, except that Step Up was presented as a brand with a primary mission to be a fashion leader that

makes high-quality socks that can be worn on every occasion and collaborates with fashion suppliers that work on international runway shows. In the vignette, it was indicated that each pair of socks has a unique pattern created from a selection of different colors and shapes, and five examples of socks accompanied by images were shown (e.g., “Decorated with tribal patterns on a green base, these socks will add some color to your outfit”). The sock brand in the utopian condition was inspired by the actual sock brand “Conscious Step” that produces socially conscious socks. Images of their socks were used in both conditions but were presented differently depending on the condition.

After being exposed to the corresponding manipulation, participants were presented with the questions assessing the dependent variable—their intention to buy the socks—after which they filled in the Utopian Impulse Scale and responded to several questions assessing covariates as well as to the check items (see the *Measures* section below). In the end, participants in the fashion condition were informed that Step Up is a fictitious brand, whereas those in the utopian condition were informed that, although the company is a fictitious brand, it was based on a real brand with the same mission. They were also encouraged to write any comments they may have regarding the study in a text box. The data for Study 5 were collected on 20 August 2019.

Measures

The dependent variable (*intention to buy the socks*) was measured via four items similar to the ones from Study 4 (e.g., Lee, Bolton, & Winterich, 2017; White, MacDonnell, & Ellard, 2012; White & Peloza, 2009), answered on a 7 point Likert scale from 1 (*strongly disagree*) to 7 (*strongly agree*). Participants had to indicate to what extent they would be likely to purchase the product, they would be willing to buy the product, they would exert a great deal of effort to purchase the product, and they would be likely to recommend it to others ($\alpha = .916$). The 12-item *Utopian Impulse Scale*, assessed on a response scale from 1 (*strongly disagree*) to 7 (*strongly agree*), was again scored as a single general factor to be used as a moderator. As covariates, we assessed participants’ *age* and *gender* (male vs. female vs. other). The check items can be seen under *Exclusion Criteria* in Supplementary Materials (p.30).

Results

To test the hypothesis, we computed an interaction between the utopian versus fashion condition and the general utopian impulse factor as a moderator. As in Study 4, the pattern of the interaction was probed using the Johnson-Neyman technique (Johnson & Fay, 1950)

implemented via the *interactions* package in R (Long, 2019), and the false discovery rate correction developed by Esarey & Sumner (2018) was applied. As predicted, the condition interacted with the moderator (*Multiple R*² = .40) in influencing the intentions to buy the product, $t(262) = 3.790$, $b = 0.463$, 95% CI [0.222, 0.703], $p < .001$, *Cohen's f*² = 0.055. As can be seen in Figure 3, after the cut-off value of the general utopian impulse factor equal to 3.874, the utopian versus fashion condition increased the intention to buy the product, whereas below this value the effect was not significant. The interaction between the condition and the moderator (*Multiple R*² = .41) remained significant after controlling for the covariates, $t(259) = 3.711$, $b = 0.456$, 95% CI [0.214, 0.698], $p < .001$, *Cohen's f*² = 0.053. The cut-off value of the general factor after which the utopian versus fashion condition increased the intention to buy the product remained similar (3.878). Overall, these results showed a convincing support for the hypothesis.

Figure 3 about here

Finally, to determine whether there was a main effect of the condition on the intentions to buy the product, for which we did not have a clear prediction, we performed an independent samples t-test (two-tailed). Participants in the utopian condition ($M = 5.02$; $SD = 1.40$) had higher intentions to buy the socks compared to participants in the fashion condition ($M = 4.07$; $SD = 1.36$), $t(264) = 5.606$, $p < .001$, $d = 0.689$, 95% CI [0.440, 0.939].

Discussion

The findings of Study 5 supported our prediction. The Utopian Impulse Scale scored as a general factor moderated the influence of the utopian versus fashion condition on the intentions to buy the socks: this influence increased as participants' utopian impulse scores increased and was not significant for those with scores below 3.874. Finally, we found that the main effect was highly significant: participants in the utopian (versus fashion) condition had higher purchase intentions across the entire sample. Overall, this study strongly supported our prediction and the importance of the utopian impulse for a wide range of social causes that manifest concern for others and for the planet.

Study 6: Degrowth vs. Investment

In Study 6, we had two aims. First, we wanted to probe the general utopian impulse factor as a moderator outside of the domain of consumer choice. We focused on the theme of degrowth

because Studies 3c and 3d showed that the utopian impulse is linked to this construct, but also because of the practical importance that degrowth plays for tackling climate change (D'Alessandro, Cieplinski, Distefano, & Dittmer, 2020; Kallis & March, 2015). In that regard, understanding whether the utopian impulse determines the extent to which people may support this movement could have various practical implications when it comes to reconceptualizing, restructuring, and relocating our society and its economic system to pave the way toward a sustainable future (Latouche, 2009). As the opposing theme to manipulate in the present study, we focused on investment. We selected *investment* rather than *growth* as a contrasting theme for several reasons. Like degrowth, investment is linked to economic behavior and our economic system. However, unlike the concept of growth, which may influence attitudes or behavior because it is the linguistic antonym of degrowth, we found investment decisions to be more neutral while at the same time having various real-world implications and consequences.

As the second aim of the present study, we wanted to use a dependent variable that goes beyond intentions that we measured in the previous two studies and that captures actual behavior. In this regard, previous research in the realm of scale development and validation typically focused on a writing behavior (e.g., participants writing their opinions regarding a cause or feedback for nonprofit organizations to help improve their campaigns; Caviola et al, 2018) because it can be easily measured both offline and online and involves participants making an effort concerning an issue or a topic they care about. Whereas in the previous literature writing was typically treated as a dichotomous dependent variable (i.e. whether participants did vs. did not write), in the present study we wanted to treat this variable in a more nuanced way and quantify the number of ideas participants wrote in a writing task.

Overall, in the present study we investigated whether reading a text introducing degrowth versus basic investment strategies would influence both participants' attitudes regarding the text and their writing behavior. More specifically, the writing task involved asking them to list different ideas regarding how people in their country could implement degrowth-related practices into their daily living (degrowth condition) or regarding how people in their country could best invest their money in an efficient way (investment condition). If the utopian impulse is indeed linked to the construct of degrowth, then the Utopian Impulse Scale scored as a general factor should moderate the influence of the degrowth (vs. investment) condition on both the attitudes (*Hypothesis 1*) and behavior (*Hypothesis 2*). More precisely, the positivity of attitudes

and the number of ideas written in the degrowth relative to the investment condition should increase as the moderator scores increase. We did not have a specific hypothesis regarding the main effect given that this could not be clearly predicted based on previous literature.

Method

Participants and Procedure

Participants demographics are reported in Table 2. The exclusion criteria and the rationale behind the sample sizes are detailed in Supplementary Materials (p.31). All participants first completed the consent form, after which they were randomly allocated to either the degrowth or the investment condition. In the degrowth condition, they read a brief 293-word text introducing degrowth. This text was a transcription of the two minute degrowth video by Jason Hickel recorded for the British Broadcasting Corporation (BBC).³ In the investment condition, we used a text of similar length (291 words) and structure that introduced three essential types of investment—ownership, lending, and cash equivalents—and was adapted from an article on the popular website, *Investopedia.com* (Beattie, 2019). Immediately after reading the text, participants were given a check item probing what the text was about, after which they were asked to answer the questions assessing the first dependent variable—their attitudes toward the text. Thereafter, we measured the second dependent variable—behavior—and participants subsequently filled in the Utopian Impulse Scale and responded to several questions assessing covariates as well as to the remaining check items (see the *Measures* section below). At the end, all participants were encouraged to write any comments they may have regarding the study in a text box. The data for Study 6 were collected between 12-13 September 2019.

Measures

The first dependent variable (*attitudes toward the text*) was measured via four items answered on a 5-point Likert scale from 1 (*not at all*) to 5 (*extremely*) that required participants to indicate how convincing and interesting they found the text, how much they enjoyed it, and how much they agreed with it ($\alpha = .857$). The *behavioral dependent variable* involved a writing task in which participants were given the option to write up to seven ideas either regarding how people in their country could implement degrowth-related practices into their daily living (degrowth condition), or regarding how people in their country could best invest their money in an efficient way (investment condition). This variable could therefore range from 0-7, depending on how many ideas people wrote. To avoid the difficulty of having to code what

counts as one idea, which could be subjective, we gave participants seven text boxes for each idea: the first text box was labeled as *Idea 1*, the second one as *Idea 2*, and so on.

The 12-item Utopian Impulse Scale scored as a general factor was used as a moderator. As covariates, we assessed participants' *age*, *gender* (male vs. female vs. other), and their *personal annual income (after taxes)* expressed in \$1,000s on a continuous scale from \$0 to \$100,000 or more. The check items are available under *Exclusion Criteria* in Supplementary Materials (p.31).

Results

To test Hypothesis 1, we computed an interaction between the degrowth versus investment condition and the general utopian impulse factor as a moderator. The pattern of the interaction was probed using the Johnson-Neyman technique (Johnson & Fay, 1950), and the FDR correction (Esarey & Sumner, 2018) was applied. As predicted, the condition interacted with the moderator (*Multiple R*² = .30) in influencing the attitudes toward the text, $t(843) = 9.105$, $b = 0.459$, 95% CI [0.360, 0.558], $p < .001$, *Cohen's f*² = 0.098. As can be seen in Figure 4, above (below) the cut-off value of the general factor of 5.195 (4.711), people had more positive (negative) attitudes toward the degrowth versus the investment text. Within these two cut-off values, the effect was not significant. The interaction between the condition and the moderator (*Multiple R*² = .31) remained significant after controlling for the covariates, $t(839) = 9.282$, $b = 0.465$, 95% CI [0.367, 0.564], $p < .001$, *Cohen's f*² = 0.103. Overall, these results showed a convincing support for Hypothesis 1.

Figure 4 about here

To test Hypothesis 2, we performed the same analyses as for Hypothesis 1. Considering that we excluded 46 ideas (out of 2526 ideas that participants wrote in total) across both conditions due to either participants writing the same ideas multiple times or writing meaningless responses, in the footnote we also report the results without exclusions to ensure that any effects we obtained remained significant.⁴ As predicted, the condition interacted with the moderator (*Multiple R*² = .07) in influencing the writing behavior, $t(843) = 2.736$, $b = 0.483$, 95% CI [0.136, 0.829], $p = .006$, *Cohen's f*² = 0.009. As can be seen in Figure 5, as the moderator scores increased, the number of ideas written in the degrowth relative to the investment condition

increased: below the cut-of value of 4.704, degrowth resulted in relatively fewer ideas being written, whereas above the cut-off point participants in both conditions wrote a similar number of ideas. The interaction effect (*Multiple R*² = .09) remained significant after controlling for the covariates, $t(839) = 2.818$, $b = 0.492$, 95% CI [0.149, 0.835], $p = .005$, *Cohen's f*² = 0.009.

Hypothesis 2 was therefore supported.

Figure 5 about here

Finally, to determine whether there was a main effect of the condition on the attitudes and behavior, we performed two independent samples t-tests (two-tailed). The analyses indicated the absence of the main effects for both DVs (all $ps > .099$).

Discussion

The findings of Study 6 supported our predictions. The Utopian Impulse Scale scored as a general factor moderated the influence of the condition on both attitudes and behavior. Both the positivity of participants' attitudes and the number of ideas they wrote in the degrowth (vs. investment) condition increased as the moderator scores increased. When it comes to the specific pattern of the interactions, there were slight differences between the two dependent variables. At lower levels of the utopian impulse, degrowth led to less positive attitudes than investment, whereas this effect reversed at the higher levels. For the behavioral variable, degrowth made participants write fewer ideas at the lower levels, whereas this effect reversed at the higher levels but was not statistically significant. One possible explanation for the absence of the effect on the behavioral variable for participants high in the utopian impulse is that they saw both generating ideas regarding how people in their country could best invest their money and implement degrowth-related practices into their daily living as something that could contribute to the collective good (e.g., by helping people to be better off or to adopt practices that can have positive environmental or societal effects). Hence, the quantity of ideas written was similar across both conditions. Regardless, the present results indicate that the utopian impulse is a valuable individual difference for understanding degrowth because it can switch people's attitudes and behavior in relation to this construct.

General Discussion

The present article established the utopian impulse as a psychological construct of relevance to the understanding of social change. In Study 1, we developed a theoretically driven scale to measure individual differences in the utopian impulse and demonstrated its measurement invariance. By employing bifactor statistical indices (Rodriguez et al., 2016), we also showed that, despite containing four factors as determined via exploratory and confirmatory factor analyses, our scale can be scored as a single general factor and thus captures a unified theoretical construct of the utopian impulse. In Studies 2a-2e, we mapped the nomological network of the scale to embed it within psychological and behavioral science. By showing that the utopian impulse was associated with various psychological characteristics, in line with our theorizing (e.g., openness to experience, sensation seeking, fantasy, hope, activist identity, egalitarianism), whereas it was generally not significantly correlated with constructs that were not of theoretical relevance (e.g., self-esteem and general self-efficacy, life satisfaction, material values), we also demonstrated convergent and discriminant validity of the scale. Importantly, in Studies 3a-3d, we showed that the Utopian Impulse Scale predicted, above and beyond the competing scales, nine behavioral and ten attitudinal constructs that capture different aspects of social change.

Whereas in Studies 1, 2a-2e, and 3a-3d we focused on the four factors of the Utopian Impulse scale, in Studies 4-6 we focused on the Utopian Impulse Scale scored as a general factor because we wanted to more clearly explore the contributions of this factor. Given that, when researchers study personality as a moderator of various experimental manipulations or interventions, it is typically preferable to focus on a single scale as a moderator rather than on its multiple components (e.g., Gable et al., 2000), we probed the general factor as a moderator of various constructs relevant to social change. In Study 4, we focused on the utopian impulse in the context of ethical versus unethical consumption and showed that, the higher participants in the ethical (vs. unethical) condition scored on the general factor, the more they were willing to buy the product (chocolate). Moreover, in Study 5, we went beyond a single construct such as ethical consumption and focused on the intentions to buy a “utopian” product (socks) that tackles a range of global issues (e.g., from fighting poverty to preventing transmission of HIV/AIDS to protecting the rainforests) versus a socially unengaged product focused around the theme of fashion. Similar to Study 4, we found that, the higher the participants in the utopian (vs. fashion) condition scored on the general factor, the higher their intentions to buy a product supporting

progress towards the United Nations Sustainable Development Goals. Finally, in Study 6, we focused on the construct of degrowth due to its importance in the context of social transformation relevant to climate change (D'Alessandro et al., 2020; Kallis, 2011) and its conceptualization as a concrete utopian initiative (Kallis & March, 2015; Latouche, 2009). We showed that the general factor moderated the impact of degrowth (vs. investment) on both attitudes and behavior. More specifically, participants' attitudes toward degrowth (vs. investment) became more positive as their scores on the general factor increased. Moreover, the number of ideas participants generated regarding how people in their country could implement degrowth-related practices (vs. invest their money) increased as the moderator scores increased.

Overall, we showed that the Utopian Impulse Scale can be used both as a predictor and moderator of various variables linked to social change. In the next section, we more comprehensively discuss how the construct of the utopian impulse that we have developed contributes to the existing literature on social change in psychology.

Theoretical Implications

Considering that the utopian impulse comprises individual differences in the propensity to engage in transformative thought or action directed at resolving society's biggest issues, it is necessary to embed it into broader literature that aims to understand psychological processes behind social transformation. Previous research in that regard can be broadly categorized into four domains: 1) understanding characteristics of a prospective future society that predict or determine people's intentions or actions that promote or prevent such a society (e.g., Bain et al., 2013); 2) understanding how group membership and identity motivate collective action (e.g., Hässler et al., 2020; Thomas et al., 2009; Van Zomeren, Postmes, & Spears, 2008); 3) understanding how to situationally influence people's intentions and action to change society (e.g., Fernando et al., 2019a); and 4) understanding individual characteristics such as personality or values that predict support for and engagement in actions relevant to social change (e.g., Stern, Dietz, Abel, Guagnano, & Kalof, 1999).

Because the present research makes the most significant contribution to the fourth domain, we discuss more broadly the construct we have developed in relation to that domain, but we also touch upon other domains and propose future research directions. Thus far, when it comes to the contribution of individual differences to the understanding of social change, research has investigated the role of either broad personality constructs (e.g., openness; Agronick & Duncan,

1998) and values (e.g., basic individual values; Stern et al., 1999) or specific individual differences capturing particular aspects of social change such as activism (Klar & Kasser, 2009) and socially conscious consumption (Haws et al., 2014; Sudbury-Riley & Kohlbacher, 2016). The present research demonstrated that the utopian impulse is a unique construct associated with broad personality constructs (e.g., openness, approach temperament, sensation seeking, hope, rational engagement) and values (e.g., self-directed thought, stimulation, universalism-nature, universalism-concern) as well as with more specific individual differences (e.g., activist identity, ethically minded and green consumption). However, given that the Utopian Impulse Scale predicted various variables of interest beyond the individual differences with which it was strongly correlated, our research shows that this construct approached from the personality perspective enriches the understanding of social change relative to previously researched psychological concepts.

Our findings therefore support the theorizing by scholars from a range of disciplines who proposed that utopian thinking grounded upon the change (rather than compensatory) function propels social transformation (e.g., Bloch, 1986; Jovchelovitch & Hawlina, 2018; Levitas, 2013). In psychology, the few studies that focused on utopia to understand social transformation tackled this construct without embedding the change function in its definition. For example, Fernando et al. (2018) conceptualized and measured utopia in terms of thinking about an ideal society and investigated the conditions under which it propels social transformation. In contrast, based on analyses from utopian scholars, we have approached utopian thinking from a perspective that integrates the change function as one of its key features. Moreover, we have uncovered that the personality construct of the utopian impulse arising from this conceptualization is multilayered and comprises people's propensity for transformative utopian thinking and action, their belief in and responsiveness to transformative utopian solutions, and the choice of transformative utopian products and services. Overall, we have developed the first well-validated psychological scale to measure individual differences in the propensity for diverse forms of transformative utopian thinking and action that can be used by psychological scientists and practitioners in various relevant contexts, whether economic, social, or political.

Whereas the present research makes the most significant contribution to the understanding of individual characteristics relevant to social change, it also contributes to other domains of research that aim to understand the psychological processes behind this change, or have the

potential to do so. For example, our research (Studies 4-6) indicates that the utopian impulse may determine the effectiveness of interventions designed to influence people's intentions and actions to change society. Future research may therefore need to investigate whether one way to incite social transformation on a global level (e.g., tackling climate change or reducing inequality) is to first mobilize people with a strong utopian impulse who may subsequently engage in activities to propel the remaining members of the society to act (e.g., see Chenoweth & Belgioioso, 2019). In general, we posit that the most interesting application of the utopian impulse will be to understand how social change happens on a global level. This could be achieved by investigating whether individuals high in the utopian impulse are generally more likely to attempt to change society, whether their action for change is propelled by specific circumstances (e.g., life events or characteristics of their environment), and whether additional personality traits or situational circumstances also determine to what degree they are successful in their endeavor.

Strengths and Limitations

In addition to the theoretical contributions, it is important to emphasize other strengths of our scale that concern the methodological rigor with which it was developed. First, in the process of scale development, we used highly powered (.999999) confirmatory factor analyses as indicated via a Monte Carlo simulation (Muthén & Muthén, 2002) based on the data from the initial exploratory factor analysis. Although using simulations to determine sample size when developing a scale is recommended (Schmitt, 2011), such procedures have rarely been employed so far. Another methodological strength is that, in addition to demonstrating excellent fit of the scale, we established configural, metric, scalar, and residual invariance in relation to US versus UK participants and male versus female gender. This is the strictest form of measurement invariance (Chen, 2007; Putnick & Bornstein, 2016) and thus indicates the equivalence of the construct the scale tackles—the utopian impulse—across both variables. Moreover, in multiple studies (3a-3d, 4, & 5), we employed pre-registration that, although recommended due to recent replication issues (Shrout & Rodgers, 2018), has not been frequently used when developing new psychological constructs. Another methodological strength of our scale is that we employed bifactor statistical indices to demonstrate that, despite comprising four factors as demonstrated via exploratory and confirmatory factor analyses, it can also be scored as a single general factor and thus captures the utopian impulse as a unified theoretical construct (Rodriguez et al., 2016).

