

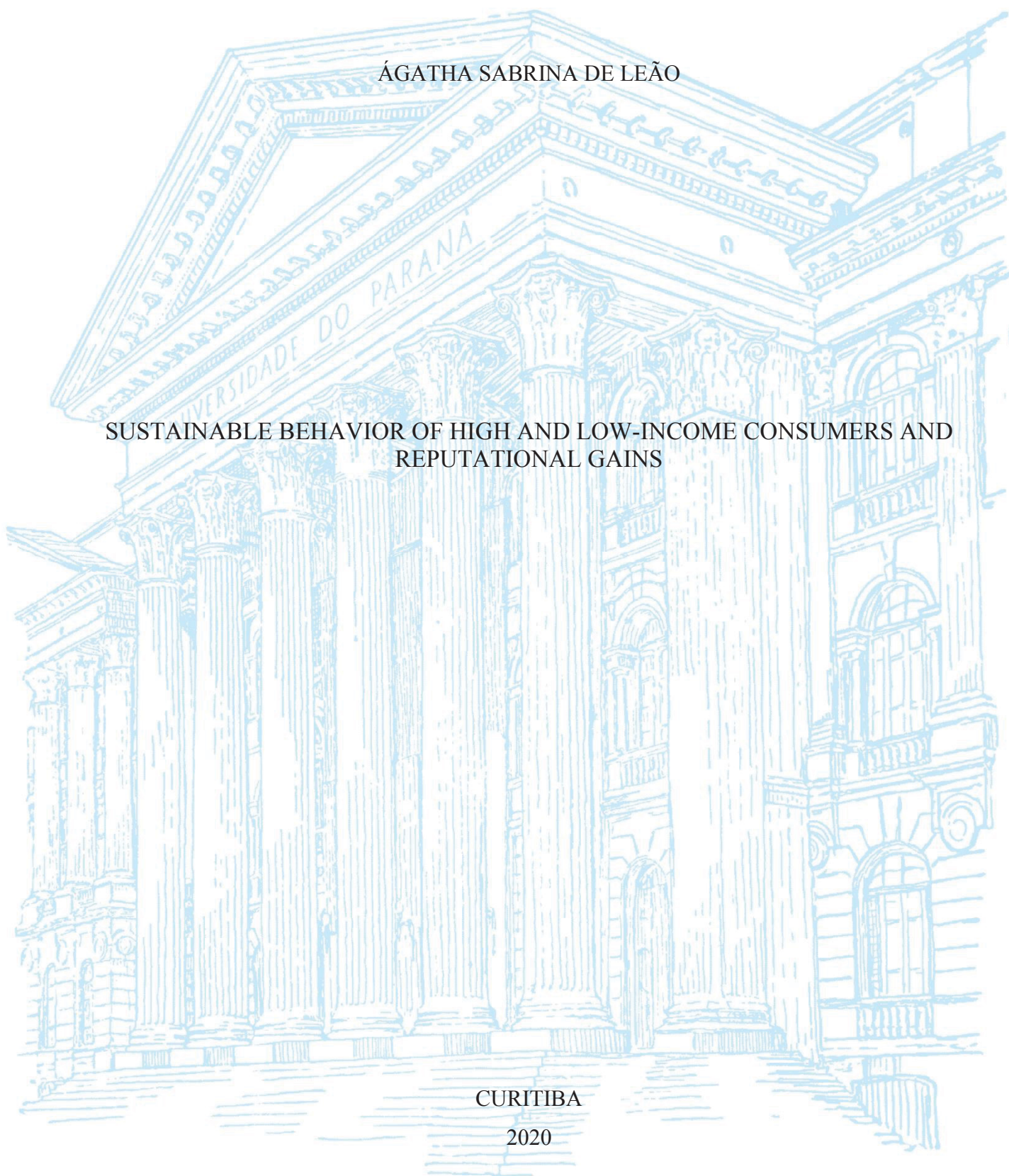
UNIVERSIDADE FEDERAL DO PARANÁ

ÁGATHA SABRINA DE LEÃO

SUSTAINABLE BEHAVIOR OF HIGH AND LOW-INCOME CONSUMERS AND
REPUTATIONAL GAINS

CURITIBA

2020



ÁGATHA SABRINA DE LEÃO

SUSTAINABLE BEHAVIOR OF HIGH AND LOW-INCOME CONSUMERS AND
REPUTATIONAL GAINS

Dissertação apresentada ao curso de Pós-Graduação em Administração – Linha de estratégia de marketing e comportamento do consumidor do setor de Ciências Sociais Aplicadas na Universidade Federal do Paraná, como requisito à obtenção do título de mestre.

Orientadora: Prof.^a Dr.^a Danielle Mantovani
Lucena da Silva.

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RESUMO

Pesquisas anteriores mostram que os consumidores de classe baixa se comportam de maneira mais pró-social e são frequentemente percebidos como mais altruístas e virtuosos em comparação com indivíduos de classe alta (por exemplo, ajudando outras pessoas, se voluntariando e até doando mais recursos). No entanto, para ações pró-ambientais, o julgamento oposto é observado. Nesta pesquisa, defendemos que os ganhos de percepções positivas derivadas do consumo pró-ambiental são assimétricos entre classes sociais baixas e altas. Portanto, as mesmas ações sustentáveis são percebidas como contribuindo mais para o meio ambiente e mais altruístas quando executadas pela classe alta em comparação aos indivíduos da classe baixa. Além disso, esse efeito é percebido tanto com a economia quanto com o gasto de recursos financeiros em prol dessas ações. Mostramos que a motivação percebida conduz esse julgamento assimétrico. Enquanto as ações ambientais realizadas pelas pessoas pobres são percebidas como motivadas principalmente pelo interesse próprio (metas de economia), essas ações quando executadas pela classe alta são julgadas como motivadas por valores pessoais (preocupação ambiental). Este estudo também demonstra que esse ganho reputacional assimétrico e mais negativo é ainda mais evidente para os indivíduos dentro do grupo da classe baixa. No geral, os consumidores da classe alta atribuem maior contribuição e altruísmo nas práticas sustentáveis em comparação aos consumidores da classe baixa. Os consumidores da classe alta também julgam que as ações de seus pares contribuem mais do que os membros do grupo externo. O padrão oposto é observado quando consumidores de classe baixa julgam a contribuição de ações sustentáveis de classe baixa e alta, atribuindo maior contribuição aos membros do grupo externo.

Palavras-chave: Classe social, comportamento sustentável, ganhos de reputação, contribuição ambiental.

ABSTRACT

Past research shows that lower-class consumers behave more prosocially and are often perceived as more altruistic and virtuous compared to their upper-class counterparts (e.g., helping others, volunteering, and even donating more resources). However, for proenvironmental actions, the opposite judgment is observed. In this research, we contend that the gains of positive perceptions derived from proenvironmental consumption are asymmetrical between low and high social classes. Therefore, the same sustainable actions are perceived as contributing more to the environment and more altruistic when performed by upper-class compared to lower-class individuals. This effect holds true for both sustainable actions that result in more saving or expending of financial resources. We show that distinct perceived motivations drive this asymmetric judgment. While the environmental actions performed by poor people are perceived as primarily motivated by self-interest (saving goals), these actions are judged as more motivated by personal values (environmental concern) when performed by the upper-class. This study also demonstrates that this asymmetrical reputational gain is even more pronounced for ingroup members within the lower-class group. Overall, upper-class consumers attribute higher contribution and altruism in sustainable practices compared to lower-class consumers. Upper-class consumers also judge that their peers' actions contribute more than outgroup members. The opposite pattern is observed when lower-class consumers judge the contribution of lower and upper-class sustainable actions, attributing higher contribution to outgroup members.

Keywords: Social class, sustainable behavior, reputational gains, environmental contribution.

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INTRODUCTION

The relationship between social class and prosocial behavior is a frequent topic of appreciation in the literature (Piff et al., 2010; Kraus & Callaghan, 2016; Piff & Robinson, 2017). Most of these studies show that lower-class individuals behave more prosocially compared to higher-income individuals. For instance, Piff et al. (2010) demonstrate that lower class individuals proved to be more generous, charitable, trusting, and helpful compared with their upper-class counterparts. Previous studies also show that low-income consumers, compared to high-income individuals, performed less unethical behaviors to benefit themselves (Dubois, Rucker, & Galinsky, 2015), indicated more prosocial behavior in private context (Kraus & Callaghan, 2016), were more sensitive to others' welfare and were more likely to engage in other-beneficial prosocial behavior (Piff & Robinson, 2017).

However, prosocial behavior related to sustainable actions is an exception in the literature (Olson, McFerran, Morales, & Dahl, 2016; Olson et al., 2017; Eom et al., 2018). Although sustainable behavior is associated with positive outcomes, such as the attribution of altruism and social status from others, given the individual's capacity to spend their resources for the greater good of the environment (Griskevicius, Tybur, & Van den Bergh, 2010; Berger, 2019; Luomala et al., 2020), lower-class consumers do not equally benefit from these reputational gains compared to upper-class consumers. Research generally attributes this discrepancy in sustainability to lower environmental knowledge, lack of infrastructure (Eom et al., 2018), and even morality. For instance, Olson et al. (2016) demonstrated that low-income individuals receiving government assistance are perceived as less moral when choosing ethical (vs. conventional) products, whereas the opposite occurs to high-income individuals. Further, when volunteering to causes (time giving) and when donating material possessions (resource giving), the same pattern is observed (Olson et al., 2017).

In this research, we contend that asymmetric reputational gains related to perceptions about the environmental contribution of actions and pure altruism may also help explain this phenomenon. We argue that the same sustainable behavior is perceived as contributing more to the environment when an upper-class individual performs it compared to a lower-class counterpart.

These asymmetric judgments are based on the perceived motivation for sustainable actions. Low-income consumers live in a scenario of scarcity of financial resources, constantly considering the opportunity costs of their behaviors toward resource optimization (Carey & Markus; Pham, 2016; Shavitt, Jiang, & Cho 2016). When saving natural resources through acts of sustainable consumption, such behaviors may be accounted for their goals of resource optimization and not to altruistic motivation. Specifically, this sustainable behavior would be accounted to benefit the low-income individual self and not the public welfare (i.e., he is going to work by bicycle because he cannot afford a car; she is reusing products because she is not able to buy new ones). Consequently, perceptions of relevance and contribution of sustainable actions will be attenuated for the poor.

Conversely, upper-class consumers have plenty of financial resources and have the means to freely choose between the options available in the market to satisfy their needs. Therefore, engaging in sustainable behavior (i.e., recycling, saving water or energy, not buying too many clothes or choosing a green option) signals that the individual is giving up to consume more natural resources, which is perceived as a pure form of altruism as well as a significant environmental contribution. Without resource constraints, sustainable consumption will signal others their ability to be altruistic at the expense of own benefits, thus resulting in more ascribed social capital (Bird & Smith, 2005; Griskevicius, Tybur & Van den Bergh, 2010).

