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Abstract

Despite growing recognition that image considerations underlie the adoption of second-hand goods, research in this domain has largely overlooked the possibility that different image dimensions operate through distinct channels. Using a vignette experiment on a nationally representative Italian sample ($N = 10,496$), this paper disentangles the effects of three image perspectives – self-image, social image, and second-order self-image (beliefs about others’ self-image) – across four main dimensions of second-hand adoption: financial, social, environmental, and hygiene. Contrary to findings in other behavioral domains, self-image emerges as the stronger predictor of intention to adopt second-hand, with the largest gaps over social image for hygiene and social-approval dimensions and the smallest – but still significant – for environmental considerations. Within self-image, hygiene and financial considerations are the strongest correlates of adoption, while environmental consciousness is the weakest; yet it becomes relevant under other-oriented perspectives (social and second-order), suggesting it operates more as a social signal than a private value. Participants also systematically underestimate how positively others view themselves when engaging in second-hand adoption, and this underestimation depresses adoption intentions more than overestimation boosts them – a pattern consistent with pluralistic ignorance that may act as a self-reinforcing barrier to adoption.

Keywords: Second-hand adoption · Self-image · Social image · Second-order beliefs
· Vignette experiment

JEL Codes: D12 · D83 · D91 · Q50

1 Introduction

The past decades have witnessed a significant increase in the demand for a broad variety of pre-owned goods, ranging from electronic devices and appliances to furniture, clothing, and even sports equipment (Gilal et al., 2024). Second-hand adoption, that is, the acquisition of pre-owned goods through specific channels of exchange (Guiot and Roux, 2010), is considered a fundamental practice for achieving the transition to a circular economy (Abdul-Rahman and Wright, 2014; Ekins et al., 2020). As a form of product reuse, aimed at extending the life of goods and reducing the demand for new production, second-hand adoption also plays a fundamental role in the waste management hierarchy established by the Waste Framework Directive.¹ To put its relevance in perspective, consider its impact on the fashion market: it is estimated that purchasing 100 second-hand clothing items can displace between 60 and 85 new purchases (Farrant et al., 2010) and reduce in turn the impact on climate change by up to 42% and on water scarcity by 35–53% (Klooster et al., 2024).

Despite its beneficial effect for the environment, engagement in second-hand adoption, at least in Europe, remains quite low. For instance, the survey by Pérez-Belis et al. (2017) involving a representative sample of Spanish consumers highlights that less than 1% of respondents had ever purchased small used appliances. Understanding what holds consumers back – and what draws them in – remains an open question with both theoretical and practical relevance, especially for policymakers (Gilal et al., 2024; Congiu et al., 2025).

The investigation of the factors underlying demand for second-hand goods has recently drawn attention to potential image concerns arising from their adoption (Hur, 2020; Silva et al., 2021; Gilal et al., 2024; Congiu et al., 2025). Consumers care about what buying second-hand says about them, that is, how they are judged or evaluated for it. Such considerations may entail both barriers and motivators. On the one hand, second-hand goods have historically been associated with financial hardship, inferior quality, or contamination from prior use – factors that can make adoption image-threatening. On the other hand, in an economy of tightening budgets and growing sustainability demands, buying second-hand may also enhance one’s image, among others, as an environmentally conscious and financially savvy consumer. These observations hint at three important gaps in the investigation of image considerations in the second-hand literature.

First, as just argued, whether image considerations act as barriers or motivators depends on the “valence” of the associations they activate, that is, whether these associations are positive or negative. The literature on second-hand adoption has identified four core evaluative dimensions along which image-relevant associations may form: financial, environmental, social, and hygiene-related (see, e.g., the systematic review by Gilal et al., 2024). Each dimension admits both positive and negative readings: adopting second-hand may be evaluated as financially wise or financially desperate, environmentally conscious or wasteful, embarrassing or socially commendable, and disgusting or hygienic. Ulti-

¹ https://environment.ec.europa.eu/topics/waste-and-recycling/waste-framework-directive_en

mately, second-hand adoption may depend on a balance between image-depressing and image-enhancing associations across these different evaluative dimensions, and this calls for measures sensitive to valence, not merely to whether image concerns are present.

Second, image concerns need not stem from a single source of evaluation. Psychological works on the self have long emphasized that individuals evaluate their actions from multiple perspectives, including how they see themselves and how they believe they are seen by others (Baumeister, 1982; Chen and Critcher, 2025). Accordingly, social psychology and behavioral economics distinguish between self-image and social image concerns (Manstead and Semin, 1981; Bénabou and Tirole, 2006; Gausel and Leach, 2011). Self-image refers to how a person perceives and evaluates themselves, that is, whether one’s choices feel consistent with one’s own values and moral standards. Social image, by contrast, refers to how a person is perceived and evaluated by others, that is, the impression one makes in public and the signals one sends to friends, colleagues, or strangers. These evaluations need not necessarily coincide. A consumer might feel privately proud of engaging in second-hand while worrying about how it looks to others; or might enjoy the social signal of sustainability while feeling, privately, no particular attachment to it. Research in other behavioral domains – such as on dishonesty (Fries et al., 2021; Bašić and Quercia, 2022), prosocial behavior (Lacetera and Macis, 2010; Filiz-Ozbay and Ozbay, 2014; Friedrichsen and Engelmann, 2018) and social comparison (Eriksson et al., 2017; Petrishcheva et al., 2023; Bottan et al., 2025) – has shown that self-image and social image can differ in the intensity of their behavioral effects. Yet in the second-hand literature, the two have not been properly disentangled, and social image has received by far greater attention. Disentangling their effects is relevant not only from a scientific standpoint but also for designing policies targeting different image motives.

Third, individuals may also hold beliefs about how other people privately evaluate themselves (Bradford et al., 2015; Chen and Critcher, 2025). These beliefs may serve as a signal of how accepted, valued, or desirable a behavior is within a social environment and may therefore affect individual behavior. Since private evaluations are generally unobservable, beliefs about them are necessarily inferential and may depart from actual evaluations, generating instances of “pluralistic ignorance” (e.g., Bursztyn et al., 2020; Andre et al., 2024; Barigozzi and Montinari, 2025). This possibility may be especially plausible in the context of second-hand adoption, given its longstanding association with financial hardship and contamination: consumers may privately evaluate second-hand adoption more favorably than they believe others do, underestimating how positively the behavior is privately evaluated by others and potentially reducing their willingness to adopt it. Whether such a misperception characterizes second-hand adoption remains largely unknown. To study these beliefs, we introduce the notion of “second-order self-image”, namely individuals’ beliefs about how others evaluate themselves when engaging in a given behavior.

This paper addresses these literature gaps. It investigates image considerations in second-hand adoption by (i) distinguishing between image perspectives, namely self-image, social image, and second-order self-image; (ii) parsing each into dimensions linked to core

determinants of second-hand behavior (financial, environmental, social and hygienic); and (iii) using semantic differentials to assess the valence of each image dimension. Our central question is to study the differential effects of image perspectives and their relations, as declined in four evaluative dimensions, on the decision to adopt second-hand goods.

For this purpose, we set up a vignette-based survey experiment. Participants are presented with a hypothetical choice scenario involving a second-hand product and are asked to state their intention to adopt it. Then, for each of the four image dimensions, the respondent is presented with a pair of opposite statements (one positive and one negative) and asked to indicate the degree of agreement with one over the other. This task is proposed to each respondent from the perspectives of self-image, second-order self-image and social-image.

The experiment was administered by a survey company in October–December 2024 to a large representative sample of the Italian population ($N = 10,496$). Among the three perspectives, self-image dimensions turn out to be the strongest predictors of second-hand adoption, followed by social image and second-order self-image. This suggests that, while all perspectives are relevant for second-hand adoption, personal evaluations drive behavior more than perceived judgments from others, in contrast with the literature on the relationship between social image and self-image concerns. Interestingly, the environmental dimension of self-image does not significantly influence second-hand adoption, indicating that sustainability motivations may be instead more about public signaling than private concern. When self-image evaluations exceed social and second-order self-image, adoption increases; the reverse pattern decreases it, and more strongly so. Finally, we find that consumers perceive that second-hand choices enhance their social image less than their self-image, on all the four dimensions, but also rate themselves as more favorable toward second-hand products than they believe others are, indicating the presence of pluralistic ignorance.

The remainder of this paper is structured as follows. [Section 2](#) discusses the image dimensions and perspectives studied in the experiment. [Section 3](#) illustrates the experimental procedure and design. The main results and exploratory analyses are presented in [Section 4](#) and [Section 5](#), while [Section 6](#) discusses their implications and concludes.

2 Literature review

2.1 Image dimensions in second-hand adoption

Image is not a unitary construct but rather comprises multiple evaluative dimensions. Following established practice in research on the self and self-evaluation ([Shavelson et al., 1976](#); [Marsh, 1990](#)), this paper adopts a domain-specific approach, parsing image into dimensions that correspond to the main determinants identified in the second-hand literature: financial, environmental, social, and hygiene considerations (see, e.g., the systematic literature review by [Gilal et al., 2024](#)).

Financial considerations entail one’s image as financially distressed versus financially savvy and value-conscious (Williams, 2002; Gopalakrishnan and Matthews, 2018; Hur, 2020). Consumers may refrain from purchasing second-hand clothing because it would make them feel poor and as if they could not provide for themselves and their families, but also engage in it for the satisfaction of acquiring quality products for a fraction of the price (Hur, 2020).

Social considerations reflect one’s image as socially approved versus disapproved by one’s reference group. Shopping at second-hand stores may evoke embarrassment and fear of stigma (Laitala and Klepp, 2018; Silva et al., 2021), even though this varies across cultures (Xu et al., 2014) and generations, with younger cohorts exhibiting lower social image concerns (Liang and Xu, 2018; Valor et al., 2022). In some contexts, second-hand practices may even trigger pride and perceived social approval (Terzioğlu, 2021). More generally, second-hand consumption may carry symbolic meanings that contribute to social approval and disapproval, as it can be associated with traits such as social responsibility, creativity, and fashion awareness (Cervellon et al., 2012).

Environmental considerations relate to whether second-hand consumption enhances one’s image as environmentally responsible. Environmentally conscious consumers are more likely to engage in second-hand practices (Cervellon et al., 2012; Parguel et al., 2017), and adopters report feeling they are “doing their part” for the environment, although some remain uncertain whether others appreciate this contribution (Hur, 2020).

Finally, hygiene considerations involve one’s image as clean and disgust-free versus contaminated. Wearing or using items previously owned by strangers may trigger feelings of disgust, as second-hand products can be perceived as carriers of the previous owner’s residue (whether physical or symbolic; see e.g. Rozin et al., 1986), ultimately threatening consumers’ sense of cleanliness. This is particularly relevant for products in close contact with the body (Bezançon et al., 2019; Hazée and Van Vaerenbergh, 2021).

As will be discussed in the next sections, insofar as one strives to preserve one’s image, one is expected to be more likely to adopt second-hand the more positive the evaluations are on these four dimensions, that is, whether one feels financially savvy rather than distressed, environmentally conscious rather than wasteful, socially approved rather than disapproved, and not disgusted by second-hand adoption.

2.2 Image perspectives

One’s image can be conceptualized from diverse social perspectives (Manstead and Semin, 1981; Baumeister, 1982; Chen and Critcher, 2025). In this paper, we focus on three of them: self-image, social image, and second-order self-image. These perspectives are linked by a common focus on evaluation, but differ in the target of that evaluation. The evaluative target may be oneself (self-image), oneself as viewed by others (social image), or other individuals as viewed by themselves (second-order self-image). Empirical evidence suggests that individuals can make valid distinctions among these different evaluative perspectives, from private and public self-focused evaluations (Fenigstein et al., 1975) to

beliefs about how they are perceived by others (Carlson et al., 2011).

While the three perspectives are conceptually related, they may influence behavior through distinct motivational channels. Self-image acts as an internal source of motivation. Individuals derive psychological benefits from behaving consistently with moral, social, or personal standards, and incur psychological costs when they fail to do so (Gausel and Leach, 2011; Ploner and Regner, 2013; Regner, 2018; Falk, 2021). Experimental studies show that individuals often refrain from behaving selfishly or dishonestly even when their actions cannot be observed by others, indicating that the maintenance of a positive self-image can serve as a powerful source of motivation (e.g., Ploner and Regner, 2013; Tonin and Vlassopoulos, 2013; Falk, 2021). Related evidence suggests that similar self-evaluative considerations extend to consumption and market settings, where individuals derive utility from behaving consistently with the type of person they wish to be (Gneezy et al., 2012). Qualitative evidence indicates that such mechanisms may also be relevant for second-hand adoption (Hur, 2020).

Social image operates as an external source of motivation, making behavior responsive to anticipated judgments from others. Individuals derive psychological benefits (costs) from conveying a favorable (unfavorable) impression of themselves, that is, from being perceived as possessing desirable rather than undesirable characteristics (Bénabou and Tirole, 2006; Andreoni and Bernheim, 2009; Bursztyn and Jensen, 2017). Since social evaluations may affect reputation, status, and social inclusion, individuals often modify their behavior in response to actual or anticipated judgment by others. A large experimental literature (for a review, see Bursztyn and Jensen, 2017) documents social-image effects in domains such as honesty (Fries et al., 2021; Bašić and Quercia, 2022), social comparison (Eriksson et al., 2017; Petrishcheva et al., 2023; Bottan et al., 2025), charitable giving (Lacetera and Macis, 2010; Adloff and Pondorfer, 2026) and cooperation (Filiz-Ozbay and Ozbay, 2014; Grimalda et al., 2016).