Finally, to understand value of our research it is also necessary to examine its main limitations. The utopian impulse as a construct we have developed primarily applies to Western cultures (US and UK), but we have not examined whether it manifests in the same way in Eastern cultures. For example, Eastern and Western cultures differ to some degree in their norms, values, or communication styles (Sanchez-Burks et al., 2003), and it is possible that the utopian impulse is expressed and experienced differently in the East than in the West (e.g., Longxi, 2002). Moreover, we have developed this scale in two democratic countries (US and UK), and it is probable that people living in authoritarian political regimes would be less likely to openly express their utopian impulse or that they may experience it in a different way. We therefore hope that the present research will inspire researchers to investigate the utopian impulse within different political systems and cultures.

Conclusion

The importance of people's urge to change the world into a better one by tackling concrete issues has been extensively documented throughout human history and theorized as one of the key drivers of various events that have transformed society. In psychology, this "utopian impulse" has rarely been studied despite its potential to deepen the understanding of social change. In the present research, we approached the utopian impulse from an individual differences perspective and showed that it brings a unique viewpoint to the understanding of people's inclination to transform society by addressing existing global issues. We hope that our research will inspire researchers to further study the role of utopian thinking in the context of social change and transformative action.

Research Ethics Statement

All the studies conducted in the present manuscript were aligned with the research ethics policy and code of research conduct established by the Research Ethics Committee of the university to which the authors are associated.

References

- Agronick, G. S., & Duncan, L. E. (1998). Personality and social change: Individual differences, life path, and importance attributed to the women's movement. *Journal of Personality and Social Psychology*, 74, 1545-1555.
- Alin, A. (2010). Multicollinearity. *Wiley Interdisciplinary Reviews: Computational Statistics*, 2, 370-374.
- Altemeyer, B. (1988). *Enemies of freedom: Understanding right-wing authoritarianism*. San Francisco, CA: Jossey-Bass.
- Badaan, V., Jost, J. T., Fernando, J., & Kashima, Y. (2020). Imagining better societies: A social psychological framework for the study of utopian thinking and collective action. *Social and Personality Psychology Compass*, 14(4), e12525.
- Bain, P. G., & Bongiorno, R. (2020). It's not too late to do the right thing: Moral motivations for climate change action. *Wiley Interdisciplinary Reviews: Climate Change*, 11. <https://doi.org/10.1002/wcc.615>
- Bain, P. G., Hornsey, M. J., Bongiorno, R., Kashima, Y., & Crimston, D. (2013). Collective futures: How projections about the future of society are related to actions and attitudes supporting social change. *Personality and Social Psychology Bulletin*, 39, 523-539.
- Beattie, A. (2019, May 15). Defining 3 types of investments: Ownership, Lending and Cash. Retrieved from Investopedia website: <https://www.investopedia.com/articles/younginvestors/10/what-is-an-investment.asp>
- Beavers, A. S., Lounsbury, J. W., Richards, J. K., Huck, S. W., Skolits, G. J., & Esquivel, S. L. (2013). Practical considerations for using exploratory factor analysis in educational research. *Practical Assessment, Research & Evaluation*, 18, 1-13.
- Benjamini, Y., & Hochberg, Y. (1995). Controlling the false discovery rate: A practical and powerful approach to multiple testing. *Journal of the Royal Statistical Society: Series B (Methodological)*, 57, 289-300.
- Bennett, E. M., Solan, M., Biggs, R., McPhearson, T., Norström, A. V., Olsson, P., ... Xu, J. (2016). Bright spots: Seeds of a good Anthropocene. *Frontiers in Ecology and the Environment*, 14, 441-448.
- Blackwood, L. M., Livingstone, A., & Leach, C. (2013). Regarding societal change. *Journal of Social and Political Psychology*, 1, doi:10.5964/jspp.v1i1.282

- Bloch, E. (1986). *The principle of hope*. Cambridge, MA: MIT Press.
- Bloch, E. (1988). Something's missing: A discussion between Ernst Bloch and Theodor W. Adorno on the contradictions of utopian longing. In E. Bloch, *The Utopian Function of Art and Literature: Selected Essays* (pp. 1-17). Cambridge, MA: MIT Press.
- Bornstein, D. (2013, April 17). Beyond profit: A talk with Muhammad Yunus. Retrieved from Opinionator website: <https://opinionator.blogs.nytimes.com/2013/04/17/beyond-profit-a-talk-with-muhammad-yunus/>
- Bossy, S. (2014). The utopias of political consumerism: The search of alternatives to mass consumption. *Journal of Consumer Culture*, 14, 179–198.
- Bregman, R. (2017). *Utopia for realists: How we can build the ideal world*. New York: Little, Brown and Company.
- Buss, A. R. (1976). Karl Mannheim's legacy to humanistic psychology. *Journal of Humanistic Psychology*, 16, 79–81.
- Carlson, M., Wilcox, R., Chou, C. P., Chang, M., Yang, F., Blanchard, J., ... & Clark, F. (2011). Psychometric properties of reverse-scored items on the CES-D in a sample of ethnically diverse older adults. *Psychological Assessment*, 23, 558-562.
- Carlsson, C., & Manning, F. (2010). Nowtopia: Strategic exodus? *Antipode*, 42, 924–953.
- Caviola, L., Everett, J. A., & Faber, N. S. (2019). The moral standing of animals: Towards a psychology of speciesism. *Journal of Personality and Social Psychology*, 116, 1011-1029.
- Chatelperron, C. de. (2018). *Nomade des mers: Le tour du monde des innovations low-tech*. Vanves, France: E/P/A.
- Chen, F. F. (2007). Sensitivity of goodness of fit indexes to lack of measurement invariance. *Structural Equation Modeling: A Multidisciplinary Journal*, 14, 464-504.
- Chen, S. X., Lam, B. C., Hui, B. P., Ng, J. C., Mak, W. W., Guan, Y., ... & Lau, V. C. (2016). Conceptualizing psychological processes in response to globalization: Components, antecedents, and consequences of global orientations. *Journal of Personality and Social Psychology*, 110, 302-331.
- Chenoweth, E., & Belgioioso, M. (2019). The physics of dissent and the effects of movement momentum. *Nature Human Behaviour*, 3, 1088-1095.
- Claeys, G. & Sargent, L. T. (Eds.). (1999). *The utopia reader*. New York, NY: New York University Press.

- Cook, J. A. (2018). Hope, utopia, and everyday life: Some recent developments. *Utopian Studies*, 29, 380–397.
- Crawford, J. T., Brandt, M. J., Inbar, Y., & Mallinas, S. R. (2016). Right-wing authoritarianism predicts prejudice equally toward “gay men and lesbians” and “homosexuals”. *Journal of Personality and Social Psychology*, 111, e31–e45.
- D’Alessandro, S., Cieplinski, A., Distefano, T., & Dittmer, K. (2020). Feasible alternatives to green growth. *Nature Sustainability*, 3, 329–335.
- Davis, J. C. (1981). *Utopia and the ideal society*. Cambridge, UK: Cambridge University Press.
- Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology*, 44, 113–126.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49, 71–75.
- Doran, C. J. (2009). The role of personal values in fair trade consumption. *Journal of Business Ethics*, 84, 549–563.
- Dutton, J. (2010). ‘Non-western’ utopian traditions. In G. Claeys (Ed.), *The Cambridge Companion to Utopian Literature* (pp. 223–258). Cambridge, UK: Cambridge University Press.
- Elliot, A. J., & Thrash, T. M. (2010). Approach and avoidance temperament as basic dimensions of personality: Approach and avoidance temperament. *Journal of Personality*, 78, 865–906.
- Epstein, S., Pacini, R., Denes-Raj, V., & Heier, H. (1996). Individual differences in intuitive–experiential and analytical–rational thinking styles. *Journal of Personality and Social Psychology*, 71, 390–405.
- Erbas, Y., Ceulemans, E., Kalokerinos, E. K., Houben, M., Koval, P., Pe, M. L., & Kuppens, P. (2018). Why I don’t always know what I’m feeling: The role of stress in within-person fluctuations in emotion differentiation. *Journal of Personality and Social Psychology*, 115, 179–191.
- Esarey, J., & Sumner, J. L. (2018). Marginal effects in interaction models: Determining and controlling the false positive rate. *Comparative Political Studies*, 51, 1144–1176.
- Farrar, D. E., & Glauber, R. R. (1967). Multicollinearity in regression analysis: the problem revisited. *The Review of Economic and Statistics*, 49, 92–107.

- Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G* Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39, 175–191.
- Fazey, I., Moug, P., Allen, S., Beckmann, K., Blackwood, D., Bonaventura, M., ... Wolstenholme, R. (2018). Transformation in a changing climate: A research agenda. *Climate and Development*, 10, 197–217.
- Fernando, J. W., Burden, N., Ferguson, A., O'Brien, L. V., Judge, M., & Kashima, Y. (2018). Functions of utopia: How utopian thinking motivates societal engagement. *Personality and Social Psychology Bulletin*, 44, 779–792.
- Fernando, J. W., O'Brien, L. V., Burden, N. J., Judge, M., & Kashima, Y. (2019a). Greens or space invaders: Prominent utopian themes and effects on social change motivation. *European Journal of Social Psychology*. <https://doi.org/10.1002/ejsp.2607>
- Fernando, J. W., O'Brien, L., Judge, M., & Kashima, Y. (2019b). More than idyll speculation: Utopian thinking for planetary health. *Challenges*, 10, 16. <https://doi.org/10.3390/challe10010016>
- Frankel, H. M., & Staeheli, J. C. (1992). Calculating body mass index. *Annals of Internal Medicine*, 117, 698-699.
- Frantzeskaki, N., Dumitru, A., Anguelovski, I., Avelino, F., Bach, M., Best, B., ... Rauschmayer, F. (2016). Elucidating the changing roles of civil society in urban sustainability transitions. *Current Opinion in Environmental Sustainability*, 22, 41–50.
- Fresco, J. (1995). *The Venus project: The redesign of a culture*. Venus, FL: Global Cyber-Visions
- Gable, S. L., Reis, H. T., & Elliot, A. J. (2000). Behavioral activation and inhibition in everyday life. *Journal of Personality and Social Psychology*, 78, 1135-1149.
- Glover, N., Miller, J. D., Lynam, D. R., Crego, C., & Widiger, T. A. (2012). The five-factor narcissism inventory: A five-factor measure of narcissistic personality traits. *Journal of Personality Assessment*, 94, 500–512.
- Goodwin, B. (1978). *Social science and utopia*. Brighton, UK: Harvester.
- Goodwin, B., & Taylor, K. (2009). *The politics of utopia: A study in theory and practice*. Oxford, UK: Peter Lang.

- Gosling, S. D., Rentfrow, P. J., & Swann, W. B. (2003). A very brief measure of the Big-Five personality domains. *Journal of Research in Personality*, 37, 504–528.
- Habermas, J. (2010). The concept of human dignity and the realistic utopia of human rights. *Metaphilosophy*, 41, 464–480.
- Haidt, J. (2012). *The righteous mind: Why good people are divided by politics and religion*. New York, NY: Pantheon Books
- Hansot, E. (1974). *Perfection and progress: Two modes of utopian thought*. Cambridge, MA: MIT Press.
- Hässler, T., Ullrich, J., Bernardino, M., Shnabel, N., Van Laar, C., Valdenegro, D., ... & Ditlmann, R. K. (2020). A large-scale test of the link between intergroup contact and support for social change. *Nature Human Behaviour*, 4, 380–386.
- Haws, K. L., Winterich, K. P., & Naylor, R. W. (2014). Seeing the world through GREEN-tinted glasses: Green consumption values and responses to environmentally friendly products. *Journal of Consumer Psychology*, 24, 336–354.
- Hayton, J. C., Allen, D. G., & Scarpello, V. (2004). Factor retention decisions in exploratory factor analysis: A tutorial on parallel analysis. *Organizational Research Methods*, 7, 191–205.
- Hendrickson, A. E., & White, P. O. (1964). Promax: A quick method for rotation to oblique simple structure. *British Journal of Statistical Psychology*, 17, 65–70.
- Hirsh, J. B., Kang, S. K., & Bodenhausen, G. V. (2012). Personalized persuasion: Tailoring persuasive appeals to recipients' personality traits. *Psychological Science*, 23, 578–581.
- Ho, A. K., Sidanius, J., Kteily, N., Sheehy-Skeffington, J., Pratto, F., Henkel, K. E., ... & Stewart, A. L. (2015). The nature of social dominance orientation: Theorizing and measuring preferences for intergroup inequality using the new SDO₇ scale. *Journal of Personality and Social Psychology*, 109, 1003–1028.
- Hodgkinson, T. (2016, October 6). How utopia shaped the world. Retrieved from <http://www.bbc.com/culture/story/20160920-how-utopia-shaped-the-world>
- Horberg, E. J., Kraus, M. W., & Keltner, D. (2013). Pride displays communicate self-interest and support for meritocracy. *Journal of Personality and Social Psychology*, 105, 24–37.
- Horn, J. L. (1965). A rationale and test for the number of factors in factor analysis. *Psychometrika*, 30, 179–185.

- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: a Multidisciplinary Journal*, 6, 1-55.
- Jackson, D. L., Gillaspay Jr, J. A., & Purc-Stephenson, R. (2009). Reporting practices in confirmatory factor analysis: An overview and some recommendations. *Psychological Methods*, 14, 6-23.
- Jameson, F. (2005). *Archaeologies of the future. The desire called utopia and other science fictions*. New York, USA: Verso.
- Johnson, P. O., & Fay, L. C. (1950). The Johnson-Neyman technique, its theory and application. *Psychometrika*, 15, 349-367.
- Jones, D. N., & Paulhus, D. L. (2014). Introducing the short dark triad (SD3): A brief measure of dark personality traits. *Assessment*, 21, 28-41.
- Jost, J. T. (2019). A quarter century of system justification theory: Questions, answers, criticisms, and societal applications. *British Journal of Social Psychology*, 58, 263-314.
- Jost, J. T., & Thompson, E. P. (2000). Group-based dominance and opposition to equality as independent predictors of self-esteem, ethnocentrism, and social policy attitudes among African Americans and European Americans. *Journal of Experimental Social Psychology*, 36, 209-232.
- Jost, J. T., Blount, S., Pfeffer, J., & Hunyady, G. (2003). Fair market ideology: Its cognitive-motivational underpinnings. *Research in Organizational Behavior*, 25, 53-91.
- Jost, J. T., Glaser, J., Kruglanski, A. W., & Sulloway, F. J. (2003). Political conservatism as motivated social cognition. *Psychological Bulletin*, 129, 339-375.
- Jovchelovitch, S., & Hawlina, H. (2018). Utopias and world-making: Time, transformation and the collective imagination. In C. de Saint-Laurent, S. Obradović, & K. R. Carriere (Eds.), *Imagining collective futures* (pp. 129-151). London, UK: Palgrave Macmillan.
- Kaiser, H. F. (1958). The varimax criterion for analytic rotation in factor analysis. *Psychometrika*, 23, 187-200.
- Kallis, G. (2011). In defence of degrowth. *Ecological Economics*, 70, 873-880.
- Kallis, G., & March, H. (2015). Imaginaries of hope: The utopianism of degrowth. *Annals of the Association of American Geographers*, 105, 360-368.

- Katz, I., & Hass, R. G. (1988). Racial ambivalence and American value conflict: Correlational and priming studies of dual cognitive structures. *Journal of Personality and Social Psychology*, 55, 893–905.
- Kellner, D. (1997). Ernst Bloch, utopia, and ideology critique. In J. O. Daniel & T. Moylan (Eds.), *Not Yet: Reconsidering Ernst Bloch* (pp. 80–95). London, UK: Verso.
- Klar, M., & Kasser, T. (2009). Some benefits of being an activist: Measuring activism and its role in psychological well-being. *Political Psychology*, 30, 755–777.
- Kline, R.B. (2005). *Principles and practice of structural equation modeling* (2nd Ed.). New York, NY: The Guilford Press.
- Kraha, A., Turner, H., Nimon, K., Zientek, L., & Henson, R. (2012). Tools to support interpreting multiple regression in the face of multicollinearity. *Frontiers in Psychology*, 3, 44.
- Latouche, S. (2009). *Farewell to growth*. Cambridge, UK: Polity Press.
- Lee, S., Bolton, L. E., & Winterich, K. P. (2017). To profit or not to profit? The role of greed perceptions in consumer support for social ventures. *Journal of Consumer Research*, 44, 853–876.
- Levine, D. S. (2009). Where is Utopia in the Brain?. *Utopian Studies*, 20, 249–274.
- Levitas, R. (1990). Educated hope: Ernst Bloch on abstract and concrete utopia. *Utopian Studies*, 1, 13–26.
- Levitas, R. (2011). *The concept of utopia* (2nd Ed.). Oxford, UK: Peter Lang.
- Levitas, R. (2013). *Utopia as method. The imagery reconstitution of society*. London, UK: Palgrave Macmillan.
- Long, J. A. (2019). Package ‘interactions’. Acquired from <https://cran.r-project.org/web/packages/interactions/interactions.pdf>
- Longxi, Z. (2002). The utopian vision, east and west. *Utopian Studies*, 13, 1–20.
- Luerssen, A., Jhita, G. J., & Ayduk, O. (2017). Putting yourself on the line: self-esteem and expressing affection in romantic relationships. *Personality and Social Psychology Bulletin*, 43, 940–956.
- Mannheim, K. (1979). *Ideology and utopia*. London, UK: Routledge and Kegan Paul.
- Manuel, F.E., & Manuel, F.P. (1979). *Utopian thought in the Western world*. Oxford, UK: Basil Blackwell.

- Marvakis, A. (2007). The utopian surplus in human agency: Using Ernst Bloch's philosophy for psychology. In V. Van Deventer, M. Terre Blanche, E. Fourie, & P. Segalo, *Citizen city: Between constructing agent and constructed agency* (pp. 278-288). Concord, Ontario: Captus University Publications.
- Matz, S. C., Kosinski, M., Nave, G., & Stillwell, D. J. (2017). Psychological targeting as an effective approach to digital mass persuasion. *Proceedings of the National Academy of Sciences*, 114, 12714-12719.
- Maydeu-Olivares, A. (2017). Maximum likelihood estimation of structural equation models for continuous data: Standard errors and goodness of fit. *Structural Equation Modeling: A Multidisciplinary Journal*, 24, 383-394.
- Meleady, R., Crisp, R. J., Dhont, K., Hopthrow, T., & Turner, R. N. (2019). Intergroup contact, social dominance, and environmental concern: A test of the cognitive-liberalization hypothesis. *Journal of Personality and Social Psychology*, 118, 1146-1164
- More, T. (1516). *Utopia*. Mineola, NY: Dover Publications.
- Morton, A. L (1969). *The English utopia*. London, UK: Lawrence & Wishart.
- Muthén, L. K., & Muthén, B. O. (2002). How to use a Monte Carlo study to decide on sample size and determine power. *Structural Equation Modeling*, 9, 599-620.
- Neel, R., Kenrick, D. T., White, A. E., & Neuberg, S. L. (2016). Individual differences in fundamental social motives. *Journal of Personality and Social Psychology*, 110, 887-907.
- Negley, G., & Patrick, J.M. (1971). *The quest for utopia*. Maryland, MD: McGrath.
- Nestor, N. (2016). The empathetic turn: The relationship of empathy to the utopian impulse. In C. Jones & C. Ellis (Ed.). *The individual and utopia* (pp. 135-150). London, UK: Routledge.
- Nobel Committee. (1964, 10 October). The Nobel Peace Prize 1964. Retrieved from NobelPrize.org website: <https://www.nobelprize.org/prizes/peace/1964/summary/>
- Piff, P. K., Wiwad, D., Robinson, A. R., Aknin, L. B., Mercier, B., & Shariff, A. (2020). Shifting attributions for poverty motivates opposition to inequality and enhances egalitarianism. *Nature Human Behaviour*, 4(5), 496-505.
- Piketty, T. (2015). About *Capital in the twenty-first century*. *American Economic Review*, 105, 48-53.

