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A multi-method approach on sustainability consciousness and discount rates

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Supervisor: Profa. Dra. Luciana Oranges Cezarino

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A Multi-method Approach on Sustainability Consciousness and Discount Rates

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ABSTRACT:

This study explores if individuals' experience and awareness of sustainable development can influence their intertemporal preferences towards longer-term views. To answer this question, we surveyed 90 professionals, assessed their Sustainability Consciousness (SC) scores, compared them to their respective discount rates obtained through an experiment, and adjusted them to subjective time perceptions. Our result showed that, even though SC psychological aspects and theoretical dimensions positively correlate with each other, no direct effect could be observed between SC and discount rates metrics. This study pioneers in applying the Brazilian Portuguese version of the SC Questionnaire and exploring the relationship between SC and short-termism at an individual level.

KEYWORDS: Sustainable Development; Sustainability Consciousness; Discount Rates; Multi-Method

Consciência de sustentabilidade e taxas de desconto: uma abordagem multi-método

RESUMO:

Este estudo explora se a experiência e a consciência dos indivíduos sobre o desenvolvimento sustentável pode influenciar suas preferências intertemporais em relação a visões de longo prazo. Para responder a essa questão, entrevistamos 90 profissionais, avaliamos seus escores de Consciência de Sustentabilidade (CS), comparamos com suas respectivas taxas de desconto obtidas por meio de um experimento e os ajustamos às percepções subjetivas de tempo. Nosso resultado mostrou que, embora os aspectos psicológicos do CS e as dimensões teóricas se correlacionem positivamente, nenhum efeito direto pode ser observado entre as métricas do CS e as taxas de desconto. Este estudo foi pioneiro na aplicação da versão em português do Brasil do questionário SC e na exploração da relação entre o CS e a visão de curto prazo em nível individual.

PALAVRAS-CHAVE: Desenvolvimento sustentável; Consciência de sustentabilidade; Taxas de desconto; Multi-Método

A Multi-Method Approach on Sustainability Consciousness and Discount Rates

Time is essential to sustainable development, perceiving time tradeoffs is a key component in defining and studying sustainability managers' and organizations' decisions (Bansal & DesJardine, 2014). While businesses and societies strive to become sustainable, only partial successes have been achieved (Dyllick & Hockerts, 2002). To prevent intergenerational environmental, social and economic prejudice, we must be able to balance our, as well as future generations, short- and long-term needs.

Short-termism, or the disproportional overvaluation of the present, is an increasing trend that leads to suboptimal long-term performance (Slawinski et al., 2017). Both individuals and organizations are prone to short-termism and its negative consequences which can be systemic and irreparable. The preference for the present over the future does not come without reasoning, since the future outcomes always have an associated uncertainty (Augier & March, 2008). Individuals and organizations that are pro-sustainability shouldn't over evaluate the short term since it is easy to see how sustainability and short-termism are incompatible both from a conceptual and practical standpoint as exemplified in Graafland (2016).

When comparing intertemporal tradeoffs, such as payoffs occurring at different times, individuals often resort to a discounting method (Andersen et al., 2014). Each option is discounted based on the time until it pays off, or on the subjective perceived time until it pays off (Wang et al., 2015). Through the lens of time preference, short-termism can be seen as a preference for an immediate gratification even when faced with a delayed gratification of much greater value, from which a high discount rate will be estimated.

Yet, to be able to explore the relationship between short-termism and sustainability at an individual level, a reliable metric for the second term also has to be chosen. The construct of Sustainability Consciousness (SC) can be understood as a latent capacity within individuals to act in a pro-sustainable way. Though scarce, the literature proposes metrics to assess the SC construct. The Sustainability Consciousness Questionnaire (SCQ) measures SC in relation to the knowingness, attitudes, and behavioral aspects, and each of those aspects is measured on the environmental, social, and economic dimensions (Gericke et al., 2019).

There is still a gap in observing whether and how managers intertemporal preferences relate to their SC scores. Previous literature has yet to investigate how much influence the construct of SC can have on time tradeoffs, especially in pushing managers' decisions away from short-termism and stimulating their sustainable development.

Therefore, this dissertation aims to empirically observe if and how people with higher SC, measured through SCQ, will present lower discount rates. This observation will be adjusted by the subjective time perceived in order to reduce discounting anomalies and also take into consideration the multiple aspects and dimensions of SC.

This introduction is followed by a brief literature review on the key theories and concepts that frame this research: sustainability and time; short-termism; sustainability consciousness; time preference and discount rates. The methods section explains the overall approach to the research, and the methods chosen for data collection and analysis. Finally, a results section presents this dissertation's contributions and suggestions for future research.

Literature Review

Sustainability and Time

Since its origins as a construct, sustainability has been inextricably intertwined with the notion of time. To recurrently meet the needs of the present without compromising the ability of future generations to meet their own needs (WCED, 1987), society must manage its resources and foresee future needs through a systemic approach (Cezarino, 2020).

Businesses have had mixed success in approaching sustainable development. Trying to conciliate that concept with the traditional search for optimal economic growth has led them to look for business cases, mutually beneficial scenarios, and sustainable appeal among others. (Carroll & Shabana, 2010; Delmas & Burbano, 2011). With the feedback cycle reduced by modern media, societies become more aware of the challenges proposed by sustainability (Ryland, 2000).

However, the notion of sustainability can greatly suffer from the reductionist lens, once its complexity has been implied since its definition (Donaires et al., 2019). The environmental, social, and economic dimensions are interrelated and must be simultaneously integrated and satisfied alongside the short-term and long-term aspects (Dyllick & Hockerts, 2002). Many approaches can be taken to deal with the complexity of sustainability to better comprehend whether and how businesses are truly sustainable (Arevalo et al., 2011; Dyllick & Muff, 2016; Fearne et al., 2012; Zollo et al., 2013).

Bansal & DesJardine (2014) emphasizes the role of time in sustainability, phrasing it as the “ability of the firm to balance the short and long term” and reinforcing the value of managing dynamic trade-offs in decision making. Not only do trade-offs emerge from different

levels which represent systems that may contain or be contained by the organization, such as industry and individual levels, but also are not limited to the intergenerational problems within the temporal dimension, they can also relate to outcomes and effects of the corporate activity or the required change in processes towards sustainability (Hahn et al., 2010; Slawinski & Bansal, 2015).

Short-termism

When managing intertemporal trade-offs, short-termism is an increasingly frequent bias that leads to poor sustainability, therefore often economical, outcomes at both individual and organizational levels (Bansal & DesJardine, 2014; Slawinski et al., 2017). Defined as “decisions and outcomes that pursue a course of action that is best for the short term but suboptimal over the long run”, short-termism can also be considered a “myopia”, which may be comprehended through the firm’s systemic elements such as its culture, processes, and routines (Lavery, 1996; Lavery, 2004).