The third perspective, second-order self-image, captures beliefs about how other individuals evaluate themselves. Whereas self-image focuses on one’s own private evaluations and social image on the evaluations one expects from others, this perspective involves beliefs about the private evaluations held by others. In this sense, it occupies an intermediate position between self-focused and other-focused forms of evaluation: individuals continue to reason about others, but the object of inference is not how others evaluate them, rather how others evaluate themselves. This perspective is rooted in a broader literature on social cognition showing that people routinely make attributions to others about mental states, including beliefs, intentions, emotions, values, and norms, and use such information to form mental models of social actors (Happé, 2003; Bradford et al., 2015).

Together, the image dimensions discussed in Section 2.1 and the three image perspectives just introduced define the image framework adopted in our analysis, summarized in Table 1. In this framework, the former capture the content of image evaluations (financial, social, environmental, and hygienic), while the latter capture the viewpoint from which those evaluations are formed.

Table 1: Image perspectives and dimensions

Image Dimension	Self-Image <i>(How I see myself)</i>	Social Image <i>(How others see me)</i>	Second-Order Self-Image <i>(How others see themselves)</i>
Financial	Do I feel financially savvy?	Do others see me as financially savvy?	Do others feel financially savvy?
Social	Do I feel socially approved?	Do others approve of my choice?	Do others feel socially approved?
Environmental	Do I feel environmentally conscious?	Do others see me as environmentally conscious?	Do others feel environmentally conscious?
Hygienic	Do I feel disgusted by the product?	Do others think I am disgusted?	Do others feel disgusted?

As anticipated in [Section 1](#), while image evaluations associated with second-hand goods have been documented across financial, environmental, social, and hygienic dimensions ([Hur, 2020](#); [Silva et al., 2021](#); [Gilal et al., 2024](#)), these concerns have largely been examined through the lens of social image. Existing evidence suggests that consumers often perceive second-hand adoption, particularly in the context of clothing, as potentially detrimental to the image they project to others. Recurring concerns include social embarrassment, low social acceptance, associations with lower socioeconomic status, contamination, and fears that second-hand products may signal financial hardship or undesirable personal characteristics ([Guiot and Roux, 2010](#); [Cervellon et al., 2012](#); [Laitala and Klepp, 2018](#); [Hur, 2020](#); [Silva et al., 2021](#); [Congiu et al., 2025](#)). Much less is known, however, about how consumers privately evaluate second-hand adoption or about how they perceive the private evaluations held by others. Consequently, existing evidence provides only a partial picture of image concerns in second-hand markets, leaving largely unexplored how self-image and second-order self-image influence second-hand adoption. At any rate, one’s willingness to engage in second-hand adoption is expected to be higher the more positive are one’s self-image, social image, and second-order self-image.

2.3 Relationships between perspectives

We are not aware of studies systematically investigating the relationships among self-image, social image, and second-order beliefs in second-hand adoption. However, experimental studies in other behavioral domains offer some tentative predictions about how the three image perspectives may relate to one another in this context.

First, research on prosocial behavior, honesty, ethical consumption, and social influence suggests that social image concerns often loom larger than self-image concerns (e.g., [Lacetera and Macis, 2010](#); [Filiz-Ozbay and Ozbay, 2014](#); [Ewers and Zimmermann, 2015](#); [Friedrichsen and Engelmann, 2018](#); [Bašić and Quercia, 2022](#); [Braghieri, 2024](#); [Bottan et al., 2025](#)). This asymmetry arises because social evaluation carries tangible consequences, such

as reputational damage and social exclusion, whereas private self-evaluation, while still psychologically meaningful, lacks such external stakes (Manstead and Semin, 1981). Individuals therefore strive more to preserve their social image than self-image. For instance, Rind and Benjamin (1994) and Ewers and Zimmermann (2015) find stronger compliance effects when social image is at stake, while Bašić and Quercia (2022) show that lying behavior decreases more when observers’ presence is made salient (social image) than when participants’ attention is directed toward themselves (self-image). However, this pattern is not universal: Teyssier et al. (2015) and Friedrichsen and Engelmann (2018) found no statistically significant differences in willingness to pay for fair-trade products between treatments making social- versus self-image salient.

As argued above, the existing literature on second-hand has predominantly focused on social image concerns (e.g., Laitala and Klepp, 2018; Silva et al., 2021) and has overlooked how individuals privately evaluate themselves. If second-hand is perceived to pose image concerns, and if it is more relevant to preserve one’s social image than self-image, then we should expect individuals to evaluate themselves more negatively on social image dimensions than self-image ones, and to be more sensitive to changes in social image than self-image.

Second, the literature suggests that one’s private evaluations often diverge from those attributed to others, giving rise to what has been termed “pluralistic ignorance” (Bursztyn et al., 2020). A recurrent situation is that of an individual who believes that most others do not support a progressive value while she privately does, and suppresses public expression of that value in response. For example, Bursztyn et al. (2020) show that although 87% of Saudi men privately support women working outside the home, only 25% believe most others share this view, and this belief sustains a social norm not aligned with prevalent private values. Similarly, Barigozzi and Montinari (2025) find that personal values on gender issues are systematically more progressive than those attributed to others, while Andre et al. (2024) report that U.S. citizens underestimate both the adoption rate (67%) and normative support (76%) for climate change mitigation practices.

The literature is silent on whether pluralistic ignorance occurs for second-hand adoption. However, insofar as individuals hold positive private attitudes toward second-hand (high self-image) but believe that others view it negatively (low second-order self-image), they might be less likely to engage in this behavior themselves.

The next section illustrates the design of our experiment and discusses how it elicits the valence of the four determinants across the three image perspectives and tests for the conjectured relationships.

3 Experiment

The vignette experiment was embedded in a larger study. The entire study received approval from the Board for Ethical Questions in Science of the University of Innsbruck and was pre-registered on Open Science Framework (OSF).² Among others, the study included general questions about past adoption of second-hand products and intention to adopt them again in the future, as well as scales eliciting personal traits such as one’s need for uniqueness (Tian et al., 2001) and pro-environmental behavior (Menardo et al., 2020). The full text of the vignette experiment is available in Appendix A and, together with the complete material, in the public OSF repository of the project.

3.1 Procedure

The survey was implemented and administered by the survey company Scenari from October to December 2024 to a panel of Italian respondents, using the computer-assisted web interviewing (CAWI) methodology. Respondents were recruited using a stratified sampling approach to ensure that the sample ($N = 10,496$) was representative at the province level with respect to major sociodemographic variables. In our sample, representativeness holds for age (mean: 49.67, sd: 15.62), gender (percentage of men: 48.83%; percentage of women: 51.17%), education (percentage of people holding a university degree or above: 36.81%) and macro-region of residence (North-west: 26.93%; North-East: 19.76%; Center: 19.63%; South: 22.77%; Islands: 10.91%).

During the completion of the survey, respondents were unaware of the upcoming questions and could not go back to amend their answers. Respondents were paid €4 for filling in the survey, and could earn up to €4 for matching modal answers in the second-order self-image elicitation task (see Section 3.3.2 for details on this task and its incentive scheme).³

3.2 Vignette

In vignette studies, the respondent is asked to provide judgments or make choices on the basis of a short description of a hypothetical scenario (a “vignette”) involving a person, a situation, or an event; the description contains aspects and elements that the researcher expects to be important or decisive when making judgments or choices (Jasso, 2006; Stantcheva, 2023). The methodology of vignettes has become increasingly popular (Beegle et al., 2012; Ambuehl et al., 2015; Ambuehl and Ockenfels, 2017; Fromell et al., 2021; Folke and Rickne, 2022), and employed in diverse domains, such as the investigation of image concerns in social contexts (Manstead and Semin, 1981; Unzueta et al., 2010) and perception of social norms (Fromell et al., 2021; Barigozzi and Montinari, 2025).

² <https://osf.io/wzcqh/>

³ The survey agency employs a point-based reward system where 50 points can be exchanged for a €10 Amazon gift card. Respondents were rewarded with 20 points for the completion of the survey and 5 points for each correct answer in the second-order self-image task.

To the best of our knowledge, no contribution in the literature has applied the vignette methodology to the analysis of second-hand consumption.

Our vignette describes a hypothetical choice scenario in which the respondent is considering the purchase of a second-hand product with a given condition and price. The product featured in the vignette is randomly selected from four types: T-shirt, closet, refrigerator, or smartphone. Each product type is associated with a single predefined model, which does not change across vignettes for the same product (attributes and levels summarized in Table 2).

Table 2: Attributes and levels adopted in the vignette

Attribute	Levels
Products and models characteristics	T-shirt: a light blue, 100% cotton T-shirt, in your size
	Refrigerator: an LG with 384ℓ capacity, measures $59 \times 203 \times 68$ cm, and energy class A++
	Closet: a wooden closet, with dimensions $226 \times 212 \times 56$ cm, 3 compartments (90, 45, 90 cm), two double doors and one single door
	Smartphone: an Honor 90, Android system, with 6.7" display, 256GB physical storage and 8GB RAM, 200MP back camera and 50MP front camera
Conditions	Excellent conditions
	Good conditions
	Acceptable conditions
Price level	Free of charge
	At an affordable price

Each respondent is presented with one and only one vignette. An example, translated from Italian, is provided in the following (italicized elements vary across vignette versions; see Appendix A for the other versions of the vignette):

Imagine you need to buy a *T-shirt*. You find the model you are interested in, *a light blue, 100% cotton T-shirt, in your size*, second-hand. The product is in *acceptable condition*, has been sanitized, and you can pick it up *at an affordable price*.

We chose to randomize the product described because the literature suggests a heterogeneous impact of the determinants of second-hand adoption across products and thus we conjectured that image concerns could differ accordingly. For instance, hygiene considerations are found to be relevant both for clothing and furniture (Yan et al., 2015; Bezançon et al., 2019), which enter in close contact with one’s body, but are less pronounced for furniture than for clothing (Bezançon et al., 2019).

To select these products, we opted for the most widely researched categories in the second-hand consumption literature (see, e.g., Gilal et al., 2024). The product model and its characteristics were specified to enhance the realism of the choice and encourage the respondents to imagine themselves making a real purchase decision.

The full randomization with 4 products (T-shirt, closet, refrigerator, smartphone) $\times$ 3 condition levels (excellent, good, acceptable) $\times$ 2 price levels (affordable price, free of charge) yields a total of 24 possible versions of the vignette. On average, 437 participants (4.16% of the sample) were presented with the same version. The distribution of demographic characteristics – including age, gender, education, income, employment status, and macro-region – was balanced across products, conditions and price levels, as shown in the balance tables reported in [Section B.1](#).

3.3 Statements

First, the respondent is asked to state the probability, from 0 to 100, that they decide to adopt the item described in the vignette (“Referring to the situation described, what is the probability that you decide to take the product?”). Then, the respondent is presented with four Likert items evaluating the valence of financial, environmental, social, and hygiene considerations. The items are proposed under the three social perspectives of self-image, second-order self-image, and social image, in this order.

3.3.1 Eliciting self-image

Starting with self-image, the respondent is asked to complete the sentence “*If I decided to take the product described...*” by indicating the best fitting statement from a pair of opposite ones (e.g., “*A = I would feel that I am in financial distress*” versus “*B = I would feel that I was using money responsibly*”). Respondents could indicate a complete agreement with the statement A, a stronger agreement with statement A than B, a stronger agreement with B than A, and a complete agreement with B (4-point scale).⁴ For all these pairs, we opted for an even-numbered scale to rule out situations of indecisiveness (i.e., answers at the middle point) and force respondents to lean more towards one statement than the other (for a discussion on this practice, see [Stantcheva, 2023](#)). The statements pertaining to self-image are reported in the following.

⁴The use of bipolar semantic pairs (e.g., *pleasant – unpleasant*, *good – bad*, or even *supports the family – does not support the family*, etc.), also termed “semantic differential”, is common practice in studies on image concerns and social emotions such as shame and guilt. Recently, [Chun et al. \(2023\)](#) and [Negash and Akhbar \(2024\)](#) have used bipolar semantic pairs to evaluate consumer orientation toward second-hand products and have done it by presenting opposite pairs as extremes of a 4-point scale, similarly to our implementation. For other contributions adopting semantic differentials, see [Leduc \(1976\)](#); [Manstead and Semin \(1981\)](#); [Reynolds \(2002\)](#). For a general overview of semantic differentials, see [Fishbein and Ajzen \(2011, Ch. 3\)](#) and references therein, especially works by Osgood and associates, and the more recent work by [Stantcheva \(2023\)](#).

“If I decided to take the product described...”