- Prescott, S., & Logan, A. (2018). Larger than life: Injecting hope into the planetary health paradigm. *Challenges*, 9, 13. <https://doi.org/10.3390/challe9010013>
- Putnick, D. L., & Bornstein, M. H. (2016). Measurement invariance conventions and reporting: the state of the art and future directions for psychological research. *Developmental Review*, 41, 71-90.
- Quarta, C. (1996). Homo Utopicus: On the need for utopia. *Utopian Studies*, 7(2), 153–166.
- Reimer, N. K., Becker, J. C., Benz, A., Christ, O., Dhont, K., Klocke, U., ... & Hewstone, M. (2017). Intergroup contact and social change: Implications of negative and positive contact for collective action in advantaged and disadvantaged groups. *Personality and Social Psychology Bulletin*, 43, 121-136.
- Rendell, L. (2016, July 26). These socks give clean water. Retrieved from Broadsheet website: <https://www.broadsheet.com.au/national/fashion/article/socks-change>
- Reynolds, W. M. (1982). Development of reliable and valid short forms of the Marlowe-Crowne social desirability scale. *Journal of Clinical Psychology*, 38, 119-125.
- Ricoeur, P. (1986). *Lectures on ideology and utopia*. New York: Columbia University Press.
- Roberts, J. A. (1993). Sex differences in socially responsible consumers' behavior. *Psychological Reports*, 73, 139–148
- Rodriguez, A., Reise, S. P., & Haviland, M. G. (2016). Applying bifactor statistical indices in the evaluation of psychological measures. *Journal of Personality Assessment*, 98, 223-237.
- Rorty, R. (1999). *Philosophy and social hope*. London, UK: Penguin Books.
- Sanchez-Burks, J., Lee, F., Choi, I., Nisbett, R., Zhao, S., & Koo, J. (2003). Conversing across cultures: East-West communication styles in work and nonwork contexts. *Journal of Personality and Social Psychology*, 85, 363-372.
- Sargent, L. T. (1994). The three faces of utopianism revisited. *Utopian Studies*, 5, 1–37.
- Sargent, L. T. (2010). *Utopianism: A very short introduction*. Oxford, UK: Oxford University Press.
- Savalei, V. (2018). On the computation of the RMSEA and CFI from the mean-and-variance corrected test statistic with nonnormal data in SEM. *Multivariate Behavioral Research*, 53, 419-429.

- Scheibe, S., Freund, A. M., & Baltes, P. B. (2007). Toward a developmental psychology of Sehnsucht (life longings): The optimal (utopian) life. *Developmental Psychology*, 43, 778–795.
- Scheier, M. F., Carver, C. S., & Bridges, M. W. (1994). Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem): A reevaluation of the Life Orientation Test. *Journal of Personality and Social Psychology*, 67, 1063–1078.
- Schmitt, T. A. (2011). Current methodological considerations in exploratory and confirmatory factor analysis. *Journal of Psychoeducational Assessment*, 29, 304–321.
- Schmitt, T. A., & Sass, D. A. (2011). Rotation criteria and hypothesis testing for exploratory factor analysis: Implications for factor pattern loadings and interfactor correlations. *Educational and Psychological Measurement*, 71, 95–113.
- Schmitt, T. A., Sass, D. A., Chappelle, W., & Thompson, W. (2018). Selecting the “best” factor structure and moving measurement validation forward: An illustration. *Journal of Personality Assessment*, 100, 345–362.
- Schuldt, J. P., Muller, D., & Schwarz, N. (2012). The “fair trade” effect: Health halos from social ethics claims. *Social Psychological and Personality Science*, 3, 581–589.
- Schwartz, S. H., Cieciuch, J., Vecchione, M., Davidov, E., Fischer, R., Beierlein, C., ... Konty, M. (2012). Refining the theory of basic individual values. *Journal of Personality and Social Psychology*, 103, 663–688.
- Seuntjens, T. G., Zeelenberg, M., Van de Ven, N., & Breugelmans, S. M. (2015). Dispositional greed. *Journal of Personality and Social Psychology*, 108, 917–933.
- Shrout, P. E., & Rodgers, J. L. (2018). Psychology, science, and knowledge construction: Broadening perspectives from the replication crisis. *Annual Review of Psychology*, 69, 487–510.
- Simms, L. J., Zelazny, K., Williams, T. F., & Bernstein, L. (2019). Does the number of response options matter? Psychometric perspectives using personality questionnaire data. *Psychological Assessment*, 31, 557–566.
- Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S. T., ... & Harney, P. (1991). The will and the ways: development and validation of an individual-differences measure of hope. *Journal of Personality and Social Psychology*, 60, 570–585.

- Stern, P. C., Dietz, T., Abel, T., Guagnano, G. A., & Kalof, L. (1999). A value-belief-norm theory of support for social movements: The case of environmentalism. *Human Ecology Review*, 6, 81–97.
- Strack, F., & Deutsch, R. (2004). Reflective and impulsive determinants of social behavior. *Personality and Social Psychology Review*, 8, 220–247.
- Sudbury-Riley, L., & Kohlbacher, F. (2016). Ethically minded consumer behavior: Scale review, development, and validation. *Journal of Business Research*, 69, 2697–2710.
- Tabachnick, B. G., Fidell, L. S., & Ullman, J. B. (2007). *Using multivariate statistics*. Boston, MA: Pearson.
- Thomas, E. F., McGarty, C., & Mavor, K. I. (2009). Transforming “apathy into movement”: The role of prosocial emotions in motivating action for social change. *Personality and Social Psychology Review*, 13, 310–333.
- Trudel, R., & Cotte, J. (2009). Does it pay to be good? *MIT Sloan Management Review*, 50, 61–68.
- Turner, J. C., Oakes, P. J., Haslam, S. A., & McGarty, C. (1994). Self and collective: Cognition and social context. *Personality and Social Psychology Bulletin*, 20, 454–463.
- Van Sonderen, E., Sanderman, R., & Coyne, J. C. (2013). Ineffectiveness of reverse wording of questionnaire items: Let’s learn from cows in the rain. *PloS one*, 8, e68967.
- Van Zomeren, M., Postmes, T., & Spears, R. (2008). Toward an integrative social identity model of collective action: A quantitative research synthesis of three socio-psychological perspectives. *Psychological Bulletin*, 134, 504–535.
- Van't Veer, A. E., & Giner-Sorolla, R. (2016). Pre-registration in social psychology—A discussion and suggested template. *Journal of Experimental Social Psychology*, 67, 2–12.
- Webb, D. (2007). Modes of hoping. *History of the Human Sciences*, 20, 65–83.
- Webb, D. J., Green, C. L., & Brashear, T. G. (2000). Development and validation of scales to measure attitudes influencing monetary donations to charitable organizations. *Journal of the Academy of Marketing Science*, 28, 299–309.
- White, K., MacDonnell, R., & Ellard, J. H. (2012). Belief in a just world: Consumer intentions and behaviors toward ethical products. *Journal of Marketing*, 76, 103–118.
- White, K., & Peloza, J. (2009). Self-benefit versus other-benefit marketing appeals: Their effectiveness in generating charitable support. *Journal of Marketing*, 73, 109–124.

- Whitmee, S., Haines, A., Beyrer, C., Boltz, F., Capon, A. G., de Souza Dias, B. F., ... Yach, D. (2015). Safeguarding human health in the Anthropocene epoch: Report of the Rockefeller Foundation–Lancet commission on planetary health. *The Lancet*, 386, 1973–2028.
- Wilkinson, R., & Pickett, K. (2010). *The spirit level. Why equality is better for everyone*. New York: Bloomsbury Press.
- Winter, J. (2008). *Dreams of peace and freedom: Utopian moments in the twentieth century*. New Haven, CT: Yale University Press.
- Wong, N., Rindfleisch, A., & Burroughs, J. E. (2003). Do reverse-worded items confound measures in cross-cultural consumer research? The case of the material values scale. *Journal of Consumer Research*, 30, 72-91.
- Worthington, R. L., & Whittaker, T. A. (2006). Scale development research: A content analysis and recommendations for best practices. *The Counseling Psychologist*, 34, 806-838.
- Wright, E. O. (2010). *Envisioning real utopias*. London, UK: Verso.
- Zuckerman, M. (1979). *Sensation seeking: Beyond the optimal level of arousal*. Hillsdale, NJ: Erlbaum.

Footnotes

¹ The word impulse as used in utopian theory should not be equated with the same word as used in psychology, where it denotes acting without reflection and deliberation (e.g., Strack & Deutsch, 2004). In contrast, utopian theorists use it to denote more broadly a tendency to think/act in a certain way.

² Some examples of such solutions involve the Venus Project started by Jacque Fresco that proposes architectural and design solutions to build more sustainable cities (e.g., Fresco, 1995), or low-tech labs which are collaborative research and documentation projects designed to share and promote local and efficient low technologies that could be used to tackle many global challenges ranging from the climate crisis to hunger across the world (e.g., Chatelperron, 2018).

³ The video is available on BBC website via the following link:

<https://www.bbc.co.uk/news/av/uk-40869867/viewsnight-our-addiction-to-economic-growth-is-killing-us>

⁴ When all ideas were included in the analysis, the interaction between the condition and the moderator (*Multiple* $R^2 = .07$) in influencing the writing behavior was almost identical, $t(843) = 2.985$, $b = 0.526$, 95% CI [0.180, 0.872], $p = .003$, *Cohen's* $f^2 = 0.011$.

Table 1

Standardized Factor Loadings from the Exploratory Factor Analysis (Study 1)

Item	F 1	F 2	F 3	F 4	F 5
17.* One of the most important driving forces in my life is to develop ideas that could contribute to a better world in which nothing is missing for all human beings.	.915				
8.* I often participate in conversations whose purpose is to come up with potential solutions to the biggest social ills of our time.	.907				
13.* I frequently have the impulse to help transform the current society into a new world where the biggest issues of our age are extinct.	.879				
6. I am driven to think about big ideas that could provide solutions to some of the challenges humanity is facing today.	.773				
16. I am the type of person who is inclined to brainstorm about solutions to existing global challenges.	.747				
46. I have the urge to look for concrete propositions that could improve our malfunctioning economic system.	.718				
18. I often think about transformative ideas that could radically change the world by making it a more just place where everyone will have equal opportunities.	.716				
3. I tend to look for new types of society that could overcome life adversities such as poverty, crime, and discrimination.	.711				
12. My actions are motivated by the prospect of achieving a radically different world in which the social, economic, and environmental issues of today will be resolved.	.662				
37. I make every effort to encourage activities, products, and services that could contribute to resolving the most challenging economic, social, or environmental issues that we are facing nowadays.	.652			.352	
21. Whenever I hear about a social, economic, or environmental issue, I spontaneously think about how efforts can be made to radically change the world to resolve it.	.647				
44. I seek existing solutions that will change the living conditions of everyone in our society for the better.	.645				
47. I push solutions that can make our future society more sustainable.	.634				
23. When I hear about a social issue that affects people, I usually feel the urge to find solutions that could transform our current society to fix it.	.629				
10. My actions are motivated by the desire to transform the world into a place where all human beings would flourish.	.628				
5. I often have an urge to do things that could contribute to a radically better society where all human rights are guaranteed and enjoyed by everyone.	.607				
11. I can't help thinking about ideas that would transform the current world into a place where all people	.603				

would have full rights to food, lodging, medicine, education, and work.

52. The world in which we live is faced with many socioeconomic and environmental problems, but I am taking concrete steps to contribute to a new world where at least some of them would stop existing.	.603	
14. I am strongly attracted to developing big ideas that could resolve the most challenging social, economic, or environmental issues that we currently face.	.587	.382
25. When I hear about a strike action, I can't help thinking about how to create a new world in which everybody would have fair working conditions.	.577	
1. I am driven by the prospect of creating a society in which the ills of today's world will not exist.	.560	
27. Incidents involving discrimination against people motivate me to think about how I could transform the current world into a place where such suffering would be eliminated.	.543	
55. I often tend to think about how political institutions could be remodelled to overcome the global challenges of today.	.530	
22. Whenever I see people who are socially or economically disadvantaged, I start thinking about how it would be possible to achieve a new society devoid of these problems.	.500	.473
48. I am eager to find propositions for alternative ways of economic and social life that can eventually become reality.	.493	.328
41. I am motivated to explore current solutions that can transform our society by creating desirable living conditions such as peace, work, food, lodging, healthcare, or education.	.484	.332
30. When I see homeless people sleeping on the street, I usually start thinking about actions that could change the world to stamp out poverty, homelessness, and economic inequality.	.482	
19. I often imagine how the world would need to be changed for the important issues we are currently facing to be resolved.	.466	.404
24. Encountering public protests against social injustice on the street usually inspires me to think about how I could change our world into a better place.	.436	
54. It motivates me to think about key practices that would be found in a political system that creates a just world for everyone.	.417	
15. Thinking about how to transform society by creating high living standards for all human beings stimulates me.	.351	.324
38. I feel energized and motivated to support alternative solutions that can help improve our current malfunctioning economic system.	.329	
53.* I feel that there are many alternative social and economic activities that could resolve current social issues if they were widely adopted.		.813
4 I support initiatives that aim to create a transformed society that would be just for everyone.		.767

35. I can't help thinking that solutions to address most of our pressing economic, social, and environmental problems already exist but are not taken seriously enough by governments and political authorities.	.712	
2.* I often feel that there are new ways of living that would create social and economic justice for everyone.	.712	
39.* I often get the impression that the future of our society could be better if some existing solutions to transform economic and social reality were scaled up.	.666	
59. My instinct tells me that some social or political practices that are not currently mainstream could in the future lead to a world where the dignity of all human beings will be achieved.	.642	
57. I have the intuition that there are alternative approaches to social life and politics that could lead to new institutions capable of resolving the issues humanity is currently facing.	.597	
32. Seeing people who are denied their dignity shows that our current world is imperfect and usually incites me to think about practices that could correct its flaws and transform it.	.592	
34. I support existing social and economic activities that should be widespread to improve our society in the future by reducing inequalities and suffering.	.585	
58. I have the impression that there are concrete solutions to achieve a world without undesirable living conditions such as war, hunger, poverty or pollution.	.548	
28. When I see someone who is underprivileged or disadvantaged, I often start thinking about how social and political institutions could be changed to resolve this in the future.	.428	.510
29. When I encounter practices that are destroying the planet, I often start thinking in practical terms about how the world could be changed to prevent this from continuing to happen.	.343	
9.* I get excited when I encounter ideas that changed the world for the better by enabling social and economic progress.	.717	
45. I feel inspired when I hear about examples of new ways of living that can be implemented to tackle our current social, economic, or environmental problems.	.675	
20. I feel excited and energized when I come across thought-provoking ideas that offer solutions to our most pressing environmental, social, or economic issues.	.606	
50.* I feel excited when I come across propositions that could overcome our past and present economic, social, and environmental failures.	.605	
40.* I am thrilled when I come across already existing solutions that could improve the circumstances of people who are underprivileged if they were more widely adopted.	.549	
51. I enjoy coming across alternative ways of organizing our everyday economic and social life that could eliminate the biggest ills of today's world.	.479	

49. I look forward to coming across new forms of communication and cooperation that enable the development of concrete political projects well able to improve society in the long run.	.448				
7. I feel energized when I encounter ideas about alternative social systems that could lead to a society where all human beings are socially and economically equal.	.443				
42. I am amazed by the human capacity to come up with solutions that could tackle our social, economic, and environmental problems.	.420			.334	
31. When I have the choice, I often select products that could contribute to a better future society built on social and economic justice.			.770		
36.* Whenever I have the choice, I choose products and services that can help fix the social and environmental problems resulting from our malfunctioning economic system.			.707		
26.* Current examples of social and economic inequality motivate me to choose ethical products that counter exploitation and injustice.			.650		
43.* My everyday choices of products and services can help transform the economic and social life of the workers in these industries.			.592		
33. I frequently make an effort to support currently existing products and services from organisations that treat their employees fairly and empower them to live a decent life.			.510		
56. I have the feeling that recent technological developments will in the future resolve the most challenging social, economic, and environmental issues.				.730	
60. I sense that some of the currently existing products or technologies will change the world in the future to allow for all human beings to thrive and flourish.				.682	
% Variance Explained	29.519	16.140	11.332	7.312	2.817
Eigenvalue	36.538	1.828	1.323	1.160	1.078
Factor1	-				
Factor2	.781	-			
Factor 3	.793	.769	-		
Factor 4	.732	.674	.700	-	
Factor 5	.525	.516	.529	.498	-

Note. Labels F1-F5 refer to factors 1-5 respectively. Items that are in bold and labelled with * are the ones that entered the final version of the scale tested in confirmatory factor analyses. Only factor loadings $\geq .32$ are reported. Coefficients for Factors 1-5 at the bottom of the table indicate correlations between the factors. Factor 1 corresponds to *Propensity for Transformative Utopian Thinking and Action*, Factor 2 to *Belief in Transformative Utopian Solutions*, Factor 3 to *Responsiveness to Transformative Utopian Solutions*, and Factor 4 to *Choice of Transformative Utopian Products and Services*.

Table 2

Demographics for Participants Who Were Included in Statistical Analyses in Studies 1-6

Study	Sample N°	Sample Size	M age	SD age	Gender			Country
					Male	Female	Other	
1	1	629	36.01	10.96	360	269	-	US
1	2	436	38.08	12.13	239	197	-	US
1	3	466	38.01	12.98	137	329	-	UK
2a	-	254	35.76	10.92	137	117	-	US
2b	-	266	37.65	10.54	126	140	-	US
2c	-	268	38.66	12.71	140	128	-	US
2d	-	263	37.71	12.03	126	137	-	US
2e	-	255	37.91	11.31	115	140	-	US
3a	-	520	37.07	11.99	217	303	-	US
3b	-	489	36.71	11.61	215	274	-	US
3c	-	521	37.09	11.51	201	320	-	US
3d	-	486	38.49	12.60	177	309	-	US
4	-	324	35.46	11.77	160	164	0	US
5	-	266	38.82	12.69	119	144	3	US
6	-	847	39.57	12.72	365	480	0	US

Note. Studies were administered via Qualtrics. US participants were recruited via Amazon Mechanical Turk (MTurk). UK participants were recruited via Prolific Academic.