Still, short-term challenges must be appraised and addressed accordingly. Developing countries, for instance, face many sustainability-related problems in the short, such as an urge to promote sustainable development, engage in cooperation, provide basic services and eradicate poverty, and the long term alike (Buss et al., 2012; Gouveia, 1999).

One of the reasons for short-termism is the relationship between time and uncertainty, as distant events are harder to predict they are discounted to avoid uncertainty (Augier & March, 2008). Loewenstein & Thaler (1989) acknowledge that humans over evaluate the short-term and immediate gratifications. Dasgupta & Maskin (2005) argue that this behavior can also be explained through the outcome of an evolutionary process in which survival relies

heavily on the short term. When companies receive negative external evaluations, short-termism tends to be reinforced, shortening the companies' time horizon in response to its pressure (DesJardine & Bansal, 2019).

Despite its origin, multiple negative consequences of short-termism can be observed, such as decreasing companies' value, inhibiting innovation and enhancement of stakeholder relationships (Flammer & Bansal, 2017), organizational inaction toward climate change (Slawinski et al., 2017), institutional corruption and loss of public trust (Salter, 2013).

Sustainability Consciousness

The notion of SC builds upon previous measures of sustainability-related multidimensional constructs such as environmentalism, referred by Zelezny & Schultz (2000) as the intended processes and actions to lessen the impact of human behavior on the natural environment, and as the environmental consciousness (Dunlap et al., 2000; Krause, 1993; Sánchez & Lafuente, 2010). Previously established methods such as the New Ecological Paradigm Revised scale (Dunlap et al., 2000) and the Two Dimensional Model of Ecological Values (Bogner & Wiseman, 2006) were very useful for the ecological dimension but lacked integration of the economic and environmental ones, disregarding them not as a mistake, but as the methods' design and scope choice. Michalos et al. (2011) measured an index of knowledge attitudes and behaviors that are favorable towards sustainable development on tenth grade students, through a clinometric rather than psychometric approach. Michalos et al. (2011) method's was tested, revised and improved upon in following papers (D. Olsson et al., 2016; D. Olsson et al., 2019; D. Olsson & Gericke, 2016, 2017; Pauw et al., 2015).

Gericke et al. (2019) refer to SC as an individual's experience and awareness of sustainable development. Their work is grounded to assess the construct with a robust sample of 638 students. It embeds the environmental, social, and economic dimensions, evaluating each through behaviors, attitudes, and knowingness. Each of the nine subfactors or three aspects can be measured individually, as well as the aggregated one that represents SC, see Figure 1. The SCQ has two versions, a longer one with full measuring capability and a shorter one, with 27 questions limited to measuring the behavioral, knowingness, and attitudinal aspects, apart from SC itself.

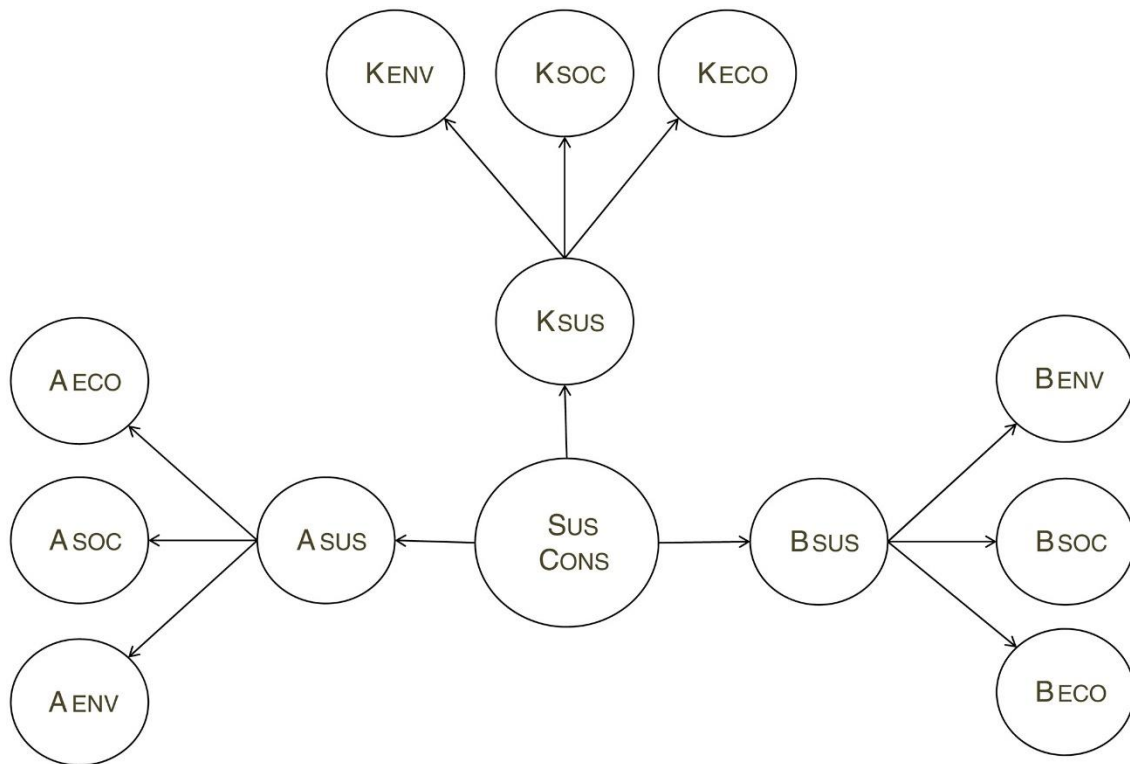


Figure 1 - Theorized three-order model of sustainability consciousness constructs from Gericke et al. (2019). K = knowingness; A = attitudes; B = behavior; ECO = economic; SOC = social; ENV = environmental; SUS CONS = sustainability consciousness

The SQC followed the framework proposed by the United Nations (UN) Decade of Education for Sustainable Development (UNESCO, 2005, 2014), thus the questions used to create it are based on a few subthemes for each dimension. Natural resources, climate change,

sustainable urbanization, and disaster prevention and mitigation are the subthemes for the environmental dimension. Human rights, peace and human security, gender equality, cultural diversity and intercultural understanding, health, HIV/AIDS, and governance are the subthemes for the social dimension. Poverty reduction, corporate responsibility and accountability, and market economy are the economic subthemes.

One of the strengths of the SCQ is that the psychological aspects shown in Figure 1 can be interchanged with the sustainability dimensions, thus being more flexible to aid in answering different research questions, this alternate structuration of the same construct has been applied by Daniel Olsson et al. (2019) and Pauw et al. (2015)..