	Agree completely with A	Agree more with A than B	Agree more with B than A	Agree completely with B
A = I would feel I am in financial distress	☐	☐	☐	☐
B = I would feel that I was using money responsibly				
A = I would feel embarrassment	☐	☐	☐	☐
B = I would have the approval of others				
A = I would feel that I had not made a sustainable choice	☐	☐	☐	☐
B = I would feel that I had made a sustainable choice				
A = I would feel disgusted in using it	☐	☐	☐	☐
B = I would not feel disgusted in using it				

3.3.2 Eliciting second-order self-image

The elicitation of second-order self-image was based on the matching coordination game proposed by [Krupka and Weber \(2013\)](#) and widely adopted in the elicitation of second-order beliefs (e.g., [Krupka et al., 2022](#); [König-Kersting, 2024](#); [Barigozzi and Montinari, 2025](#); [Gächter et al., 2025](#); [Adloff and Pondorfer, 2026](#)). The respondent is presented with the same battery of Likert items employed to elicit self-image and asked to indicate the answers most commonly given in a representative sample from the same geographical “macro-region” of the respondent.

To clarify to respondents what we meant by “macro-region” and what were the regions belonging to each macro-region, we adopted the EU Nomenclature of Territorial Units for Statistics (NUTS), which subdivides Italy in five sets of regions, and proceeded to list them in the question text.⁵ Reference groups were set at the macro-region level since a more granular subdivision, such as that at the regional or province level, would have compromised the power of our analyses, while less granular subdivisions would have obscured relevant cultural and geographical differences in social norms.

Respondents were also told that they would be compensated with €1 each time their answer coincided with the modal response in the reference group (and thus up to a total of €4). The incentivization of the task had the purpose of ensuring an honest and reliable elicitation of second-order self-image, that is, free from response biases such as experimenter demand effects, social desirable responding, and focal point effects (e.g., [Fallucchi](#)

⁵ Accordingly, we distinguished in North-West (Liguria, Lombardia, Piemonte, Valle d’Aosta), North-East (Emilia-Romagna, Friuli-Venezia Giulia, Provincia Autonoma di Trento, Provincia Autonoma di Bolzano, Veneto), Center (Lazio, Marche, Toscana, Umbria), South (Abruzzo, Basilicata, Calabria, Campania, Molise, Puglia), and Islands (Sardegna, Sicilia).

and Nosenzo, 2022; Fallucchi et al., 2026; for a more general discussion of these effects, see Section 6). In fact, the possibility of obtaining a monetary reward offers an incentive for respondents to try their best to match modal answers in the sample of reference, thereby increasing the accuracy and reliability of their stated beliefs. The reward was given to a subset of 400 participants randomly drawn after the data collection process ended; respondents were informed of the drawing mechanism when undertaking the task. Paying a subset of respondents has been shown to be as effective as paying the full sample (Charness et al., 2016) and is a common mechanism in experimental studies on social norms (Burks and Krupka, 2012; Fromell et al., 2021; Barigozzi and Montinari, 2025).

As anticipated, the elicitation of second-order beliefs also serves to investigate the potential misperception of the prevalent self-image, in line with pluralistic ignorance. This can be done by comparing the responses given on second-order self-image with the modal responses for self-image within the reference group.

3.3.3 Eliciting perceived social image

Finally, respondents were presented with a battery similar to that to elicit self-image but framed in terms of how others would see the respondent if they decided to take the product described in the vignette. That is:

“If I decided to take the product described, others would think that...”

	Agree completely with A	Agree more with A than B	Agree more with B than A	Agree completely with B
A = I would feel that I was in financial distress	☐	☐	☐	☐
B = I would feel that I was using money responsibly				
A = I would feel embarrassment	☐	☐	☐	☐
B = I would have the approval of others				
A = I would feel that I had not made a sustainable choice	☐	☐	☐	☐
B = I would feel that I had made a sustainable choice				
A = I would feel disgusted in using it	☐	☐	☐	☐
B = I would not feel disgusted in using it				

In addition to eliciting social-image determinants, this task enables us to investigate the relationship between self and social image, and whether it affects second-hand adoption.

3.4 Registered Hypotheses

We formulate the following hypotheses. First, we hypothesize that the probability to adopt the product described in the vignette is influenced by its condition and price levels, in the following ways:

H.1 The stated intention to adopt the SH product is higher...

H.1.a the better the conditions are.

H.1.b if the product is free.

Based on the literature reviewed above (Section 2), we hypothesized that willingness to engage in second-hand would be higher the more positive image is, regardless of the perspective under consideration. More specifically, on the impact of self-image, social image, and second-order self-image on second-hand adoption, we hypothesize what follows:

H.2 The stated intention to adopt the SH product is higher the stronger the respondent's belief that, by adopting the SH product...

H.2.a s/he is financially savvy.

H.2.b s/he receives social approval.

H.2.c s/he is environmentally conscious.

H.2.d s/he does not feel disgusted.

H.3 The stated intention to adopt the SH product is higher the stronger the respondent's belief that, by adopting the SH product...

H.3.a s/he is seen by others as financially savvy.

H.3.b s/he seen by others as worthy of social approval.

H.3.c s/he is seen by others as environmentally conscious.

H.3.d s/he seen by others as not disgusted.

H.4 The stated intention to adopt the SH product is higher the stronger the respondent's belief that, by adopting the SH product, most of others from the same macro-region...

H.4.a feel they are financially savvy.

H.4.b feel they receive social approval.

H.4.c feel they are environmentally conscious.

H.4.d do not feel they are disgusted.

Finally, we advance two conjectures regarding the relationship between image perspectives, both motivated by the literature. First, insofar as individuals are more sensitive to the preservation of their social image than their self-image, and assuming that second-hand is more likely to pose image concerns than first-hand consumption, we conjecture

that respondents will report lower scores for the four determinants under social image than self-image. We also expect social image scores to affect second-hand adoption more than self-image ones. We hence formulate the following hypotheses:

H.5.a Scores reported for the four determinants under social image are systematically lower than under self-image.

H.5.b The probability to adopt the second-hand product is more sensitive to social-image dimensions than self-image.

Second, given that in many social domains individuals tend to attribute less progressive values to others than those held collectively (pluralistic ignorance), we conjecture that this also occurs for second-hand. In particular, we expect respondents to report higher scores on the self-image determinants than second-order self-image ones, and to systematically underestimate the modal self-image scores elicited in their macro-regional subsample of reference. This leads to these final hypotheses:

H.6.a Scores reported on self-image determinants are systematically higher than those on second-order self-image determinants.

H.6.b There is a systematic underestimation of the modal self-image scores observed in respondents' macro-regional reference subsample.

Note that, with respect to our pre-registration, we inverted the order of *H.3* and *H.4* to improve the clarity in the presentation of results. For the same reason, we have also laid down Hypotheses *H.5* and *H.6* that formalize analyses previously stated only narratively.

4 Main Results

4.1 Product adoption across vignette attributes

Before turning to the main analysis of image considerations, we first explore the patterns observed in respondents' adoption intentions. Specifically, we start by analyzing how the stated probability of adopting the product described in the vignette varies across product types, condition and price.

The average stated probabilities by product are graphed in [Figure 1](#), and those by conditions and price levels in [Figure 2](#). Regarding the former, we find that the average stated probabilities of taking a second-hand closet (61.13), a smartphone (60.73), or a refrigerator (59.08) do not differ significantly from one another, whereas the average probability of taking a second-hand T-shirt is statistically significantly lower (54.72).⁶

With respect to conditions and price, as expected, there is a sharp decrease in probability when the product shifts from free to available at a low price, regardless of conditions.

⁶ This is confirmed by three pairwise Mann-Whitney rank-sum tests, for which the Šidák-Holm adjusted p-values fall below 0.001.

Likewise, the stated probability decreases when the condition varies from excellent to acceptable, for both price levels. In particular, when the product is free, the decrease in the average stated probability is statistically significant as the condition changes from excellent (63.38) to acceptable (60.20), but not when it shifts from excellent to good (64.40); the difference in probability between excellent and acceptable is exacerbated when the product is no longer free (55.41 versus 50.42). These trends hold for all products considered (see [Figure B.1](#) and [Figure B.2](#) in [Appendix B](#)).

Figure 1: Probability to take the product by type

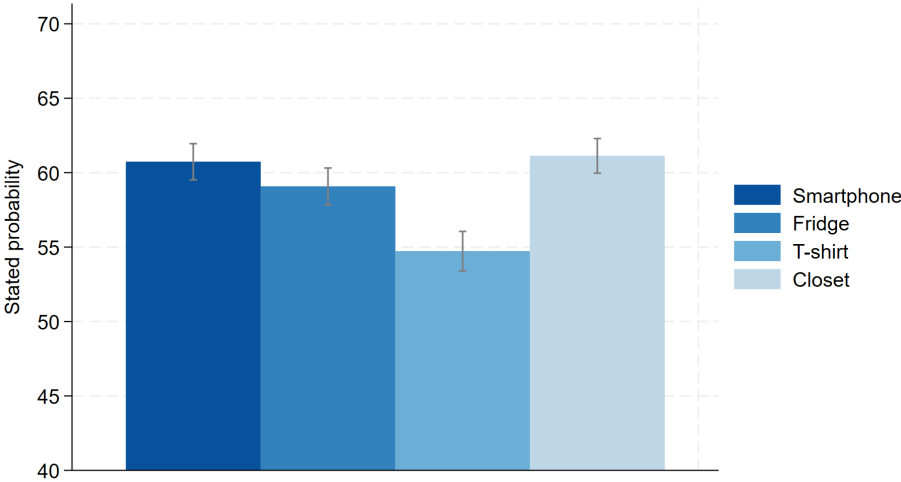
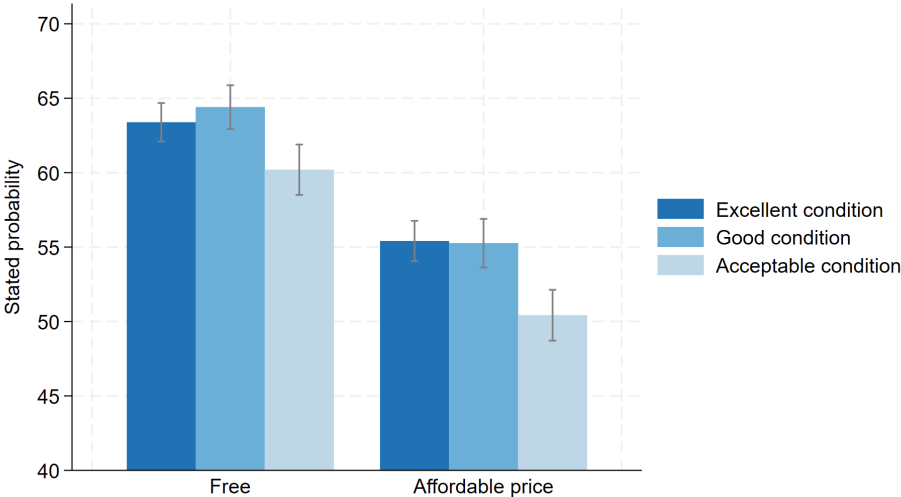


Figure 2: Probability to take the product by vignette attributes



To test Hypothesis *H.1*, as for all other analyses involving the stated probability elicited in the vignette, we adopt fractional probit models after rescaling this variable to a unitary interval. Table 3 displays the estimation results for product condition and price, separately (Models 1 and 2) and jointly (Model 3), as well as their joint estimation controlled for product type (Model 4) and respondents' demographic traits (Model 5).

In line with Hypothesis *H.1.a*, the stated probability to take the vignette product is higher when shifting from acceptable to good and excellent conditions. Compared to the cheap-price condition, obtaining the product for free significantly increases the likelihood of choosing the second-hand good, supporting our hypothesis *H.1.b*. These effects are robust to the joint estimation of conditions and price and to several other controls, including the product type and respondents' demographic traits. As a further robustness check, we re-estimated the regression models by including interactions among the attributes (product, condition, and price level) to account for differences across the vignettes shown to respondents. The inclusion of these interaction terms does not alter the sign or statistical significance of the estimated effects on the probability of choosing the product described in the vignette (see the estimation results reported in Table B.11).