Table 3

Correlations Between Each Measure Tested in Studies 2a-2e and the Four Utopian Impulse Factors, As Well As the General Utopian Impulse Factor

Measure	Utopian Impulse				General Factor
	F1	F2	F3	F4	
Study 2a (N = 254)					
BIG 5 – Extraversion	.095	-.029	.059	.057	.053
BIG 5 – Conscientiousness	.052	.073	.035	.042	.057
BIG 5 – Emotional stability	-.042	-.070	-.068	-.003	-.050
BIG 5 – Agreeableness	.118	.119	.170**	.235***	.181**
BIG 5 – Openness	.220***	.222***	.230***	.220***	.251***
Approach Temperament	.227***	.185**	.312***	.274***	.282***
Avoidance Temperament	.103	.155*	.152*	.112	.146*
Self-Esteem	-.043	-.098	.007	.023	-.031
General Self-Efficacy	.101	.092	.118	.136*†	.126*
Life Satisfaction	.045	-.108	.006	.065	.005
PANAS – Positive Affectivity	.238***	.083	.206***	.216***	.211***
PANAS – Negative Affectivity	.075	.050	-.012	-.020	.026
Sensation Seeking	.273***	.191**	.209***	.274***	.268***
Study 2b (N = 266)					
Grandiose Fantasies	.313***	.002	.039	.078	.128*
Life Orientation Test	.086	-.019	.082	.082	.068
Narcissism	.342***	.021	.061	.149*	.168**
Utopianism	.699***	.529***	.579***	.588***	.688***
Anti-Utopianism	-.053	-.250***	-.195**	-.078	-.162**
IRI – Fantasy	.306***	.320***	.309***	.259***	.341***
IRI – Empathic Concern	.372***	.454***	.589***	.486***	.543***
IRI – Perspective Taking	.267***	.350***	.417***	.414***	.413***
IRI – Personal Distress	.062	.094	.088	.073	.090
FSM – Affiliation (Group)	.267***	.174**	.343***	.312***	.315***
FSM – Affiliation (Exclusion)	.115	.104	.101	.067	.111
FSM – Affiliation (Independence)	-.092	.082	-.122*†	-.103	-.070
REI – Rational Ability	.138*	.146*	.142*	.157*	.167**
REI – Rational Engagement	.220***	.184**	.231***	.250***	.254***
REI – Experiential Ability	.099	.072	.028	.100	.086
REI – Experiential Engagement	.132*†	.097	.075	.141*	.127*
Study 2c (N = 268)					
PVQ5X – Self-Directed Thought	.358***	.444***	.556***	.454***	.507***
PVQ5X – Self-Directed Action	.118	.276***	.230***	.206***	.230***
PVQ5X – Stimulation	.386***	.350***	.358***	.381***	.417***
PVQ5X – Hedonism	.316***	.286***	.252***	.267***	.317***
PVQ5X – Achievement	.304***	.173**	.202***	.247***	.265***
PVQ5X – Power-Resources	.207***	.033	.019	.115	.111

PVQ5X – Power-Dominance	.306***	.117	.070	.182**	.196**
PVQ5X – Face	.225***	.173**	.187**	.246***	.236***
PVQ5X – Security-personal	.067	.143*	.200**	.208***	.172**
PVQ5X – Security-Societal	.081	-.036	.031	.044	.037
PVQ5X – Tradition	.051	-.113	-.022	.010	-.017
PVQ5X – Conformity-Rules	-.009	-.129*	-.049	-.051	-.064
PVQ5X – Conformity-Interpersonal	.149*	.251***	.258***	.230***	.247***
PVQ5X – Humility	.128*	.218***	.199**	.171**	.199**
PVQ5X – Benevolence-Dependability	.234***	.272***	.342***	.295***	.320***
PVQ5X – Benevolence-Caring	.283***	.407***	.474***	.378***	.430***
PVQ5X – Universalism-Concern	.451***	.621***	.653***	.541***	.633***
PVQ5X – Universalism-Nature	.567***	.575***	.662***	.686***	.702***
PVQ5X – Universalism-Tolerance	.523***	.578***	.617***	.562***	.640***
Hope – Agency	.258***	.225***	.195**	.228***	.256***
Hope – Pathways	.331***	.323***	.279***	.302***	.348***
<hr/> Study 2d (<i>N</i> = 263)					
MVS – Success	.067	-.089	-.061	-.065	-.038
MVS – Centrality	-.054	-.128*	-.101	-.125*†	-.113
MVS – Happiness	.045	.031	.070	-.081	.018
Green Scale	.523***	.604***	.675***	.796***	.724***
EMCB – Eco-Buy	.473***	.553***	.602***	.772***	.669***
EMCB – Eco-Boycott	.428***	.538***	.595***	.725***	.636***
EMCB – Recycle	.447***	.542***	.578***	.675***	.625***
EMCB – CSR-Boycott	.397***	.506***	.556***	.701***	.601***
EMCB – Pay More	.456***	.527***	.578***	.696***	.630***
Fair Market Ideology Scale	-.183**	-.407***	-.340***	-.239***	-.323***
Meritocracy Scale	-.133*	-.278***	-.249***	-.214***	-.242***
Egalitarianism Scale	.449***	.574***	.553***	.560***	.595***
AHO	.517***	.607***	.636***	.593***	.656***
ACO	.276***	.269***	.305***	.340***	.333***
AICS – Activist Identity	.676***	.496***	.486***	.599***	.636***
AICS – Activist Commitment	.658***	.473***	.476***	.611***	.625***
<hr/> Study 2e (<i>N</i> = 255)					
BJW – General	.050	-.117	.012	.039	<.001
BJW – Personal	-.063	-.139*	-.011	-.068	-.079
Right Wing Authoritarianism	.020	-.255***	-.140*	-.131*†	-.135*
Dogmatism	.137*	-.132*†	-.088	.030	-.006
SDO-D – Pro-trait	-.192**	-.446***	-.367***	-.287***	-.357***
SDO-D – Con-trait	.296***	.484***	.467***	.362***	.448***
SDO-E – Pro-trait	-.370***	-.542***	-.500***	-.424***	-.513***
SDO-E – Con-trait	.393***	.565***	.526***	.422***	.532***
Humanitarianism-Egalitarianism	.508***	.619***	.624***	.545***	.645***
Protestant Ethic	-.064	-.221***	-.067	-.085	-.120

Economic System Justification	-.326***	-.556***	-.435***	-.416***	-.483***
Household Income Satisfaction	-.103	-.204**	-.140*	-.032	-.131*
Political Orientation	-.209***	-.348***	-.246***	-.269***	-.300***

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. Raw significance values are reported. Symbol † indicates results that stopped being significant after the false discovery rate (FDR) correction was applied across Factors 1-4. The general utopian impulse factor is reported for informative purposes—it was not involved in sample size planning based on the FDR correction and we therefore did not use the correction in relation to this factor.

IRI = Interpersonal Reactivity Index; FSM = Fundamental Social Motives; REI = Rational Experiential Inventory; PVQ5X = Portrait Value Questionnaire; MVS = Material Values Scale; EMCB = Ethically Minded Consumer Behavior Scale; CSR (in EMCB – CSR-Boycott) = Corporate Social Responsibility; AHO = Attitudes toward Helping Others; ACO = Attitudes toward Charitable Organisations; AICS = Activist Identity and Commitment Scale; BJW = Belief in a Just World; SDO-D: Social Dominance Orientation pro- and con-trait Dominance; SDO-E: Social Dominance Orientation pro- and con-trait anti-Egalitarianism.

Table 4

Incremental Predictive Validity in Study 3a

Competing Scale (CS)	ΔR^2 Covariates	ΔR^2 CS	ΔR^2 UIS	Significant Factors
Research ($\alpha = .906$)				
Utopianism	.016*	.152***	.284***	F1***, F4***, UI***
IRI – Empathic Concern	.016*	.055***	.382***	F1***, F4***, UI***
Green Scale	.016*	.390***	.109***	F1***, -F3*†, F4***, UI***
EMCB (all subscales)	.016*	.473***	.071***	F1***, F4*†, UI***
Egalitarianism Scale	.016*	.093***	.344***	F1***, F4***, UI***
PVQ5X (SDT, UNC, UNN, & UNT)	.016*	.308***	.161***	F1***, F4***, UI***
Localism ($\alpha = .823$)				
Utopianism	.014*	.070***	.225***	F1***, F4***, UI***
IRI – Empathic Concern	.014*	.045***	.248***	F1***, F4***, UI***
Green Scale	.014*	.350***	.038***	F1***, UI***
EMCB (all subscales)	.014*	.435***	.018**	F1***, UI*
Egalitarianism Scale	.014*	.047***	.247***	F1***, F4***, UI***
PVQ5X (SDT, UNC, UNN, & UNT)	.014*	.248***	.092***	F1**, F4***, UI***
Public ($\alpha = .788$)				
Utopianism	.015*	.142***	.223***	F1***, -F3**, F4**, UI***
IRI – Empathic Concern	.015*	.027***	.346***	F1***, -F3*†, F4**, UI***
Green Scale	.015*	.161***	.211***	F1***, -F3**, UI***
EMCB (all subscales)	.015*	.195***	.188***	F1***, -F3*, UI***
Egalitarianism Scale	.015*	.135***	.247***	F1***, -F3**, F4**, UI***
PVQ5X (SDT, UNC, UNN, & UNT)	.015*	.191***	.183***	F1***, -F3**, F4*, UI***
Knowledge ($\alpha = .869$)				
Utopianism	.008	.218***	.251***	F1***, F4*, UI***
IRI – Empathic Concern	.008	.065***	.404***	F1***, F4*, UI***
Green Scale	.008	.259***	.228***	F1***, UI***
EMCB (all subscales)	.008	.279***	.219***	F1***, UI***
Egalitarianism Scale	.008	.130***	.341***	F1***, F4*, UI***
PVQ5X (SDT, UNC, UNN, & UNT)	.008	.291***	.188***	F1***, UI***
Sacrifice ($\alpha = .659$)				
Utopianism	.006	.099***	.251***	F1***, F4***, UI***
IRI – Empathic Concern	.006	.049***	.300***	F1***, F4***, UI***
Green Scale	.006	.273***	.126***	F1***, -F3*†, UI***
EMCB (all subscales)	.006	.274***	.122***	F1***, UI***

Egalitarianism Scale	.006	.072***	.278***	F1***, F4***, UI***
PVQ5X (SDT, UNC, UNN, & UNT)	.006	.195***	.161***	F1***, F4***, UI***
Individual Change ($\alpha = .751$)				
Utopianism	.005	.113***	.245***	F1***, F4***, UI***
IRI – Empathic Concern	.005	.039***	.322***	F1***, F4***, UI***
Green Scale	.005	.208***	.166***	F1***, UI***
EMCB (all subscales)	.005	.236***	.153***	F1***, UI***
Egalitarianism Scale	.005	.079***	.279***	F1***, F4***, UI***
PVQ5X (SDT, UNC, UNN, & UNT)	.005	.256***	.126***	F1***, F4*, UI***
Collective Imagination ($\alpha = .813$)				
Utopianism	.010	.293***	.176***	F1***, F2**, F4**, UI***
IRI – Empathic Concern	.010	.121***	.327***	F1***, F2**, F4**, UI***
Green Scale	.010	.204***	.244***	F1***, F2**, F4*†, UI***
EMCB (all subscales)	.010	.227***	.224***	F1***, F2***, UI***
Egalitarianism Scale	.010	.181***	.274***	F1***, F2*, F4**, UI***
PVQ5X (SDT, UNC, UNN, & UNT)	.010	.324***	.143***	F1***, F2**, F4*, UI***
Collective Change ($\alpha = .795$)				
Utopianism	.009	.249***	.212***	F1***, F2***, F3**, UI***
IRI – Empathic Concern	.009	.112***	.341***	F1***, F2***, F3**, UI***
Green Scale	.009	.207***	.253***	F1***, F2***, F3**, UI***
EMCB (all subscales)	.009	.219***	.251***	F1***, F2***, F3**, - F4*†, UI***
Egalitarianism Scale	.009	.300***	.200***	F1***, F2***, F3**, UI***
PVQ5X (SDT, UNC, UNN, & UNT)	.009	.335***	.149***	F1***, F2***, F3*, UI***
Tolerance ($\alpha = .876$)				
Utopianism	.006	.163***	.095***	F1***, UI***
IRI – Empathic Concern	.006	.065***	.181***	F1***, UI***
Green Scale	.006	.087***	.158***	F1***, UI***
EMCB (all subscales)	.006	.115***	.136***	F1***, UI***
Egalitarianism Scale	.006	.043***	.204***	F1***, UI***
PVQ5X (SDT, UNC, UNN, & UNT)	.006	.273***	.072***	F1***, UI***

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. Raw significance values are reported. ΔR^2 = change in R^2 ; CS = Competing scale; UIS = Utopian Impulse Scale; Symbol † indicates results that stopped being significant after the false discovery rate (FDR) correction was applied across ΔR^2 for the Utopian Impulse Scale (UIS) and Factors 1-

4. *Significant Factors* column contains information concerning which individual factors were significant as predictors—whenever a factor has - sign in front of it, this means its relationship with a dependent variable was negative rather than positive. UI in this column indicates the Utopian Impulse Scale scored as a general factor. It is reported for informative purposes and its significance levels were computed in a different hierarchical regression analysis in which only this factor rather than the four individual factors was included as a predictor. Because UI was not involved in sample size planning based on the FDR correction, we did not use the correction in relation to this factor. IRI = Interpersonal Reactivity Index; EMCB = Ethically Minded Consumer Behavior; PVQ5X = Portrait Value Questionnaire; SDT = Self-Directed Thought; UNC = Universalism-Concern; UNN = Universalism-Nature; UNT = Universalism-Tolerance.

Table 5

Incremental Predictive Validity in Study 3b

Competing Scale (CS)	ΔR^2 Covariates	ΔR^2 CS	ΔR^2 UIS	Significant Factors
Research ($\alpha = .900$)				
AHO	.034***	.126***	.321***	F1***, F4***, UI***
AICS (all subscales)	.034***	.292***	.193***	F4***, UI***
Humanitarianism-Egalitarianism	.034***	.140***	.307***	F1***, F4***, UI***
SDO-E (pro- and con-trait)	.034***	.065***	.386***	F1***, F4***, UI***
Economic System Justification	.034***	.083***	.365***	F1***, F4***, UI***
Localism ($\alpha = .803$)				
AHO	.002	.078***	.209***	F4***, UI***
AICS (all subscales)	.002	.158***	.151***	F4***, UI***
Humanitarianism-Egalitarianism	.002	.078***	.208***	F4***, UI***
SDO-E (pro- and con-trait)	.002	.041***	.259***	F4***, UI***
Economic System Justification	.002	.036***	.253***	F4***, UI***
Public ($\alpha = .745$)				
AHO	.015*	.120***	.226***	F1***, F4**, UI***
AICS (all subscales)	.015*	.374***	.071***	F1***, UI***
Humanitarianism-Egalitarianism	.015*	.118***	.226***	F1***, F4**, UI***
SDO-E (pro- and con-trait)	.015*	.066***	.278***	F1***, F4**, UI***
Economic System Justification	.015*	.160***	.202***	F1***, F4**, UI***
Knowledge ($\alpha = .865$)				
AHO	.010	.159***	.269***	F1***, F4**, UI***
AICS (all subscales)	.010	.311***	.157***	F1***, F4**, UI***
Humanitarianism-Egalitarianism	.010	.144***	.283***	F1***, F4***, UI***
SDO-E (pro- and con-trait)	.010	.079***	.350***	F1***, F2*†, F4***, UI***
Economic System Justification	.010	.141***	.287***	F1***, F4***, UI***
Sacrifice ($\alpha = .646$)				
AHO	.002	.131***	.240***	F1***, F4***, UI***
AICS (all subscales)	.002	.252***	.146***	F1***, F4***, UI***
Humanitarianism-Egalitarianism	.002	.116***	.255***	F1***, F4***, UI***
SDO-E (pro- and con-trait)	.002	.051***	.329***	F1***, F4***, UI***
Economic System Justification	.002	.082***	.288***	F1***, F4***, UI***
Individual Change ($\alpha = .773$)				
AHO	.002	.140***	.285***	F1***, F4***, UI***
AICS (all subscales)	.002	.343***	.135***	F1***, F4***, UI***
Humanitarianism-Egalitarianism	.002	.123***	.299***	F1***, F4***, UI***
SDO-E (pro- and con-trait)	.002	.055***	.373***	F1***, F4***, UI***
Economic System Justification	.002	.069***	.353***	F1***, F4***, UI***
Collective Imagination ($\alpha = .789$)				
AHO	.017*	.168***	.248***	F1***, F2***, UI***
AICS (all subscales)	.017*	.207***	.216***	F1***, F2***, UI***
Humanitarianism-Egalitarianism	.017*	.189***	.226***	F1***, F2***, UI***

SDO-E (pro- and con-trait)	.017*	.147***	.270***	F1***, F2**, UI***
Economic System Justification	.017*	.148***	.265***	F1***, F2***, UI***
Collective Change ($\alpha = .790$)				
AHO	.022**	.171***	.280***	F1***, F2***, UI***
AICS (all subscales)	.022**	.239***	.229***	F1**, F2***, UI***
Humanitarianism-Egalitarianism	.022**	.228***	.225***	F1***, F2***, UI***
SDO-E (pro- and con-trait)	.022**	.206***	.255***	F1***, F2***, UI***
Economic System Justification	.022**	.354***	.160***	F1***, F2**, UI***
Tolerance ($\alpha = .879$)				
AHO	.005	.108***	.125***	F1***, F3*, UI***
AICS (all subscales)	.005	.112***	.120***	F1***, F3**, UI***
Humanitarianism-Egalitarianism	.005	.101***	.127***	F1***, F3**, UI***
SDO-E (pro- and con-trait)	.005	.086***	.151***	F1***, F3*, UI***
Economic System Justification	.005	.032***	.202***	F1***, F3**, UI***

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. Raw significance values are reported. ΔR^2 = change in R^2 ; CS = Competing scale; UIS = Utopian Impulse Scale; Symbol † indicates results that stopped being significant after the false discovery rate (FDR) correction was applied across ΔR^2 for the Utopian Impulse Scale (UIS) and Factors 1-4. *Significant Factors* column contains information concerning which individual factors were significant as predictors—whenever a factor has - sign in front of it, this means its relationship with a dependent variable was negative rather than positive. UI in this column indicates the Utopian Impulse Scale scored as a general factor. It is reported for informative purposes and its significance levels were computed in a different hierarchical regression analysis in which only this factor rather than the four individual factors was included as a predictor. Because UI was not involved in sample size planning based on the FDR correction, we did not use the correction in relation to this factor. AHO = Attitudes toward Helping Others; AICS = Activist Identity and Commitment Scale; SDO-E: Social Dominance Orientation pro- and con-trait anti-Egalitarianism.

Table 6

Incremental Predictive Validity in Study 3c

Competing Scale (CS)	ΔR^2 Covariates	ΔR^2 CS	ΔR^2 UIS	Significant Factors
Immersion ($\alpha = .862$)				
Utopianism	.041***	.275***	.199***	F1***, F3*†, UI***
IRI – Empathic Concern	.041***	.080***	.384***	F1***, UI***
Green Scale	.041***	.199***	.264***	F1***, UI***
EMCB (all subscales)	.041***	.214***	.256***	F1***, UI***
Egalitarianism Scale	.041***	.186***	.284***	F1***, UI***
PVQ5X (SDT, UNC, UNN, & UNT)	.041***	.342***	.154***	F1***, UI***
Commitment ($\alpha = .807$)				
Utopianism	.046***	.243***	.181***	F1***, F2**, F4***, UI***
IRI – Empathic Concern	.046***	.078***	.337***	F1***, F2***, F4***, UI***
Green Scale	.046***	.248***	.171***	F1***, F2***, UI***
EMCB (all subscales)	.046***	.248***	.172***	F1***, F2***, UI***
Egalitarianism Scale	.046***	.237***	.198***	F1***, F2*, F4**, UI***
PVQ5X (SDT, UNC, UNN, & UNT)	.046***	.328***	.112***	F1***, F2**, UI***
Empowerment ($\alpha = .775$)				
Utopianism	.029***	.232***	.184***	F2***, F3**, F4**, UI***
IRI – Empathic Concern	.029***	.120***	.290***	F1**, F2***, F3*†, F4*, UI***
Green Scale	.029***	.261***	.154***	F1**, F2***, F3*, UI***
EMCB (all subscales)	.029***	.271***	.153***	F1**, F2***, F3*, UI***
Egalitarianism Scale	.029***	.222***	.193***	F1**, F2**, F3*, F4*†, UI***
PVQ5X (SDT, UNC, UNN, & UNT)	.029***	.393***	.072***	F1*†, F2***, UI***
Perspective Taking ($\alpha = .747$)				
Utopianism	.048***	.193***	.146***	F3***, UI***
IRI – Empathic Concern	.048***	.351***	.117***	F1*, F3*†, UI***
Green Scale	.048***	.207***	.126***	F1**, F2*†, F3***, UI***
EMCB (all subscales)	.048***	.193***	.141***	F1**, F2*, F3***, UI***
Egalitarianism Scale	.048***	.168***	.164***	F1**, F3***, UI***

PVQ5X (SDT, UNC, UNN, & UNT)	.048***	.447***	.021***	F3*†, UI***
Refugees ($\alpha = .869$)				
Utopianism	.029***	.135***	.159***	F3***, F4*, UI***
IRI – Empathic Concern	.029***	.257***	.123***	F2*†, F4*, UI***
Green Scale	.029***	.213***	.092***	F2*, F3**, UI***
EMCB (all subscales)	.029***	.209***	.107***	F2**, F3**, UI***
Egalitarianism Scale	.029***	.258***	.085***	F3**, UI***
PVQ5X (SDT, UNC, UNN, & UNT)	.029***	.405***	.013*	F3*†, UI**
Contempt ($\alpha = .732$)				
Utopianism	.013*	.234***	.259***	F2***, F3***, UI***
IRI – Empathic Concern	.013*	.223***	.298***	F1*†, F2***, F3**, UI***
Green Scale	.013*	.269***	.225***	F1*, F2***, F3***, UI***
EMCB (all subscales)	.013*	.256***	.248***	F1**, F2***, F3***, UI***
Egalitarianism Scale	.013*	.372***	.168***	F1**, F2***, F3***, UI***
PVQ5X (SDT, UNC, UNN, & UNT)	.013*	.467***	.088***	F2***, F3**, UI***
Life Improvement ($\alpha = .836$)				
Utopianism	.042***	.327***	.216***	F2***, UI***
IRI – Empathic Concern	.042***	.129***	.394***	F1***, F2***, UI***
Green Scale	.042***	.251***	.272***	F1***, F2***, UI***
EMCB (all subscales)	.042***	.242***	.283***	F1***, F2***, UI***
Egalitarianism Scale	.042***	.438***	.159***	F1***, F2***, UI***
PVQ5X (SDT, UNC, UNN, & UNT)	.042***	.415***	.139***	F1***, F2***, UI***
Personal Autonomy ($\alpha = .731$)				
Utopianism	.039***	.253***	.103***	F1***, F2***, UI***
IRI – Empathic Concern	.039***	.042***	.290***	F1***, F2***, UI***
Green Scale	.039***	.116***	.215***	F1***, F2***, UI***
EMCB (all subscales)	.039***	.133***	.205***	F1***, F2***, UI***
Egalitarianism Scale	.039***	.204***	.151***	F1***, F2***, -F4*†, UI***
PVQ5X (SDT, UNC, UNN, & UNT)	.039***	.232***	.122***	F1***, F2***, UI***
Degrowth ($\alpha = .856$)				
Utopianism	.016*	.241***	.232***	F2***, F4***, UI***
IRI – Empathic Concern	.016*	.070***	.396***	F1**, F2***, F4***, UI***
Green Scale	.016*	.298***	.178***	F1**, F2***, UI***
EMCB (all subscales)	.016*	.306***	.186***	F1***, F2***, UI***

Egalitarianism Scale	.016*	.303***	.189***	F1**, F2***, F4**, UI***
PVQ5X (SDT, UNC, UNN, & UNT)	.016*	.360***	.128***	F1*, F2***, UI***
Urgency ($\alpha = .829$)				
Utopianism	.028***	.211***	.222***	F2***, F4***, UI***
IRI – Empathic Concern	.028***	.087***	.336***	F2***, F4***, UI***
Green Scale	.028***	.348***	.114***	F2***, UI***
EMCB (all subscales)	.028***	.329***	.139***	F2***, UI***
Egalitarianism Scale	.028***	.289***	.163***	F2***, F4***, UI***
PVQ5X (SDT, UNC, UNN, & UNT)	.028***	.403***	.077***	F2***, UI***

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. Raw significance values are reported. ΔR^2 = change in R^2 ; CS = Competing scale; UIS = Utopian Impulse Scale; Symbol † indicates results that stopped being significant after the false discovery rate (FDR) correction was applied across ΔR^2 for the Utopian Impulse Scale (UIS) and Factors 1-4. *Significant Factors* column contains information concerning which individual factors were significant as predictors—whenever a factor has - sign in front of it, this means its relationship with a dependent variable was negative rather than positive. UI in this column indicates the Utopian Impulse Scale scored as a general factor. It is reported for informative purposes and its significance levels were computed in a different hierarchical regression analysis in which only this factor rather than the four individual factors was included as a predictor. Because UI was not involved in sample size planning based on the FDR correction, we did not use the correction in relation to this factor. IRI = Interpersonal Reactivity Index; EMCB = Ethically Minded Consumer Behavior; PVQ5X = Portrait Value Questionnaire; SDT = Self-Directed Thought; UNC = Universalism-Concern; UNN = Universalism-Nature; UNT = Universalism-Tolerance.