Rural development belongs to the environmental dimension as a subtheme. However, the SCQ does not cover it within its questions because elaboration and validation of the questionnaire has been made in a Swedish context, where the respondents wouldn't identify to the issue adequately (Gericke et al., 2019). The questionnaire does, however, contain questions other questions that are applicable to both an urban as well as a rural context.

Even though the SCQ can be considered new, the authors have gathered experience from other survey applications with similar purpose. Apart from the mentioned worked of Gericke et al. (2019) in which he validates it as a psychometric scale, D. Olsson (2014; D. Olsson et al., 2016;) compared the SC score of Swedish students that had a special approach toward education for sustainable development and students that had traditional education and concluded that the alternative approach had not been particularly successful. A similar research was conducted by D. Olsson et al. (2019) with a Taiwanese project and students, no change was perceived in students SC, but genders and age gaps were detected.

Other lights have been shed upon the Sustainability Consciousness concept, such as the five-dimensional approach undertaken by De Carvalho et al. (2015), which takes the consumers' perspective, providing a greatly different point of view, and involves the 'sense of retribution; access to information; labelling and peer pressure; health issues; and crisis scenario'.

Time Preference

Decisions involving tradeoffs among costs and benefits occurring at different times are frequent and relevant. The capability of delaying gratification affects not only personal health, wealth and satisfaction but, can be considered a fundamental factor in the formation of organizational wealth and technological advancement (Frederick et al., 2003; Galor & Özak, 2016). Galor & Özak (2016) empirically observe that cultural evolution and geographical settings influence societies in the propagation and prevalence of long-term orientation.

Time preference is a crucial factor to determine human behavior (Frederick et al., 2003). Studies have related time discounting and delayed gratification to many decisive outcomes in human life, such as obesity (Dassen et al., 2016), smoking (Bickel et al., 1999), drinking (Granö et al., 2004), gambling (Dixon et al., 2003), cognitive abilities (Shamosh et al., 2008) and even support to environmental sustainability (Arbuthnott, 2010). Chabris et al. (2008) indicated that time discounting can better explain these variables as an aggregate, rather than separate traits.

Discount Rates

When comparing two payoffs that are to be earned within different time intervals, humans apply a discounting method to decide which is the most advantageous option. Many discussions arise from how the discounting occurs (Andersen et al., 2014; Dasgupta & Maskin, 2005), however, some hypothesis have been postulated and empirically tested revealing inconsistencies within the same individual and through different subjects (Coller & Williams, 1999; Goulder & Williams, 2012; Harrison et al., 2002).

Probably the most common form of intentional discounting comes from financial decisions where payoffs are brought to present value, therefore discounting at an individual rate from its future value based on the comparison between the moment of decision making and its payoffs. The method of exponential discounting is well established as an ongoing solution for those problems, since it offers a rational, or proportional tradeoff between time intervals, making it a decreasing trend that tend to zero in the long run (Doyle & Chen, 2012).

Even though exponential discounting is consistent, humans lack the processing power to reach those same results spontaneously, and, when tested to observe its discounting behavior, the results have arguably better been approximated by a hyperbolic discounting. Hyperbolic discounting, in comparison, over discounts in the short-term and doesn't discount

as much in the long-term. The resulted area under the hyperbolic curve is infinite, differing from exponential discounting (Epper et al., 2011; Farmer & Geanakoplos, 2011).

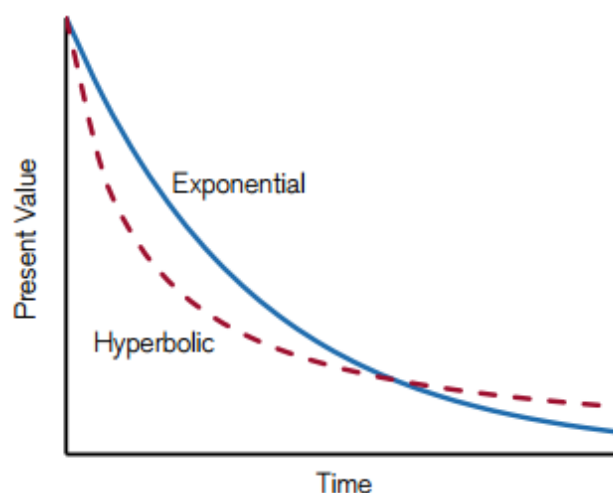


Figure 2 – Hyperbolic versus Exponential Discounting. Source: Discount rates based on Leonard Green and Joel Myerson, “Exponential Versus Hyperbolic: Discounting of Delayed Outcomes: Risk and Waiting Time” *American Zoologist*, Vol. 36, No. 4, September 1996, 496-505.

This discrepancy brings many questions and interesting consequences (Frederick et al., 2003; Paternoster & Pogarsky, 2009), Bansal & DesJardine (2014), for instance, adds that discounting payoffs to present value inhibits the long-term aspect of sustainability. Given that it is reasonable to question that individual’s payoff in different ways, therefore we tackle: Would more sustainably conscious individual discount less over time?

The discounting operation, in any of its forms, requires a basic knowledge or intuition of both compound rates and inflation. Even though financial education is more widely available than ever before (Lusardi, 2019), we still have to look for individuals with basic financial literacy in order to be able to take the appraised discount rates into account.

Literature tried to explain intertemporal preferences that deviate from the standard hyperbolic discounting model through multiple factors that alters individuals perception or valuation of the outcomes that are received at different times. Zauberman et al. (2009) proposed a new approach in which the deviation comes from perception of time duration itself. Their results pointed out that consumers' subjective time perceptions are logarithmic, when translated to objective (real) time, so two years may feel like less than four times as long as a six months period. Wang et al. (2015) through the same approach observed that subjective time perception explains most of the anomalies of the discounted utility model.

Realizing the impact that a high discount rate, authors have proposed alternatives to enable future generations to receive a fairer share of our resources such as environmental discount rates (e.g., Weitzman, 1994) and social discount rates (e.g., Rambaud & Torrecillas, 2005). Hellweg et al. (2003) even questioned if social and environmental questions should receive the same discount rates, reiterating the necessity of performing holistic analysis also proposed by Barkin (2006) when he compared anthropocentric and ecocentric perspectives in environmental politics. One of the practical alternatives being employed are green bonds, which try to provide a fair edge for sustainable projects by giving investors more favorable conditions (Hafner et al., 2020).

Varian (2006), Chief Economist at Google wrote on the right discount rate for climate change: 'There is no definitive answer to this question because it is inherently an ethical judgment that requires comparing the well-being of different people: those alive today and those alive in 50 or 100 years.'