Table 3: Vignette attributes and probability to take the product

	(1)	(2)	(3)	(4)	(5)
Excellent condition	0.102*** (0.020)		0.103*** (0.020)	0.107*** (0.020)	0.111*** (0.019)
Good condition	0.120*** (0.022)		0.116*** (0.021)	0.113*** (0.022)	0.091*** (0.021)
Free		0.227*** (0.016)	0.226*** (0.016)	0.227*** (0.016)	0.245*** (0.015)
Smartphone				0.158*** (0.023)	0.122*** (0.023)
Fridge				0.111*** (0.024)	0.192*** (0.023)
Closet				0.166*** (0.023)	0.174*** (0.022)
Constant	0.146*** (0.016)	0.101*** (0.011)	0.022 (0.018)	-0.088*** (0.023)	-0.791*** (0.070)
Controls	No	No	No	No	Yes
Observations	10,496	10,496	10,496	10,496	10496

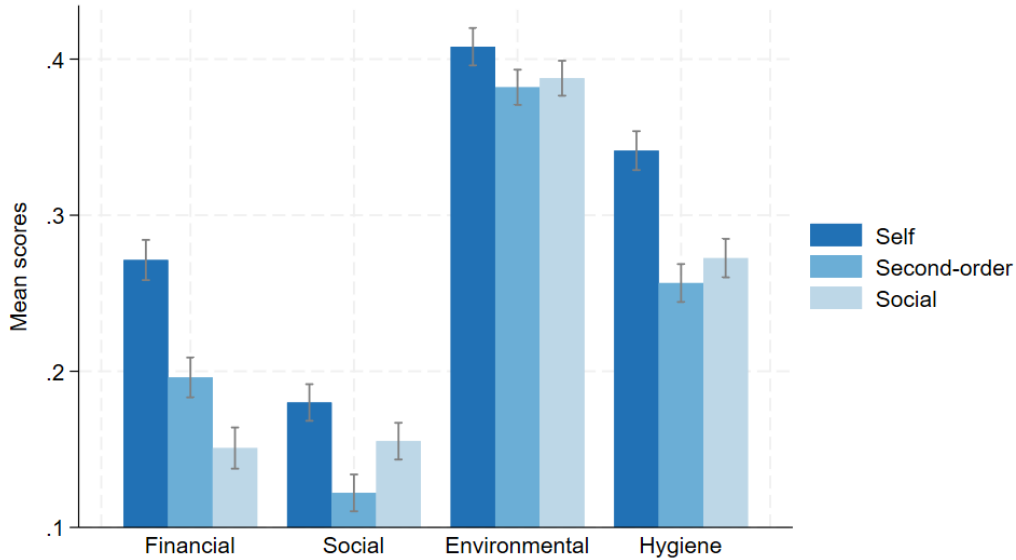
Note: Fractional probit regression estimation. Dependent variable. *Probability of taking the second-hand product*: variable ranging between 0 and 1. Regressors. *Excellent condition* and *Good condition* are dummy variables equal to 1 if the condition is the one described, 0 otherwise. Baseline: *Acceptable condition*. *Free* is a dummy variable equal to 1 if the product can be taken for free, 0 otherwise. Baseline: *Affordable price*. Controls in column (2). *Smartphone*, *Fridge*, *Closet* are dummy variables equal to 1 if the product belongs to that category, 0 otherwise. Baseline: *T-shirt*. *Controls* include demographic variables such as age, gender, need for uniqueness score, pro-environmental behavior, income, education, past adoption of and disposition toward second-hand, and macro-region of residence (full specification in Table B.4). Standard errors clustered at the individual level are reported in parentheses. Significance of coefficients: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

4.2 Product adoption across image dimensions and perspectives

We turn now to the investigation of how the probability to take the vignette product depends on the financial, social, environmental and hygiene dimensions of the three image perspectives. In keeping with other contributions eliciting social norms through matching coordination games (Fromell et al., 2021; Krupka and Weber, 2013; Barigozzi and Montinari, 2025), the values of the responses to the four-point items have been recoded as -1 , -0.33 , $+0.33$, and $+1$. Although this coding is standard in the literature, before adopting it we verified the implied ordering by estimating regressions with category dummies; the coefficients displayed the expected monotonic pattern (see Table B.8 for Hypothesis 2, Table B.9 for Hypothesis 3, and Table B.10 for Hypothesis 4).

The distribution of the recoded scores elicited on the corresponding image items is graphed in Figure 3. The environmental dimension has the highest mean scores across all three image perspectives, and unlike the other dimensions, its scores remain relatively stable across perspectives. Within each image perspective, scores differ substantially across dimensions. Matched-pairs sign tests confirm that these within-perspective differences are highly statistically significant (Šidák-Holm adjusted p-values below 0.001), with one exception: the financial and social-approval dimensions of the social image yield identical mean scores (0.15).

Figure 3: Mean scores on image dimensions across perspectives



We now proceed with the test of Hypotheses $H.2$ – $H.4$, for which we conducted fractional probit model estimations on the stated probability of taking the vignette product using as regressors the scores on each determinant under self-image, social image and second-order self-image. Results of these estimations are reported, respectively, in Table 4, Table 5 and

[Table 6](#). In all these models, the dependent variable remains the standardized unitary stated probability to take the product described in the vignette. All specifications include vignette characteristics as regressors; as a robustness check, we also estimated models with vignette fixed effects for the vignette seen by each respondent, and none of the results reported in this section changes in sign or significance (see [Table B.15](#)). Given that regressions estimate the impact on the dependent variable of a positive increase in their regressors, the image determinants are labeled as the positive extremes of the related scales, that is, as financial savvy, environmental consciousness, social approval and disgust insensitivity.

[Table 4](#) shows that the four self-image dimensions are positively correlated with the probability of taking a second-hand product. Interestingly, environmental consciousness is the only self-image dimension that is not significantly associated with the probability of taking the product seen in the vignette, once the other dimensions of self-image are taken into account. This suggests that, conditional on financial, social, and hygiene considerations, the extent to which adopting a second-hand product enhances one’s environmental self-image provides little additional explanatory power for adoption intentions. We return to this point when we compare the relative weight of image dimensions across perspectives below in [Figure 4](#). Results do not change when controlling for product type, condition, and price, as well as for demographic characteristics: the sign and significance of coefficients are preserved. Overall, with the exception of *H.2.c*, which posited an effect of the environmental dimension of self-image on second-hand adoption, these results broadly support Hypothesis *H.2*.

These analyses are replicated, with comparable findings, for the image perspectives of social image ([Table 5](#)) and second-order self-image ([Table 6](#)), lending support to our Hypotheses *H.3* and *H.4*. However, unlike in the specification for self-image, the environmental dimension is positively and significantly associated with adoption intentions under both the social-image and second-order self-image perspectives. In these two perspectives, the environmental dimension captures the belief that adopting a second-hand product would be regarded as a sustainable choice, respectively, by others evaluating one’s behavior and by others evaluating their own. This finding suggests that environmental consciousness contributes additional explanatory power when adoption is evaluated through others’ perspectives. The fact that environmental consciousness behaves differently across image perspectives motivates us to explore this dimension more closely in the remainder of the paper.

Again as a robustness check, we re-estimated the regression models in [Table 4](#), [Table 5](#), and [Table 6](#) by including interactions among the image dimensions and the vignette attributes. The inclusion of these interaction terms does not alter the sign or statistical significance of the estimated effects on the probability of choosing the product described in the vignette (see the estimation results reported respectively in [Table B.12](#), [Table B.13](#), and [Table B.14](#)).

Table 4: Self-image and probability to take the vignette product

	(1)	(2)	(3)	(4)
Financial savvy	0.132*** (0.016)	0.127*** (0.016)	0.129*** (0.016)	0.125*** (0.016)
Social approval	0.155*** (0.018)	0.156*** (0.018)	0.153*** (0.018)	0.111*** (0.018)
Environmental consciousness	0.020 (0.017)	0.020 (0.017)	0.021 (0.017)	0.019 (0.016)
Disgust insensitivity	0.406*** (0.017)	0.405*** (0.017)	0.403*** (0.017)	0.293*** (0.017)
Excellent condition		0.079*** (0.019)	0.080*** (0.019)	0.091*** (0.019)
Good condition		0.079*** (0.021)	0.075*** (0.021)	0.066*** (0.020)
Free		0.219*** (0.016)	0.221*** (0.016)	0.235*** (0.015)
Smartphone			0.093*** (0.023)	0.071*** (0.022)
Fridge			0.103*** (0.022)	0.158*** (0.022)
Closet			0.135*** (0.022)	0.148*** (0.022)
Constant	0.029*** (0.010)	-0.147*** (0.018)	-0.230*** (0.023)	-0.491*** (0.070)
Controls	No	No	No	Yes
Observations	10,496	10,496	10,496	10,496

Note: Fractional probit regression estimation. Dependent variable. *Probability of taking the second-hand product*: variable ranging between 0 and 1. Regressors. *Self-image*: *Financial savvy*; *Environmental consciousness*; *Social approval*; *Disgust insensitivity*: discrete variables taking a value in $\{-1, -0.33, +0.33, +1\}$. *Excellent condition* and *Good condition* are dummy variables equal to 1 if the condition is the one described, 0 otherwise. Baseline: *Acceptable condition*. *Free* is a dummy variable equal to 1 if the product can be taken for free, 0 otherwise. Baseline: *Affordable price*. *Smartphone*, *Refrigerator*, *Closet* are dummy variables equal to 1 if the product belongs to that category, 0 otherwise. Baseline: *T-shirt*. *Controls* include demographic variables such as age, gender, need for uniqueness score, pro-environmental behavior, income, education, past adoption of and disposition toward second-hand, and macro-region of residence (full specification available in [Table B.5](#)). Standard errors clustered at the individual level are reported in parentheses. Significance of coefficients: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 5: Social image and probability to take the vignette product

	(1)	(2)	(3)	(4)
Financial savvy	0.062*** (0.017)	0.060*** (0.017)	0.060*** (0.017)	0.045*** (0.017)
Social approval	0.126*** (0.021)	0.131*** (0.021)	0.128*** (0.021)	0.082*** (0.020)
Environmental consciousness	0.108*** (0.019)	0.103*** (0.019)	0.105*** (0.019)	0.080*** (0.018)
Disgust insensitivity	0.250*** (0.018)	0.252*** (0.018)	0.248*** (0.018)	0.154*** (0.017)
Excellent		0.083*** (0.020)	0.085*** (0.020)	0.097*** (0.019)
Good		0.094*** (0.021)	0.091*** (0.021)	0.080*** (0.020)
Free		0.233*** (0.016)	0.234*** (0.016)	0.247*** (0.015)
Smartphone			0.099*** (0.023)	0.082*** (0.022)
Fridge			0.094*** (0.023)	0.165*** (0.023)
Closet			0.124*** (0.023)	0.144*** (0.022)
Constant	0.096*** (0.010)	-0.096*** (0.018)	-0.175*** (0.023)	-0.615*** (0.070)
Controls	No	No	No	Yes
Observations	10,496	10,496	10,496	10,496

Note: Fractional probit regression estimation. Dependent variable. *Probability of taking the second-hand product*: variable ranging between 0 and 1. Regressors. *Social image*: *Financial savvy*; *Environmental consciousness*; *Social approval*; *Disgust insensitivity*: discrete variables taking values in $\{-1, -0.33, +0.33, +1\}$. *Excellent condition* and *Good condition*: dummy variables equal to 1 if the condition is the one described, 0 otherwise. Baseline: *Acceptable condition*. *Free*: dummy variable equal to 1 if the product can be taken for free, 0 otherwise. Baseline: *Affordable price*. *Smartphone*, *Refrigerator*, *Closet* are dummy variables equal to 1 if the product belongs to that category, 0 otherwise. Baseline: *T-shirt*. *Controls* include demographic variables such as age, gender, need for uniqueness score, pro-environmental behavior, income, education, past adoption of and disposition toward second-hand, and macro-region of residence (full specification available in [Table B.6](#)). Standard errors clustered at the individual level are reported in parentheses. Significance of coefficients: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 6: Second-order self-image and probability to take the vignette product

	(1)	(2)	(3)	(4)
Financial savvy	0.110*** (0.017)	0.108*** (0.017)	0.109*** (0.017)	0.070*** (0.017)
Social approval	0.076*** (0.019)	0.079*** (0.019)	0.075*** (0.019)	0.063*** (0.018)
Environmental consciousness	0.128*** (0.018)	0.126*** (0.018)	0.128*** (0.018)	0.092*** (0.017)
Disgust insensitivity	0.214*** (0.018)	0.213*** (0.018)	0.209*** (0.018)	0.129*** (0.017)
Excellent		0.086*** (0.020)	0.088*** (0.020)	0.099*** (0.019)
Good		0.095*** (0.021)	0.092*** (0.021)	0.080*** (0.020)
Free		0.226*** (0.016)	0.227*** (0.016)	0.243*** (0.015)
Smartphone			0.104*** (0.023)	0.085*** (0.022)
Fridge			0.099*** (0.023)	0.170*** (0.022)
Closet			0.130*** (0.023)	0.148*** (0.022)
Constant	0.099*** (0.010)	-0.089*** (0.018)	-0.173*** (0.023)	-0.636*** (0.070)
Controls	No	No	No	Yes
Observations	10,496	10,496	10,496	10,496

Note: Fractional probit regression estimation. Dependent variable. *Probability of taking the second-hand product*: variable ranging between 0 and 1. Regressors. *Second-order self-image*: *Financial savvy*; *Environmental consciousness*; *Social approval*; *Disgust insensitivity*: discrete variables taking values in $\{-1, -0.33, +0.33, +1\}$. *Good condition* and *Excellent condition*: dummy variables equal to 1 if the condition is the one described, 0 otherwise. Baseline: *Acceptable condition*. *Free*: dummy variable equal to 1 if the product can be taken for free, 0 otherwise. Baseline: *Affordable price*. *Smartphone*, *Refrigerator*, *Closet*: dummy variables equal to 1 if the product belongs to that category, 0 otherwise. Baseline: *T-shirt*. *Controls* include demographic variables such as age, gender, need for uniqueness score, pro-environmental behavior, income, education, past adoption of and disposition toward second-hand, and macro-region of residence (full specification available in [Table B.7](#)). Standard errors clustered at the individual level are reported in parentheses. Significance of coefficients: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

4.3 Relationships between social image and self-image

In [Section 2.3](#) and [Section 3.4](#) we discussed and formalized potential differences across perspectives in the scores reported on the image dimensions. Specifically, we conjectured that social image scores would be systematically lower than self-image ones (Hypothesis *H.5.a*) and that social image would be more predictive of second-hand adoption than self-image (Hypothesis *H.5.b*). We now explore both these questions.