Since consumers hold different viewpoints about consumption based on their own socioeconomic positions (Carey & Markus, 2016; Olson et al., 2016; Durante & Fiske, 2017;

Fiske, 2018), we suggest that these asymmetric judgments regarding sustainable actions will emerge not only based on the target income but also the socioeconomic position of the evaluators. Therefore, the same choice can trigger different judgments in the eyes of others, depending on the socioeconomic standing of the actor. We find that these asymmetric judgments regarding the perceived contribution of sustainable actions are observed both from the lower and upper-class observers' perspectives. However, lower-income consumers judge that their ingroup members contribute less to the environment compared to the upper-class judgment about the sustainable action performed by lower-class consumers.

This research contributes to the literature in a number of ways. First, we contribute to past research examining prosocial and, more specifically, sustainable behavior from the socioeconomic perspective (Brooks & Wilson, 2015; Kraus, 2016; Piff & Robinson, 2017; De Nardo, 2017; Piff, Kraus & Keltner, 2018). This study demonstrates how the impact of the same sustainable behavior could be evaluated based on the socioeconomic background of the actor performing this environmental action. We show that the stereotypical differences that form the perception about the motivation of lower and upper social class individuals to engage in sustainable consumption are responsible for the asymmetric reputational gains between these groups. Second, we demonstrate that this effect is consistent both for sustainable actions associated with money saving (e.g., reusing and recycling) and money expending (e.g., considering more eco-efficient home appliances) behaviors. It is interesting to note that even when lower-income consumers spend more resources on sustainable actions, they are still perceived to be motivated by a saving orientation, which reduces the perceived relevance and contribution of their actions to the environment. Third, we contribute to previous research investigating individuals perceptions about in and outgroup members (Berger & Heath, 2008; White & Dahl, 2007; Kim & Loury, 2019) by showing that the asymmetric reputational gains associated with sustainable actions do not necessarily reflect an outgroup perspective judgment.

We demonstrate that although the socioeconomic position of the observer does not change the pattern of perception about the contribution of the sustainable behaviors performed by in and outgroup members, the asymmetric effect is more pronounced when judging ingroup members. This finding also contributes to the theoretical discussion about social class as a group social identity (Berger & Heath, 2008; Shavitt, 2016; Dahl, 2013). Finally, we add to the findings that sustainable consumption not always triggers positive signaling (Delgado et al., 2015; Olson et al., 2016; Luomala et al., 2020) by showing that not all groups of consumers will equally benefit from sustainable behavior. The perceived motivation behind sustainable action will shape these reputational judgments.

BACKGROUND THEORY

REPUTATION AND SUSTAINABILITY

The world is facing many social and environmental problems. As a result, consumers are constantly asked to take virtuous actions and behaviors. For instance, consumers are increasingly engaging in social and environmental causes, by volunteering, donating resources (i.e., money, food, blood) (Olson et al., 2017; Broek et al. 2019), and increasing ecological practices, such as reducing consumption (Lin and Chang 2012; White, Simpson and Argo 2014; Meng & Trudel, 2017) and choosing green and sustainable products (Rose & DeJesus, 2007; White and Simpson 2013).

Besides the social and environmental benefits, engaging in virtuous behavior also results in positive reputational gains. For instance, previous research postulates that altruism can work to build and maintain a good reputation (Roberts, 1998; Van Vugt, Roberts & Hardy, 2007. Lee et al. (2015) show that prosocial actions result in positive signaling to others, such as pure altruism. Reed, Aquino & Levy (2007) & Olson et al. (2017) demonstrate that those

acting in a prosocial manner are perceived with higher levels of morality. Sustainable choices also involve the perception of concerning with long-term benefits for others and the natural world (White et al., 2019). Therefore, getting involved in pro-environmental behaviors such as the conservation of nature and conscious consumption can build a prosocial reputation (Semmann, Krambeck & Milinski, 2005).

However, not all behaviors are created equal, as group membership and inferred motivation for social action also matter. Although members of lower social classes are perceived as more generous (Piff & Robinson, 2010; Piff et al., 2012), when it comes to sustainability behavior, they do not benefit from the same reputational gains acquired by their upper-class counterparts. If the prosocial behavior is perceived as self-interested, then reputational gains become neutral or even reputational losses. Basically, people buy green and sustainable products because the purchase of such products can be interpreted as altruistic since green products cost more and are of lower quality compared to conventional analogs, but green products benefit the environment for all (Griskevicius et al., 2010; Bereczkei, Birka, & Kerekes, 2010; Brooks & Wilson, 2015).

High-income consumers have sufficient financial resources to choose freely from the options available in the market to meet their needs. Nevertheless, their choice to forego consumption symbolizes a sacrifice. Therefore, engaging in sustainable behaviors - recycling or choosing a green option - indicates that the individual is giving up consuming more resources, which is perceived as a significant environmental contribution. Without resource constraints, upper-class sustainable consumption choices will signal to others their ability to be altruistic to the detriment of their own benefits, resulting in social capital.

While upper-class individuals are characterized by economic independence, high personal control and freedoms of personal choice (Snibbe & Markus, 2005; Stephens et al., 2007), lower-class individuals possess fewer resources and less personal control (Argyle, 1994;

Domhoff, 1998). Therefore, reputational gains associated with sustainable choices are reduced for lower class individuals, since they live in a scenario of scarcity of options, constantly considering the costs of their behavior in light of the optimization of their limited resources (Shavitt, Jiang, & Cho 2016).

Consequently, sustainable consumption of low-income individuals will be more associated with saving goals instead of environmental concern, compared to high-income individuals engaging in the same behavior. That is, this sustainable behavior will be considered beneficial only to the low-income individual and not to the well-being of society as a whole.

This motivation perception influences evaluations about the impact of sustainable behaviors. When consumers are judged as motivated by self-interest, perceived contribution and relevance of the action are reduced, compared to when the motivation is interpreted as an environmental concern.

SOCIAL CLASS, INFERRED MOTIVATION FOR PROSOCIALITY AND REPUTATIONAL GAINS

The conditions and realities of socioeconomic classes shape the process by which people perceive and understand their world (Markus & Kitayama, 2010; Carey & Markus, 2016; Kraus & Callaghan, 2016). Those in lower class contexts have a more interdependent self-construal and are more likely to have processes that are shaped by a self that is fundamentally connected to others, resilient and adjusting to situational forces (Durante & Fiske, 2017). Consequently, lower class consumers make choices and decisions in contexts that de-emphasize the importance of personal preferences and emphasize the importance of others, situational forces, and norms (Riemer, Shavitt & Koo, 2015). In contrast, choices in higher class contexts often serve to express and affirm oneself. Rather than expressing and reflecting the self, choices of lower class members often imply others and connections to others (Carey & Markus, 2016).

Past research indicates that lower-class individuals are more oriented to the welfare of others as a means to adapt to their more hostile environments and that this orientation gives rise to greater prosocial behavior (Piff et al., 2010; Piff et al., 2012; Piff & Robinson, 2017). These prosocial actions also result in more positive reputational gains compared to prosocial actions performed by their upper-class counterparts (Kraus et al., 2012; Piff et al., 2012; Whillans, Caruso & Dunn 2017; Van Doesum, Tybur & Van Lange, 2017).

However, when lower-class individuals have a proenvironmental behavior, they will be perceived as motivated more by self-interested (vs. other-oriented) goals when compared to their higher-class counterparts. Since lower-class individuals live with fewer resources, sustainable practices will signal others financial constraints. Conversely, upper-class consumers have more financial and social support, allowing them to freely choose what to consume (Whitehead et al., 2016; Ezeh et al., 2017; Pepper & Nettle, 2017). Because many green choices are associated with higher costs and lower quality perception (Milinski et al., 2006; Griskevicius, Tybur, & Van den Bergh, 2010; Sekhon & Soule, 2019), the upper-class sustainable choice represents a self-sacrifice for the greater good of the environment and not a self-interest goal of saving resources.

For these reasons, lower-class individuals will also receive less reputational gains from acting prosocially, compared to upper-class individuals. This effect holds true even when lower-class consumers spend more resources when choosing a sustainable option (i.e., buy a more energy efficient appliance) because observers look at the long-term benefit these consumers will acquire by saving resources in the future. More formally:

H1a: Proenvironmentally actions will generate higher reputational gains (higher contribution to the environment and pure altruism) when they are performed by upper-class (vs. lower-class) individuals.

H1b: Perceived motivation (self vs. other-oriented) mediates the effect that occurs in H1a.

SOCIAL CLASS AND REPUTATIONAL GAINS AMONG INGROUPS

Social class is one of the many forms of culture that feeds the understanding and experience of an individual's world (Carey & Markus, 2016). As a form of culture, social class can be described as a dynamic system of ideas, institutions and interactions that guide individuals to think, feel and act. Through their behavior, individuals perpetuate the cultures of which they are part (Markus & Conner, 2013; Carey & Markus, 2016). Social relationships are largely sorted based on social class (Bottero, 2004). Therefore, some behaviors are more visible to ingroups, but not necessarily to outgroups.

People tend to mimic behaviors that reinforce the group's identity and its ties to the group (Trudel, 2018). In addition to individual identity, social identity also influences people's sustainable behavior. Consumers' attitudes, beliefs and behaviors are affected by social groups to which they belong, sometimes even more than their personal identities (Onorato & Turner, 2004). Attitudes and behaviors are strongly influenced by other individuals who are trustworthy and share an adherence to the ingroup (people who share a social identity) and a divergence to outgroup (people who do not share a social identity). In this way, it is possible to understand that the social foundations of groups can be effective in conducting consumer behavior and understanding consumer decision making in the area of sustainability (Trudel, 2018).

Sustainability is highly valued by higher-class individuals and is often used as a signaling strategy. One reason is that the social influence of ingroup members can impact sustainable behavior through "social desirability." Consumers tend to choose sustainable options to make a positive impression on others (Green & Peloza, 2014) and they endorse sustainable options for high involvement (for example, hybrid vehicles) to convey social status to others (Griskevicius, Tybur & Bergh 2010). In addition, consumers are more likely to act

proenvironmentally in public contexts where others can observe and evaluate their actions (Green & Peloza 2014; Grolleau, Ibanez & Mzoughi 2009; Peloza, White & Shang 2013). Consumers are also less likely to exhaust resources when their reputation is at stake (Hardy & Van Vugt 2006; Milinski et al., 2006). Concerns with reputation can also induce people to buy proenvironmental products even when they perceive such products as inferior (Griskevicius, Tybur, & Van den Bergh 2010) or are more expensive (Sekhon & Soule, 2019).

However, these positive signalings do not receive much attention from their lower-class peers. We base this argument on research demonstrating that sustainable actions can be associated with negative reputational gains in some circumstances (Brooks & Wilson, 2015; De Nardo et al., 2017; Sekhon & Soule, 2019). For instance, Sekhon and Soule (2019) show that consumers supporting consumption reduction practices are perceived as members of lower socioeconomic groups. Thus, since higher-class individuals value more green behaviors than their lower-class peers, the reputational gains of behaving proenvironmentally should also be greater among the former.