Methods

In order to observe whether more sustainability-conscious individuals have lower long-term discount rates, as expected by the literature, a multi-method procedure combining a survey and experiment is designed to gather quantitative data.

According to Pandey & Pandey (2015) research categories, this dissertation can be considered a mostly quantitative, experimental, cross-sectional research with a survey and experiment as its methods. The combination of survey and experiment was intentional, since the survey method alone could not address the behavioral decision-making aspects whereas the experiment is used associated with sample generalization bias.

Survey studies are well-established methods of collecting large amount of data to provide more generalizable results and will serve for a planned data collection to establish relations between variables and test its validities (Pandey & Pandey, 2015), to lessen the restrictive effect of the questionnaire a single open-ended question has been placed.

The experiments allow for influence or control of the set of rates and actions available to actors, thus enabling measurement of the impact of these factors on behavior (Delmas & Aragon-Correa, 2016; Levitt & List, 2007). In this case, behavior analysis is focused on the decision-making respondents are submitted to. We explore the experiment technique by offering options of discount rates in order to understand the path and standard decisions taken.

We demonstrate the relational model in Figure 3. The independent variable is the SC level, here shown as a higher order construct, composed by its nine subfactors, with subjective time perception acting as a moderator towards the discount rate.

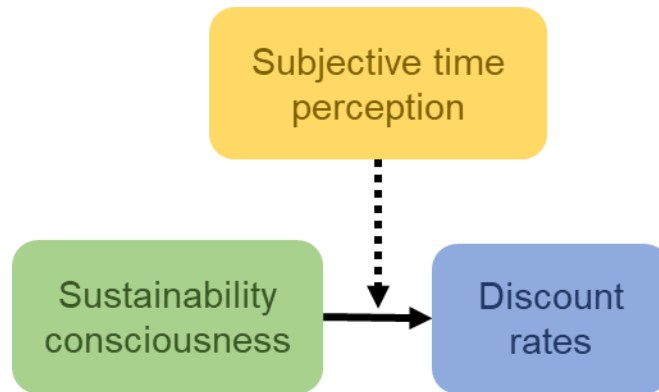


Figure 3- Conceptual Framework

Figure 3 summarizes the conceptual framework and aids the comprehension of the research goals, which are:

To investigate the influence of sustainability consciousness on individuals' discount rates.

To observe if the usage of discount rates corrected by the perceived time better elucidates the relationship between sustainability consciousness and discount rates.

And the underlying hypothesis to be tested are:

Hypothesis 1: More sustainability conscious individuals tend to have lower discount rates.

Hypothesis 2: Subjective time perception moderates the relation between sustainability consciousness and discount decisions.

Theoretical Model	Research Objectives	Research Hypothesis	Questions	Analysis Techniques
Sustainable development requires long-term thinking. Sustainability-conscious individual should have lower discount rates.	We aim to investigate the influence of sustainability consciousness in individuals discount rates.	Hypothesis 1: Highly sustainability-conscious individuals tend to have lower discount rates.	Q13, Q16	Structural Equations Modelling
Using subjective perceived time reduces distortions when assessing individual's discount rates.	To observe if the usage of discount rates corrected by the perceived time better elucidates the relationship between sustainability consciousness and discount rates.	Hypothesis 2: Subjective time perception moderates the relation between sustainability consciousness and discount decisions	Q13, Q15, Q16	Moderated regressions

Table 1 - Methodological association matrix based on Mazzon (2018)

Participants

This study surveyed postgraduate students from business schools who are at least 18 years old and working executives and managers. The sampling was gathered through voluntary responses.

Design and Procedure

This research combines empirical methods from distinct fields to better comprehend whether and how a theoretical intersection between those fields will be expressed in an experimental setting. The questionnaire proposed in Appendix A is the combination of surveys on sociodemographic information, the SCQ, and a discount rate elicitation experiment and is

composed of 16 questions. Q_n will be used to reference the nth question on the questionnaire, e.g.: Q1 refers to the first question.

The first set of questions, Q1 through Q10, draw a sociodemographic profile of the sample and will be used to assess representativeness and be observed as control variables. The household income per capita scale on Q10 was based on Centro de Políticas Sociais (2014) from FGV Social. Note that sex is asked instead of gender because we are mainly interested in biological factors rather than behaviors associated with a sex category membership (Westbrook & Saperstein, 2015).

The experiment, Q13, is based on discount rate elicitation research such as Coller & Williams(1999), Andersen et al. (2008), and, mainly, Harrison et al. (2002) since it best matches the scope of this research. In the experiment the respondents are asked to mark which payment option they would rather receive a smaller amount in a week or a larger amount after two years. The respondents are told that one them will be randomly chosen to win one of their singaled preferred options, also chosen randomly, and that the if the longer-term option is selected, the respondent would, in a week time, receive a cashier's check from a large Brazilian institution that could be redeemed in two years, thus lowering or nullyfying non-payment risk.

If a respondent chooses the shorter-term option of receiving it in a week, they will receive another version of the same question, but now offering a 2,5% larger amont in it's payoff, this continues until either the respondent chooses the longer-term option or the longer-term option gets to it's largest amount. Observing the value in which a respondet changes it's preference from the short-term to the long-term payoff, we can estimate an indifference point and approximate the respondent's discount rate. The employment of a digital surveying platform with conditional logic allowed for simplifying the experience of answering Q13,

instead of given the entire table of payment options to be analyzed, the respondents were only shown one payment option at a time and only until the indifference point is reached, not forcing them to go through the whole list.

Q14 was added based on Coller & Williams (1999) to be able to take into consideration if the respondent has any real life circumstantial reason for giving extreme responses. In Q15 the respondents are asked to point in a scale how long the 2 years waiting period for the payoff felt, it was included based on Wang et al. (2015) to consider subjective aspects of time perception and to allow testing to reduce anomalies that commonly arise from discounting in an empirical setting.

All questions from the full length SCQ by Gericke et al. (2019) are grouped under Q16, thus Q16.1 through Q16.49, provides a measure of each respondent's Sustainability Consciousness level, the full length version was chosen to prioritize robustness and to allow drilling down each of the nine subfactors. On questions Q15.1 through Q15.49 respondents were asked to indicate their level of agreement or disagreement with each sentence on a Likert-type scale between 'strongly agree' (=1), through 'neutral' (=3) to 'strongly disagree' (=5), each sentence is also linked to one aspect and one dimension. Most sentences are positive related to SC, though a few are inverted, such as Q16.2, Q16.19 and Q16.22, when analyzing the data such inversions were accounted for.

A careful translation process was undertaken to bring the original SCQ to Brazilian Portuguese. An English expert and native Portuguese speaker translated the items from English into Portuguese, only then another English expert translated it back into English without the reference of the original SCQ. The original and final translations were compared and the later adjusted until consensus was reached, a discussion was held on items for which the back

translation was not totally in line with the original English version, thus arriving on the Brazilian Portuguese version presented in Appendix B.