4.3.1 Self-image versus social image

The distribution of the scores elicited on image items, under the perspectives of self-image and social image, are reported in Table 7. For each perspective, four columns report the proportion of respondents agreeing completely with A (Column “--”), more with A than with B (Column “-”), more with B than A (Column “+”) and completely with B (Column “++”). Test statistics (adjusted p-values) are reported in the last column of the table.

Table 7: Distribution of scores under self-image versus social image

Dimension	Self-image				Social image				Sign test p-value
	--	-	+	++	--	-	+	++	
Financial	11.98	20.25	32.82	34.96	15.44	24.73	31.55	28.28	<.001
Social	10.61	24.73	41.61	23.05	10.84	26.97	40.18	22.01	<.001
Environmental	7.87	15.62	33.88	42.64	6.39	15.81	40.92	36.88	<.001
Hygiene	9.27	19.37	32.18	39.18	10.19	21.24	35.99	32.57	<.001

Note: Distribution of scores on the four image dimensions. Columns (--, -, +, ++) indicate the proportion of respondents, respectively, completely agreeing with A, agreeing with A more than B, agreeing with B more than A, and completely agreeing with B. Modal scores are highlighted in bold. The last column reports Šidák–Holm adjusted p-values from sign tests.

In line with our expectation, self-image is generally more positive than social image; the only exception occurs for the social-approval dimension, for which the two modal answers coincide at a partial agreement with statement B (Column “+”). Matched-pairs sign tests are strongly statistically significant for all dimensions (Šidák–Holm adjusted p-values < 0.001). Ultimately, these results suggest that our respondents believe their self-image is more positively affected by second-hand adoption than their social image. Hypothesis *H.5.a* is thus confirmed.⁷

4.3.2 Relative weight of social image for adoption

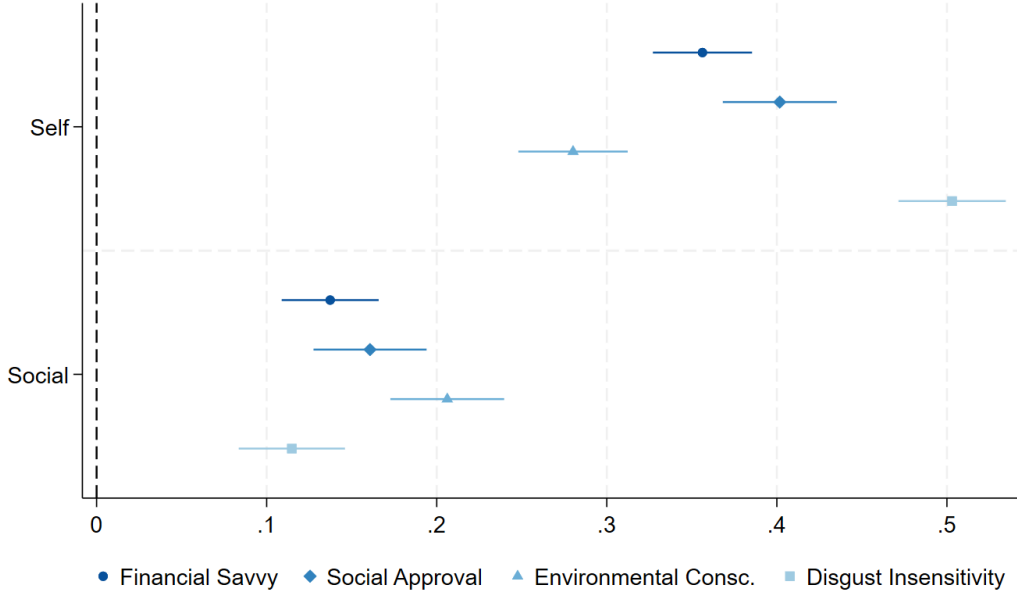
A related question we investigated is whether the social-image perspective on a dimension is more predictive of second-hand adoption than self-image, in line with our Hypothesis *H.5.b*. To assess the relative importance of self-image and social image, we estimated four fractional probit models, one for each image dimension, including both the self-image and social-image scores for that dimension (specifications and estimation results are available in Table B.16). Figure 4 displays the coefficients of these regressors.

Figure 4 shows a remarkably consistent pattern in all four dimensions. The coefficient associated with self-image is always larger than the corresponding social-image coefficient. Wald tests reject the equality of the two coefficients for every dimension. The largest differences emerge for disgust insensitivity, followed by social approval and financial savvy, whereas the gap is smaller, although still statistically significant, for environmental consciousness.⁸

⁷ We have limited the discussion to the total sample as these trends also hold across macro-regions. Scores and test statistics for regional trends are available in Table B.17.

⁸ Wald tests show relevant differences for Financial savvy (difference = 0.219; Šidák–Holm p <

Figure 4: The relative weight of image dimensions across perspectives



These findings, which contradict Hypothesis *H.5.b*, suggest that self-image is consistently more strongly associated with second-hand adoption intentions than social-image. In other words, respondents appear to care more about how adopting second-hand makes them feel about themselves than about how it makes them appear to others. This result is in stark contrast to the pattern typically observed in other behavioral domains, where social image is generally found to exert a stronger influence than self-image (see, e.g., [Rind and Benjamin, 1994](#); [Ewers and Zimmermann, 2015](#); [Bašić and Quercia, 2022](#)).

The result for environmental consciousness represents a partial exception to the general pattern. Although self-image remains more strongly associated with adoption intentions than social image, the difference between the two perspectives is considerably smaller than for the other image dimensions. This finding mirrors the descriptive evidence in [Figure 3](#), where the environmental dimension shows both the highest mean scores and the smallest differences across the three image perspectives. Taken together, these results suggest that adopting a second-hand product is widely perceived as a sustainable choice, whose effects on respondents' self-evaluations and on how they expect to be perceived by others appear closely aligned. This may explain why the distinction between self-image and social image is considerably less pronounced for environmental consciousness than for the other image dimensions.

0.001), Social approval (0.241; $p < 0.001$), and Disgust insensitivity (0.388; $p < 0.001$), and a smaller, but still significant gap for Environmental consciousness (0.074; $p = 0.012$).

4.4 Pluralistic ignorance in second-hand adoption

The elicitation of second-order self-image, i.e., the respondents’ beliefs about the self-image that prevails among others in their reference group, allows us to explore the possibility of pluralistic ignorance, that is, a systematic misperception of such prevailing self-image. As anticipated in Section 2.3 and Section 3.4, we conjectured that second-order self-image would be systematically lower than respondents’ own self-image (*Hypothesis H.6.a*) and than the modal self-image score observed within their reference group (*Hypothesis H.6.b*). We explore both of these questions in the following.

4.4.1 Second-order versus first-order self-image

Table 8 reports the distribution of the scores on the image dimensions across self-image and second-order self-image. The table is structured in the same fashion as Table 7, with four columns for each perspective reporting proportions of respondents agreeing completely with A, more with A than with B, more with B than A, completely with B (respectively, Columns “--”, “-”, “+”, “++”), and with the last column reporting the adjusted p-values of the hypothesis tests.

Table 8: Distribution of scores under self-image versus second-order self-image

Dimension	Self-image				Second-order self-image				Sign test p-value
	--	-	+	++	--	-	+	++	
Financial	11.98	20.25	32.82	34.96	12.65	24.70	33.20	29.45	<.001
Social	10.61	24.73	41.61	23.05	11.47	29.40	38.42	20.70	<.001
Environmental	7.87	15.62	33.88	42.64	6.50	16.33	40.43	36.74	<.001
Hygiene	9.27	19.37	32.18	39.18	9.57	23.09	36.57	30.77	<.001

Note: Distribution of scores on the four image dimensions across first-order and second-order self-image. Columns (--, -, +, ++) indicate the proportion of respondents, respectively, completely agreeing with A, agreeing with A more than B, agreeing with B more than A, and completely agreeing with B. Modal scores are highlighted in bold. The last column reports Šidák–Holm adjusted p-values from sign tests.

The proportion of respondents agreeing completely with B is always higher under self-image than second-order self-image, with the exception of social approval, for which the modal answers match at a partial agreement with B. All pairwise differences turn out to be statistically strongly significant, as evidenced by a series of proportion tests (p-values < 0.001; Šidák–Holm adjusted; see Table B.18 for tests on the scores disaggregated per macro-region). Overall, these findings support the conjecture that people generally tend to attribute more positive values to themselves than to others, that is, that their self-image is more positively affected by adopting second-hand than how much it affects that of others (*Hypothesis H.6.a*).⁹

⁹ Consistent with our pre-registration, we conducted matched-pairs chi-squared tests of marginal homogeneity (Stuart–Maxwell, the $k \times k$ generalization of McNemar) comparing the distributions of the four dimension scores between self- and social-image perspectives within each product. These tests assess whether the marginal distributions differ, that is, whether responses under

4.4.2 Beliefs about self-image modes

In this section, we further investigate the extent of the mismatch between respondents’ beliefs about others’ self-image and the actual modal self-image observed within their reference group. In [Table 9](#), “Mismatch” represents the proportion of participants whose responses on the second-order self-image elicitation task did not match the modal responses on the self-image items observed in their macro-regional reference group for the same vignette. Overall, the mismatch is substantial across all four image dimensions: between 61% and 67% of respondents fail to correctly predict the modal self-image evaluation within their reference group (for disaggregation in macro-regions, see [Table B.19](#)). All scores are statistically significantly different from 50%, as evidenced by a series of one-sample binomial tests (all p-values < 0.001).

[Table 9](#) also reports the proportion of respondents who underestimated (“Below”) or overestimated (“Above”) the modal self-image response observed within their reference group for the corresponding vignette. Interestingly, the mismatch is mostly pessimistic, as respondents who made an incorrect prediction tend to underestimate more frequently than to overestimate how positively others privately evaluate the effect of second-hand adoption on their self-image. The proportion is extremely high for the environmental and hygiene dimensions (around 90% of mismatches), followed by the financial (84%) and the social dimensions (65%). Ultimately, these findings confirm the presence of pluralistic ignorance regarding others’ beliefs about second-hand consumption and lend support to our Hypothesis *H.6.b*.

Table 9: Mismatch between second-order self-image and self-image mode

Dimension	Mismatch	Below	Above
Financial	66.96	84.00	16.00
Social	61.49	65.38	34.62
Environmental	61.10	90.29	9.71
Hygiene	65.04	89.40	10.60

Note: “Mismatch” reports the proportion of respondents whose second-order self-image response does not coincide with the modal self-image response observed within their reference group (macro-area) for the corresponding vignette. “Below” and “Above” identify respondents for whom their second-order response falls respectively below and above the modal self-image. All proportions are statistically significantly different from 0.50 (two-sided binomial tests; $p < 0.001$ for all).

The evidence of pluralistic ignorance raises the question of whether the direction of the mismatch is correlated with the probability of taking a product. [Table 10](#) explores this question. For all dimensions, underestimating the modal value is associated with lower adoption intentions than among respondents who hold accurate beliefs, suggesting that

self-image are systematically shifted toward higher categories relative to social-image. Since these results are consistent with those already discussed in the text, we do not report them and instead focus on matched-pairs sign tests, whose interpretation is more intuitive and aligns with common practice in the literature (see, e.g., [Barigozzi and Montinari, 2025](#)).

pessimistic misperceptions about others’ self-image discourage second-hand adoption. In contrast, overestimating others’ evaluations has a weaker and, in most cases, not statistically significant positive effect. An exception is the environmental dimension, where “above” misalignment is significantly negatively associated with adoption intentions. The social dimension, instead, is always significantly positively associated with the intention to adopt. One possible, suggestive interpretation of the former effect is that respondents who overestimate the modal value for the environmental consciousness dimension may perceive second-hand adoption as a less distinctive action. If adopting second-hand is considered an environmentally responsible choice by the majority of people in one’s reference group, this behavior contributes less to one’s self-image and therefore reduces the intention to adopt. In contrast, perceiving greater social approval tends to operate as a positive social cue, increasing stated adoption intentions.

5 Exploratory analyses

5.1 Self- and social-image misalignment

Considering the greater predictive role of self-image relative to social image documented in [Section 4.3.2](#), we investigated whether the probability to adopt second-hand is affected by the direction of the “misalignment” between these two perspectives within the individual, and specifically whether it is higher when self-image scores are above those of social image and lower otherwise.