Table 7

Incremental Predictive Validity in Study 3d

Competing Scale (CS)	ΔR^2 Covariates	ΔR^2 CS	ΔR^2 UIS	Significant Factors
Immersion ($\alpha = .869$)				
AHO	.057***	.111***	.369***	F1***, F3**, UI***
AICS (all subscales)	.057***	.347***	.163***	F1***, F3**, UI***
Humanitarianism-Egalitarianism	.057***	.149***	.333***	F1***, F3**, UI***
SDO-E (pro- and con-trait)	.057***	.110***	.374***	F1***, F3**, UI***
Economic System Justification	.057***	.163***	.322***	F1***, F3**, UI***
Commitment ($\alpha = .785$)				
AHO	.051***	.139***	.299***	F1***, F4**, UI***
AICS (all subscales)	.051***	.348***	.127***	F1***, F2*, F3*, UI***
Humanitarianism-Egalitarianism	.051***	.176***	.269***	F1***, F4**, UI***
SDO-E (pro- and con-trait)	.051***	.110***	.329***	F1***, F3*†, F4**, UI***
Economic System Justification	.051***	.178***	.268***	F1***, F4**, UI***
Empowerment ($\alpha = .797$)				
AHO	.031***	.175***	.304***	F1***, F2***, F3**, F4**, UI***
AICS (all subscales)	.031***	.222***	.258***	F1*, F2***, F3***, F4*, UI***
Humanitarianism-Egalitarianism	.031***	.220***	.264***	F1***, F2***, F3**, F4**, UI***
SDO-E (pro- and con-trait)	.031***	.189***	.292***	F1***, F2***, F3**, F4**, UI***
Economic System Justification	.031***	.234***	.251***	F1***, F2***, F3**, F4**, UI***
Perspective Taking ($\alpha = .755$)				
AHO	.051***	.298***	.133***	F1***, F3***, UI***
AICS (all subscales)	.051***	.213***	.161***	F3***, UI***
Humanitarianism-Egalitarianism	.051***	.290***	.130***	F1***, F3***, UI***
SDO-E (pro- and con-trait)	.051***	.172***	.201***	F1***, F3***, UI***
Economic System Justification	.051***	.190***	.184***	F1***, F3***, UI***
Refugees ($\alpha = .887$)				
AHO	.036***	.285***	.125***	F3***, UI***
AICS (all subscales)	.036***	.194***	.161***	F2*, F3***, UI***
Humanitarianism-Egalitarianism	.036***	.295***	.112***	F1*, F3***, UI***
SDO-E (pro- and con-trait)	.036***	.202***	.165***	F1**, F3***, UI***
Economic System Justification	.036***	.270***	.125***	F1**, F3***, UI***
Contempt ($\alpha = .760$)				
AHO	.060***	.286***	.208***	F1*, F2***, F3*, F4**, UI***
AICS (all subscales)	.060***	.198***	.255***	F2***, F3***, UI***

Humanitarianism-Egalitarianism	.060***	.305***	.188***	F1*, F2***, F3**, F4*, UI***
SDO-E (pro- and con-trait)	.060***	.233***	.240***	F1**, F2***, F3***, F4*†, UI***
Economic System Justification	.060***	.338***	.165***	F1**, F2**, F3**, F4*†, UI***
Life Improvement ($\alpha = .854$)				
AHO	.079***	.230***	.207***	F1***, F2***, F4***, UI***
AICS (all subscales)	.079***	.202***	.209***	F1*†, F2***, F4*, UI***
Humanitarianism-Egalitarianism	.079***	.277***	.173***	F1***, F2***, F4***, UI***
SDO-E (pro- and con-trait)	.079***	.266***	.189***	F1***, F2***, F4*, UI***
Economic System Justification	.079***	.379***	.119***	F1***, F2**, F4*, UI***
Personal Autonomy ($\alpha = .784$)				
AHO	.057***	.135***	.180***	F1***, F2**, F4*, UI***
AICS (all subscales)	.057***	.190***	.126***	F1**, F2***, UI***
Humanitarianism-Egalitarianism	.057***	.119***	.188***	F1***, F2**, F4*, UI***
SDO-E (pro- and con-trait)	.057***	.109***	.200***	F1***, F2**, F4*, UI***
Economic System Justification	.057***	.180***	.146***	F1***, F4*†, UI***
Degrowth ($\alpha = .829$)				
AHO	.066***	.116***	.245***	F1*†, F2***, F3**, F4**, UI***
AICS (all subscales)	.066***	.144***	.216***	F2***, F3**, F4**, UI***
Humanitarianism-Egalitarianism	.066***	.138***	.223***	F1*†, F2***, F3**, F4**, UI***
SDO-E (pro- and con-trait)	.066***	.104***	.256***	F1*†, F2***, F3**, F4**, UI***
Economic System Justification	.066***	.234***	.153***	F1*, F2*, F3*, F4**, UI***
Urgency ($\alpha = .771$)				
AHO	.064***	.160***	.262***	F2***, F3***, F4**, UI***
AICS (all subscales)	.064***	.193***	.234***	F2***, F3***, F4*†, UI***
Humanitarianism-Egalitarianism	.064***	.199***	.227***	F2***, F3**, F4**, UI***
SDO-E (pro- and con-trait)	.064***	.209***	.224***	F2***, F3***, F4*, UI***

Economic System Justification	.064***	.278***	.171***	F2***, F3***, F4*, UI***
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Note. * $p < .05$, ** $p < .01$, *** $p < .001$. Raw significance values are reported. ΔR^2 = change in R^2 ; CS = Competing scale; UIS = Utopian Impulse Scale; Symbol † indicates results that stopped being significant after the false discovery rate (FDR) correction was applied across ΔR^2 for the Utopian Impulse Scale (UIS) and Factors 1-4. *Significant Factors* column contains information concerning which individual factors were significant as predictors—whenever a factor has - sign in front of it, this means its relationship with a dependent variable was negative rather than positive. UI in this column indicates the Utopian Impulse Scale scored as a general factor. It is reported for informative purposes and its significance levels were computed in a different hierarchical regression analysis in which only this factor rather than the four individual factors was included as a predictor. Because UI was not involved in sample size planning based on the FDR correction, we did not use the correction in relation to this factor. AHO = Attitudes toward Helping Others; AICS = Activist Identity and Commitment Scale; SDO-E: Social Dominance Orientation pro- and con-trait anti-Egalitarianism.

$\chi^2(48) = 62.897, p = .073, \text{SRMR} = .028, \text{CFI} = .991, \text{RMSEA} = .035, 90\% \text{ CI } [<.001, .057]$

$\chi^2(48) = 51.348, p = .344, \text{SRMR} = .027, \text{CFI} = .997, \text{RMSEA} = .017, 90\% \text{ CI } [<.001, .047]$

Figure 1. Factor structure of the Utopian Impulse Scale (UIS) established using confirmatory factor analyses on Sample 2 (US participants; Panel A) and Sample 3 (UK participants; Panel B) with standardized item and latent variable loadings. CFI and RMSEA are robust indices calculated using recommendations by Savalei (2018). α below the name of each factor refers to Cronbach's α for that factor.

Figure 2. The influence of ethical versus unethical condition on intention to buy the product (chocolate) depending on participants' level of the general utopian impulse factor (Study 4).

Figure 3. The influence of utopian versus fashion condition on intention to buy the product (socks) depending on participants' level of the general utopian impulse factor (Study 5).

Figure 4. The influence of degrowth versus investment condition on attitudes toward the text that introduced either degrowth (degrowth condition) or three essential investment types (investment condition) depending on participants' level of the general utopian impulse factor (Study 6).

Figure 5. The influence of degrowth versus investment condition on behavior—the number of ideas that participants wrote regarding how people in their country could implement degrowth-related practices into their daily living (degrowth condition), or regarding how people in their country could best invest their money in an efficient way (investment condition)—depending on participants' level of the general utopian impulse factor (Study 6).

Appendix

Pre-registrations for studies 3a-3d, 4 and 5 follow Van't Veer & Giner-Sorolla's (2016) guidelines and can be accessed through the Open Science Framework via the following links:

Studies 3a-3d – https://osf.io/ztj2f/?view_only=f4c89450ef6143c1a5bbb1ce1c9688ae

Study 4 – https://osf.io/gcvb2/?view_only=78f07eac214441dcb26bcd49df7ca58

Study 5 – https://osf.io/t46dj/?view_only=08f4fd2fc1a94f0ca0054e22324df5c7

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Participants' Demographics for Studies 1-4 Before Exclusion Criteria Were Applied

Table S1

Participants' Demographics for Each Study Before the Exclusion Criteria Were Applied

Study	Sample N°	Sample Size	M age	SD age	Gender ^a		Country
					Male	Female	
1	1	751	35.89	10.87	441	310	US
1	2	499	37.77	11.97	282	217	US
1	3	496	37.97	12.97	147	349	UK
2a	-	293	35.44	10.97	164	129	US
2b	-	326	37.78	11.37	156	170	US
2c	-	316	38.50	12.51	165	151	US
2d	-	313	37.19	11.68	155	158	US
2e	-	311	37.93	11.36	150	161	US
3a	-	604	36.79	11.76	265	339	US
3b	-	606	36.94	11.67	260	346	US
3c	-	610	37.03	11.61	232	378	US
3d	-	609	38.26	12.50	223	386	US
4	-	960	39.40	12.73	429	527	US

^a No participant selected the nonbinary gender category "Other" added to Study 4.

US participants were recruited via Amazon Mechanical Turk (MTurk). UK participants were recruited via Prolific Academic.

Study 1: Scale Development

Exclusion Criteria

In each of the three samples, participants completed a seriousness check (Aust, Diedenhofen, Ullrich, & Musch, 2013). In addition, three instructed-response items (e.g., “Please respond with ‘Strongly agree’ for this item”) were used per each sample (Meade & Craig, 2012). Only participants who passed the seriousness check and accurately answered all instructed-response items were included in statistical analyses.

Rationale Behind Sample Size for Exploratory and Confirmatory Factor Analyses

In the absence of general consensus regarding required sample size for exploratory factor analysis, we considered a range of different approaches when determining the number of participants to recruit in Sample 1 (MacCallum, Widaman, Zhang, & Hong, 1999; Reio Jr & Shuck, 2015). Comrey and Lee (1992) suggested that testing a minimum of 300 participants is necessary, and they urged researchers to obtain a sample of 500 or more participants whenever possible. Other researchers indicated that the ratio of the number of participants tested to the number of items should be at least 5:1 or ideally 10:1 (Everitt, 1975; Gorsuch, 1983; Reio Jr & Shuck, 2015). Moreover, MacCallum et al. (1999) estimated that, with a ratio of items to factors of 10:3 or higher a sample size of 400 should yield a high power, even under low communalities. Based on these assumptions, we decided that we would need a sample of roughly 600 participants—the final sample size after exclusions were applied exceeded this number ($N_{\text{Sample1}} = 629$). This sample size meets the criterion of Comrey and Lee (1992) as well as the criterion regarding the sample to item ratio (Everitt, 1975; Gorsuch, 1983; Reio Jr & Shuck, 2015), considering that we created a total of 60 items. It also meets the criterion by MacCallum et al.

(1999), given that, based on our theoretical assumptions, we did not have a reason to expect that the ratio of items to factors would be larger than 10:3 (which would mean that more than 18 factors would be extracted).

To determine the number of participants for Samples 2 and 3 used in confirmatory factor analyses, we computed the necessary sample size to replicate the parameters obtained via confirmatory factor analysis conducted on Sample 1 using a Monte Carlo simulation (Muthén & Muthén, 2002) implemented via the R package *simsem* (Pornprasertmanit, Miller, Schoemann, Quick, & Jorgensen, 2016). The factor loadings used for the simulation were acquired from the confirmatory factor analysis performed on Sample 1, with the `std.lv` argument being set to TRUE and `std.ov` to FALSE. We used a conservative significance level of .01 and the high power of .999999. This power analysis indicated that testing 362 participants is enough to replicate the factor structure established using the original confirmatory factor analysis on Sample 1. Both Sample 2 ($N = 436$) and Sample 3 ($N = 466$) exceeded the sample size after the exclusion criteria were applied.

Criteria for Selecting Items for Confirmatory Factor Analysis

Because we wanted to have a scale that meets high psychometric standards but is also short and easy to administer, we decided to have three items per factor, based on recommendations that a factor should have three or more items (Tabachnick, Fidell, & Ullman, 2007; Yong & Pearce, 2013). Standardized factor loadings (in the exploratory factor analysis performed on Sample 1 based on which the items were selected) had to be higher than .50 (Costello & Osborne, 2005; Hair, Black, Babin, & Anderson, 2010; Peterson, 2000) and cross-loadings smaller than .32 (Tabachnick et al., 2007). Furthermore, for each factor, we avoided selecting

items that were too repetitive or similar and sampled a relatively broad spectrum of items. Based on these considerations, items 2, 8, 9, 13, 17, 26, 36, 39, 40, 43, 50, and 53 were selected for confirmatory factor analysis. Items 17, 13, and 8 comprised Factor 1; items 53, 2, and 39 comprised Factor 2; items 50, 40, and 9 comprised Factor 3; and items 26, 36, and 43 comprised Factor 4.

Testing Alternative Factor Models

Next to confirming the factor structure, in order to show that the model with four factors is in fact the most appropriate one, we also conducted additional factor analyses where we tested other possible models and compared them with the four factor model using the *anova* function in R (e.g., Birnbaum, Mikulincer, Szepeswöl, Shaver, & Mizrahi, 2014; Cohen, Wolf, Panter, & Insko, 2011; Thrash & Elliot, 2003). More precisely, the additional models we computed included a single-factor model; four two-factor models where each of the four factors were treated as one factor and the remaining factors were combined into the second factor; three two-factor models in which two of the four factors were combined into one factor and the remaining two factors into another factor (i.e. F1+F2 and F3+F4; F1+F3 and F2+F4; F1+F4 and F2+F3); and six three-factor models in which two of the four factors were combined into a single factor and the remaining two factors remained separate (i.e. F1+F2 and F3 and F4; F1+F3 and F2 and F4; F1+F4 and F2 and F3; F2+F3 and F1 and F4; F2+F4 and F1 and F3; F3+F4 and F1 and F2). The analyses showed that the four-factor model had a better fit than any of these models across all three samples, all $ps < .001$. Therefore, the confirmatory factor analyses overall provided strong evidence in support of the factor structure of the Utopian Impulse Scale.

Measurement Invariance

To show that the construct we are measuring (i.e. the utopian impulse) is equivalent across *country* (US vs. UK) and *gender* (male vs. female), we tested all four types of measurement invariance—configural, metric, scalar, and residual (Putnick & Bornstein, 2016)—across Samples 2 and 3. For the configural invariance, we used the same model fit criteria as for the CFA models: SRMR < .05; CFI > .95; and RMSEA < .06 (Hu & Bentler, 1999; Jackson, Gillaspay Jr, & Purc-Stephenson, 2009). For metric, scalar, and residual invariance, we used the cutoff criteria by Chen (2007): a -.01 change in CFI, paired with changes in RMSEA of .015 and SRMR of .030 (for metric invariance) or .010 (for scalar or residual invariance). All the models were fit using the MLMV maximum likelihood estimator with robust standard errors (Maydeu-Olivares, 2017), and the robust fit indices were computed based on recommendations by Savalei (2018). As can be seen from Table S2, all four types of measurement invariance were established for both *country* and *gender*, given that the fit criteria were met.

Table S2

Measurement Invariance Tests of the Utopian Impulse Scale (UIS) for Country (US vs. UK) and Gender (Male vs. Female) Computed Across Samples 2 and 3

Variable	SRMR	Δ SRMR	CFI	Δ CFI	RMSEA	Δ RMSEA
US vs. UK Sample ($N = 902$)						
Configural invariance	.026	-	.994	-	.027	-
Metric invariance	.036	.011	.992	-.002	.031	.003
Scalar invariance	.038	.001	.991	-.001	.032	.001
Residual invariance	.038	<.001	.991	<.001	.031	-.001
Males vs. Females ($N = 902$)						
Configural invariance	.026	-	.991	-	.035	-
Metric invariance	.032	.006	.990	<.001	.034	-.001
Scalar invariance	.033	.001	.990	<.001	.033	<.001
Residual invariance	.034	.001	.988	-.002	.034	.001

Note. Sign Δ refers to a change in fit indices for one model relative to the previous model. CFI and RMSEA are robust indices calculated using recommendations by Savalei (2018).

Social Desirability

To ensure that the Utopian Impulse Scale is not susceptible to socially desirable responding, we correlated all the individual items tested in Samples 1-3 with the Marlowe-Crowne Social Desirability Scale (form C; Reynolds, 1982). For Sample 1, the correlations between this scale and each of the 60 utopian impulse items were small (all $rs \leq .198$); for Sample 2, the correlations between this scale and each of the 12 items from the Utopian Impulse Scale were also small (all $rs \leq .171$); finally, the correlations between the social desirability scale and each of the 12 items from the Utopian Impulse Scale for Sample 3 were small (all $rs \leq .125$). Likewise, the correlations between the four Utopian Impulse Scale factors and the social desirability scale in Samples 1, (all $rs \leq .213$), 2 (all $rs \leq .142$), and 3 (all $rs \leq .113$) were small. Therefore, across all 3 samples, we did not find evidence that social desirability would be a serious issue for our scale.

Bifactor Analysis

According to Rodriguez, Reise, and Haviland (2016a; 2016b), a scale captures a general underlying construct and can be scored as a single factor if the following criteria are met: a) omega hierarchical (ω_h) coefficient needs to be high, ideally $> .80$; b) factor determinacy (FD) value needs to exceed $.90$; c) construct replicability index (H) needs to be larger than $.80$; d) explained common variance (ECV) needs to be large, ideally $> .70$; and e) percentage of uncontaminated correlations (PUC) needs to be $> .70$. To compute these indices, we fit bifactor models via the *lavaan* package (Rosseel, 2012) using the MLMV estimator for each of the three samples and then implemented the R function *omegaFromSem*. For Sample 1, ω_h was $.90$, FD was $.95$, H was $.94$, ECV was $.81$, and PUC was $.82$. For Sample 2, ω_h was $.88$, FD was $.94$, H

was .92, *ECV* was .77, and *PUC* was .82. For sample 3, ω_h was .85, *FD* was .93, *H* was .91, *ECV* was .71, and *PUC* was .82. Therefore, for all 3 samples, the criteria proposed by Rodriguez et al. (2016a) were met, thus indicating that our scale can be scored as a single utopian impulse factor. On a side note, Cronbach's α values were also above .70 in Samples 1 ($\alpha = .938$), 2 ($\alpha = .921$), and 3 ($\alpha = .905$).