IBM AMOS was used to replicate the Gerickes et al.'s (2019) structural equation modelling framework of the SCQ's subfactors and used in calculating the score factor weights of each respondent for each subfactor. Figure 4 summarizes this dynamic while showing the model to IBM AMOS.

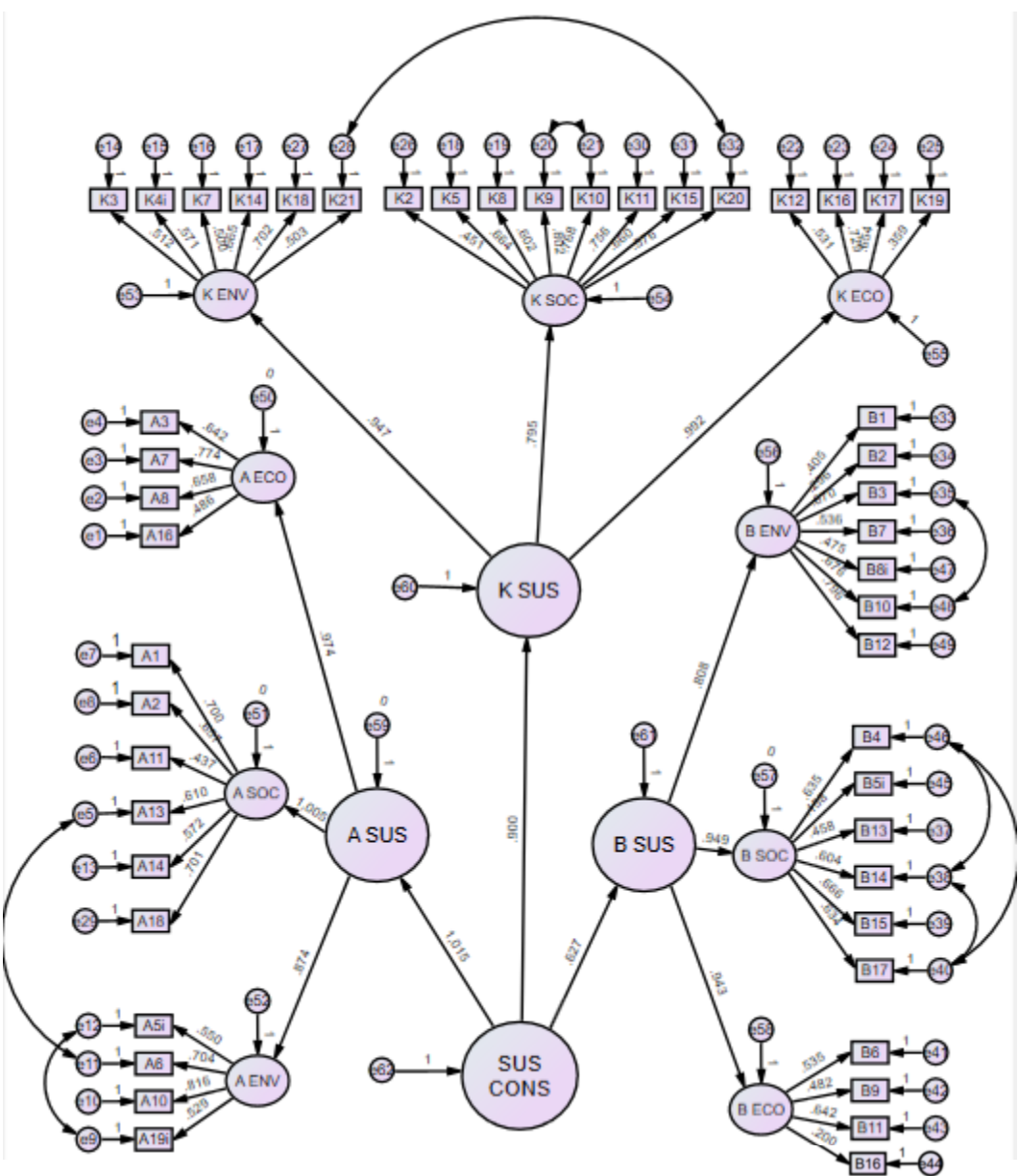


Figure 4 - SCQ structure modeled on IBM AMOS

Results

A sample of 129 answers were obtained between February and May of 2021 from four different groups of MBA students and a group of executives in leadership positions. The sample was reduced to 95 after removing incomplete answers and those who failed at least one of the basic financial knowledge questions Q11 and Q12.

Out of the 95 respondents, 5 would not change their preference to receiving the payoff later even when offered a yearly interest rate of 60%, thus an indifference rate and discount rate cannot be detected from this group. The only information that can be extracted is that their indifference rate is higher than 60%, which is not sufficient for including them on analysis that require a discount rate. From the open-ended question (Q14) we were able to identify that most of these respondents were facing personal contexts that made them prefer to receive the payoff as soon as possible regardless of the interest rate offer, thus being largely indifferent to it.

Figure 4 summarizes the descriptive statistics for the categorical variables. In order to guarantee that the respondents knew and understand the notion of interested rates our population was intentionally skewed towards postgraduates (94,7%) and executives on leadership positions (77,9%), which is also reflected on the respondents average age of 38 years and average of 18 years of work experience, and standard deviations of 8,94 and 9,94 respectively.

Through the aggregate of Q16 we are able to calculate for each respondent a SC level, which can be dismantled in three aspects and three dimensions as well as its subfactors. Table 2 summarizes metrics related to the SQC. The attitudinal aspect lags significantly behind all

other aspects, even when analyzed through its subfactors, this may be interpreted as respondents that present proportionally better knowledge of what is required to propel sustainable development and act in accordance to it than they believe should be conducted differently.

Variable	Minimum	Maximum	Mean	Std. Deviation
Sustainability Consciouness	3,09	4,85	4,15	0,37
Knowingness	3,11	4,94	4,29	0,44
Behavior	2,25	5,00	4,31	0,47
Attitude	2,61	4,76	3,87	0,45
Environmental	3,11	4,95	4,17	0,42
Social	3,00	4,86	4,18	0,39
Economic	2,83	5,00	4,11	0,43
KEnv	3,00	5,00	4,37	0,44
KSoc	2,75	5,00	4,25	0,53
KEco	2,50	5,00	4,24	0,57
BEnv	2,75	5,00	4,31	0,62
BSoc	2,00	5,00	4,33	0,50
BEco	1,75	5,00	4,29	0,56
AEnv	2,57	4,86	3,82	0,58
ASoc	2,83	5,00	3,97	0,45
AEco	2,00	5,00	3,82	0,61

Table 2- SCQ Metrics

All SCQ score factors weights but the AEnv, environmental dimension of the attitude aspect, failed a Kruskal-Wallis test for normal distribution with significance of 0,05, and thus were normalized before the regression.