SOCIAL CLASS, ANTICIPATED REPUTATIONAL GAINS AMONG INGROUPS AND SUSTAINABLE BEHAVIOR

A good reputation is based on personal gains, which can come in many forms, but those gains are asymmetrical between the upper and lower classes when they have different motivations for the same action and sustainable consumption choices. Because reputation is measured in the eyes of observers, the signs of gain vary depending on the characteristics that are valued in a reference group (Marwick, 2010). For example, because wealth is a trait valued across various reference groups, luxury brands are commonly considered as status signals (Han, Nunes, & Drèze, 2010). Similarly, being aware of the environment is increasingly a valued trait and therefore green brands (such as Tesla, Prius, Patagonia) can signal status and reputational

gains (Griskevicius, Tybur, & Van den Bergh, 2010; Dastrup et al., 2012; Sexton & Sexton, 2014). Existing research on signaling theory and sustainable consumption suggest that green products are more attractive when they allow consumers to signal desirable personal traits, such as social status or prosocial values (Thaler and Sunstein, 2008; Whitfield, 2011; Iredale & van Vugt, 2012; Babutsidze & Chai, 2018).

Nevertheless, the same behavior may be more valued by specific groups. Specifically, the lower-class group will not perceive the same reputational gains associated with sustainable consumption compared to the upper-class members. Observers use consumption to form impressions over a range of disposition characteristics about the individual, such as wealth (Nelissen & Meijers, 2011), intelligence (Manz & Lueck, 1968), taste and culture (Bourdieu, 2013), and so on. These impressions are a sign of value or status to others, often considered a central symbolic benefit that consumption can provide (Eastman, Goldsmith, and Flynn, 1999). Lower-class consumers perceive higher social status when consumption increases the perception of social mobility (Piff et al., 2012). Hall-Phillips et al. (2016), Nabi, O’Cass & Siahtiri (2019) shows that low-class people buy products from more expensive brands because they increase individuals’ sense of belonging to the higher-income group and signal a high status to others. However, sustainable choices are more often associated with self-sacrifice, lower quality options and lower socioeconomic status (Bird & Smith, 2005; Sekhon & Soule, 2019). Although upper-class consumers may also perceive that green choices implicate self-sacrifice, their ingroup members value these sustainable practices, which generates higher reputational gains in the eyes of these observers.

Upper-class groups are more cohesive with their ingroup, which increases the positive perceptions about the actions performed by ingroup members (Steele, 2002; White & Argo, 2014; Fiske, 2018). Yzerbyt & Demoulin (2010) postulates that higher-class individuals

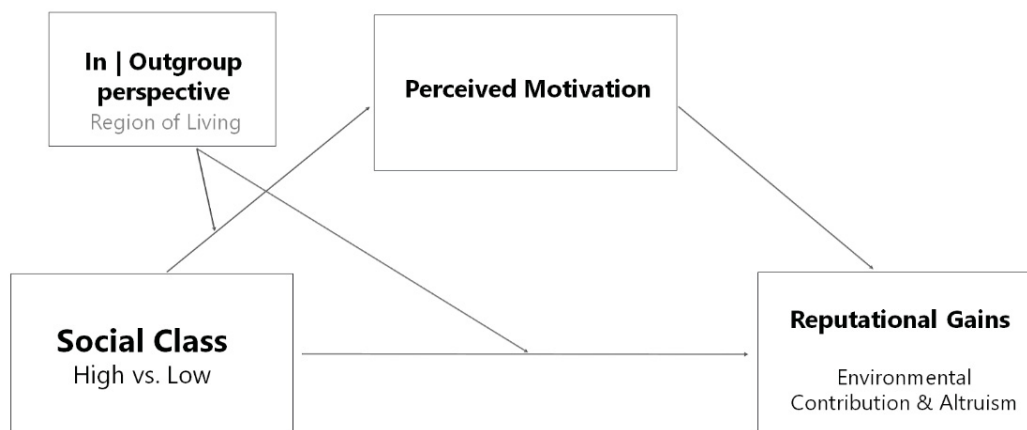
perceive themselves as more competent than everybody, so they defend their position in relation to outside groups. This group seeks a positive identity and self-image and a distinct stereotype.

Therefore, upper-class individuals judge that proenvironmental behavior generates more positive signaling when their peers perform it. The same cohesive behavior is not observed for lower-class consumers, who perceive higher reputational gains for sustainable practices performed by members of upper-classes compared to their ingroup members. More formally:

H2a: Upper-class (vs. lower-class) individuals will attribute higher (vs. lower) proenvironmental reputational gains for ingroup (vs. outgroup) members;

H2b: Lower-class individuals will attribute lower proenvironmental reputational gains to ingroup members compared to the judgment from higher-class individuals about these members.

FIGURE 1 - CONCEPTUAL MODEL OF STUDY



Conceptual model shows the perspective in – out group as moderator in relation social class between social action evaluation.

STUDY 1 – REPUTATIONAL GAINS AND MOTIVATION FOR SUSTAINABILITY

This study examines the impact of sustainable actions performed by lower and upper-class consumers on people's judgment about the contribution of this behavior to the environment and the altruism of the actor. Within four different scenarios, we expect that these reputational gains will be higher for upper-class compared to lower-class individuals. We also examine the mediating impact of perceived motivation for performing this sustainable behavior.

METHOD

Participants and Design. This study followed a 2 social class pro-environmental action (performed by a lower vs. an upper-class individual) by 4 different scenarios (two eco-friendly products – washing machine and lamps; ecological furniture and packaging reuse) between-subjects design. The scenarios involving eco-friendly products are among the expending dimension, where consumers often spend more money on buying these options compared to non-sustainable products. The other two scenarios, ecological furniture and packaging reuse, are among the sustainable options where consumers often spend fewer financial resources to make this choice. Therefore, we examine if our predictions hold true across different scenarios, both for money saving and expending choices. For each scenario, participants were randomly assigned to one of the two social class manipulation conditions.

For the eco-friendly washing machine, the sample was composed by eighty-eight undergraduate students (55.7 % male; $Mage = 20.81$; $SD = 3.45$). The study was conducted in exchange for a small gift at the end of the study. For the ecological furniture scenario ($N = 202$ respondents, 88.6% female; $Mage = 43.69$; $SD = 12.87$), the eco-friendly led lamps scenario ($N = 108$ respondents, 77.8% % female; $Mage = 37.67$; $SD = 13.22$) and the packaging reuse

(N = 66 respondents, 75.7 % female; *Mage* = 37.43; SD = 15.89), participants were recruited in an online panel, in exchange for a chance to win a shopping voucher of \$100.

Procedures. Participants were invited to participate in a series of unrelated studies. They were told that researchers were interested in examining consumers choices and decisions. Social class manipulation followed previous studies (Olson et al, 2016; Griskevicius et al, 2010).

In the eco-friendly washing-machine scenario, respondents were exposed to one of the following social class sustainable behavior: *“Ana is a middle-aged woman who belongs to an upper (vs. lower) social class and lives at a rich (vs. poor) neighborhood of the city in which you live. Recently, Ana decided to buy a new washing machine. When comparing the product options, one of Ana's main decision concern is check the equipment’s energy consumption.”*

Just for the sake of comparison, in the local market, the more energy efficient a washing machine is, the more expensive it will be. An option classified with the most efficient energy consumption is about 30% more expensive compared to a similar option classified in the lower level of efficiency. At the same time, the most efficient option saves about 25% more energy. Although choosing the most sustainable option means expending more resources at the time of the decision, in the long run, consumers would benefit from saving more money in the energy consumption, while also benefiting the environment.

Within the ecological furniture scenario, participants read one of the following situations: *“Ana is a 35-year-old woman who lives at a rich neighborhood of her city. (vs. poor neighborhood). Ana needs to buy some furniture for her living room and will purchase these items from a second-hand provider, which sells furniture made from recycled materials, such as wooden pallets and reused fabrics.”*

The third scenario was also based on sustainable energy consumption in an expending situation, the choice to buy led lamps. Led lamps are usually 50% more expensive compared to

other options available in the local market. Although more expensive, they are also more energy efficient and last longer. Therefore, consumers deciding to buy this product option would have to spend more money by the time of the decision, but also benefit from saving resources in the long run, while also contributing to the environment.

The scenario describing the decision to buy eco-friendly led lamps did not explicitly describe that the consumer was a member of a specific socioeconomic class, including only the information about the place of living. A male character was also used in this scenario:

“Daniel is a 35-year-old man who lives in a rich neighborhood of his city (vs. poor neighborhood). Daniel recently replaced all the lamps in his home for LED lamps.”

Finally, in the scenario about packaging reuse, participants were exposed to one to the two social class conditions:

“Julia is a 35-year-old woman living in a rich neighborhood of her city (vs. poor neighborhood). At home, Julia often gives another utility to the already used packaging of products, such as storing objects and household items.”

Measures. After reading the scenario, participants rated their judgment about actor's perceived motivation ($\alpha = .749$) to perform the sustainable action described in the scenario, in two items: “*Actor is thinking about saving money*” and “*Actor is thinking about the benefits for the environment,*” both in 7-point scale, were 1 = “Totally disagree” to 7 = “Totally agree.”

The perception about the actor's contribution to the environment ($\alpha = .707$) was measured with two items: “*Actor's action contributes a lot to the environment*” and “*Actor's action is relevant to the environment*”), in 7-point scale, varying from 1 = “Totally disagree” to 7 = “Totally agree.”

Pure altruism ($\alpha = .807$) was also measured with a scale adapted from Brown et al. (2003) composed by four items (“I think *Actor* wants to cooperate with society”, “I think *Actor* is motivated to help”, and “I think *Actor* is sacrificing herself for others”) and Competitive

Altruism (I think *Actor* wants to compete and I think *Actor* is motivated to have a higher social status) in 7-point scale, varying from 1 = “Totally disagree” to 7 = “Totally agree”.

To access respondents’ perception about *Actor*’s environmental knowledge ($\alpha = .920$), we used a scale adapted from Mostafa (2007), composed by five questions (“*Actor* buys products that have environmentally correct packaging”, “*Actor* knows more about recycling than the average population”, “*Actor* knows how to choose products and packaging that will reduce the amount of waste destined for landfills”, “*Actor* understands the environmental messages and symbols on the packaging of products”, and “*Actor* has a broad knowledge of environmental issues.”;),) in 7-point scale, varying from 1 = “Totally disagree” to 7 = “Totally agree”.

The manipulation check for social class followed the procedure from Adler *et al.* (2000). Participants were asked to imagine a ladder, in which each step represents a specific place that people occupy in society. Specifically, at the top of this ladder are the people who have the most money, the highest educational level, and the highest status job. At the bottom of the ladder are people who have less money, lower educational level, and lower-status jobs. Next, they were asked: “How would you rate *Actor*’s position on this ladder?”. Thus, it was necessary that the participant indicates, in which of those steps they judge to be *Actor*, after visualizing the presented scenario in a 7-point scale, varying from 1 = “In the worst position” to 7 = “In the best position.”