Studies 2a-2e: Nomological Network

Exclusion Criteria

To determine which participants should be excluded from statistical analyses, several instructed-response items (Meade & Craig, 2012) were administered in each study: seven in Study 2a, eight in Study 2b, five in Study 2c, eight in Study 2d, and eight in Study 2e. Also, all participants had to answer a seriousness check (Aust et al., 2013) at the end of the study. Only participants who passed all the instructed-response items and the seriousness check were included in statistical analyses.

Determining Sample Size

For each study, we computed the number of participants to be tested to capture a medium size correlation ($r = .03$) with the significance criterion corresponding to the most conservative p-value used by the FDR correction (Benjamini & Hochberg, 1995) and the high power of .95.¹ For study 2a, 52 correlation analyses (13 scales/subscales multiplied by the four utopian impulse factors) were planned and the significance criterion was therefore .000962; for Study 2b, 72 correlation analyses (18 scales/subscales multiplied by the four utopian impulse factors) were planned and the significance criterion was therefore .000694; for Study 2c, 84 correlation analyses (21 scales/subscales multiplied by the four utopian impulse factors) were planned and the significance criterion was therefore .000595; for Study 2d, 64 correlation analyses (16 scales/subscales multiplied by four the utopian impulse factors) were planned and the

¹ The most conservative p-value used by the FDR correction is computed via the formula $P_i \leq \frac{i}{m} q^*$, where P is a cut-off p-value that determines whether a significance test produced a statistically significant finding or not, i is the number of a p-value in a sequence consisting of all the significance tests ranging from smallest to largest, m is the total number of significance tests conducted, and q^* is the significance criterion used (.05). The most conservative p-value (P_i) is therefore calculated by using m equal to the total number of significance tests computed and i equal to 1.

significance criterion was therefore .000781; and for Study 2e, 52 correlation analyses (13 scales/subscales multiplied by the four utopian impulse factors) were planned and the significance criterion was therefore .000962.²

All power analyses were conducted in G*Power (Faul, Erdfelder, Lang, & Buchner, 2007). For Study 2a, the estimated sample size was 259; for Study 2b it was 268; for Study 2c it was 273; for Study 2d it was 265; and for Study 2e it was 259. Given the large number of check items used (based on which we were expecting many exclusions), in each study we tested roughly 12-22% more participants than estimated via the power analyses to account for the participants whose data would need to be excluded because of not passing the check items (see the *Exclusion Criteria* section above). Overall, the number of participants who were eventually included in statistical analyses (Study 2a = 254; Study 2b = 266; Study 2c = 268; Study 2d = 263; Study 2e = 255) was close to the estimates provided by the power analyses, thus indicating that the study was highly powered to capture medium correlation effect sizes while accounting for the FDR correction (Benjamini & Hochberg, 1995).

Study 2a – Measures

In this study, participants completed the Utopian Impulse Scale along with 13 scales/subscales.

² In Study 2b, we initially tested 18 scales/subscales, given that in addition to the 16 measures that can be seen in Table 3 in the article the Hope Scale (Snyder et al., 1991)—consisting of two subscales—was also tested. Hence, the power analysis for this study was based on 18 scales/subscales. However, due to an error, one item of the Hope Scale was missing from the survey. We therefore could not compute the analyses regarding the Hope Scale in Study 2b and the FDR correction was applied to 64 (corresponding to 16 scales/subscales, given that the two subscales of the Hope Scale were not used in statistical analyses) rather than 72 significance tests (corresponding to all 18 scales/subscales). The Hope Scale was instead tested in Study 2c, in which it was accounted for in the power analysis for that study.

Utopian Impulse. The 12-item *Utopian Impulse Scale* developed in Study 1 was used to assess four factors, namely F1, F2, F3, and F4 ($\alpha = .832, .855, .899$, and $.878$, respectively). For informative purposes, we also reported correlations with the general utopian impulse factor ($\alpha = .944$).

Big Five. The *Ten Item Personality Inventory* (TIPI) was used to measure *Agreeableness* and *Openness to Experience* along with *Extraversion*, *Conscientiousness*, and *Emotional Stability* (Gosling, Rentfrow, & Swann, 2003). The responses were anchored on 7-point scales from 1 (*strongly disagree*) to 7 (*strongly agree*; $\alpha = .432, .578, .780, .647$, and $.750$ for agreeableness, openness to experience, extraversion, conscientiousness and emotional stability, respectively).

Motivational Orientation. *Approach Temperament* was measured with the 6-item scale (e.g., “Thinking about the things I want really energizes me”) developed by Elliot & Thrash (2010). An additional series of 6 items measured *Avoidance Temperament* (e.g., “I react very strongly to bad experiences”; Elliot & Thrash, 2010). The responses were anchored on 7-point scales from 1 (*strongly disagree*) to 7 (*strongly agree*; $\alpha = .849$ and $.912$ for approach temperament and avoidance temperament respectively).

Self-Esteem. The 10-item *Rosenberg Self-Esteem Scale* (RSES; Rosenberg, 1965; Schmitt & Allik, 2005) was administered to assess one’s overall sense of worth as a person (e.g., “On the whole, I am satisfied with myself”). The responses were anchored on 7-point scales from 1 (*strongly disagree*) to 7 (*strongly agree*; $\alpha = .948$).

Life Satisfaction. The 5-item *Satisfaction with Life Scale* (SWLS; Diener, Emmons, Larsen, & Griffin, 1985) was employed to measure the cognitive-judgmental aspect of subjective well-being (e.g., “So far I have gotten the important things I want in life”). The responses were anchored on 7-point scales from 1 (*strongly disagree*) to 7 (*strongly agree*; $\alpha = .921$).

PANAS. As second and third components of the emotional aspect of subjective well-being (Diener et al., 1985), *Positive* (e.g., “Interested”) and *Negative Affect* (e.g., “Distressed”) were assessed using the two 10-item mood subscales that comprise the *Positive and Negative Affect Schedule* (PANAS; Watson, Clark, & Tellegen, 1988). The responses were anchored on 5-point scales from 1 (*very slightly or not at all*) to 5 (*extremely*; $\alpha = .900$ and $.931$ for positive and negative affect, respectively).

Sensation Seeking. The 8-item *Brief Sensation Seeking Scale* (Hoyle, Stephenson, Palmgreen, Lorch, & Donohew, 2002; Schumpe, Bélanger, Moyano, & Nisa, 2018) was administered to assess sensation seeking (e.g., “I would like to explore strange places”). The responses were anchored on 7-point scales from 1 (*strongly disagree*) to 7 (*strongly agree*; $\alpha = .828$).

General Self-Efficacy. The 17-item *General Self-Efficacy Scale* (Sherer et al., 1982) was employed to assess the belief that one can successfully perform a certain behavior (e.g., “When I make plans, I am certain I can make them work.”). The responses were anchored on 7-point scales from 1 (*strongly disagree*) to 7 (*strongly agree*; $\alpha = .945$).

Study 2b – Measures

In this study, participants completed the Utopian Impulse Scale along with 16 scales/subscales.

Utopian Impulse. Same as Study 2a ($\alpha = .799, .875, .903$, and $.872$, for F1, F2, F3, and F4, respectively, in this study). For informative purposes, we also reported correlations with the general utopian impulse factor ($\alpha = .939$).

Grandiose Fantasies. The 10-item *Grandiose Fantasies Scale* (Glover, Miller, Lynam, Crego, & Widiger, 2012) was used to assess fantasies of grandeur and success (e.g., “I often feel

consumed with thoughts about great things I'm going to do"). The responses were anchored on 7-point scales from 1 (*strongly disagree*) to 7 (*strongly agree*; $\alpha = .882$).

Life Orientation. The 6-item *Revised Life Orientation Test* (Scheier, Carver, & Bridges, 1994) was employed to measure dispositional optimism (e.g., "I'm always optimistic about my future."). The responses were anchored on 7-point scales from 1 (*strongly disagree*) to 7 (*strongly agree*; $\alpha = .934$).

Narcissism. The 9-item *Narcissism Scale* from the *Dark Short Triad* (SD3; Jones & Paulhus, 2014) was administered to measure grandiose identity (e.g., "I know that I am special because everyone keeps telling me so"). The responses were anchored on 7-point scales from 1 (*strongly disagree*) to 7 (*strongly agree*; $\alpha = .846$).

Utopianism and Anti-utopianism. Two 4-item scales assessing *Utopianism* and *Anti-utopianism* (Fernando et al., 2018) were used to measure positive (e.g., "It is important that people think about an ideal version of society") and negative (e.g., "It is useless to dream about what an ideal society might look like") attitudes toward thinking about an ideal society. The responses were anchored on 7-point scales from 1 (*strongly disagree*) to 7 (*strongly agree*; $\alpha = .916$ and $.812$ for utopianism and anti-utopianism respectively).

IRI. Four 7-item scales from the *Interpersonal Reactivity Index* (IRI; Davis, 1983) were employed to assess *Fantasy* (e.g., "I daydream and fantasize, with some regularity, about things that might happen to me"), *Empathic Concern* (e.g., "I often have tender, concerned feelings for people less fortunate than me"), and *Perspective Taking* (e.g., "I try to look at everybody's side of a disagreement before I make a decision"), along with *Personal Distress* (e.g., "In emergency situations, I feel apprehensive and ill-at-ease"). The responses were anchored on 7-point scales

from 1 (*strongly disagree*) to 7 (*strongly agree*; $\alpha = .815, .927, .885$, and $.883$ for fantasy, empathic concern, perspective taking, and personal distress respectively).

Affiliation. *Group Affiliation* motive (e.g., “Being part of a group is important to me”) along with *Exclusion Concern* (e.g., “It would be a big deal to me if a group excluded me”) and *Independence* (e.g., “I like to be by myself”) were assessed using three (out of 11) 6-item subscales that measure *Fundamental Social Motives* (FSM; Neel, Kenrick, White, & Neuberg, 2015). The responses were anchored on 7-point scales from 1 (*strongly disagree*) to 7 (*strongly agree*; $\alpha = .886, .927$, and $.885$ for group affiliation, exclusion concern, and independence respectively).

REI. Four 10-item subscales from the *Rational-Experiential Inventory* (REI; Pacini & Epstein, 1999) were administered to assess *Rational Ability* (e.g., “I have a logical mind”), *Rational Engagement* (e.g., “I enjoy intellectual challenges”), *Experiential Ability* (e.g., “I can usually feel when a person is right or wrong, even if I can't explain how I know”), and *Experiential Engagement* (e.g., “I tend to use my heart as a guide for my actions”). The responses were anchored on 7-point scales from 1 (*strongly disagree*) to 7 (*strongly agree*; $\alpha = .914, .942, .922$, and $.923$ for rational ability, rational engagement, experiential ability, and experiential engagement).

Study 2c – Measures

In this study, participants completed the Utopian Impulse Scale along with 21 scales/subscales.

Utopian Impulse. Same as Study 2a ($\alpha = .801, .872, .884, \text{ and } .896$, for F1, F2, F3, and F4, respectively, in this study). For informative purposes, we also reported correlations with the general utopian impulse factor ($\alpha = .943$).

Hope. Two 4-item subscales comprising the *Hope Scale* (Snyder et al., 1991) were administered to assess *Agency*, defined as a sense of successful determination in meeting goals in the past, present, and future (e.g., “I energetically pursue my goals”) and *Pathways*, defined as a sense of being able to generate successful plans to meet goals (e.g., “Even when others get discouraged, I know I can find a way to solve the problem”). The responses were anchored on 7-point scales from 1 (*strongly disagree*) to 7 (*strongly agree*; $\alpha = .871$ and $= .886$ for agency and pathways, respectively).

PVQ5X. We administered a series of 3-item scales from the *Portrait Value Questionnaire* (PVQ5X) to assess basic individual values (Schwartz et al., 2012). We assessed values that comprise openness to change (*Self-direction and Stimulation*) and self-transcendence (*Universalism and Benevolence*) and are thus conceptually linked to the utopian impulse. Two scales—*Self-Directed Thought* (e.g., “It is important to her to form her own opinions and have original ideas”; $\alpha = .675$) and *Self-Directed Action* (e.g., “Freedom to choose what she does is important to her”; $\alpha = .721$)—were used to assess the freedom to cultivate one’s own ideas and abilities and to determine one’s own actions as motivational goals. The scale *Stimulation* (e.g., “She is always looking for different kinds of things to do”; $\alpha = .808$) was used to assess excitement, novelty, and change as motivational goals. The three scales *Universalism-Concern* (e.g., “Protecting society’s weak and vulnerable members is important to her”; $\alpha = .797$), *Universalism-Tolerance* (e.g., “She works to promote harmony and peace among diverse groups”; $\alpha = .782$), and *Universalism-Nature* (e.g., “She strongly believes that she should care

for nature”; $\alpha = .916$) were used to assess the commitment to the protection for the welfare of all people and the preservation of nature as motivational goals. The two scales *Benevolence-Dependability* (e.g., “It is important to her to be loyal to those who are close to her”; $\alpha = .707$) and *Benevolence-Caring* (e.g., “It’s very important to her to help the people dear to her”; $\alpha = .877$) were used to assess the welfare of ingroup members as a motivational goal.

We also measured the other basic individual values developed by Schwartz et al. (2012) to further specify the value system and the motivational goals associated with the utopian impulse. These values were *Hedonism* ($\alpha = .865$), *Achievement* ($\alpha = .763$), *Power-Resources* ($\alpha = .856$), *Power-Dominance* ($\alpha = .763$), *Face* ($\alpha = .675$), *Security-Personal* ($\alpha = .773$), *Security-Societal* ($\alpha = .771$), *Tradition* ($\alpha = .893$), *Conformity-Rules* ($\alpha = .868$), *Conformity-Interpersonal* ($\alpha = .827$), and *Humility* ($\alpha = .600$).

According to the gender they entered (male or female), participants read descriptions of a female or male person, and indicated whether the person in the description is like them. The responses were anchored on 6-point scales from 1 (*not at all like me*) to 6 (*very much like me*).

Study 2d – Measures

In this study, participants completed the Utopian Impulse Scale along with 16 scales/subscales.

Utopian Impulse. Same as Study 2a ($\alpha = .775, .865, .910$, and $.835$, for F1, F2, F3, and F4, respectively, in this study). For informative purposes, we also reported correlations with the general utopian impulse factor ($\alpha = .941$).

Green Scale. The 6-item *Green Scale* (Haws, Winterich, & Naylor, 2014) was administered to assess the tendency to express the value of environmental protection through one's purchases and

consumption behaviors (e.g., “I would describe myself as environmentally responsible”). The responses were anchored on 7-point scales from 1 (*strongly disagree*) to 7 (*strongly agree*; $\alpha = .933$).

EMCB. Five 2-item subscales—*Eco-Buy* (e.g., “I have switched products for environmental reasons”), *Eco-Boycott* (e.g., “I do not buy household products that harm the environment”), *Recycle* (e.g., “Whenever possible, I buy products packaged in reusable or recyclable containers”), *CSRBoycott* (e.g., “I do not buy products from companies that I know use sweatshop labor, child labor, or other poor working conditions”), and *Pay More* (e.g., “I have paid more for socially responsible products when there is a cheaper alternative”)—were employed to measure *Ethically-Minded Consumer Behavior* (EMCB; Sudbury-Riley & Kohlbacher, 2014), which concerns various consumption choices pertaining to environmental issues and corporate social responsibility. The responses were anchored on 7-point scales from 1 (*strongly disagree*) to 7 (*strongly agree*; $\alpha = .816, .807, .782, .784$, and $.900$, for eco-buy, eco-boycott, recycle, CSRBoycott, and pay more, respectively).

FMI. The 25-item *Fair Market Ideology* scale (FMI; Jost, Blount, Pfeffer, & Hunyady, 2003) was used to measure the tendency to view market-based processes and outcomes as efficient, inherently fair, legitimate, and just. The responses for the first 15 items (e.g., “The free market system is a fair system”) were anchored on 7-point scales from 1 (*strongly disagree*) to 7 (*strongly agree*) and the responses for the last 10 items (e.g., “The fact that scarce goods tend to cost more in a free market system is...”) were anchored on 7-point scales from 1 (*completely unfair*) to 7 (*completely fair*; $\alpha = .908$).

Meritocracy. The 4-item *Meritocracy Scale* (Horberg, Kraus, & Keltner, 2013) was employed to measure participants’ general beliefs about the value of meritocracy in society (e.g., “It is okay

for some people to have better lives if they earned it”). The responses were anchored on 7-point scales from 1 (*strongly disagree*) to 7 (*strongly agree*; $\alpha = .766$).

Egalitarianism. The 4-item *Egalitarianism Scale* (Horberg et al., 2013) was used to measure participants’ general beliefs about the value of egalitarianism in society (e.g., “It is important to treat all individuals as equals, no matter who they are”). The responses were anchored on 7-point scales from 1 (*strongly disagree*) to 7 (*strongly agree*; $\alpha = .631$).

AICS. To measure individual differences in terms of activism, two 4-item subscales of the *Activist Identity and Commitment Scale* (AICS; Klar & Kasser, 2009) were employed. The *Activist Identity* subscale assessed people’s self-identification with the activist role (e.g., “Being an activist is central to who I am”), and the *Activist Commitment* subscale measured people’s motivation to engage in activist activities (e.g., “I go out of my way to engage in activism”). The responses were anchored on 7-point scales from 1 (*strongly disagree*) to 7 (*strongly agree*; $\alpha = .972$ and $.963$, for activist identity and activist commitment, respectively).

AHO. The 4-item scale *Attitudes toward Helping Others* (AHO; Webb, Green, & Brashear, 2000) assessed evaluations regarding helping or assisting other people (e.g., “Helping troubled people with their problems is very important to me”). The responses were anchored on 7-point scales from 1 (*strongly disagree*) to 7 (*strongly agree*; $\alpha = .865$).

ACO. In addition to the previous scale, the 5-item scale *Attitudes toward Helping Charitable Organizations* (ACO; Webb et al., 2000) assessed evaluations with regard to nonprofit organizations that help individuals (e.g., “Charity organizations perform a useful function for society”). The responses were anchored on 7-point scales from 1 (*strongly disagree*) to 7 (*strongly agree*; $\alpha = .855$).

MVS. Three 5-item subscales were employed to assess *Material Values* defined as the importance ascribed to the ownership and acquisition of material goods in achieving major life goals or desired states (Richins, 2004): *Materialism – Success* (e.g., “I admire people who own expensive homes, cars, and clothes”), *Materialism – Centrality* (e.g., “Buying things gives me a lot of pleasure”), and *Materialism – Happiness* (e.g., “I’d be happier if I could afford to buy more things”). The responses were anchored on 7-point scales from 1 (*strongly disagree*) to 7 (*strongly agree*; $\alpha = .875, .768, \text{ and } .827$, for success, centrality and happiness, respectively).

Study 2e – Measures

In this study, participants completed the Utopian Impulse Scale along with 13 scales/subscales.

Utopian impulse. Same as Study 2a ($\alpha = .827, .845, .888, \text{ and } .868$, for F1, F2, F3, and F4, respectively, in this study). For informative purposes, we also reported correlations with the general utopian impulse factor ($\alpha = .940$).

RWA. The 11-item version of the *Right-Wing Authoritarianism Scale* (RWA; Altemeyer, 1988; Crawford, Brandt, Inbar, & Mallinas, 2016) was administered to assess the tendencies to obey authorities perceived as legitimate and to aggress against those who would disobey these authorities (e.g., “Our country desperately needs a mighty leader who will do what has to be done to destroy the radical new ways and sinfulness that are ruining us”). The responses were anchored on 7-point scales from 1 (*strongly disagree*) to 7 (*strongly agree*; $\alpha = .927$).