Table 3 summarizes the data related to the intertemporal payoffs respondents chose on the experiment.

Variable	Minimum	Maximum	Mean	Std. Deviation
Preferred Future Payoff	R\$ 1.040,40	R\$ 2.560,00	R\$ 1.398,19	R\$ 334,07
Indifference Rate	2%	60%	18%	13%
Subjective Time	0,04	3,90	2,00	0,92
Adjusted Preferred Future Payoff	R\$ 1.006,47	R\$ 6.247,73	R\$ 1.483,01	R\$ 799,47
Adjusted Discount Rate	0%	150%	19%	25%

Table 3 - Intertemporal Tradeoffs Data

The preferred future payoff and indifference rate derives from the first question in which each respondent opted to wait for the higher payoff rather than receiving a smaller payoff quicker. The subjective time was calculated as in Wang et al. (2015), using the average perception as the reference for the real time of two years, than adjusting the subjective time for each by its distance from the mean.

The adjusted preferred future payoff has been obtained by applying the subjective time, instead of the real time to the capitalization of the future payoff and, similarly, the adjusted discount rate derives from the adjusted preferred future payoff rather than the discount rate itself.

Conclusions

The results, according to expectations derived from literature, should show a plausible regression model that fits the data and relates higher SC to lower discount rates, mainly in the long-term, this concept can be further explored by trying to model a meaningful structural equation that takes into account not only SC itself but also its three aspects or even the nine subfactors, thus requiring a larger sample size. If true, as an example of practical implication, companies with a long-term value orientation can use it as decision-making basis to invest in elevating their manager and employees' SC and start using SC level as a hiring criterion.

It was expected that introducing the perceived time to the model would reduce discounting anomalies between the short- and long-term, thus revealing a moderator effect and elevating the significance of the relationship between the SC level and discount rates. We also expect that perceived time and SC level won't be significantly related to each other, allowing for the better relation of SC levels and discount rates to be explained solely by the better fit provided for the behavioral adjustment of perceived time.

Even though there is a positive relationship between all psychological aspects and the sustainability dimensions of SC, no significant relationship was observed between SC and discount rates, even when subjective time and adjusted subjective discount rate were accounted as moderators. Previous literature hasn't tested for this relationship or affirmed it directly, but it appears that there are other relevant factors to be accounted for.

For future research the relationship between SC may be investigated in relation to more granular and directedly related variables, such as the length of time horizons in decision making, adjust the tradeoff capturing method to also account for decisionmakers with extremely high discount rates, and also use as criteria for inclusion in sample, or as moderators, other financial literacy indicators. The difference between levels of the attitudes and the other two aspects may also be a point of interest to expand upon as it might not be restricted to this survey sample and could reflect on our education for sustainable development.

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Appendix A - Questionnaire

First page:

1. How old are you? ____
2. Which ethnicity best describes you?
 White Black Native American Asian Other: _____
3. What is your current marital status?
 Married Separated Divorced Common law married
 Single, never before married Single, but living with a partner
4. What is your sex? Male Female Other
5. How many years of work experience have you had?
6. What is the highest level of education you have studied?
 Primary education Secondary education Technical Course Graduate
 Postgraduate None of the above
7. Which of the following categories best describes your employment status?
 Not Employed Intern Informal Worker Employed Entrepreneur
8. Which word best describes your current role?
 Assistant Supervisor Coordinator Manage
 Director C-Level Other: (Specify)
9. How many employees work for the same company as you?
 Up to 9 employees Between 10 and 49 employees Between 50 and 99 employees
 More than 100 employees I am not currently working
10. What is your monthly household income per capita?
 Between R\$ 0 and R\$ 1254 Between R\$ 1255 and R\$ 2004 Between R\$ 2005 and
R\$ 8640 Between R\$ 8641 and R\$ 11261 Higher than R\$ 11261

Second page:

11. Suppose you had \$100 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow?

More than \$102 Exactly \$102 Less than \$102

12. Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, would you be able to buy more than, exactly the same as, or less than today with the money in this account?

More than today Exactly the same as today Less than today

Third page:

13. For each payoff alternative consider payments options A and B and indicate your preferred option, the annual interest rate involved in payment option B is also listed. One of this survey's respondents will be randomly chosen to receive a randomly chosen preferred payment option. If the picked option is A, the respondent will receive a deposit in that value, if it is B the respondent will receive a cashier's check from a large bank to be redeemed in two years.

Payoff Alternative	Payment Option A		Payment Option B		Annual interest rate	Preferred payment option	
	(pays amount below in 1 week)		(pays amount below in 2 years)			(AR, in percent)	(circle A or B)
1	R\$	2.000,00	R\$	2.101,25	2,5%	A	B
2	R\$	2.000,00	R\$	2.205,00	5,0%	A	B
3	R\$	2.000,00	R\$	2.311,25	7,5%	A	B
4	R\$	2.000,00	R\$	2.420,00	10,0%	A	B
5	R\$	2.000,00	R\$	2.531,25	12,5%	A	B
6	R\$	2.000,00	R\$	2.645,00	15,0%	A	B
7	R\$	2.000,00	R\$	2.761,25	17,5%	A	B
8	R\$	2.000,00	R\$	2.880,00	20,0%	A	B
9	R\$	2.000,00	R\$	3.001,25	22,5%	A	B
10	R\$	2.000,00	R\$	3.125,00	25,0%	A	B
11	R\$	2.000,00	R\$	3.251,25	27,5%	A	B
12	R\$	2.000,00	R\$	3.380,00	30,0%	A	B
13	R\$	2.000,00	R\$	3.511,25	32,5%	A	B
14	R\$	2.000,00	R\$	3.645,00	35,0%	A	B
15	R\$	2.000,00	R\$	3.781,25	37,5%	A	B
16	R\$	2.000,00	R\$	3.920,00	40,0%	A	B
17	R\$	2.000,00	R\$	4.061,25	42,5%	A	B
18	R\$	2.000,00	R\$	4.205,00	45,0%	A	B
19	R\$	2.000,00	R\$	4.351,25	47,5%	A	B
20	R\$	2.000,00	R\$	4.500,00	50,0%	A	B

14. If you changed your preferred payment option between A and B at some point, why was that? _____

15. Place a mark on the line indicating your response to the following question: “If you were to wait two years before being paid, how long does this time period until you get the money seem to you?”

Very Short ←————→ Very Long

Fourth page, question order is randomized:

16.