In all the items, the word “actor” was replaced by the name of the character described in the specific scenario. Finally, respondents answered demographic questions, were thanked and debriefed.

Results

The results are detailed for each scenario to show the consistency of the effects across saving and expending sustainable behaviors.

The eco-friendly washing-machine scenario

Manipulation check. We conducted an ANOVA with social class as the factor and the social position perception as the dependent variable. As expected, there was a main effect of social class on social position ($F(1, 86) = 88.733; p < .000; \eta_p^2 = .508$). Participants perceived Ana in higher social class when they were presented to the higher social position manipulation ($M = 5.48, SD = 1.13$) when compared to those exposed to the lower social class condition ($M = 3.20, SD = 1.13$).

Perceived Motivation. A perceived motivation index was created by averaging the two items. The item about the motivation to save money was reverse coded. The results showed a statistically significant effect of social class on perceived motivation ($F(1, 86) = 27.211; p < .000; \eta_p^2 = .240$). As expected, perceived motivation was higher for those in the upper social class ($M = 3.71, SD = 1.51$), compared to those in the lower social class ($M = 2.14, SD = 1.29$).

Environmental Contribution. An environmental contribution index was created by averaging the two items. An ANOVA with social class as predictor of individuals' contribution to the environment showed a significant effect of social class on environmental contribution motivation ($F(1, 86) = 20.002; p < .000; \eta_p^2 = .189$). When the sustainable action was performed by a lower-class individual ($M = 3.26, SD = 1.37$), environmental contribution was perceived as having a lower impact, compared to the same sustainable action performed by the upper-class group ($M = 4.56, SD = 1.36$).

Pure altruism. The results followed the same pattern for the judgment about pure altruism. The three items were averaged to form an index of pure altruism. The results of an

ANOVA show that those in an upper-class were perceived as more altruistic ($M = 3.60$, $SD = 1.32$), compared to those in the lower-class position ($M = 2.75$, $SD = 1.44$; ($F(1, 86) = 8.254$; $p < .005$; $\eta_p^2 = .088$). Competitive altruism that indicates the status that the individual signals with the action was not significant in this study or in the later ones.

Environmental Knowledge Perception. An ANOVA with the social class condition (high vs. low) as predictor on environmental knowledge perception showed a significant effect ($F(1, 86) = 21.350$; $p < .000$; $\eta_p^2 = .199$). Higher income people are perceived with greater knowledge about environmental practices when contrasted to those in lower-income condition ($M_{low-income} = 2.73$, $SD = 1.21$; $M_{high-income} = 4.02$, $SD = 1.38$). We included this variable as a covariate in the analysis and it did not change the previous findings. This result is consistent across conditions and therefore, is not reported in the next studies.

Mediation analysis

Two mediation analysis were conducted to investigate how perceived motivation would impact the relationship between social class sustainable behavior and reputational gains, which were measured in this study as the environmental contribution and pure altruism. The results of the analysis using the PROCESS macro on SPSS (model 4; 10,000 samples; Hayes 2018) showed a positive indirect effect ($\beta = .5141$, $CI = .1501$ to $.8981$) of perceived motivation on the relationship between sustainable action and environmental contribution. There was no direct effect of social class on environmental contribution ($\beta = .4617$, $CI = -.0963$ to 1.0196). However, there was a positive effect of social class on perceived motivation ($\beta = 1.5682$, $CI = .9706$ to 2.1658) and a positive effect of perceived motivation on environmental contribution ($\beta = .3278$; $CI = .1115$ to $.5442$),

Similar analysis was performed for pure altruism as the dependent variable. Again, the expected indirect effect was significant ($\beta = 1.1035$, $CI = .6944$ to 1.4902). No direct effect of

social class on pure altruism was observed ($\beta = -.2550$, CI = $-.7279$ to $.2179$), but we found a positive effect of social class on perceived motivation ($\beta = 1.5682$, CI = $.9706$ to 2.1658), a positive effect of perceived motivation on pure altruism ($\beta = .7037$; CI = $.5558$ to $.8515$).

The Ecological Furniture Scenario

The same analysis was conducted for the ecological furniture scenario. The manipulation check confirmed showed that participants perceived Ana in higher social class when they were presented to the higher social position manipulation ($M = 5.90$, $SD = 1.29$) when compared to those exposed to the lower social class condition ($M = 3.45$, $SD = 1.98$; $F(1, 200) = 38.311$; $p < .000$; $\eta_p^2 = .161$).

There was a statistically significant effect of social class on perceived motivation ($F(1, 200) = 17.003$; $p < .000$; $\eta_p^2 = .078$). As expected, perceived motivation was higher for those in the upper social class ($M = 4.79$, $SD = 1.16$), compared to those in the lower social class ($M = 4.03$, $SD = 1.45$). For environmental contribution we found a significant effect of social class on environmental contribution motivation ($F(1, 200) = 8.885$; $p < .003$; $\eta_p^2 = .043$). When the sustainable action was performed by a lower-class individual ($M = 6.05$, $SD = 1.59$), environmental contribution was perceived as having a lower impact, compared to the same sustainable action performed by the upper-class group ($M = 6.68$, $SD = .84$). The results followed the same pattern for the judgment about pure altruism. Those in an upper-class were perceived as more altruistic ($M = 5.69$, $SD = 1.22$), compared to those in the lower-class position ($M = 4.71$, $SD = 1.63$; $F(1, 200) = 23.068$; $p < .000$; $\eta_p^2 = .103$).

Mediation analysis

Two mediation analysis were conducted to investigate how perceived motivation would impact the relationship between social class sustainable behavior and reputational gains, which

were measured in this study as the environmental contribution and pure altruism. For The results of the analysis using the PROCESS macro on SPSS (model 4; 10,000 samples; Hayes 2018) showed a positive indirect effect ($\beta = .2593$, CI = .1111 to .4513) of perceived motivation on the relationship between sustainable action and environmental contribution. There was no direct effect of social class on environmental contribution ($\beta = .2683$, CI = -.0724 to .6091). However, there was a positive effect of social class on perceived motivation ($\beta = .7612$, CI = .3972 to 1.1252) and a positive effect of perceived motivation on environmental contribution ($\beta = .3406$; CI = .2153 to .4659).

Similar analysis was performed for pure altruism as dependent variable. Again, the expected indirect effect was significant ($\beta = .2525$, CI = .0939 to .4661). The direct effect of social class on pure altruism was observed ($\beta = .7206$, CI = .3229 to 1.1182) and we found a positive effect of social class on perceived motivation ($\beta = .7612$, CI = .3972 to 1.1252), a positive effect of perceived motivation on pure altruism ($\beta = .3317$; CI = .1855 to .4780).

The Eco-Friendly Led Lamps Scenario

The same analysis was conducted for the eco-friendly led lamps scenario. The manipulation check confirmed showed that participants perceived Daniel in higher social class when they were presented to the higher social position manipulation ($M = 5.77$, $SD = 1.32$) when compared to those exposed to the lower social class condition ($M = 2.22$, $SD = 1.48$; $F(1, 107) = 37.737$; $p < .000$; $\eta_p^2 = .263$).

There was a statistically significant effect of social class on perceived motivation ($F(1, 107) = 9.901$; $p < .002$; $\eta_p^2 = .085$). As expected, perceived motivation was higher for those in the upper social class ($M = 4.11$, $SD = 1.57$), compared to those in the lower social class ($M = 3.53$; $SD = 1.36$). For environmental contribution we found a significant effect of social class on environmental contribution motivation ($F(1, 107) = 9.549$; $p < .003$; $\eta_p^2 = .083$). When the

sustainable action was performed by a lower-class individual ($M = 5.75$, $SD = 1.37$), environmental contribution was perceived as having a lower impact, compared to the same sustainable action performed by the upper-class group ($M = 6.44$, $SD = .87$). The results followed the same pattern for the judgment about pure altruism. Those in an upper-class were perceived as more altruistic ($M = 5.25$, $SD = 1.10$), compared to those in the lower-class position ($M = 4.35$, $SD = 1.72$; $F(1, 107) = 10.476$; $p < .002$; $\eta_p^2 = .090$).

Mediation analysis

Two mediation analysis were conducted to investigate how perceived motivation would impact the relationship between social class sustainable behavior and reputational gains, which were measured in this study as the environmental contribution and pure altruism. For The results of the analysis using the PROCESS macro on SPSS (model 4; 10,000 samples; Hayes 2018) showed a positive indirect effect ($\beta = .3816$, $CI = .1253$ to $.7014$) of perceived motivation on the relationship between sustainable action and environmental contribution. There was no direct effect of social class on environmental contribution ($\beta = .3036$, $CI = -.0831$ to $.6903$). However, there was a positive effect of social class on perceived motivation ($\beta = .5741$, $CI = .2124$ to $.9358$) and a positive effect of perceived motivation on environmental contribution ($\beta = .6647$; $CI = .4678$ to $.8615$).

Similar analysis was performed for pure altruism as dependent variable. The expected indirect effect was significant ($\beta = .4724$, $CI = .1681$ to $.8419$). The direct effect of social class on pure altruism was not observed ($\beta = .4288$, $CI = -.0597$ to $.9173$) and we found a positive effect of social class on perceived motivation ($\beta = .5741$, $CI = .2124$ to $.9358$), a positive effect of perceived motivation on pure altruism ($\beta = .8230$; $CI = .5742$ to 1.0717).

The Packaging Reusing Scenario

The same analysis was conducted for the packaging reusing scenario. The manipulation check confirmed showed that participants perceived Julia in higher social class when they were presented to the higher social position manipulation ($M = 5.16$, $SD = 1.59$) when compared to those exposed to the lower social class condition ($M = 4.00$, $SD = 2.11$; $F(1, 65) = 6.509$; $p < .003$; $\eta_p^2 = .092$).

There was a statistically significant effect of social class on perceived motivation ($F(1, 65) = 18.239$; $p < .000$; $\eta_p^2 = .222$). As expected, perceived motivation was higher for those in the upper social class ($M = 5.05$, $SD = 1.26$), compared to those in the lower social class ($M = 3.81$; $SD = 1.05$). For environmental contribution we found a significant effect of social class on environmental contribution motivation ($F(1, 65) = 13.381$; $p < .001$; $\eta_p^2 = .173$). When the sustainable action was performed by a lower-class individual ($M = 5.37$, $SD = 1.36$), environmental contribution was perceived as having a lower impact, compared to the same sustainable action performed by the upper-class group ($M = 6.41$, $SD = .93$). The results followed the same pattern for the judgment about pure altruism. Those in an upper-class were perceived as more altruistic ($M = 5.53$, $SD = 1.09$), compared to those in the lower-class position ($M = 4.65$, $SD = 1.69$; $F(1, 65) = 6.507$; $p < .013$; $\eta_p^2 = .092$).