SDO. A series of four 2-item scales comprising the short version of *Social Dominance Orientation* (SDO; Ho et al., 2015) was administered to assess the pro-trait (e.g., “An ideal society requires some groups to be on top and others to be on the bottom”) and con-trait indices

(e.g., “No one group should dominate in society”) of *SDO-Dominance* (SDO-D) which constitutes a preference for systems of group-based dominance; along with the pro-trait (e.g., “Group equality should not be our primary goal”) and con-trait indices (e.g., “We should do what we can to equalize conditions for different groups”) of *SDO-anti-Egalitarianism* (SDO-E) which constitutes a preference for systems of group-based inequality. The responses were anchored on 7-point scales from 1 (*strongly disagree*) to 7 (*strongly agree*; $\alpha = .878, .708, .792$, and $.773$, for SDO-D pro-trait, SDO-D con-trait, SDO-E pro-trait, and SDO-E con-trait, respectively).

Humanitarianism-Egalitarianism. The 10-item *Humanitarianism-Egalitarianism Scale* (Katz & Hass, 1988) was employed to assess endorsement of the democratic ideals of equality, social justice, and concern for the well-being of other people (e.g., “A good society is one in which people feel responsible for one another”). The responses were anchored on 7-point scales from 1 (*strongly disagree*) to 7 (*strongly agree*; $\alpha = .897$).

Protestant Ethic. The 10-item *Protestant Ethic Scale* (Katz & Hass, 1988) was employed to assess individualistic ideology, devotion to work, and discipline (e.g., “If people work hard enough they are likely to make a good life for themselves”). The responses were anchored on 7-point scales from 1 (*strongly disagree*) to 7 (*strongly agree*; $\alpha = .857$).

ESJ. The 17-item *Economic System Justification Scale* (ESJ; Jost & Thompson, 2000) was administered to measure people’s ideological tendency to legitimize economic inequality (e.g., “Laws of nature are responsible for differences in wealth in society”). The responses were anchored on 7-point scales from 1 (*strongly disagree*) to 7 (*strongly agree*; $\alpha = .905$).

HHIS. *Household Income Satisfaction* (HHIS; e.g., Joshanloo, 2018) was reported on a single-item scale that measures income satisfaction (“Which one of these phrases comes closest to your own feelings about your household's income these days?”). The responses were anchored on a

4-point scale (1 = *finding it very difficult on present income*; 2 = *finding it difficult on present income*; 3 = *getting by on present income*; 4 = *living comfortably on present income*).

Political Orientation. *Political Self-identification* (Graham et al., 2009) was reported on a single-item scale (“Please indicate on the scale below your political standing”). The responses were anchored on a 7-point scale from 1 (*extremely liberal*) to 7 (*extremely conservative*).

BJW. A 6-item subscale assessing *General Belief in a Just World* (e.g., “I think basically the world is a just place”) and a 7-item subscale assessing *Personal Belief in a Just World* (e.g., “I am usually treated fairly”) were administered to measure *Beliefs in a Just World* (BJW; Dalbert, 1999) according to which the world is generally a just place and oneself is treated fairly. The responses were anchored on 7-point scales from 1 (*strongly disagree*) to 7 (*strongly agree*; $\alpha = .895$ and $\alpha = .942$ for general and personal BJW respectively).

DOG. The 20-item *Dogmatism Scale* (DOG; Altemeyer, 2002) was used to measure unjustified certainty highly resistant to change (e.g., “If you are “open-minded” about the most important things in life, you will probably reach the wrong conclusions”). The responses were anchored on 7-point scales from 1 (*strongly disagree*) to 7 (*strongly agree*; $\alpha = .922$).

Distinguishing the Utopian Impulse from Highly Correlated Constructs

To show that the utopian impulse is distinct from the constructs with which any of the utopian impulse factors had correlations of .50 or higher, we performed a series of confirmatory factor analyses (e.g., Seuntjens, Zeelenberg, Van de Ven, & Breugelmans, 2015).

First, using the *anova* function in R, we tested whether a model in which a highly correlated construct is treated as the fifth factor of the Utopian Impulse Scale has a better fit compared to when this construct is combined with a utopian impulse factor with which it is

highly correlated into the same factor. If the utopian impulse is different from other highly related constructs, then the models in which such constructs are treated as the fifth factor of the Utopian Impulse Scale should have a better fit than models in which they are combined with the highly correlated utopian impulse factors. The analyses showed that the five-factor models had a better fit than the four-factor models in all cases, all $ps < .001$.

Second, we tested whether a model in which one factor from the Utopian Impulse Scale and a highly correlated construct are treated as two separate factors has a better fit compared to a model which has only one factor that combines the utopian impulse factor and the competing construct. If the utopian impulse is different from other highly related constructs, then the models in which a utopian impulse factor and the competing construct are treated as separate factors should have a better fit than models in which the two are combined into a single factor. The analyses showed that the two-factor models had a better fit than the one factor models in all cases, all $ps \leq .014$.

Overall, these analyses indicate that the four utopian impulse factors are distinct from the other constructs to which they were highly correlated.

Expanded Discussion

As expected, Study 2a showed that the four factors comprising the Utopian Impulse Scale were consistently significantly positively correlated with openness to experience, approach temperament, and sensation seeking. These results supported the positive motivational orientation toward imagination and action that lies at the core of our conceptualization of the utopian impulse. Along this line of argument, every factor (but F2) was also positively correlated with positive affectivity, and none of them were significantly correlated with negative

affectivity. Additionally, we found a small but significant positive correlation between two factors (F2 and F3) and avoidance temperament, which may be due to the association between the utopian impulse and the feeling that “something is missing” (Bloch, 1988). Moreover, a positive correlation between two factors (F3 and F4) and agreeableness denotes the general concern for others’ well-being associated with the utopian impulse.

As expected, Study 2b showed that the four factors comprising the utopian impulse were consistently significantly correlated with scales associated with fantasy and other-orientation (empathic concern, perspective taking, and group affiliation), and with analytical thinking and utopianism (rational engagement, rational ability, utopianism, and anti-utopianism). In this perspective, Study 2c found that every factor comprising the Utopian Impulse Scale was positively significantly correlated with hope, which is conceptually related to the utopian impulse.

In line with expectations, Study 2c also indicated that values associated with openness to change (self-directed thought and stimulation) and self-transcendence (universalism and benevolence) underpin the utopian impulse. These results are consistent with the positive correlations with openness to experience (Study 2a) and with empathic concern and perspective taking (Study 2b). The strong positive association between the utopian impulse and values underpinning openness to change was also complemented by the absence of significant positive correlation between the utopian impulse and societal-security, tradition, or conformity, which are values whose related motivational goals constrain freedom and limit social change.

Unexpectedly, however, self-directed action was positively correlated with every utopian impulse factor (including the general factor) except for F1. This may be explained by the specificity of this factor. Indeed, F1 is the only factor significantly positively correlated with

grandiose fantasies and narcissism (Study 2b), and with values expressing both control of material resources and dominance over people (power resources and power dominance). As such, F1 may thus not be very well-aligned with valuing the freedom to determine one's own actions that is conveyed by self-directed action. More generally, this reveals that F1 may be conceptually broader and more complex than the other factors of the Utopian Impulse Scale.

In Study 2c, the four factors of the Utopian Impulse Scale were also correlated with values focusing on personal outcomes and self-enhancement such as hedonism (sensory pleasure and gratification) and achievement (personal success by social standards), as well as with values focusing on social outcomes by renouncing self-interest (humility) and avoiding harm to others (interpersonal conformity). Reciprocally, various factors of the Utopian Impulse Scale were positively correlated with face and personal security, which indicates that people higher (vs. lower) in the utopian impulse may, to some degree, be more motivated to avoid threat or harm to one's self.

As expected, in Study 2d, every factor comprising the Utopian Impulse Scale was significantly positively correlated with scales measuring altruistic attitudes (attitudes toward helping others and attitudes toward charitable organizations), activism (activist identity and activist commitment), and ethical and socially responsible consumption (green consumption values, ethically minded consumer behavior). Remarkably, the latter result suggests, as further supported by the general absence of significant negative correlations with material values (especially material success and material happiness), that the utopian impulse is not associated with a rejection of every form of product consumption but rather with a strong support for socially conscious consumption practices that could lead to positive social transformation (e.g., fairly traded or green products). Consistently, the four factors underpinning the utopian impulse

were significantly negatively correlated with support for the free-market system (fair market ideology and meritocracy), and positively correlated with egalitarian beliefs.

As expected, this tendency was also observed in Study 2e, where correlation analyses showed that the four utopian impulse factors were consistently significantly positively correlated with scales measuring egalitarianism (humanitarianism-egalitarianism, and social dominance orientations con-trait dominance and con-trait anti-egalitarianism), and negatively correlated with scales measuring the tendency to legitimize economic and social inequality (economic system justification, and social dominance orientations pro-trait dominance and pro-trait anti-egalitarianism) and a conservative political orientation. These results are further complemented by the negative correlations of some factors with right-wing authoritarianism and Protestant ethic.

Studies 3a-3d: Incremental Predictive Validity

Exclusion Criteria

In each study participants received ten instructed-response items (Meade & Craig, 2012). At the end, all participants had to answer a seriousness check (Aust et al., 2013). Only participants who passed all the instructed-response items and the seriousness check were included in statistical analyses.

Determining Sample Size

Given that Studies 3a-3d were pre-registered, a comprehensive description of the rationale behind sample size is available in the pre-registration document via the following link:

https://osf.io/ztj2f/?view_only=f4c89450ef6143c1a5bbb1ce1c9688ae

Measures – Behavioral and Attitudinal Items and Their Definitions

These constructs comprised nine self-reported behaviors and ten self-reported attitudes. Their items, definitions, and supporting references are reported in Table S3 below.

Table S3

Definition and Theoretical Justification of the Self-Reported Behavioral and Attitudinal Variables Used in Studies 3a-3d.

Constructs	Items	Definition and theoretical justification
Collective change ^b	<ul style="list-style-type: none"> - Have you ever argued that the economic status quo is endangering our society and/or planet? - Have you ever said that our current rules and/or laws contribute to reproducing social and economic inequalities? 	This construct measures how frequently people express a critical point of view about economic and social status quo. This construct exemplifies the critical dimension at the core of utopian thinking as a rejection of system justification (e.g., Badaan, Jost, Fernando, & Kasima, 2020; Extinction Rebellion, 2019; Fernando et al., 2018; Jost, 2019).
Collective imagination ^b	<ul style="list-style-type: none"> - Have you ever argued that we need more people who think about what a better society might look like? - Have you ever said that our society could be improved if everyone tried to think about new ways of living together? 	This construct measures how frequently people express the need for collective imagination, which is acknowledged as a source of societal transformation (e.g., Jovchelovitch & Hawlina, 2018; Maslow, 1961; Zittoun & Gillespie, 2015).
Individual change ^b	<ul style="list-style-type: none"> - Have you ever left your comfort zone to take action for change and support a cause you care about? - Have you ever changed things in your life to focus more on what you believe could transform the world for the better? 	This construct measures how frequently people have been willing to change their habits to contribute to social transformation. This has been illustrated in the literature by the need for radical changes in terms of food and energy consumption, for instance (e.g., Judge & Wilson, 2015; Martin, Maris, & Simberloff, 2016; Springmann et al., 2018).
Knowledge ^b	<ul style="list-style-type: none"> - Have you ever bookmarked a website or subscribed to a newsletter or a mailing list that covers alternative practices aimed at tackling some of the issues humanity is currently facing? - Have you ever bought magazines, reports, or books that propose alternative views on how to tackle pressing societal problems? 	This construct measures how frequently people collect information to learn about past or current concrete utopian initiatives and solutions to economic, social, and environmental problems that could transform the future (e.g., Bennett et al., 2016; Winter, 2008).

	<ul style="list-style-type: none"> - Have you ever informed yourself about current initiatives that could be rolled out to improve our society in the future by satisfying the most critical needs of people? - Have you ever looked up historical initiatives that led to radical societal transformations? - Have you ever informed yourself about current initiatives that could be rolled out to bring about greater equality between social groups in the future? 	
Localism ^b	<ul style="list-style-type: none"> - Have you ever avoided buying products in chains in order to support independent local shops? - Have you ever gone out of your way to avoid buying products from a large retail grocery chain? - Have you ever supported small producers by buying local products? - Have you ever bought locally grown products and brands? - Have you ever bought books from independent and socially conscious publishers? 	This construct measures how frequently people buy products from local and independent producers or stores. It illustrates utopian aspirations associated with the “re-localization” of the economy as a source of economic and social transformation toward more sustainable consumption (e.g., Bossy, 2014; Latouche, 2009; Longhurst et al., 2016; Peattie & Samuel, 2018).
Public ^b	<ul style="list-style-type: none"> - Have you ever publicly expressed your views about our greatest societal concerns (e.g., via a website, blog, chat room, newspaper, radio, or in some other way)? - Have you ever displayed and/or worn badges/stickers/signs that promote a more just and equitable world? - Have you ever participated in protests against current problems related to environment, economy, or social life? 	This construct measures how frequently people publicly advocate some political cause and engage in actions associated with economic, social, and political transformation toward a more sustainable society (e.g., Corning & Myers, 2002, Klar & Kasser, 2009).
Research ^b	<ul style="list-style-type: none"> - Before purchasing a product, have you ever investigated how the company producing it treats its employees? 	This construct measures how frequently people collect information about the economic, social, and environmental conditions of production and the

	<ul style="list-style-type: none"> - Before buying products or services from a company, have you ever researched whether this company negatively impacts local communities? - Have you ever examined the consequences that particular brands have for the wider society or the environment? - Have you ever checked whether different products or services you are using could create positive change in the world? 	<p>implications of the consumption associated to products and services. This construct exemplifies utopian aspirations associated with socially conscious consumption as a source of economic, social, and environmental transformation (e.g., Bossy, 2014; Litvinoff & Madeley, 2015; Roberts, 1993).</p>
Sacrifice ^b	<ul style="list-style-type: none"> - Have you ever done something that is for the benefit of society or the planet even if it disadvantaged you in some way (e.g., in terms of income, career opportunities, life quality, personal relationships, etc.)? - When applying for a job position or deciding what to study, have you ever prioritized whether it can help you change the world, rather than make you more money? 	<p>This construct measures how frequently people undertake personally costly actions for present and future public good. It exemplifies the altruistic orientation that motivates utopian aspirations and actions in favor of planetary health (e.g., Bain & Bongiorno, 2020; Garforth, 2017; Prescott & Logan, 2018).</p>
Tolerance ^b	<ul style="list-style-type: none"> - Have you ever argued that we will never solve the most pressing issues that the world is facing if we do not understand everybody's point of view? - Have you ever argued that we will never improve our society if we do not listen to everybody, even people with whom we disagree? - Have you ever argued that we cannot neglect other people's point of view because we disagree with their views about what a better society would look like? 	<p>This construct measures how frequently people argue in favor of democratic tolerance, which is a key ingredient to adopt solutions for the betterment of society (e.g., Albritton, 2012; Frantzeskaki et al., 2016). This construct illustrates the universalism values that are related to the utopian impulse (e.g., Goodwin & Taylor, 2009; Jameson, 2005; Levitas, 1990, 2011).</p>
Commitment ^a	<ul style="list-style-type: none"> - Have you ever thought that, whatever their outcome, it is key to take part in protests and initiatives that aim to change our society? 	<p>This construct measures how frequently people have thoughts expressing a commitment to initiatives or protests in favor of social change and against anti-social or unsustainable institutional decisions. This construct expresses the association between collective action and</p>

	<ul style="list-style-type: none"> - Have you ever thought that we should be ready to resist and defend the planet against the government? - Have you ever thought that we should never miss an opportunity to protest against and resist any organization that prioritizes profit over people and the planet? 	sustainability (e.g., Klein, 2014; Rees & Bamberg, 2014).
Contempt ^a	<ul style="list-style-type: none"> - Have you ever been angry at people who ignore the voices of those who are disadvantaged? - Have you ever been infuriated by economic actions that could further undermine social cohesion? 	This construct measures how frequently people experience anger at those who show contempt for others or the society. This construct exemplifies anger as a source of motivating action for social change (e.g., Gopaldas, 2014; Thomas, McGarty, & Mavor, 2009).
Degrowth ^a	<ul style="list-style-type: none"> - Have you ever thought that, instead of focusing on endless economic growth, we should focus on our personal growth to create a better world? - Have you ever thought that our current obsession with economic growth is detrimental for people and the planet? - Have you ever felt that we will never change the world if we do not abandon our illusions about economic growth as the primary purpose of our society? 	This construct measures how frequently people think that we should reduce our economic production and consumption to transform society and favor self-actualization and planetary health (e.g., Kallis & March, 2015; Latouche, 2009; Longhurst et al., 2016; Prescott & Logan, 2018).
Empowerment ^a	<ul style="list-style-type: none"> - Have you ever felt that we have to take action to solve global challenges rather than wait for the governments or people in positions of power to do it? - Have you ever thought that the world will never solve important global problems if it does not give people the opportunity to be imaginative and creative? - Have you ever thought that it is our duty as human beings to empower ourselves and change the world 	This construct measures how frequently people have felt or thought that bottom-up implementations and solutions are sources of societal transformation (e.g., Amundsen, Hovelsrud, Aall, Karlsson, & Westskog, 2018; Bennett et al., 2016).

Immersion ^a	<p>without waiting for people in positions of authority to do it?</p> <ul style="list-style-type: none"> - Have you ever been enraptured by programs or documentaries that explore solutions to some of the critical challenges that our society needs to overcome? - Have you ever been engrossed in literature on social and economic ways of living that could tackle some of the most alarming issues of our time? - Have you ever been absorbed by radio programs or podcasts about social and economic initiatives that could lead to societal change? - Have you ever been captivated by events, meetings, or conferences discussing propositions that could help solve societal or environmental challenges? - Have you ever been immersed in exhibitions displaying creative and innovative propositions that could make our future society flourish? 	<p>This construct measures how frequently people experience feelings of immersion when they learn about solutions to economic, social, and environmental issues. It illustrates the fantasy and the experience of flow that are associated with the utopian impulse (e.g., Maslow, 1961; Nestor, 2016).</p>
Life improvement ^a	<ul style="list-style-type: none"> - Have you ever thought that your living conditions would be better in a more just society? - Have you ever thought that you would like to change things in our current economic system to have a better life? - Have you ever thought that our current society should be transformed because it does not provide everyone with an equal chance of building the life of their choice? - Have you ever thought that, as long as consumerism is driving our society, people will not be able to reach their full potential? 	<p>This construct measures how frequently people have thoughts related to social justice and societal transformation to have a better life (e.g., Cooper, 2014; Wright, 2010, 2013).</p>

Personal autonomy ^a	<ul style="list-style-type: none"> - Have you ever thought that our current society should be improved to guarantee everyone's personal autonomy? - Have you ever wished to live in a different society where personal autonomy is facilitated? 	This construct measures how frequently people think that everyone should have the right to govern themselves or to organize their own activities, which is associated with the concrete utopia of human rights (e.g., Habermas, 2010; Winter, 2008).
Perspective taking ^a	<ul style="list-style-type: none"> - Have you ever imagined yourself in the shoes of those who are less privileged than you to understand their lived experience? - Have you ever been interested in a social cause that intends to defend or protect someone who is in a difficult or vulnerable position? - Have you ever been touched by stories and/or pictures of kids who are faced with economic hardship? 	<p>Perspective taking measures how frequently people experience empathy toward others in need, which is associated with the utopian impulse (e.g., Nestor, 2016).</p> <p>This construct exemplifies empathy as a source of motivation toward action for social change (e.g., Thomas et al., 2009).</p>
Refugees ^a	<ul style="list-style-type: none"> - Have you ever been disturbed by refugees' situation? - Have you ever been upset by what refugees are going through? 	This construct measures how frequently people experience empathy toward refugees, whose situation is associated with the concrete utopia of human rights (e.g., Habermas, 2010; Winter, 2008).
Urgency ^a	<ul style="list-style-type: none"> - Have you ever thought that we need to undertake urgent action to counter some of the biggest global issues or it will be too late? - Have you ever thought that you will no longer enjoy the beauty of the planet if we do not take action now to radically change our consumerist society? 	This construct measures how frequently people think that we have to adopt immediate and radical societal transformations in order to live in a better society (e.g., Bain & Bongiorno, 2020; Extinction Rebellion, 2019; Latouche, 2009).

Note. Constructs that contain superscript ^b indicate behavioral variables, and constructs that contain superscript ^a indicate attitudinal variables.