Indicate your level of agreement or disagreement for each of the following sentences: 1 = Strongly Agree, 2 = Agree, 3 = Neutral, 4 = Disagree, 5 = Strongly Disagree	
16.1. Reducing water consumption is necessary for sustainable development.	
16.2. Preserving nature is not necessary for sustainable development.	
16.3. Sustainable development demands that we humans reduce all sorts of waste.	
16.4. Preserving the variety of living creatures is necessary for sustainable development (preserving biological diversity).	
16.5. Sustainable development requires a shift to renewable natural resources.	
16.6. For sustainable development, people need to be educated in how to protect themselves against natural disasters.	
16.7. Improving people's chances for a long and healthy life contributes to sustainable development.	
16.8. A culture where conflicts are resolved peacefully through discussion is necessary for sustainable development.	
16.9. People who exercise their democratic rights are necessary for sustainable development (for example, they vote in elections, involve themselves in social issues, express their opinions).	
16.10. Reinforcing girls' and women's rights and increasing equality around the world is necessary for sustainable development.	
16.11. Respecting human rights is necessary for sustainable development.	
16.12. To achieve sustainable development, all the people in the world must have access to good education.	
16.13. Having respect for other cultures is necessary for sustainable development.	
16.14. For sustainable development, major infectious diseases such as HIV/AIDS and malaria must be stopped.	
16.15. Sustainable development requires that companies act responsibly towards their employees, customers and suppliers.	
16.16. Sustainable development requires a fair distribution of goods and services among people in the world.	
16.17. Wiping out poverty in the world is necessary for sustainable development.	
16.18. Sustainable development demands that people understand how the economy functions.	
16.19. I think that using more natural resources than we need does not threaten the health and well-being of people in the future.	
16.20. I think that we need stricter laws and regulations to protect the environment.	
16.21. I think that it is important to take measures against problems which have to do with climate change.	

16.22. I think it is OK that each one of us uses as much water as we want.	
16.23. I think that everyone ought to be given the opportunity to acquire the knowledge, values and skills that are necessary to live sustainably.	
16.24. I think that we who are living now should make sure that people in the future enjoy the same quality of life as we do today.	
16.25. I think that the government should provide financial aid to encourage more people to make the shift to green cars.	
16.26. I think that the government should make all its decisions on the basis of sustainable development.	
16.27. I think that it is important that people in society exercise their democratic rights and become involved in important issues.	
16.28. I think that women and men throughout the world must be given the same opportunities for education and employment	
16.29. I think that companies have a responsibility to reduce the use of packaging and disposable articles.	
16.30. I think it is important to reduce poverty.	
16.31. I think that companies in rich countries should give employees in poor nations the same conditions as in rich countries.	
16.32. I think that people who pollute land, air or water should pay for the damage they cause to the environment.	
16.33. Where possible, I choose to cycle or walk when I'm going somewhere, instead of travelling by motor vehicle.	
16.34. I never waste water.	
16.35. I recycle as much as I can.	
16.36. I pick up rubbish when I see it out in the countryside or in public places.	
16.37. I don't think about how my actions may damage the natural environment.	
16.38. I always separate food waste before putting out the rubbish when I have the chance.	
16.39. I have changed my personal lifestyle in order to reduce waste (e.g., throwing away less food or not wasting materials).	
16.40. When I use a computer or mobile to chat, to text, to play games and so on, I always treat others as respectfully as I would in real life.	
16.41. I often make lifestyle choices which are not good for my health.	
16.42. I work on committees (e.g., the student council, my class committee, the cafeteria committee) at my school.	
16.43. I treat everyone with the same respect, even if they have another cultural background than mine	
16.44. I support an aid organization or environmental group.	
16.45. I show the same respect to men and women, boys and girls.	
16.46. I do things which help poor people.	

16.47. I often purchase second-hand goods over the internet or in a shop.	
16.48. I avoid buying goods from companies with a bad reputation for looking after their employees and the environment.	
16.49. I watch news programs or read newspaper articles to do with the economy.	

Appendix B – Questionnaire in Brazilian Portuguese

* 1. Quantos anos você tem?

2. Qual raça/etnia melhor descreve a sua descendência? (Escolha somente uma resposta.)

- Branca
- Preta
- Parda
- Indígena
- Amarela
- Outra/Várias etnias (especifique)

* 3. Qual das opções abaixo melhor descreve seu estado civil atual?

- Casado(a)
- Viúvo(a)
- Divorciado(a)
- Separado(a)
- Em uma união estável ou casamento civil
- Solteiro(a), mas vivendo com um(a) companheiro(a)
- Solteiro(a), nunca tendo sido casado(a)

4. Qual é o seu sexo?

- Feminino
- Masculino
- Outro (especificar)

* 5. Quantos anos de experiência profissional você tem?

6. Qual o nível de escolaridade mais alto que você completou ou está cursando?

- Ensino fundamental
- Ensino médio
- Ensino técnico
- Ensino superior
- Pós-graduação / MBA
- Nenhuma das opções acima

7. Qual das seguintes categorias melhor descreve sua situação empregatícia atual?

- Empregado(a), trabalhando em tempo integral
- Empregado(a), trabalhando meio período
- Desempregado(a), em busca de trabalho
- Desempregado(a), NÃO procurando emprego
- Aposentado(a)
- Incapacitado(a), sem poder trabalhar

* 8. Qual palavra melhor descreveria seu cargo mais recente?

- Assistente/Auxiliar
- Supervisor(a)
- Coordenador(a)
- Outro (especifique)
- Gerente
- Diretor(a)
- Presidente

* 9. Quantos colaboradores possui a organização em que você trabalha?

- Possui até 9 colaboradores
- Entre 10 e 49 colaboradores
- Entre 50 e 99 colaboradores
- Mais de 100 colaboradores
- Não trabalho

* 10. Qual é a sua renda familiar mensal per capita?

- R\$ 0 - R\$ 1.254
- R\$ 1.255 - R\$ 2.004
- R\$ 2.005 - R\$ 8.640
- De R\$ 8.641 a R\$ 11.261
- R\$ 11.262 ou mais

* 1. Suponha que você tenha \$100 em uma caderneta de poupança que gere rendimentos de 2% ao ano. Depois de 5 anos, quanto você acha que haverá na sua conta se você deixar o dinheiro crescer?

- Mais de \$102
- Exatamente \$102
- Menos de \$102
- Não sei

* 2. Imagine que a taxa de juros de sua poupança seja de 1% ao ano e que a inflação seja de 2% ao ano. Depois de um ano, com o dinheiro nessa poupança, você seria capaz de comprar:

- Mais do que compraria hoje.
- Exatamente o mesmo que compraria hoje.
- Menos do que compraria hoje.
- Não sei.