[Table 11](#) reports the share of respondents for whom the scores on self and social image differed (“Misaligned”), and the proportion, among such respondents, of those for whom the self-image scores are below versus above the social-image ones. The table clearly shows that misalignment between self-image and social image is far from negligible: depending on the dimension, between 36% and 42% of respondents report different scores in the two perspectives. Interestingly, when misalignment occurs, it is more often in the direction of self-image exceeding social image (this trend holds across macro-regions, as documented by [Table B.21](#)). This pattern is strongest for financial considerations, where 64% of misaligned respondents report higher self-image than social-image scores, followed by hygiene, environmental, and social-approval considerations. One-population proportion tests confirm that these values differ significantly from 50% (p -values < 0.001). Subjects hence tend to evaluate the impact of second-hand adoption on their own image more positively than they expect others to do.

[Figure 5](#) plots the mean scores of social image for each score of self-image, and shows a more nuanced but consistent trend: social image tends to be lower than self-image for respondents reporting a positive self-image and higher otherwise, regardless of image dimension. Across all four dimensions, respondents seem to attribute less extreme evaluations to others than to themselves. When self-image is positive, social-image scores are generally lower, whereas when self-image is negative, social-image scores are generally higher.

Table 10: Second-order self-image and self-image mode mismatch on adoption

	(1)	(2)	(3)
Financial below	−0.057** (0.023)	−0.085*** (0.022)	−0.055** (0.022)
Financial above	−0.008 (0.032)	0.063* (0.032)	0.038 (0.032)
Social below	−0.168*** (0.020)	−0.165*** (0.020)	−0.092*** (0.019)
Social above	0.136*** (0.026)	0.095*** (0.026)	0.115*** (0.025)
Environmental below	−0.133*** (0.022)	−0.139*** (0.021)	−0.089*** (0.021)
Environmental above	−0.116*** (0.039)	−0.035 (0.040)	−0.030 (0.038)
Disgust below	−0.143*** (0.021)	−0.137*** (0.021)	−0.078*** (0.021)
Disgust above	−0.046 (0.037)	−0.002 (0.037)	−0.030 (0.037)
Excellent condition		0.133*** (0.021)	0.131*** (0.020)
Good condition		0.148*** (0.023)	0.117*** (0.022)
Free		0.272*** (0.018)	0.267*** (0.017)
Smartphone		0.158*** (0.025)	0.117*** (0.024)
Fridge		0.103*** (0.024)	0.175*** (0.023)
Closet		0.170*** (0.024)	0.175*** (0.024)
Constant	0.473*** (0.022)	0.124*** (0.031)	−0.531*** (0.078)
Controls	No	No	Yes
Observations	9,397	9,397	9,397

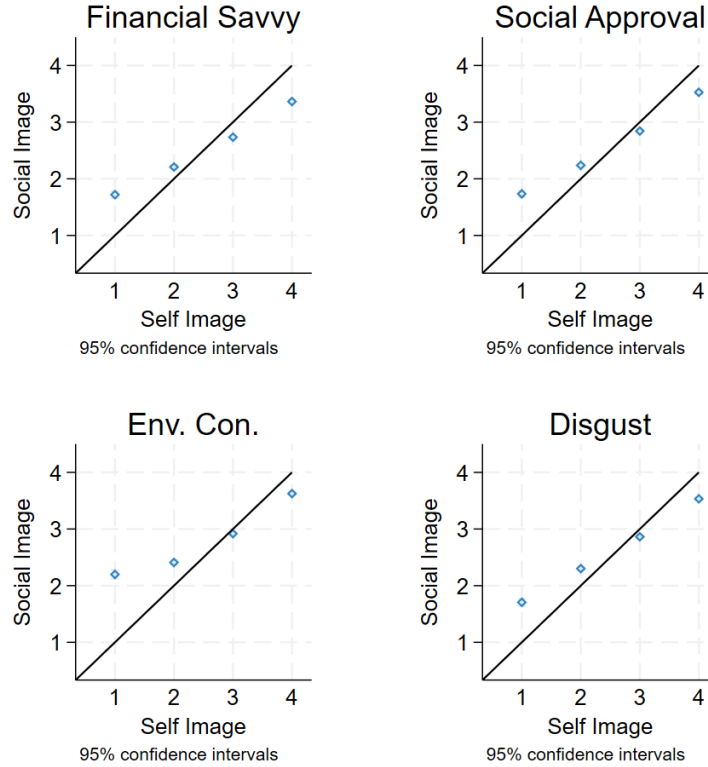
Note: Fractional probit regression estimation. Dependent variable. *Probability of taking the second-hand product*: variable ranging between 0 and 1. Regressors. *Financial above/below*; *Environmental above/below*; *Social above/below*; *Disgust above/below*: dummy variables equal to 1 when the second-order self-image score on the dimension is, respectively, above/below the modal self-image score; the reference category is no mismatch between second-order self-image and the modal self-image score. *Excellent condition* and *Good condition*: dummy variables equal to 1 if the condition is the one described, 0 otherwise. Baseline: *Acceptable condition*. *Free*: dummy variable equal to 1 if the product can be taken for free, 0 otherwise. Baseline: *Affordable price*. *Smartphone*, *Refrigerator*, *Closet*: dummy variables equal to 1 if the product belongs to that category, 0 otherwise. Baseline *T-shirt*. *Controls* include demographic variables such as age, gender, need for uniqueness score, pro-environmental behavior, income, education, past adoption of and disposition toward second-hand, and macro-region of residence (full specification available in Table B.20). Standard errors clustered at the individual level are reported in parentheses. Significance of coefficients: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 11: Misalignment between self-image and social image

Dimension	Misaligned	Below	Above
Financial	42.37	35.96	64.04
Social	37.98	45.56	54.44
Environmental	36.08	43.36	56.64
Hygiene	36.12	39.54	60.46

Note: Proportion of respondents whose answers on the self-image items did not match the social-image score for the dimension (“Misaligned”). Columns “Below” and “Above” indicate the proportion of misaligned respondents who gave an answer for the self-image dimension than is lower or higher than the social-image one. All proportions are statistically significantly different from 0.50 (two-sided binomial tests; $p < 0.001$ for all).

Figure 5: Misalignment between self-image and social image



To test whether second-hand adoption intention is affected by the direction of misalignment, we constructed for each image dimension a dummy variable denoting whether self-image score is above or below the social image one, and used these dummies as regressors of fractional probits (Table 12). Partly in line with expectations, a self-image higher than a social image is associated with a higher probability of second-hand adoption, although the effect is statistically significant only for financial and hygiene considerations. For social-approval considerations, the effect is not robust to demographic controls. A

self-image lower than the social image, instead, is associated with a lower probability of adoption, but this effect is statistically significant only for the environmental and hygiene dimensions.

Quite interestingly, also in this case, the environmental dimension follows a different pattern from the other image dimensions. While a strong negative association emerges when social-image scores exceed self-image scores, a weaker negative association is also observed when self-image scores exceed social-image scores, although the coefficient is no longer statistically significant when we control for demographic characteristics. This result is in line with our previous finding that environmental consciousness is the image dimension with the smallest distinction between self-image and social image, suggesting that alignment between the two may matter more than the direction of the discrepancy.

With the exception of the environmental dimension, taken together, previous findings indicate that intention to adopt is not driven solely by the absolute level of self-image, but depends on the direction of the misalignment with social image. It may be worth noting that adoption intentions decline more strongly when the score of self-image is lower than the score for social image than how much they rise when the opposite occurs.

5.2 Self- and second-order self-image misalignment

While [Section 4.4.2](#) focused on the accuracy of respondents’ beliefs about others’ private self-image, in this section we turn to the alignment between individual responses on own self-image and the self-image attributed to others, with the aim of investigating whether discrepancies between the two are associated with second-hand adoption intentions. Also in this case, we conjectured that the direction of this misalignment would be differentially associated with the probability of taking the vignette product.

Descriptive statistics in [Table 13](#) show that self-image and second-order self-image are misaligned for a substantial share of respondents, ranging from 36% for the environmental dimension to about 40% for the social dimension. Among such misaligned respondents, most state higher self-image scores than those attributed to others (57-62%). Thus, respondents who perceive a difference between themselves and others tend to evaluate the effect of second-hand adoption on their own self-image more positively than they believe others would evaluate it for themselves. Descriptive statistics at the macro-region level are presented in [Table B.23](#).

[Figure 6](#) plots the average second-order self-image score for each level of self-image score, across dimensions. Similarly to the patterns displayed in [Figure 5](#), across all dimensions, when respondents report a positive self-image, they tend to attribute a less positive self-image to others, whereas when they report a negative self-image, they tend to attribute a less negative self-image to others. In other terms, also in the comparison between self-image and second-order self-image, it seems that respondents tend to attribute less extreme evaluations to others than to themselves.

Table 12: Self-image and social image misalignment on adoption

	(1)	(2)	(3)
Financial below	−0.025 (0.024)	−0.023 (0.025)	−0.024 (0.024)
Financial above	0.053** (0.022)	0.057*** (0.022)	0.060*** (0.021)
Social below	−0.032 (0.024)	−0.036 (0.023)	−0.048** (0.023)
Social above	0.052** (0.023)	0.043* (0.023)	0.030 (0.022)
Environmental below	−0.111*** (0.025)	−0.114*** (0.024)	−0.088*** (0.024)
Environmental above	−0.054** (0.023)	−0.050** (0.022)	−0.028 (0.021)
Disgust below	−0.183*** (0.025)	−0.171*** (0.025)	−0.131*** (0.024)
Disgust above	0.124*** (0.023)	0.124*** (0.022)	0.084*** (0.022)
Excellent condition		0.109*** (0.020)	0.113*** (0.019)
Good condition		0.110*** (0.021)	0.089*** (0.021)
Free		0.220*** (0.016)	0.240*** (0.015)
Smartphone		0.160*** (0.023)	0.124*** (0.022)
Fridge		0.114*** (0.023)	0.192*** (0.023)
Closet		0.171*** (0.023)	0.179*** (0.022)
Constant	0.239*** (0.012)	−0.075*** (0.025)	−0.750*** (0.071)
Controls	No	No	Yes
Observations	10,496	10,496	10,496

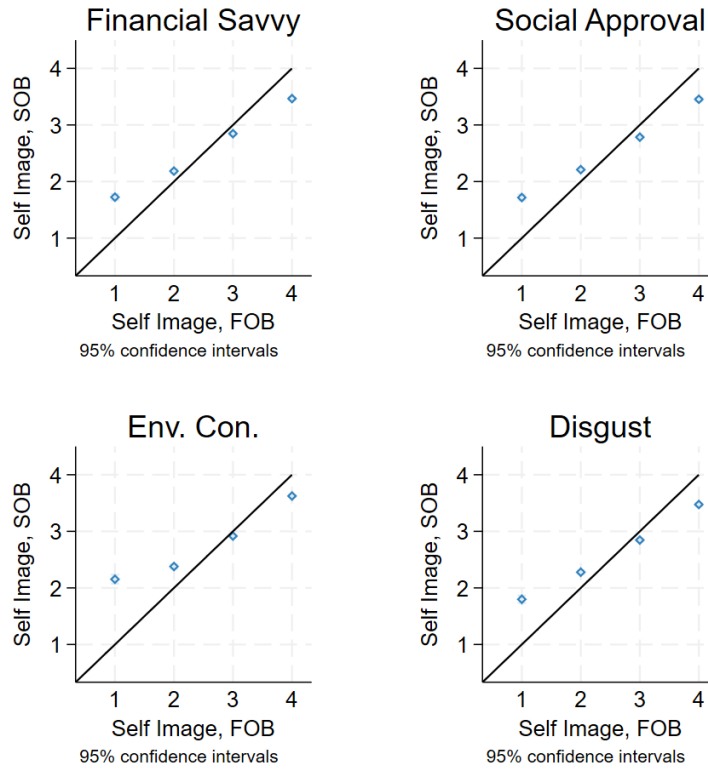
Note: Fractional probit regression estimation. Dependent variable. *Probability of taking the second-hand product*: variable ranging between 0 and 1. Regressors. *Financial above/below*; *Environmental above/below*; *Social above/below*; *Disgust above/below*: dummy variables equal to 1 when the self-image score on the dimension is, respectively, above/below the social-image score; the reference category is self-image equal to social image (alignment). *Excellent condition* and *Good condition*: dummy variables equal to 1 if the condition is the one described, 0 otherwise. Baseline: *Acceptable condition*. *Free*: dummy variable equal to 1 if the product can be taken for free, 0 otherwise. Baseline: *Affordable price*. *Smartphone*, *Refrigerator*, *Closet*: dummy variables equal to 1 if the product belongs to that category, 0 otherwise. Baseline: *T-shirt*. *Controls* include demographic variables such as age, gender, need for uniqueness score, pro-environmental behavior, income, education, past adoption of and disposition toward second-hand, and macro-region of residence (full specification available in [Table B.22](#)). Standard errors clustered at the individual level are reported in parentheses. Significance of coefficients: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 13: Misalignment between self-image and second-order self-image

Dimension	Misaligned	Below	Above
Financial	39.33	39.20	60.80
Social	39.97	41.72	58.28
Environmental	36.15	42.51	57.49
Hygiene	37.70	37.58	62.42

Note: Proportion of respondents whose answers on the second-order self-image items did not match the self-image scores for the dimension (“Misaligned”). Columns “Below” and “Above” indicate the proportion of misaligned respondents whose self-image is, respectively, lower or higher than the second-order self-image. All proportions are statistically significantly different from 0.50 (two-sided binomial tests; $p < 0.001$ for all).