Mediation analysis

Two mediation analysis were conducted to investigate how perceived motivation would impact the relationship between social class sustainable behavior and reputational gains, which were measured in this study as the environmental contribution and pure altruism. For The results of the analysis using the PROCESS macro on SPSS (model 4; 10,000 samples; Hayes 2018) showed a positive indirect effect ($\beta = .2929$, $CI = .1319$ to $.5850$) of perceived motivation on the relationship between sustainable action and environmental contribution. There was a

direct effect of social class on environmental contribution ($\beta = .1.1126$, CI = .5703 to .1.6549). However, there was a positive effect of social class on perceived motivation ($\beta = 1.2389$, CI = .8362 to 1.6416) and a positive effect of perceived motivation on environmental contribution ($\beta = .2365$; CI = .0303 to .4426).

Similar analysis was performed for pure altruism as dependent variable. The expected indirect effect was significant ($\beta = .2792 = .0530$ to .5633). The direct effect of social class on pure altruism was also observed ($\beta = .6022$, CI= .0662 to .1.1383) and we found a positive effect of social class on perceived motivation ($\beta = 1.2389$, CI = .8362 to 1.6416) and a positive effect of perceived motivation on pure altruism ($\beta = .2254$; CI = .0216 to .4292).

TABLE 1 - MEANS COMPARISON STUDY 1A | 1B | 1C | 1D

			<i>Social Class</i>		
			LOW-CLASS	HIGH-CLASS	<i>p. value</i>
RESPONSIBLE CHOICE <i>(Expending)</i>	Study 1A N = 88	<i>Perceived motivation</i>	2.14	3.71	.000
		<i>Environmental contribution</i>	3.26	4.56	.010
		<i>Pure Altruism</i>	2.75	3.60	.005
ECOLOGICAL FURNITURE <i>(Saving)</i>	Study 1B N = 202	<i>Perceived motivation</i>	4.03	4.79	.000
		<i>Environmental contribution</i>	6.05	6.68	.003
		<i>Pure Altruism</i>	4.71	5.69	.000
SMART DECISIONS <i>(Expending)</i>	Study 1C N = 108	<i>Perceived motivation</i>	3.53	4.11	.002
		<i>Environmental contribution</i>	5.75	6.44	.003
		<i>Pure Altruism</i>	4.35	5.25	.002
REUSING <i>(Saving)</i>	Study 1D N = 66	<i>Perceived motivation</i>	3.81	5.05	.000
		<i>Environmental contribution</i>	5.37	6.41	.001
		<i>Pure Altruism</i>	4.65	5.53	.013

Discussion

Overall, the results of all scenarios confirm our main predictions for H1a and H1b. While relatively poor individuals are seen with less altruism and environmental contribution in their choices of sustainable consumption, relatively wealthier individuals are judged with greater reputational gains. This effect is explained by perceived motivation. The perceived motivation for saving resources reduces the reputational gains of the lower social class individuals when doing the same sustainable behavior of upper-class individuals. Critically, these results were consistent across expending and saving sustainable actions.

In study 2 we investigate if these differences in reputational gains hold for ingroup and outgroup members of socioeconomics classes.

STUDY 2 – REPUTATIONAL GAINS AMONG INGROUPS

METHOD

Participants and Design. This employed a 2 (region of living: poor vs. wealthy) x 2 (social class of the observer: higher vs. lower) x 2 (scenarios: packaging reusing vs. recycled furniture) between-subjects design. Three hundred and eighteen residents from deprived and wealthy areas of Rio de Janeiro, in Brazil, took part in the study, 155 of whom lived in a deprived area (Favela da Maré) and 163 of whom lived in wealthy area (south zone). The south zone of Rio de Janeiro, with its internationally famous beach neighborhoods (e.g., Leblon, Ipanema, and Copacabana), is the most affluent region of town, with one of the most expensive residential square footages in the country. Favela da Maré, at the other end of the socioeconomic continuum, is a cluster of 16 slums, constituting one of the poorest parts of the city. These

neighborhoods were chosen to generate a sample with highly unequal socioeconomic indicators and life experiences. Further, the participants from the lower socioeconomic group were expected to be significantly resource constrained. Therefore, the allocation to the social class position of the observer was based on the region where the study took place. Those living at the south zone of the town were allocated to the wealthy socioeconomic position, whereas those living at Favela da Maré were allocated to the lower-class observer condition.

One hundred fifty-nine (159) respondents (51.57 % male; $Mage = 34.96$; $SD = 12.64$) were exposed to the packaging reusing scenario and one hundred fifty-nine (159) respondents were exposed to the recycled furniture scenario (56.44% female; $Mage = 33.84$; $SD = 10.47$). Participants were randomly assigned to one of the two conditions of social class of the target involved in the sustainable behavior and to one of the two scenarios.

Procedures

Two ingroup research assistants blind to the study hypothesis approached passers-by on the street and asked whether they would be willing to take part in a 5-minute survey about consumers' daily decisions. The manipulation of the social class of the actor followed the same procedures of the previous study.

Participants allocated to the packaging reuse scenario were exposed to the same situation described in study 1: *“Julia is a 35-year-old woman living at a rich neighborhood of her city (vs. poor neighborhood). At home, Julia often gives another utility to the already used packaging of products, such as storing objects and household items.”*

Those exposed to the recycled furniture scenario read a scenario similar to the one used in study 1, but with a few changes: *“Julia is a 35-year-old woman living in at a rich neighborhood (vs. poor neighborhood) of her city. Julia needs to buy a new sofa for her living*

room and she will purchase a second-hand furniture, made of recycled materials such as wooden pallets and reused fabrics.”

Measures

The measures for social class manipulation check, perceived motivation, contribution to the environment, pure altruism and demographic questions were the same of those used in study 1. In addition, we included a one-item measure to check for the respondents' self-identification with the actor's socioeconomic position: "Julia's socioeconomic situation is:" 1 = "Totally different from mine" to 7 = "Totally similar from mine".

Results

We conducted separate analysis for the two scenario conditions in order to examine the consistency of the results across different sustainable behaviors.

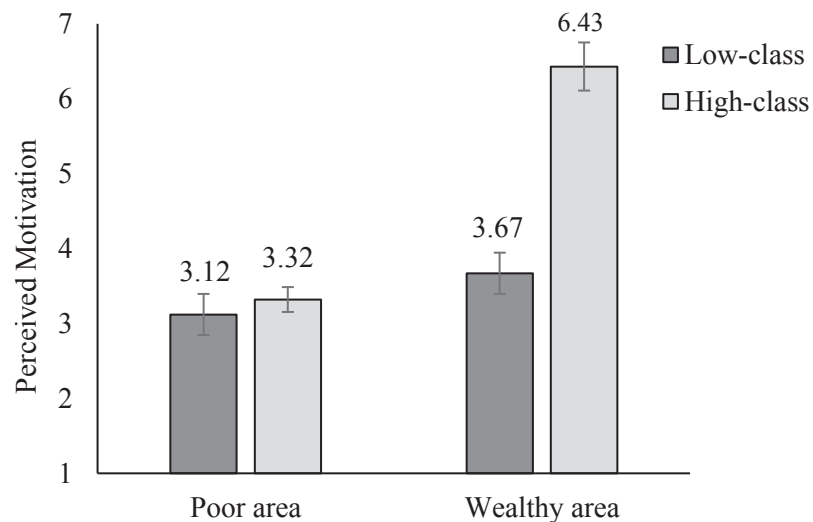
Packaging Reuse Scenario

Manipulation check. To check for the social class manipulation, we conducted a two-way ANOVA with region of living (Maré and south region) and social class position as predictors of the measure of perceived socioeconomic position. As expected, there was a main effect of region of living ($F(3, 155) = 12.395; p < .001; \eta_p^2 = .074$). We also found a main effect for social position on the perceived social position of the observer ($F(3, 155) = 1097.305; p < .000; \eta_p^2 = .876$). Participants living at the south region of the town reported to be a member of a higher socioeconomic group ($M = 6.78; S.D = .84$), compared to those living at Maré region ($M = 2.86, S.D = .79$). The interaction effect was also observed ($F(3, 155) = 13.591; p < .001; \eta_p^2 = .081$).

Similar analysis for the self-identification did not show a main effect of region of living ($F(3, 155) = .061; p < .806; \eta_p^2 = .000$), but show a main effect on social class manipulation ($F(3, 155) = 14.274; p < .000; \eta_p^2 = .084$) and an interaction effect ($F(3, 155) = 386.115; p < .000; \eta_p^2 = .714$). Pairwise contrasts showed that those living at the south region showed a higher self-identification with a higher social class actor ($M = 6.47, S.D = 1.24$), compared to those living at the Maré region ($M = 2.21, S.D = 1.20, (F(3, 155) = 201.995; p < .000; \eta_p^2 = .566)$). However, the group of the Maré region showed higher self-identification with the lower social class actor ($M = 5.61, S.D = 1.74$) compared to the higher social class actor ($M = 1.45, S.D = 1.17, (F(3, 155) = 184.567; p < .000; \eta_p^2 = .544)$).

Perceived Motivation. We conducted a two-way ANOVA with region of living and social class as predictors of perceived motivation. Similar to study 1, the item measuring the saving motivation was reverse coded and an index of perceived motivation was created by averaging the two items ($\alpha = .617$). The results showed a main effect of social class of actor ($F(3, 155) = 80.123; p < .000; \eta_p^2 = .341$), a main effect of region of living ($F(3, 155) = 122.961; p < .000; \eta_p^2 = .442$) and an interaction effect ($F(3, 155) = 59.853; p < .000; \eta_p^2 = .279$); see Figure 2).

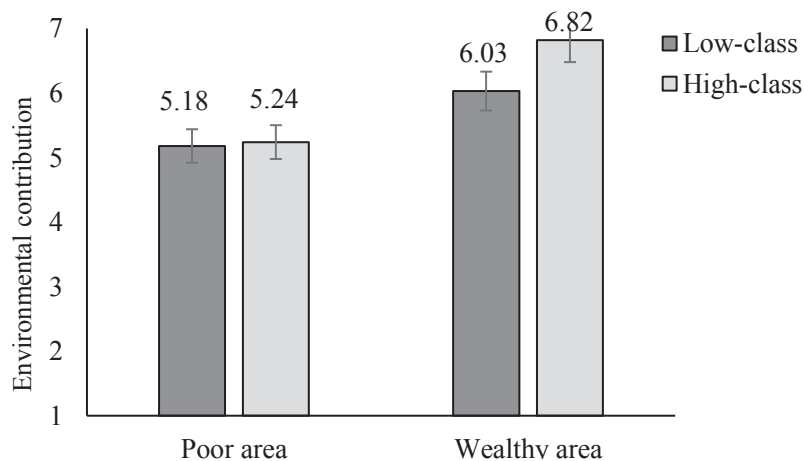
FIGURE 2 - PERCEIVED MOTIVATION FOR PACKAGING REUSE



Pairwise contrasts showed that those living in wealthy areas perceived higher environmental motivation when the actor was in the upper-class ($M = 6.43$, $SD = .76$), compared to those in the lower-class position ($M = 3.67$; $SD = 1.36$; ($F = 140.500$; $p < .000$; $\eta_p^2 = .475$). Those living in the poor area perceived no difference in environmental motivation between upper ($M = 3.32$; $SD = .94$) and lower ($M = 3.12$; $SD = .94$) social classes in the sustainable action ($F = .731$; $p < .394$; $\eta_p^2 = .005$). Within the actor's upper social class condition, wealthy respondents perceived higher environmental motivation compared to those in the poor area ($F = 180.798$; $p < .000$; $\eta_p^2 = .538$). Interesting, we also found that for those exposed to the sustainable action performed by a member of a lower social class, those living in a poor area of the town judged that their ingroup had a lower motivation to act in a sustainable manner ($F = 5.509$; $p < .020$; $\eta_p^2 = .034$).