Competing scales

In Studies 3a-d, we used all scales (or subscales of the scales that consist of multiple subscales) that were highly correlated ($r \geq .50$) with the Utopian Impulse Scale in Studies 2a-2e. In particular, in Studies 3a and 3c (see Tables 5 & 7), we used the scale measuring *Utopianism* (Fernando et al., 2018); the *Empathic Concern* subscale of the *Interpersonal Reactivity Index* (Davis, 1983); the *Green Scale* (Haws et al., 2014); all subscales of the *Ethically Minded Consumer Behavior Scale* (Sudbury-Riley & Kohlbacher, 2016); the *Egalitarianism Scale* (Horberg et al., 2013); and the *Self-directed Thought*, *Universalism-Concern*, *Universalism-Nature*, and *Universalism-Tolerance* scales of the *Portrait Values Questionnaire* (Schwartz et al., 2012). In Studies 3b and 3d (see Tables 6 & 8), we used the *Attitude toward Helping Others Scale* (Webb et al., 2000); all the subscales of the *Activist Identity and Commitment Scale* (Klar & Kasser, 2009); the *Humanitarianism-Egalitarianism Scale* (Katz & Hass, 1988); the *SDO-Egalitarianism Scale* pro- and con-trait indices (Ho et al., 2015); and the *Economic System Justification Scale* (Jost & Thompson, 2000).

Study 4: Degrowth vs. Investment

Exclusion Criteria

We used five check items. These involved two instructed-response items (Meade & Craig, 2012); one understanding check item where participants in both conditions had to identify—among six different options (degrowth/investment, advertising, physics, biology, art, and drug addiction)—what the text they read was about; a seriousness check (Aust et al., 2013); and a captcha item at the end to stop any bots from completing the survey. Only participants who passed all the checks were included in statistical analyses.

Determining Sample Size

Considering that, in Study 4, we were testing a behavioral variable, we assumed that effect sizes may be small given that there may be a large variability in terms of whether and how much people are willing to write down their ideas. To determine the sample size to probe the two hypotheses, we therefore decided to recruit the maximum number of participants we could afford to test, which was roughly 960. We estimated that, in the worst-case scenario, up to 20% participants would need to be excluded from statistical analyses after applying the exclusion criteria, which could lead to the minimum sample size of 768. We then performed a sensitivity power analysis (Faul et al., 2009) to determine the smallest interaction effect (*Cohen's f^2*) that could be detected with this sample size, assuming the power of .95 and significance level of .05. The analysis indicated that the effect was 0.017, which can be considered a small effect size, given that the cut-off point for small *Cohen's f^2* is 0.02 (Cohen, 1988). When the sensitivity power analysis was conducted on the actual sample included in statistical analyses ($N=847$), it

was revealed that our study was sufficiently powered to detect a small interaction effect (f^2) of 0.015.

References

- Albritton, R. (2012). A practical utopia for the twenty-first century. In P. Vieira & M. Marder (Eds.), *Existential utopia: New perspectives on utopian thought* (pp. 141–156). New York, NY: Continuum.
- Altemeyer, B. (1988). *Enemies of freedom: Understanding right-wing authoritarianism*. San Francisco, CA: Jossey-Bass.
- Altemeyer, B. (2002). Dogmatic behavior among students: Testing a new measure of dogmatism. *Journal of Social Psychology, 142*, 713–721.
- Amundsen, H., Hovelsrud, G. K., Aall, C., Karlsson, M., & Westskog, H. (2018). Local governments as drivers for societal transformation: Towards the 1.5 °C ambition. *Current Opinion in Environmental Sustainability, 31*, 23–29.
- Aust, F., Diedenhofen, B., Ullrich, S., & Musch, J. (2013). Seriousness checks are useful to improve data validity in online research. *Behavior Research Methods, 45*, 527–535.
- Badaan, V., Jost, J. T., Fernando, J., & Kashima, Y. (2020). Imagining better societies: A social psychological framework for the study of utopian thinking and collective action. *Social and Personality Psychology Compass, 14*(4), e12525.
- Bain, P. G., & Bongiorno, R. (2020). It's not too late to do the right thing: Moral motivations for climate change action. *Wiley Interdisciplinary Reviews: Climate Change, 11*.
<https://doi.org/10.1002/wcc.615>
- Benjamini, Y., & Hochberg, Y. (1995). Controlling the false discovery rate: A practical and powerful approach to multiple testing. *Journal of the Royal Statistical Society: Series B (Methodological), 57*, 289–300.

- Bennett, E. M., Solan, M., Biggs, R., McPhearson, T., Norström, A. V., Olsson, P., ... Xu, J. (2016). Bright spots: Seeds of a good Anthropocene. *Frontiers in Ecology and the Environment*, 14, 441–448.
- Birnbaum, G. E., Mikulincer, M., Szepeswol, O., Shaver, P. R., & Mizrahi, M. (2014). When sex goes wrong: A behavioral systems perspective on individual differences in sexual attitudes, motives, feelings, and behaviors. *Journal of Personality and Social Psychology*, 106, 822-842.
- Bloch, E. (1988). Something's missing: A discussion between Ernst Bloch and Theodor W. Adorno on the contradictions of utopian longing. In E. Bloch, *The Utopian Function of Art and Literature: Selected Essays* (pp. 1-17). Cambridge, MA: MIT Press.
- Bossy, S. (2014). The utopias of political consumerism: The search of alternatives to mass consumption. *Journal of Consumer Culture*, 14, 179–198.
- Chen, F. F. (2007). Sensitivity of goodness of fit indexes to lack of measurement invariance. *Structural Equation Modeling: A Multidisciplinary Journal*, 14, 464-504.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Earlbaum Associates.
- Cohen, T. R., Wolf, S. T., Panter, A. T., & Insko, C. A. (2011). Introducing the GASP scale: a new measure of guilt and shame proneness. *Journal of Personality and Social Psychology*, 100, 947-966.
- Comrey, A. L., & Lee, H. B. (1992). *A first course in factor analysis*. Hillsdale, NJ: Erlbaum.
- Cooper, D. (2014). *Everyday utopias: The conceptual life of promising spaces*. Durham, NC: Duke University Press.

- Corning, A. F., & Myers, D. J. (2002). Individual orientation toward engagement in social action. *Political Psychology*, 23, 703–729.
- Costello, A. B., & Osborne, J. W. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment, Research & Evaluation*, 10, 1-9.
- Crawford, J. T., Brandt, M. J., Inbar, Y., & Mallinas, S. R. (2016). Right-wing authoritarianism predicts prejudice equally toward “gay men and lesbians” and “homosexuals”. *Journal of Personality and Social Psychology*, 111, e31–e45.
- Dalbert, C. (1999). The world is more just for me than generally: About the personal belief in a just world scale’s validity. *Social Justice Research*, 12, 79–98.
- Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology*, 44, 113–126.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49, 71–75.
- Elliot, A. J., & Thrash, T. M. (2010). Approach and avoidance temperament as basic dimensions of personality: Approach and avoidance temperament. *Journal of Personality*, 78, 865–906.
- Everitt, B. S. (1975). Multivariate analysis: The need for data, and other problems. *British Journal of Psychiatry*, 126, 237-240.
- Extinction Rebellion. (2019). *This is not a drill: An extinction rebellion handbook*. London, UK: Penguin.

- Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G* Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41, 1149-1160.
- Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G* Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39, 175–191.
- Fernando, J. W., Burden, N., Ferguson, A., O'Brien, L. V., Judge, M., & Kashima, Y. (2018). Functions of utopia: How utopian thinking motivates societal engagement. *Personality and Social Psychology Bulletin*, 44, 779–792.
- Frantzeskaki, N., Dumitru, A., Anguelovski, I., Avelino, F., Bach, M., Best, B., ... Rauschmayer, F. (2016). Elucidating the changing roles of civil society in urban sustainability transitions. *Current Opinion in Environmental Sustainability*, 22, 41–50.
- Garforth, L. (2017). *Green utopias: Environmental hope before and after nature*. Cambridge, UK ; Malden, MA: Polity Press.
- Glover, N., Miller, J. D., Lynam, D. R., Crego, C., & Widiger, T. A. (2012). The five-factor narcissism inventory: A five-factor measure of narcissistic personality traits. *Journal of Personality Assessment*, 94, 500–512.
- Goodwin, B., & Taylor, K. (2009). *The politics of utopia: A study in theory and practice*. Oxford, UK: Peter Lang.
- Gopaldas, A. (2014). Marketplace sentiments. *Journal of Consumer Research*, 41, 995–1014.
- Gorsuch, R. L. (1983). *Factor analysis* (2nd Ed.). Hillsdale, NJ: Erlbaum.
- Gosling, S. D., Rentfrow, P. J., & Swann, W. B. (2003). A very brief measure of the Big-Five personality domains. *Journal of Research in Personality*, 37, 504–528.

- Graham, J., Haidt, J., & Nosek, B. A. (2009). Liberals and conservatives rely on different sets of moral foundations. *Journal of Personality and Social Psychology*, 96, 1029–1046.
- Habermas, J. (2010). The concept of human dignity and the realistic utopia of human rights. *Metaphilosophy*, 41, 464–480.
- Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.E. (2010). *Multivariate Data Analysis* (7th Ed.). Upper Saddle River, NJ: Prentice Hall.
- Haws, K. L., Winterich, K. P., & Naylor, R. W. (2014). Seeing the world through GREEN-tinted glasses: Green consumption values and responses to environmentally friendly products. *Journal of Consumer Psychology*, 24, 336–354.
- Ho, A. K., Sidanius, J., Kteily, N., Sheehy-Skeffington, J., Pratto, F., Henkel, K. E., ... & Stewart, A. L. (2015). The nature of social dominance orientation: Theorizing and measuring preferences for intergroup inequality using the new SDO₇ scale. *Journal of Personality and Social Psychology*, 109, 1003–1028.
- Horberg, E. J., Kraus, M. W., & Keltner, D. (2013). Pride displays communicate self-interest and support for meritocracy. *Journal of Personality and Social Psychology*, 105, 24–37.
- Hoyle, R. H., Stephenson, M. T., Palmgreen, P., Lorch, E. P., & Donohew, R. L. (2002). Reliability and validity of a brief measure of sensation seeking. *Personality and Individual Differences*, 32, 401–414.
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: a Multidisciplinary Journal*, 6, 1–55.

- Jackson, D. L., Gillaspay Jr, J. A., & Purc-Stephenson, R. (2009). Reporting practices in confirmatory factor analysis: An overview and some recommendations. *Psychological Methods, 14*, 6-23.
- Jameson, F. (2005). *Archaeologies of the future. The desire called utopia and other science fictions*. New York, USA: Verso.
- Jones, D. N., & Paulhus, D. L. (2014). Introducing the short dark triad (SD3): A brief measure of dark personality traits. *Assessment, 21*, 28–41.
- Joshanloo, M. (2018). Income satisfaction is less predictive of life satisfaction in individuals who believe their lives have meaning or purpose: A 94-nation study. *Personality and Individual Differences, 129*, 92–94.
- Jost, J. T. (2019). A quarter century of system justification theory: Questions, answers, criticisms, and societal applications. *British Journal of Social Psychology, 58*, 263–314.
- Jost, J. T., & Thompson, E. P. (2000). Group-based dominance and opposition to equality as independent predictors of self-esteem, ethnocentrism, and social policy attitudes among African Americans and European Americans. *Journal of Experimental Social Psychology, 36*, 209–232.
- Jost, J. T., Blount, S., Pfeffer, J., & Hunyady, G. (2003). Fair market ideology: Its cognitive-motivational underpinnings. *Research in Organizational Behavior, 25*, 53–91.
- Jovchelovitch, S., & Hawlina, H. (2018). Utopias and world-making: Time, transformation and the collective imagination. In C. de Saint-Laurent, S. Obradović, & K. R. Carriere (Eds.), *Imagining collective futures* (pp. 129–151). London, UK: Palgrave Macmillan.
- Judge, M., & Wilson, M. S. (2015). Vegetarian utopias: Visions of dietary patterns in future societies and support for social change. *Futures, 71*, 57–69.

- Kallis, G., & March, H. (2015). Imaginaries of hope: The utopianism of degrowth. *Annals of the Association of American Geographers*, 105, 360–368.
- Katz, I., & Hass, R. G. (1988). Racial ambivalence and American value conflict: Correlational and priming studies of dual cognitive structures. *Journal of Personality and Social Psychology*, 55, 893–905.
- Klar, M., & Kasser, T. (2009). Some benefits of being an activist: Measuring activism and its role in psychological well-being. *Political Psychology*, 30, 755–777.
- Klein, N. (2014). *This changes everything: Capitalism vs. the climate*. London, UK: Simon & Schuster.
- Latouche, S. (2009). *Farewell to growth*. Cambridge, UK: Polity Press.
- Levitas, R. (1990). Educated hope: Ernst Bloch on abstract and concrete utopia. *Utopian Studies*, 1, 13-26.
- Levitas, R. (2011). *The concept of utopia (2nd Ed.)*. Oxford, UK: Peter Lang.
- Litvinoff, M., & Madeley, J. (2015). *50 Reasons to buy fair trade*. London, UK: Pluto Press.
- Longhurst, N., Avelino, F., Wittmayer, J., Weaver, P., Dumitru, A., Hielscher, S., ... Elle, M. (2016). Experimenting with alternative economies: Four emergent counter-narratives of urban economic development. *Current Opinion in Environmental Sustainability*, 22, 69–74.
- MacCallum, R. C., Widaman, K. F., Zhang, S., & Hong, S. (1999). Sample size in factor analysis. *Psychological Methods*, 4, 84-99.
- Martin, J.-L., Maris, V., & Simberloff, D. S. (2016). The need to respect nature and its limits challenges society and conservation science. *Proceedings of the National Academy of Sciences*, 113, 6105–6112.

- Maslow, A. H. (1961). Eupsychia—The good society. *Journal of Humanistic Psychology, 1*, 1–11.
- Maydeu-Olivares, A. (2017). Maximum likelihood estimation of structural equation models for continuous data: Standard errors and goodness of fit. *Structural Equation Modeling: A Multidisciplinary Journal, 24*, 383-394.
- Meade, A. W., & Craig, S. B. (2012). Identifying careless responses in survey data. *Psychological Methods, 17*, 437-455.
- Muthén, L. K., & Muthén, B. O. (2002). How to use a Monte Carlo study to decide on sample size and determine power. *Structural Equation Modeling, 9*, 599-620.
- Neel, R., Kenrick, D. T., White, A. E., & Neuberg, S. L. (2016). Individual differences in fundamental social motives. *Journal of Personality and Social Psychology, 110*, 887–907.
- Nestor, N. (2016). The empathetic turn: The relationship of empathy to the utopian impulse. In C. Jones & C. Ellis (Ed.). *The individual and utopia* (pp. 135-150). London, UK: Routledge.
- Pacini, R., & Epstein, S. (1999). The relation of rational and experiential information processing styles to personality, basic beliefs, and the ratio-bias phenomenon. *Journal of Personality and Social Psychology, 76*, 972–987.
- Peattie, K., & Samuel, A. (2018). Fairtrade towns as unconventional networks of ethical activism. *Journal of Business Ethics, 153*(1), 265–282.
- Peterson, R. A. (2000). A meta-analysis of variance accounted for and factor loadings in exploratory factor analysis. *Marketing Letters, 11*, 261-275.
- Pornprasertmanit, S., Miller, P., Schoemann, A., Quick, C., & Jorgensen, T. (2016). Package ‘simsem’. Acquired from <https://cran.r-project.org/web/packages/simsem/simsem.pdf>

- Prescott, S., & Logan, A. (2018). Larger than life: Injecting hope into the planetary health paradigm. *Challenges*, 9, 13. <https://doi.org/10.3390/challe9010013>
- Putnick, D. L., & Bornstein, M. H. (2016). Measurement invariance conventions and reporting: the state of the art and future directions for psychological research. *Developmental Review*, 41, 71-90.
- Rees, J. H., & Bamberg, S. (2014). Climate protection needs societal change: Determinants of intention to participate in collective climate action. *European Journal of Social Psychology*, 44, 466–473.
- Reio Jr, T. G., & Shuck, B. (2015). Exploratory factor analysis: Implications for theory, research, and practice. *Advances in Developing Human Resources*, 17, 12-25.
- Reynolds, W. M. (1982). Development of reliable and valid short forms of the Marlowe-Crowne social desirability scale. *Journal of Clinical Psychology*, 38, 119-125.
- Richins, M. L. (2004). The material values scale: Measurement properties and development of a short form. *Journal of Consumer Research*, 31, 209–219.
- Roberts, J. A. (1993). Sex differences in socially responsible consumers' behavior. *Psychological Reports*, 73, 139–148
- Rodriguez, A., Reise, S. P., & Haviland, M. G. (2016a). Applying bifactor statistical indices in the evaluation of psychological measures. *Journal of Personality Assessment*, 98, 223-237.
- Rodriguez, A., Reise, S. P., & Haviland, M. G. (2016b). Evaluating bifactor models: Calculating and interpreting statistical indices. *Psychological Methods*, 21, 137-150.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.

- Rosseel, Y. (2012). Lavaan: An R package for structural equation modeling and more. Version 0.5–12 (BETA). *Journal of Statistical Software*, 48, 1-36.
- Savalei, V. (2018). On the computation of the RMSEA and CFI from the mean-and-variance corrected test statistic with nonnormal data in SEM. *Multivariate Behavioral Research*, 53, 419-429.
- Scheier, M. F., Carver, C. S., & Bridges, M. W. (1994). Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem): A reevaluation of the Life Orientation Test. *Journal of Personality and Social Psychology*, 67, 1063–1078.
- Schmitt, D. P., & Allik, J. (2005). Simultaneous administration of the Rosenberg self-esteem scale in 53 Nations: Exploring the universal and culture-specific features of global self-esteem. *Journal of Personality and Social Psychology*, 89, 623–642.
- Schumpe, B. M., Bélanger, J. J., Moyano, M., & Nisa, C. F. (2018). The role of sensation seeking in political violence: An extension of the significance quest theory. *Journal of Personality and Social Psychology*. <https://doi.org/10.1037/pspp0000223>
- Schwartz, S. H., Cieciuch, J., Vecchione, M., Davidov, E., Fischer, R., Beierlein, C., ... Konty, M. (2012). Refining the theory of basic individual values. *Journal of Personality and Social Psychology*, 103, 663–688.
- Seuntjens, T. G., Zeelenberg, M., Van de Ven, N., & Breugelmans, S. M. (2015). Dispositional greed. *Journal of Personality and Social Psychology*, 108, 917-933.
- Sherer, M., Maddux, J. E., Mercandante, B., Prentice-Dunn, S., Jacobs, B., & Rogers, R. W. (1982). The self-efficacy scale: Construction and validation. *Psychological Reports*, 51, 663–671.

- Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S. T., ... & Harney, P. (1991). The will and the ways: development and validation of an individual-differences measure of hope. *Journal of Personality and Social Psychology*, 60, 570-585.
- Springmann, M., Clark, M., Mason-D'Croz, D., Wiebe, K., Boudry, B. L., Lassale, L., ... Willett, W. (2018). Options for keeping the food system within environmental limits. *Nature*, 562, 519–525.
- Sudbury-Riley, L., & Kohlbacher, F. (2016). Ethically minded consumer behavior: Scale review, development, and validation. *Journal of Business Research*, 69, 2697–2710.
- Tabachnick, B. G., Fidell, L. S., & Ullman, J. B. (2007). *Using multivariate statistics*. Boston, MA: Pearson.
- Thomas, E. F., McGarty, C., & Mavor, K. I. (2009). Transforming “apathy into movement”: The role of prosocial emotions in motivating action for social change. *Personality and Social Psychology Review*, 13, 310-333.
- Thrash, T. M., & Elliot, A. J. (2003). Inspiration as a psychological construct. *Journal of Personality and Social Psychology*, 84, 871-889.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54, 1063–1070.
- Webb, D. (2007). Modes of hoping. *History of the Human Sciences*, 20, 65-83.
- Webb, D. J., Green, C. L., & Brashear, T. G. (2000). Development and validation of scales to measure attitudes influencing monetary donations to charitable organizations. *Journal of the Academy of Marketing Science*, 28, 299-309.

Winter, J. (2008). *Dreams of peace and freedom: Utopian moments in the twentieth century*.

New Haven, CT: Yale University Press.

Wright, E. O. (2010). *Envisioning real utopias*. London, UK: Verso.

Wright, E. O. (2013). Transforming capitalism through real utopias. *American Sociological Review*, 78, 1–25.

Yong, A. G., & Pearce, S. (2013). A beginner's guide to factor analysis: Focusing on exploratory factor analysis. *Tutorials in Quantitative Methods for Psychology*, 9, 79-94.

Zittoun, T., & Gillespie, A. (2015). *Imagination in human and cultural development*. London, UK: Routledge.