Figure 6: Misalignment between second-order and first-order self-image



In keeping with what we did in the previous section, we estimated a series of fractional probit models using as regressors four binary variables, one for each image dimension, denoting whether the self-image score is above or below the second-order one (Table 14).

Table 14: Self-image and second-order self-image misalignment on adoption

	(1)	(2)	(3)
Financial below	−0.063*** (0.024)	−0.058** (0.024)	−0.063*** (0.024)
Financial above	0.018 (0.023)	0.023 (0.023)	0.038* (0.022)
Social below	−0.061** (0.024)	−0.069*** (0.024)	−0.066*** (0.023)
Social above	0.067*** (0.023)	0.060*** (0.023)	0.018 (0.022)
Environmental below	−0.122*** (0.025)	−0.117*** (0.024)	−0.087*** (0.024)
Environmental above	−0.046** (0.022)	−0.041* (0.022)	−0.030 (0.021)
Disgust below	−0.204*** (0.026)	−0.201*** (0.026)	−0.134*** (0.025)
Disgust above	0.172*** (0.023)	0.174*** (0.023)	0.113*** (0.022)
Excellent condition		0.109*** (0.020)	0.113*** (0.019)
Good condition		0.111*** (0.021)	0.090*** (0.021)
Free		0.222*** (0.016)	0.241*** (0.015)
Smartphone		0.165*** (0.023)	0.127*** (0.022)
Fridge		0.114*** (0.023)	0.191*** (0.023)
Closet		0.175*** (0.023)	0.181*** (0.022)
Constant	0.245*** (0.012)	−0.073*** (0.025)	−0.723*** (0.070)
Controls	No	No	Yes
Observations	10,496	10,496	10,496

Note: Fractional probit regression estimation. Dependent variable. *Probability of taking the second-hand product*: variable ranging between 0 and 1. Regressors. *Financial above/below*; *Environmental above/below*; *Social above/below*; *Disgust above/below*: dummy variables equal to 1 when the self-image score on the dimension is, respectively, above/below the second-order self-image score; the reference category is self-image equal to second-order self-image (alignment). *Excellent condition* and *Good condition*: dummy variables equal to 1 if the condition is the one described, 0 otherwise. Baseline: *Acceptable condition*. *Free*: dummy variable equal to 1 if the product can be taken for free, 0 otherwise. Baseline: *Affordable price*. *Smartphone*, *Refrigerator*, *Closet*: dummy variables equal to 1 if the product belongs to that category, 0 otherwise. Baseline: *T-shirt*. *Controls* include demographic variables such as age, gender, need for uniqueness score, pro-environmental behavior, income, education, past adoption of and disposition toward second-hand, and macro-region of residence (full specification available in Table B.24). Standard errors clustered at the individual level are reported in parentheses. Significance of coefficients: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

For all image dimensions, the same consistent pattern can be identified: respondents whose self-image scores are below their second-order self-image scores are significantly less likely to adopt the second-hand product than respondents for whom the two perspectives are aligned. This result is robust when controlling for both product characteristics and demographic controls. By contrast, reporting a self-image score above the second-order self-image one is associated with higher adoption intentions only for the hygiene dimension once demographic controls are included. The corresponding effects for the remaining dimensions either disappear or are not statistically significant. It is worth noting that the environmental-consciousness dimension again displays a distinct pattern. Differently from other dimensions, when self-image scores are higher than the second-order self-image ones, the probability of adoption is lower, even though the coefficient loses statistical significance once demographic characteristics are controlled for.

The results of Table 14 then reveal the same asymmetric pattern observed for self- versus social-image misalignment (Table 12): relative to the case in which they are aligned, a self-image that falls below second-order self-image is associated with a larger and more robust reduction in adoption intentions than the corresponding increase observed when self-image exceeds the latter.

6 Discussion and conclusion

This paper set out to investigate how image considerations influence second-hand adoption by disentangling three distinct perspectives – self-image, social image, and second-order self-image – across four evaluative dimensions (financial, social, environmental, and hygiene), using a large-scale vignette experiment on a nationally representative Italian sample. While substantial evidence documents that financial, social, environmental, and hygiene considerations influence second-hand adoption, existing research has not systematically investigated how these determinants operate differently across image perspectives, nor how misalignments between perspectives influence adoption. Several findings emerge.

First, while all image perspectives predict second-hand adoption, self-image is a consistently stronger predictor than both social image and second-order self-image across all four dimensions. Contrary to much of the image literature, consumers appear to care more about how adopting second-hand makes them feel about themselves than about how it makes them appear to others. Second, image dimensions differ substantially in their relevance for adoption: hygiene and financial considerations are the strongest correlates of adoption, whereas environmental consciousness plays a comparatively limited role. Notably, the environmental dimension is the only dimension that does not significantly predict adoption under self-image when the other dimensions are controlled for, yet becomes significant under social and second-order perspectives. Finally, participants systematically underestimate how positively others privately evaluate second-hand adoption – a pattern consistent with pluralistic ignorance – and the direction of the mismatch matters asymmetrically: underestimation is associated with reduced adoption intentions,

more strongly than overestimation boosts them.

The behavioral patterns that emerged from the analysis validate our decision to disaggregate image into different dimensions and analyze their impact across diverse social perspectives. Eliciting a general measure of image would have obscured, on the one hand, the differential effect of the same image dimension across different perspectives and, on the other, the differential effect of the four dimensions within the same image perspective. In support of the former case, when self- and social-image measures for the same dimension are jointly included to predict second-hand adoption, the self-image coefficient is always larger and Wald tests reject equality across all four dimensions – indicating that, for instance, feeling financially savvy is more important than appearing financially savvy or believing others feel financially savvy. In support of the latter case, image dimensions within the same perspective showed statistically significant differences in mean scores, and regression analyses indicate that they vary in their relevance for second-hand adoption. For example, under self-image, the four dimensions differ markedly in their predictive strength, with disgust insensitivity exerting the largest effect on adoption and environmental consciousness the smallest.

Perhaps the most theoretically striking result is that self-image consistently outweighs social image in predicting second-hand adoption, directly contradicting the broader literature documenting stronger behavioral effects of social image (see [Section 2.3](#)). The gap between the two perspectives is largest for hygiene and social-approval considerations, and smallest – although still significant – for environmental consciousness. This heterogeneity is itself informative: the near-parity of self- and social-image for the environmental dimension suggests that buying second-hand is broadly perceived as a sustainable choice whose reputational and private value are similarly appraised, while for hygiene and social approval the internal and external evaluations diverge more sharply.

A natural explanation for the overall dominance of self-image is that second-hand adoption typically unfolds in private or low-visibility contexts, which in turn decreases the relative weight of social image concerns ([Falk, 2021](#)). But a deeper shift may also be at play: as pre-owned goods are progressively reframed from markers of financial hardship to markers of environmental awareness and savviness ([Gilal et al., 2024](#)), buying second-hand may increasingly function as a signal to oneself of who one is rather than primarily a signal to others. Relatedly, the environmental dimension of self-image is the only one that does not independently predict adoption once the other self-image dimensions are controlled for, while remaining significant under social and second-order perspectives. This suggests that sustainability motivations in this domain may operate more as a social signal than as a privately internalized value, consistent with evidence that green consumption is often driven by reputational rather than intrinsic concerns ([Parguel et al., 2017](#)).

Our findings point toward differentiated policy interventions tailored to the specific dimensions and perspectives that matter most for adoption. The dominance of self-image suggests that interventions should primarily boost private evaluations rather than leverage gains in reputation or status. Educational campaigns should focus on the two self-image

dimensions with the strongest effects – hygiene and financial savvy – while deprioritizing environmental appeals. Environmental consciousness operates primarily as a social signal rather than a private value, so sustainability messaging is better targeted at perceived social image: communicating, for instance, that second-hand adoption allows one to broadcast the image of an environmentally conscious consumer. For hygiene, policymakers should make sanitation verifiable and salient through standardized cleaning protocols and third-party certificates. To leverage the financial dimension, advertisers could reframe second-hand adoption as a financially savvy choice by emphasizing its convenience over first-hand alternatives.

Finally, the evidence of pluralistic ignorance points to an additional lever: norm-correction campaigns that make prevailing private attitudes visible – for instance, by communicating that most consumers privately feel good about buying second-hand – could help unlock latent demand. Given that underestimating others’ positive self-image significantly depresses adoption intentions, correcting this misperception may be among the most cost-effective tools available to policymakers seeking to scale second-hand markets.

As with any survey-based study, our findings may be subject to response biases, such as socially desirable responding and experimenter demand effects. However, several features of our design mitigate these concerns. First, the survey was administered anonymously online via computer-assisted web interviewing (CAWI), a setting that has been shown to reduce demand effects and social desirability bias (Kreuter et al., 2008; De Quidt et al., 2018). Second, respondents were unaware of subsequent questions and could not revise prior answers, which prevented retrospective adjustments to appear consistent. Third, and most importantly, our elicitation of second-order self-image employed an incentivized coordination game (Krupka and Weber, 2013), in which respondents earned monetary rewards for accurately predicting modal responses in their macro-region. This incentive mechanism has been specifically designed to elicit honest beliefs free from social desirability and demand effects, and recent methodological work confirms that the presence of monetary incentives in this task attenuates response biases relative to unincentivized measures (Fallucchi and Nosenzo, 2022; Fallucchi et al., 2026). We are thus confident that these features of our design, taken together, minimize the risk that our findings are driven by social desirability or demand effects.

Several limitations of this study suggest directions for future research. First, our sample consists exclusively of Italian respondents. Thus, our findings might not generalize to contexts with different second-hand market maturity, regulatory environments, or social structures. For instance, second-hand clothing is particularly widespread in the United States but dramatically low in China (Xu et al., 2014), suggesting markedly different, country-specific mechanisms (Gilal et al., 2024). Cross-cultural replications of this study would help establish the external validity of our results and assess whether the relative weight of image perspectives and the observed misalignment asymmetries replicate across settings.

Second, while we find evidence of misalignments between image perspectives, our cross-sectional design cannot establish causal relationships. Field and lab experiments that exogenously manipulate a single image dimension or perspective while holding others constant – for example, treatments emphasizing private financial gains (self-image) or the perceived social meaning of sustainability (social/second-order image) – would provide stronger causal evidence on how each lever affects adoption. Pre-registered interventions that separately manipulate these components and measure their effect on stated and revealed choices would be particularly informative.

Third, our vignette-based measure of adoption intentions may not perfectly predict actual behavior. Although stated intentions are strong predictors of behavior in many domains (for some examples, see [Fishbein and Ajzen, 2011](#)), studies measuring actual second-hand purchases would complement our findings and shed light on whether the image dynamics we identify translate into real-world consumption patterns. Embedding real-world behavioral outcomes – such as real purchase opportunities, platform sign-ups, or redemption of vouchers and discounts – within the survey or in follow-up field settings would strengthen external validity (see, e.g., the voucher choice experiment by [Lorè et al., 2025](#)). Linking survey responses to administrative or platform data (with consent) would provide direct evidence on whether stated intentions translate into actual behavior. Future research could therefore assess the extent to which the image considerations identified here translate into sustained purchasing behavior outside experimental settings.

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A Vignette and statements

[Translated from Italian. Elements varying across vignettes reported in square brackets.]

Please, read the following text and fill in the required fields.

Imagine you need to buy a *[T-shirt / refrigerator / closet / smartphone]*. You find the model you are interested in, *[a light blue, 100% cotton T-shirt, in your size / an LG with 384ℓ capacity, measures $59 \times 203 \times 68$ cm, and energy class A++ / a wooden closet, with dimensions $226 \times 212 \times 56$ cm, 3 compartments (90, 45, 90 cm), two double doors and one single door / an Honor 90, Android system, with 6.7" display, 256GB physical storage and 8GB RAM, 200MP back camera and 50MP front camera]*, second-hand. The product is in *[excellent condition / good condition / acceptable condition]*, has been sanitized, and you can pick it up *[at an affordable price / free of charge]*.

1. Referring to the situation described, what is the probability that you decide to take the product? Indicate a number from 0 to 100.

[New page]

2. At each row of the following table you find two opposite statements, A and B. We ask you to indicate whether you agree more with statement A or B.

“If I decided to take the product described...”

	Agree completely with A	Agree more with A than B	Agree more with B than A	Agree completely with B
A = I would feel I am in financial distress				
B = I would feel that I was using money responsibly	☐	☐	☐	☐
A = I would feel embarrassment				
B = I would have the approval of others	☐	☐	☐	☐
A = I would feel that I had not made a sustainable choice				
B = I would feel that I had made a sustainable choice	☐	☐	☐	☐
A = I would feel disgusted in using it				
B = I would not feel disgusted in using it	☐	☐	☐	☐

[New page]

3. We asked the previous question to a representative sample of the Italian population. In your opinion, how did other respondents from the same macro-region answer to this question? Remember that, by “macro-region”, we mean the five geographic areas: North-west (Liguria, Lombardia, Piemonte, Valle d’Aosta), North-East (Emilia-Romagna, Friuli-Venezia Giulia, Provincia Autonoma di Trento, Provincia Autonoma di Bolzano, Veneto), Center (Lazio, Marche, Toscana, Umbria), South (Abruzzo, Basilicata, Calabria, Campania, Molise, Puglia), and Islands (Sardegna, Sicilia). Note also that, for this question, you may receive an additional reward of €4, as follows: for each row, if your answer matches the one given most frequently in the sample of your macro-region, you will receive €1. We will draw 400 participants to whom we will give this additional reward.