Contribution to the Environment. We conducted a two-way ANOVA with region of living and social class as predictors of environmental contribution. Similar to study 1, an index of contribution to the environment was created by averaging the two items ($\alpha = .707$) measuring this variable. The results showed a main effect of social class ($F(3, 155) = 8.236$; $p < .005$; $\eta_p^2 = .050$), a main effect of region of living ($F(3, 155) = 66.779$; $p < .000$; $\eta_p^2 = .301$) and an interaction effect ($F(3, 155) = 5.971$; $p < .016$; $\eta_p^2 = .037$) - see Figure 3.

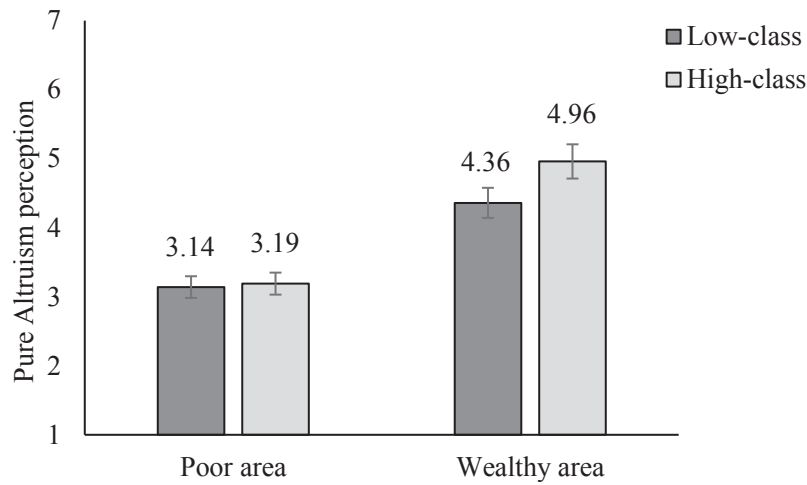
FIGURE 3 - ENVIRONMENTAL CONTRIBUTION FOR PACKAGING REUSE



Pairwise contrasts showed that those living in wealthy areas perceived higher environmental contribution when the actor was in the upper-class ($M = 6.82$, $SD = .53$), compared to those in the lower-class position ($M = 6.03$; $SD = 1.11$; ($F = 14.244$; $p < .000$; $\eta_p^2 = .084$) Those living in the poor area perceived no difference in environmental contribution between upper ($M = 5.24$; $SD = 1.04$) and lower ($M = 5.18$ $SD = .91$) social classes in the sustainable action ($F = .090$; $p < .765$; $\eta_p^2 = .001$). Within the actor's upper social class condition, wealthy respondents perceived higher environmental contribution in the sustainable action compared to those in the poor area ($F = 57.489$; $p < .000$; $\eta_p^2 = .271$). Interesting, we also found that for those exposed to the sustainable action performed by a member of a lower social class, individuals living in a poor area of the town judged that their ingroup members had a lower environmental contribution performing the same sustainable behavior ($F = 16.086$; $p < .000$; $\eta_p^2 = .094$).

Pure Altruism. An attitude index was created by averaging the pure altruism items ($\alpha = .776$). A between-subjects ANOVA was conducted to test the impact region of living and social class on pure altruism index. Results showed a main effect of region of living ($F(3, 155) = 99.090$; $p < .000$; $\eta_p^2 = .390$) and a main effect of social class ($F(3, 155) = 4.624$; $p < .033$; $\eta_p^2 = .029$) and a marginal interaction effect ($F(3, 155) = 3.408$; $p < .067$; $\eta_p^2 = .022$); see Figure 4.

FIGURE 4 - PURE ALTRUISM PERCEPTION FOR PACKAGING REUSE



Pairwise contrasts showed that those living in wealthy areas perceived higher pure altruism in the sustainable action when it was performed by an upper-class individual ($M = 4.96$; $SD = .58$), compared to a lower-class person ($M = 4.36$; $SD = 1.09$; $F = 8.059$; $p < .005$; $\eta_p^2 = .049$). Those living in the poor area perceived no difference in pure altruism between upper ($M = 3.19$; $SD = 1.04$) and lower ($M = 3.14$; $SD = .93$; $F = .046$; $p < .831$; $\eta_p^2 = .000$). Within the actor's higher-class condition, there was also a significant difference between wealthy and poor respondents ($F = 71.043$; $p < .000$; $\eta_p^2 = .314$) respondents. Interesting, we also found that for those exposed to the sustainable action performed by a member of a lower social class, individuals living in a poor area of the town judged that their ingroup members were less altruistic when performing the same sustainable behavior ($F = 32.229$; $p < .000$; $\eta_p^2 = .172$). These results partially confirm H2a, since we did not find differences for perceived contribution and pure altruism within the lower-class observers.

The role of Ingroup perception

To further investigate the impact of ingroup, we used the PROCESS macro on SPSS (model 8; 10,000 samples; Hayes, 2018). Social class was coded as 0 = low and 1 = high. For region of living the codes were 0 = poor region and 1 = wealthy region.

The results show a significant interaction of social class and region of living on perceived motivation ($\beta = 2.5511$, CI = 1.9027 to 3.2075), and that perceived motivation was significantly associated with environmental contribution ($\beta = .5749$, CI = .4638 to .6859). Additionally, there was a significant interaction between social class and region of living on contribution perception ($\beta = -.7392$, CI = -1.2769 to -.2015). The expected indirect effect of motivation on environmental contribution was significant ($\beta = 1.4688$, CI = .9791 to 2.0201). More importantly, conditional indirect effects show a positive indirect effect of motivation on environmental contribution for those living in a wealthy region ($\beta = 1.5841$, CI = 1.1243 to 2.1145) and a non-significant indirect effect on contribution for the perspective of those living in a poor region ($\beta = .1153$, CI = -.1222 to .3686).

A similar analysis was performed for pure altruism as a dependent variable. The results show a significant interaction of social class and region of living on perceived motivation ($\beta = 2.5551$, CI = 1.9027 to 3.2075), and that perceived motivation was significantly associated with pure altruism ($\beta = .5223$, CI = .4039 to .6407). Additionally, there was a significant interaction between social class and region of living on pure altruism perception ($\beta = -.7804$, CI = -1.3536 to -.2072). The expected indirect effect of motivation on pure altruism was significant ($\beta = 1.3346$, CI = .8229 to 1.9631).

More importantly, conditional indirect effects show a positive indirect effect of motivation on pure altruism for those living in a wealthy region ($\beta = 1.4393$, CI = .9371 to 2.0222) and non-significant indirect effect on pure altruism for the perspective of those living in a poor region ($\beta = .1048$, CI = -.1122 to .3248).

Recycled Furniture Scenario

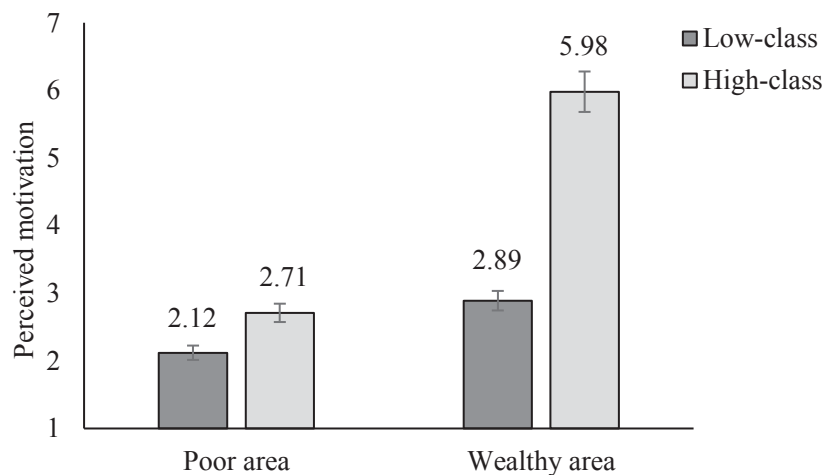
Manipulation check. To check for the social class manipulation, we conducted a two-way ANOVA with region of living (Maré and south region) and social class position as predictors of the measure of perceived socioeconomic position. There was no main effect of the region of life ($F(3, 155) = .815; p < .368; \eta_p^2 = .005$). We found a main effect for social position on the perceived social position of the observer ($F(3, 155) = 564.590; p < .000; \eta_p^2 = .785$). Participants living at the south region of the town reported to be a member of a higher socioeconomic group ($M = 6.65; S.D = .72$), compared to those living at Maré region ($M = 2.36, S.D = 1.67$). The interaction effect was also observed ($F(3, 155) = 5.813; p < .017; \eta_p^2 = .036$).

Similar analysis for the self-identification showed a main effect of region of living ($F(3, 155) = 30.224; p < .000; \eta_p^2 = .163$), also show a main effect on social class manipulation ($F(3, 155) = 57.323; p < .000; \eta_p^2 = .270$) and an interaction effect ($F(3, 155) = 212.455; p < .000; \eta_p^2 = .578$). Pairwise contrasts showed that those living at the south region showed a higher self-identification with a higher social class actor ($M = 6.68, S.D = .61$), compared to those living at the Maré region ($M = 2.05, S.D = 1.44; (F(3, 155) = 205.953; p < .000; \eta_p^2 = .571)$). However, the group of the Maré region showed higher self-identification with the lower social class actor ($M = 3.67, S.D = 2.17$) compared to the higher social class actor ($M = 1.57, S.D = 1.25, (F(3, 155) = 40.330; p < .000; \eta_p^2 = .206)$).

Perceived Motivation. We conducted a two-way ANOVA with region of living and social class as predictors of perceived motivation. Similar to study 1, the item measuring the saving motivation was reverse coded and an index of perceived motivation was created by averaging the two items ($\alpha = .610$). The results showed a main effect of social class of actor ($F(3, 155) = 136.813; p < .000; \eta_p^2 = .469$), a main effect of region of living ($F(3, 155) = 164.929;$

$p < .000$; $\eta_p^2 = .516$) and an interaction effect ($F(3, 155) = 63.433$; $p < .000$; $\eta_p^2 = .290$); see Figure 5.