* 1. Indique qual das duas alternativas de pagamento você prefere receber, ciente de que você poderá realmente ser contemplado por ela:

Receber 1000 daqui a uma semana.	Receber R\$ 1040,4 daqui a dois anos. Corresponde a uma taxa de juros de 2%a.a
<input type="radio"/>	<input type="radio"/>

2. Qual é o seu nome?

3. Qual o seu melhor endereço de email?

O contato sobre o sorteio será realizado através deste email.

* 1. Indique qual das duas alternativas de pagamento você prefere receber, ciente de que você poderá realmente ser contemplado por ela:

Receber 1000 daqui a uma semana.	Receber R\$ 1081,6 daqui a dois anos. Corresponde a uma taxa de juros de 4%a.a.
<input type="radio"/>	<input type="radio"/>

(As decisões de pagamento, como a questão acima são repetidas caso o respondente escolha a resposta imediatista de uma semana, mas o pagamento futuro é incrementado, até que sua taxa de juros atinja 60% a.a.)

1. Caso você tenha mudado sua opção preferida de receber daqui a uma semana para receber em dois anos, cite as razões que lhe levaram a tomar essa decisão:

* 2. Posicione o marcador no local correspondente à sua resposta para a seguinte pergunta: "Se você fosse esperar os dois anos para receber o pagamento, quão longo esse período de tempo até receber o dinheiro parece para você?"

Muito curto	Muito longo
<input type="range"/>	

* 1. Esse é o último conjunto de perguntas! Indique seu nível de concordância para cada uma das frases a seguir:

	Discordo Fortemente	Discordo	Neutro	Concordo	Concordo Fortemente
Reduzir o consumo de água é necessário para o desenvolvimento sustentável.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Preservar a natureza não é necessário para o desenvolvimento sustentável.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
O desenvolvimento sustentável demanda que nós reduzamos todos os tipos de desperdício.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Preservar a biodiversidade é necessário para o desenvolvimento sustentável.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Desenvolvimento sustentável requer uma transição para recursos naturais renováveis.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Para o desenvolvimento sustentável, pessoas precisam ser educadas em como se protegerem como desastres naturais.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Aumentar as chances das pessoas terem vidas longas e saudáveis contribui ao desenvolvimento sustentável.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Uma cultura em que o conflito seja resolvido pacificamente através da discussão é necessária para o desenvolvimento sustentável.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pessoas que exerçam seus direitos democráticos são necessárias para o desenvolvimento sustentável (por exemplo, votam nas eleições, se envolvem em questões sociais e expressam suas opiniões).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reforçar os direitos das meninas e mulheres e aumentar a equidade no mundo é necessário para o desenvolvimento sustentável.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Discordo Fortemente	Discordo	Neutro	Concordo	Concordo Fortemente
Respeitar os direitos humanos é necessário para o desenvolvimento sustentável.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Para alcançar o desenvolvimento sustentável, todas as pessoas no mundo devem ter acesso à boa educação.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ter respeito pelas outras culturas é necessário para o desenvolvimento sustentável.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Para o desenvolvimento sustentável, as principais doenças infecciosas como HIV/AIDS e malária devem ser paradas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
O desenvolvimento sustentável requer que empresas atuem responsabilmente com seus empregados, clientes e fornecedores.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
O desenvolvimento sustentável requer uma distribuição justa de bens e serviços entre as pessoas do mundo.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eliminar a pobreza no mundo é necessário para o desenvolvimento sustentável.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Desenvolvimento sustentável demanda que as pessoas entendam como a economia funciona.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu acho que utilizar mais recursos naturais que o necessário não ameaça a saúde e bem estar das pessoas no futuro.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu acho que nós precisamos de leis e regulações mais rígidas para proteger o meio ambiente.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu acho que é importante tomar medidas contra problemas relacionados às mudanças climáticas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Discordo Fortemente	Discordo	Neutro	Concordo	Concordo Fortemente
Eu acho que é aceitável que cada um de nós utilize tanta água quanto quisermos.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu acho que a todos deve ser dada a oportunidade de obter conhecimento, valores e habilidades que são necessárias para viver de forma sustentável.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu acho que nós que vivemos agora deveríamos nos certificar de que as pessoas do futuro disfrutem da mesma qualidade de vida que temos hoje.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu acho que o governo deveria prover auxílio financeiro para incentivar as pessoas a comprar carros menos poluentes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu acho que o governo deve tomar todas suas decisões com base no desenvolvimento sustentável.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu acho que é importante que as pessoas em sociedade exerçam seus direitos democráticos e se envolvam em assuntos importantes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu acho que aos homens e mulheres ao redor do mundo devem ser dadas as mesmas oportunidades de educação e emprego.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu acho que empresas têm a responsabilidade de reduzir o uso de embalagens e artigos descartáveis.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu acho que é importante reduzir a pobreza.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu acho que empresas de países ricos deveriam dar aos empregados em países pobres as mesmas condições daqueles em países ricos.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu acho que as pessoas que poluem a terra, ar ou água deveriam pagar pelo dano que causam ao meio ambiente.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Discordo Fortemente	Discordo	Neutro	Concordo	Concordo Fortemente
Onde é possível, eu opto pela bicicleta ou caminhada para ir aos lugares em vez de utilizar um veículo motorizado.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu nunca desperdiço água.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu reciclo tanto quanto posso.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu recolho lixo quando o vejo em locais públicos ou no campo.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu não penso em como minhas ações podem causar danos ao meio ambiente.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Antes de me desfazer do lixo separo o lixo orgânico sempre que tenho a oportunidade.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu mudei meu estilo de vida pessoal para reduzir o desperdício (por exemplo, jogar fora menos comida ou não desperdiçar materiais).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quando eu uso um computador ou celular para conversar, escrever, jogar jogos, etc., eu sempre trato os outros tão respeitosa e como o faria na vida real.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu frequentemente faço escolhas de estilo de vida que não são boas para minha saúde.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu participo de comissões (por exemplo, comissão de sustentabilidade, de diversidade/representatividade) em meu trabalho ou fora dele.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu trato a todos com o mesmo respeito, mesmo se eles têm aspectos culturais diferentes dos meus.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu apoio uma organização beneficente ou ambientalista.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu mostro o mesmo respeito aos homens e mulheres, meninos e meninas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu faço coisas que ajudam às pessoas pobres.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Discordo Fortemente	Discordo	Neutro	Concordo	Concordo Fortemente
Eu frequentemente compro bens usados pela internet ou em lojas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu evito comprar bens de empresas que possuem uma má reputação devido à sua relação com seus empregados ou com o meio ambiente.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu assisto programas de notícias ou leio artigos relacionados à economia.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>