FIGURE 5 - PERCEIVED MOTIVATION FOR RECYCLED FURNITURE

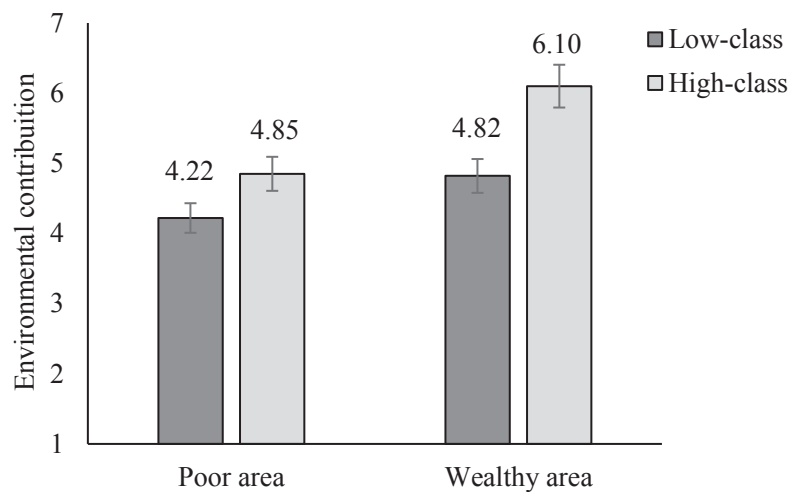


Pairwise contrasts showed that those living in wealthy areas perceived higher environmental motivation when the actor was in the upper-class ($M = 5.98$, $SD = 1.00$), compared to those in the lower-class position ($M = 2.89$; $SD = 1.09$; ($F = 202.461$; $p < .000$; $\eta_p^2 = .566$). For those living in the poor area, there was a negative effect on environmental motivation among ($M = 2.71$; $SD = .97$) and lower ($M = 2.12$; $SD = .85$) social classes in the sustainable action ($F = 6.663$; $p < .011$; $\eta_p^2 = .041$). Within the actor's upper social class condition, wealthy respondents perceived higher environmental motivation compared to those in the poor area ($F = 221.280$; $p < .000$; $\eta_p^2 = .588$). Interesting, we also found that for those exposed to the sustainable action performed by a member of a lower social class, those living in a poor area of the town judged that their ingroup had a lower motivation to act in a sustainable manner ($F = 11.644$; $p < .001$; $\eta_p^2 = .070$).

Contribution to the Environment. We conducted a two-way ANOVA with region of living and social class as predictors of environmental contribution. Similar to study 1, an index

of contribution to the environment was created by averaging the two items ($\alpha = .707$) measuring this variable. The results showed a main effect of social class ($F(3, 155) = 25.560; p < .000; \eta_p^2 = .142$), a main effect of region of living ($F(3, 155) = 24.058; p < .000; \eta_p^2 = .134$) and a marginal interaction effect was found ($F(3, 155) = 3.038; p < .083; \eta_p^2 = .019$) - see Figure 6.

FIGURE 6 - ENVIRONMENTAL CONTRIBUTION FOR RECYCLED FURNITURE

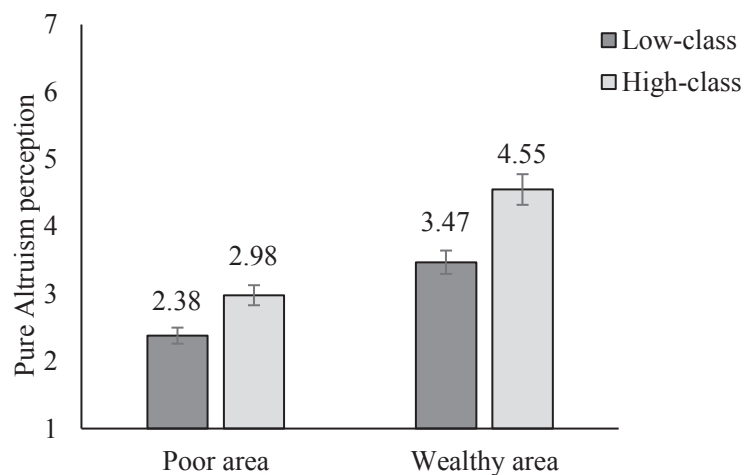


Pairwise contrasts showed that those living in wealthy areas perceived higher environmental contribution when the actor was in the upper-class ($M = 6.10, SD = .89$), compared to those in the lower-class position ($M = 4.82; SD = 1.56; (F = 24.208; p < .000; \eta_p^2 = .135)$). Those living in the poor area also perceived a significant difference in environmental contribution between upper ($M = 4.85; SD = .98$) and lower ($M = 4.22; SD = 1.18$) social classes in the sustainable action ($F = 5.249; p < .023; \eta_p^2 = .033$). Within the actor's upper social class condition, wealthy respondents perceived higher environmental contribution in the sustainable action compared to those in the poor area ($F = 25.588; p < .000; \eta_p^2 = .127$). Interesting, we also found that for those exposed to the sustainable action performed by a member of a lower social class, individuals living in a poor area of the town judged that their ingroup members had

a lower environmental contribution performing the same sustainable behavior ($F = 4.893$; $p < .023$; $\eta_p^2 = .031$).

Pure Altruism. An attitude index was created by averaging the pure altruism items ($\alpha = .682$). A between-subjects ANOVA was conducted to test the impact region of living and social class on pure altruism index. Results showed a main effect of region of living ($F(3, 155) = 58.800$; $p < .000$; $\eta_p^2 = .275$) and a main effect of social class ($F(3, 155) = 23.263$; $p < .000$; $\eta_p^2 = .130$), but no interaction effect ($F(3, 155) = 1.937$; $p < .166$; $\eta_p^2 = .012$); see Figure 7.

FIGURE 7 - PURE ALTRUISM PERCEPTION FOR RECYCLED FURNITURE



Pairwise contrasts showed that those living in wealthy areas perceived higher pure altruism in the sustainable action when it was performed by an upper-class individual ($M = 4.55$; $SD = 1.23$), compared to a lower-class person ($M = 3.47$; $SD = 1.11$; $F = 20.230$; $p < .000$; $\eta_p^2 = .115$). Those living in the poor area also perceived a difference in pure altruism between upper ($M = 2.98$; $SD = 1.08$) and lower ($M = 2.38$; $SD = .87$; $F = .5632$; $p < .019$; $\eta_p^2 = .035$). Within the actor's higher-class condition, there was also a significant difference between wealthy and poor respondents ($F = 41.954$; $p < .000$; $\eta_p^2 = .213$) respondents. We also found that for those exposed to the sustainable action performed by a member of a lower social class,

individuals living in a poor area of the town judged that their ingroup members were less altruistic when performing the same sustainable behavior ($F= 19.277$; $p < .000$; $\eta_p^2 = .111$).

Social Class, Inferred Motivation for Prosociality, and Reputational Gains Among Ingroups

To further investigate the impact of ingroup, we used the PROCESS macro on SPSS (model 8; 10,000 samples; Hayes, 2018). Social class was coded as 0 = low and 1 = high. For region of living the codes were 0 = poor region and 1 = wealthy region.

The results show a significant interaction of social class and region of living on perceived motivation ($\beta= 2.5074$, CI = 1.8855 to 3.1294), and that perceived motivation was significantly associated with environmental contribution ($\beta= .5572$, CI = .3873 to .7271). Additionally, there was a significant interaction between social class and region of living on contribution perception ($\beta= -.7366$, CI = -1.5271 to -.0538). The expected indirect effect of motivation on environmental contribution was significant ($\beta= 1.3972$, CI = .9105 to 1.9485). As expected, the conditional indirect effects show a positive indirect effect of motivation on environmental contribution for the those living in a wealthy region ($\beta= 1.7246$, CI = 1.1794 to 2.3618) and also a positive indirect effect on contribution for the perspective of those living in a poor region ($\beta= .3274$, CI = .0866 to .6096), thus confirming that both social class groups think that the upper-class contributes more with sustainable behavior.

Similar analysis was performed for pure altruism as a dependent variable. The results show a significant interaction of social class and region of living on perceived motivation ($\beta= 2.5074$, CI = 1.8855 to 3.1294), and that perceived motivation was significantly associated with pure altruism ($\beta= .6790$, CI = .5412 to .8169). Additionally, there was a significant interaction effect between social class and region of living on pure altruism perception ($\beta= -1.2204$, CI = -1.8619 to -.5789). The expected indirect effect of motivation on pure altruism was significant ($\beta= 1.7027$ CI = 1.2072 to 2.2341). As expected, conditional indirect effects show a positive

indirect effect of motivation on pure altruism for the those living in a wealthy region ($\beta = 2.1016$, $CI = 1.5966$ to 2.6312) and also positive indirect effect on pure altruism for the perspective of those living in a poor region ($\beta = .3989$, $CI = .1149$ to $.7133$).

These results also confirm the predictions that asymmetrical reputational gains are observed not only for upper-class group, but also for lower-class individuals.

Discussion

The results of study 2 confirms the expectations for H2a and H2b, expect for the non-significant difference between higher and lower-classes about perceived motivation and reputational gains from the lower-income perspective in the packaging reuse scenario. Another limitation is that the two scenarios were based on saving resources. It is an open question whether the judgments of in and outgroup members would impact the reputational gains of higher and lower-class groups for proenvironmental actions involving expending resources.

Besides these limitations, study 2 shows initial evidences that the asymmetrical reputational gains were observed for in and outgroup members. Those living in a wealthy area perceive higher reputational gains for ingroup members. Although those living in a poor area perceive lower contribution on sustainable actions, they also judge that the ingroup members (lower-income people) contribute even less compared to outgroup members (higher-income people).

GENERAL DISCUSSION

Consumption, practices are intrinsically linked to sustainability because every decision to buy, consume and dispose of has a direct impact on the environment. As a result, past

research has investigated how to motivate consumers to adopt sustainable and virtuous practices (Trudel, 2018; Winterich, Nenkov & Gonzales, 2019; White, Habib & Hardisty, 2019) and how these sustainable actions could be associated with positive signaling among ingroup members (Semmann, Krambeck & Milinski, 2005; Van Vugt, Roberts, & Hardy, 2007; Griskevicius et.al, 2010; Delgado et al, 2015). Our research adds to this debate by investigating how members of opposing socioeconomic classes value and judge the impact of sustainable actions when performed by in and outgroup members. We found that these reputation gains are asymmetric for social class groups.

Across four different scenarios, study 1 showed that upper-class consumers receive more reputational gains for sustainability compared to lower-class consumers. Consumers attributed higher contribution to the environment and judged the actor as more altruistic when the sustainable behavior was performed by an upper-class individual. Inferences about motivation explains this effect, attributing to lower-class people a more self-interest motivation to save resources, while upper-class individuals would be more concerned with the environment.

Building on these findings, study 2 investigated the role of reputational gains among in and outgroup members. This study was held in a highly unequal socioeconomic environment, with half of the participants living in a wealthy region (upper-class group) and the other half living in a poor region (lower-class group) of the town. Precisely, the results provided initial evidence for ingroup perception by showing that upper-class people perceive higher reputational gains for ingroup members, while lower-class group shows the opposite perception, attributing higher reputational gains for outgroup members in a wealthier social position.

The current research contributes to the literature in the following ways. First, we contribute to the studies on social class and prosocial behavior (Piff & Robinson, 2017) by

showing that for sustainability actions, upper-class consumers receive higher reputational gains compared to lower-class consumers. Second, we also contribute by showing that inferences for motivation shapes these judgments. The relationship between social class and scarcity has been extensively investigated (Shavitt, Jiang, & Cho 2016). Besides showing that the perceptions about scarcity/saving goals impacts how sustainability contributes to the environment, we move a step forward by demonstrating that when prosocial actions are perceived as self-oriented, perceived contribution is reduced.

Third, we contributed to the discussion about the positive signaling of sustainable behavior, showing that members of contrasting social classes are not equally evaluated for proenvironmental actions. While past research investigates how to improve this positive signaling (Griskevicius et al, 2010; Delgado et al, 2015; Luomala et. al, 2020), we move forward by showing that these judgments also reflect a group-based phenomenon. Since socioeconomic position is used as a premise for many social experiences and psychological responses (Kraus & Stephens, 2012), we demonstrate that this position impacts one's judgments about reputational gains in sustainable actions.

The findings of this research also entail public policy implications. Sustainability behavior is a demand for the whole society. However, in contexts of high economic inequality, those at the bottom of the social hierarchy (1) perceive overall less contribution to the environment for sustainable actions, (2) are judged as contributing less to the environment and (3) judge that their peers contribute even less to the environment. Past research shows that lower-class individuals are stigmatized (Fiske, 2018; Kim & Loury, 2019) and these results clearly demonstrate that for sustainability this is also the case. One possible consequence of this stigmatized judgment is that lower-class consumers would be less motivated to perform sustainable actions since consuming less resources signals saving motivation. There is also research demonstrating that lower-class individuals are motivated to consume more

conspicuous products and brands in order to signal social status (Williams, 2002; Rucker & Galinski, 2008; Kamakura & Mazzon, 2013; Hall-Phillips et al., 2016; Nabi, O' Cass & Siahtiri, 2019). Therefore, they would be also motivated to consume more resources and buy more products that signal positive motivational inferences, such as social mobility status, while avoiding sustainable actions associated with saving resources. Therefore, organizations should expend more effort to diminish this stigmatized judgment, which is observed not only at the top of the socioeconomic hierarchy, but also at the bottom level. One possibility is to promote sustainable behavior carried out by lower-class consumers, in order to demonstrate that their contribution is important to the environment. Positive reputational gains associated with virtuous behavior, such as altruism, should also be explicitly exposed.

Limitations and Future Research

One potential limitation of this research involves the manipulation of sustainable behavior. Although some scenarios involve expending situations, such as the eco-friendly led lamps and washing-machine scenarios, they all enable saving resources in the long-term. Another study demonstrating the consistency of the effects in an expending sustainable action with no saving resources is necessary. For instance, we should test if the preference for organic food, which is more expensive and does not involve long-term savings, would differently impact inferences for motivation.

Another limitation is that in study 2, we did not find consistent effects within those living in a poor region about the reputational gains associated with social class sustainable actions. In the packaging reuse scenario, we found no differences for the judgments about perceived motivation, contribution and altruism between high and low-class members performing sustainability action. In the recycled furniture scenario this effect emerged. Therefore,

additional studies are necessary to check for the consistency of these results. Expanding scenarios are also essential to be investigated in study 2.

Future studies are necessary to further investigate the reasons for the relationship between social class motivation inferences and its impact on perceived contribution of prosocial actions. Another point for future investigation is the influence of inequality rates in our findings. Past research shows that the higher the inequality, the more stereotyped are the evaluations about social-class members (Durante & Fiske, 2017; Kim & Loury, 2019). It is an open question to what extent inequality rates influences these perceptions.

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APPENDIX A

STUDY 1

MEASURES

All measurements bellow was applied in studies 1 and 2 after the scenarios. Just the names and gender were changed.

FIRST SCREEN PRESENTATION | Mean of Perceived Motivation

Ao analisar o consumo de energia do produto:

Ana está pensando em economizar dinheiro.

1- Discordo totalmente	2	3	4	5	6	7- Concordo totalmente
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Ana está pensando nos benefícios para o meio ambiente.

1- Discordo totalmente	2	3	4	5	6	7- Concordo totalmente
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SECOND SCREEN PRESENTATION | Environmental contribution measurement

Considerando a situação apresentada sobre Ana:

Por favor, responda as questões sobre a situação inicialmente apresentada em uma escala de 7 pontos, em que 1 = Discordo totalmente e 7 = Concordo Totalmente.

	1 - Discordo totalmente	2	3	4	5	6	7 - Concordo totalmente
Ana contribui muito para o meio ambiente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A ação da Ana é relevante para o meio ambiente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

THIRD SCREEN PRESENTATION | Pure Altruism scale

Considerando a atitude da Ana, você acredita que:

Por favor, responda as questões sobre a situação inicialmente apresentada em uma escala de 7 pontos, em que 1 = Discordo totalmente e 7 = Concordo Totalmente.

	1- Discordo totalmente	2	3	4	5	6	7- Concordo totalmente
Eu acho que a Ana quer cooperar com a sociedade	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu acho que a Ana está motivada para ajudar	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu acho que a Ana está se sacrificando pelos outros	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

FOURTH SCREEN PRESENTATION | Competitive Altruism scale

Considerando a atitude da Ana em pensar sobre o consumo de energia antes de comprar a máquina de lavar, você acredita que:

	1- Discordo totalmente	2	3	4	5	6	7- Concordo totalmente
Eu acho que a Ana quer competir	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eu acho que a Ana está motivada para ter um status social mais alto	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

FIFTH SCREEN PRESENTATION | Environmental knowledge scale

Ainda considerando a descrição sobre o perfil da Ana:

Por favor, responda as questões abaixo sobre a situação apresentada em uma escala de 7 pontos, em que 1 = Discordo totalmente e 7 = Concordo Totalmente.

	1 - Discordo totalmente	2	3	4	5	6	7 - Concordo totalmente
Ana compra produtos que possuem embalagens ambientalmente corretas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ana sabe mais sobre reciclagem que a média da população	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ana sabe como escolher produtos e embalagens que irão reduzir a quantidade de lixo destinada aos aterros sanitários	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ana entende as mensagens e símbolos ambientais nas embalagens dos produtos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ana tem um amplo conhecimento sobre questões ambientais	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

FIRST SCREEN PRESENTATION | Manipulation Check Ses Study 1

Por favor, agora imagine uma escada em que cada degrau representa um lugar específico que as pessoas ocupam na sociedade. No topo desta escada estão as pessoas que têm mais dinheiro, maior nível educacional e emprego de maior status. Na parte inferior da escada estão as pessoas que têm menos dinheiro, menor nível educacional e empregos de menor status.

Como você avaliaria a posição de Ana nessa escada?

SECOND SCREEN PRESENTATION | Other Manipulations Check

Quão realista você considera o cenário descrevendo Ana?

1 - Nada realista	2	3	4	5	6	7 - Muito realista
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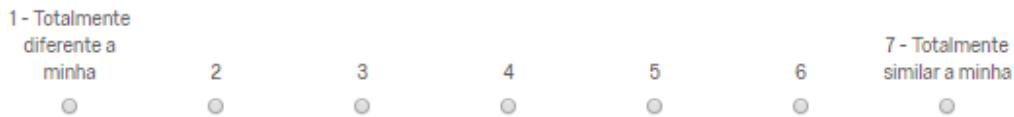
APPENDIX B

STUDY 2

In the study 2 the measurements of Self Identity were included and the manipulation check was improved.

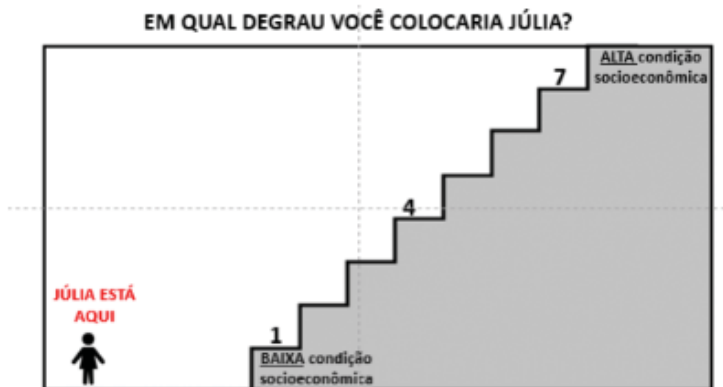
FIRST SCREEN PRESENTATION | Self Identity Measurement

A situação socioeconômica de Júlia é:



SECOND SCREEN PRESENTATION | Manipulation Check Ses

Por favor, agora imagine uma escada em que cada degrau representa um lugar específico que as pessoas ocupam na sociedade. No topo desta escada estão as pessoas que têm mais dinheiro, maior nível educacional e emprego de maior status. Na parte inferior da escada estão as pessoas que têm menos dinheiro, menor nível educacional e empregos de menor status.



DEMOGRAPHICS MEASUREMENT – For all those experiments

Gender, Age, marital status, skin color/ ethnicity, the frequency of religious activities, education level, occupation, familiar monthly income, people depending on the familiar monthly income, perceived socioeconomic status in childhood.

- Qual o seu gênero? [homem] [mulher]
- Qual é a sua idade? _____
- Qual seu estado civil? [solteiro] [casado] [divorciado] [viúvo]
- Qual é a sua escolaridade (nível de estudo)? (If respondents are not undergraduate students)
[Sem educação formal]
[Ensino Fundamental 1 (até a 4ª série) incompleto]
[Ensino Fundamental 1 (até a 4ª série) completo]
[Ensino Fundamental 2 (até a 8ª série) incompleto]
[Ensino Fundamental 2 (até a 8ª série) completo]
[Ensino Médio incompleto]
[Ensino Médio completo]
[Curso superior incompleto]
[Curso superior completo]
[Pós-graduação incompleta]
[Pós-graduação completa]
- Qual é a sua profissão? _____ (If respondents are not undergraduate students)
- Considerando todos os integrantes de sua família, qual a renda mensal aproximada de TODOS juntos?
[Menos de R\$500] [R\$501 - 1000] [R\$1001 - 2000] [R\$2001 - 3000] [R\$3001 - 4000] [R\$4001 - 5000]
[R\$5001 - 6000] [R\$6001 - 7000] [R\$7001 - 8000] [R\$8001 - 9000] [R\$9001 – 10.000] [R\$10.001 – 15.000] [R\$15.001 – 20.000] [R\$20.001 – 30.000] [R\$30.001 – 40.000] [acima de 40.001]
- Quantas pessoas dependem dessa renda que você citou?
[1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11 ou mais]
- Quando comparada com a renda da população brasileira, você diria que a renda da família na qual você cresceu é:
[Muito abaixo da média] [um pouco abaixo da média] [na média] [um pouco acima da média] [Muito acima da média]