[Same table of statements as in the previous question is shown here]

[New page]

4. At each row of the following table you find two opposite statements, A and B. We ask you to indicate whether you agree more with statement A or B.

“If I decided to take the product described, others would think that...”

	Agree completely with A	Agree more with A than B	Agree more with B than A	Agree completely with B
A = I would feel that I was in financial distress	☐	☐	☐	☐
B = I would feel that I was using money responsibly				
A = I would feel embarrassment	☐	☐	☐	☐
B = I would have the approval of others				
A = I would feel that I had not made a sustainable choice	☐	☐	☐	☐
B = I would feel that I had made a sustainable choice				
A = I would feel disgusted in using it	☐	☐	☐	☐
B = I would not feel disgusted in using it				

B Additional analyses

B.1 Balance tables

Table B.1: Distribution of demographic variables across vignette products

	T-shirt	Closet	Refrigerator	Smartphone	Joint F-test
<i>Mean</i>					
Age	50.21	50.09	50.10	48.33	<.001***
Pro-Environmental Behavior	3.38	3.37	3.37	3.34	0.219
Need for Uniqueness	2.97	2.95	2.94	2.92	0.154
<i>Proportion</i>					
<i>Gender</i>					
Woman	0.503	0.502	0.548	0.495	<.001***
Man	0.497	0.498	0.452	0.505	<.001***
<i>Macro-region</i>					
Northwest	0.291	0.283	0.236	0.267	<.001***
Northeast	0.180	0.201	0.232	0.179	<.001***
Central	0.185	0.198	0.206	0.196	0.265
South	0.238	0.204	0.220	0.250	<.001***
Islands	0.107	0.114	0.106	0.109	0.778
<i>Education</i>					
Middle School (or lower)	0.096	0.093	0.081	0.077	0.039**
High School	0.544	0.542	0.557	0.538	0.531
University	0.313	0.314	0.315	0.327	0.652
PhD	0.047	0.051	0.046	0.058	0.221
<i>Employment status</i>					
Worker (blue collar)	0.072	0.077	0.077	0.073	0.853
Employed	0.394	0.385	0.425	0.421	0.005***
Self-employed	0.110	0.123	0.107	0.127	0.050*
Student	0.065	0.065	0.056	0.060	0.464
Homemaker	0.089	0.088	0.091	0.087	0.943
Retired	0.214	0.181	0.175	0.154	<.001***
Looking for a job	0.043	0.058	0.056	0.058	0.043**
Other	0.014	0.023	0.013	0.020	0.022**
<i>Income</i>					
Don't know/Prefer not to answer	0.193	0.184	0.166	0.166	0.021**
Less than €1,000	0.041	0.047	0.046	0.046	0.775
From €1,000 to €1,500	0.113	0.108	0.111	0.100	0.394
From €1,500 to €2,000	0.160	0.161	0.167	0.167	0.842
From €2,000 to €3,000	0.216	0.229	0.242	0.234	0.153
From €3,000 to €5,000	0.185	0.188	0.183	0.187	0.958
From €5,000 to €10,000	0.058	0.052	0.052	0.063	0.222
Over €10,000	0.033	0.032	0.032	0.036	0.813

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table B.2: Distribution of demographic variables across vignette conditions

	Excellent	Good	Acceptable	Joint F-test
<i>Mean</i>				
Age	49.80	49.66	49.49	0.707
Pro-Environmental Behavior	3.36	3.37	3.37	0.960
Need for Uniqueness	2.95	2.94	2.95	0.691
<i>Proportion</i>				
<i>Gender</i>				
Woman	0.522	0.499	0.510	0.139
Man	0.478	0.501	0.490	0.139
<i>Macro-region</i>				
Northwest	0.269	0.267	0.273	0.869
Northeast	0.199	0.198	0.195	0.943
Central	0.198	0.193	0.197	0.873
South	0.224	0.227	0.233	0.667
Islands	0.110	0.115	0.102	0.272
<i>Education</i>				
Middle School (or lower)	0.089	0.090	0.079	0.260
High School	0.549	0.552	0.533	0.288
University	0.314	0.312	0.329	0.280
PhD	0.048	0.047	0.059	0.072*
<i>Employment status</i>				
Worker (blue collar)	0.078	0.073	0.072	0.595
Employed	0.400	0.403	0.420	0.240
Self-employed	0.112	0.115	0.127	0.152
Student	0.064	0.061	0.057	0.511
Homemaker	0.088	0.091	0.087	0.829
Retired	0.188	0.180	0.169	0.127
Looking for a job	0.053	0.060	0.048	0.119
Other	0.017	0.016	0.019	0.630
<i>Income</i>				
Don't know/Prefer not to answer	0.180	0.174	0.176	0.765
Less than €1,000	0.044	0.046	0.045	0.952
From €1,000 to €1,500	0.103	0.116	0.108	0.206
From €1,500 to €2,000	0.169	0.160	0.159	0.428
From €2,000 to €3,000	0.229	0.231	0.232	0.924
From €3,000 to €5,000	0.185	0.185	0.188	0.954
From €5,000 to €10,000	0.057	0.053	0.058	0.598
Over €10,000	0.033	0.035	0.033	0.824

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table B.3: Distribution of demographic variables across vignette price levels

	Free	Affordable price	Joint F-test
<i>Mean</i>			
Age	49.51	49.88	0.223
Pro-Environmental Behavior	3.37	3.36	0.876
Need for Uniqueness	2.93	2.96	0.048**
<i>Proportion</i>			
<i>Gender</i>			
Woman	0.513	0.509	0.682
Man	0.487	0.491	0.682
<i>Macro-region</i>			
Northwest	0.269	0.269	0.971
Northeast	0.198	0.197	0.974
Central	0.190	0.205	0.050*
South	0.229	0.226	0.657
Islands	0.114	0.103	0.071*
<i>Education</i>			
Middle School (or lower)	0.085	0.088	0.585
High School	0.545	0.545	0.988
University	0.318	0.317	0.958
PhD	0.052	0.049	0.534
<i>Employment status</i>			
Worker (blue collar)	0.071	0.080	0.060*
Employed	0.410	0.402	0.399
Self-employed	0.117	0.117	0.957
Student	0.063	0.059	0.346
Homemaker	0.086	0.092	0.226
Retired	0.182	0.179	0.746
Looking for a job	0.055	0.052	0.487
Other	0.017	0.019	0.450
<i>Income</i>			
Don't know/Prefer not to answer	0.180	0.173	0.344
Less than €1,000	0.045	0.045	0.946
From €1,000 to €1,500	0.104	0.113	0.178
From €1,500 to €2,000	0.167	0.160	0.395
From €2,000 to €3,000	0.234	0.225	0.296
From €3,000 to €5,000	0.178	0.196	0.018**
From €5,000 to €10,000	0.059	0.053	0.217
Over €10,000	0.033	0.034	0.768

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

B.2 Additional figures

Figure B.1: Probability to take the product by type and condition

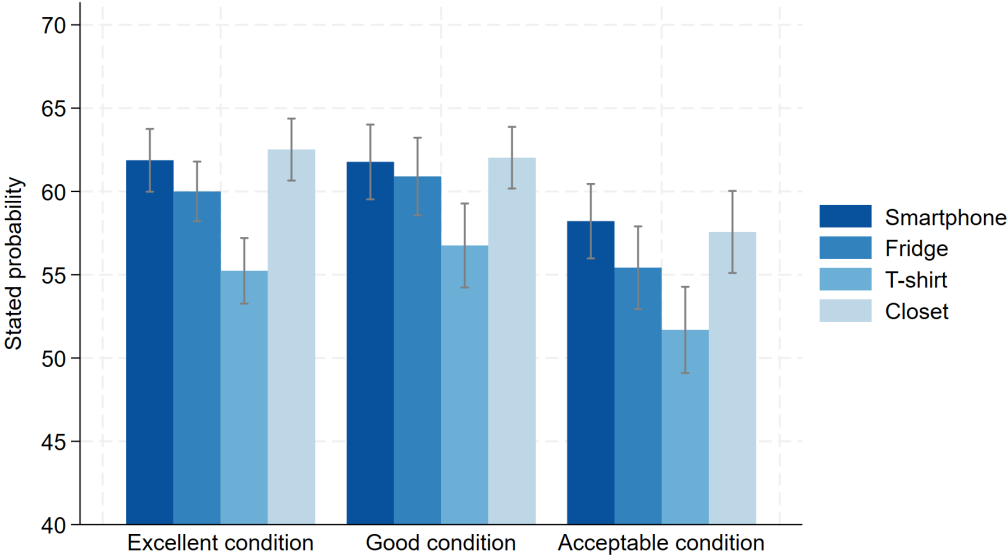
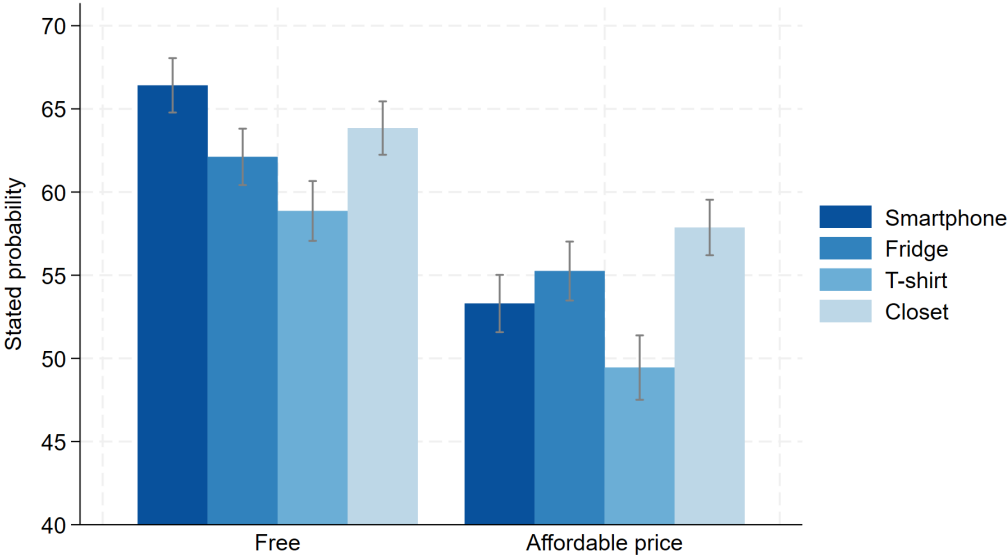


Figure B.2: Probability to take the product by type and price



B.3 Extended baseline specifications (full controls)

Table B.4: Vignette attributes and probability to take the product

	(1)	(2)	(3)	(4)	(5)
Excellent condition	0.102*** (0.020)		0.103*** (0.020)	0.107*** (0.020)	0.111*** (0.019)
Good condition	0.120*** (0.022)		0.116*** (0.021)	0.113*** (0.022)	0.091*** (0.021)
Free		0.227*** (0.016)	0.226*** (0.016)	0.227*** (0.016)	0.245*** (0.015)
Smartphone				0.158*** (0.023)	0.122*** (0.023)
Fridge				0.111*** (0.024)	0.192*** (0.023)
Closet				0.166*** (0.023)	0.174*** (0.022)
Age					-0.003*** (0.001)
Man					0.079*** (0.016)
Need for Uniqueness					-0.021** (0.011)
Pro-Environmental Behavior					0.117*** (0.012)
Don't know/Prefer not to answer					-0.032 (0.025)
Less than €1,000					0.015 (0.043)
From €1,000 to €1,500					0.013 (0.029)
From €1,500 to €2,000					-0.016 (0.025)
From €3,000 to €5,000					-0.024 (0.024)
From €5,000 to €10,000					-0.091** (0.038)
Over €10,000					-0.085* (0.049)
Middle School (or lower)					0.025 (0.030)
University					-0.053*** (0.018)
PhD					-0.147*** (0.039)
Worker (blue collar)					0.012

					(0.031)
Self-employed					−0.050*
					(0.027)
Student					−0.023
					(0.037)
Homemaker					−0.044
					(0.032)
Retired					−0.066**
					(0.029)
Looking for a job					−0.078**
					(0.037)
Other employment status					−0.038
					(0.064)
Yes, I have already purchased them					0.865***
					(0.021)
Yes, but I have never purchased them					0.695***
					(0.020)
Yes, but I would not repurchase them					0.446***
					(0.029)
North-East					0.084***
					(0.023)
Central					0.121***
					(0.023)
South					0.065***
					(0.022)
Islands					0.036
					(0.028)
Constant	0.146***	0.101***	0.022	−0.088***	−0.791***
	(0.016)	(0.011)	(0.018)	(0.023)	(0.070)
Observations	10,496	10,496	10,496	10,496	10,496

Note: Fractional probit regression estimation. Dependent variable. *Probability of taking the second-hand product*: variable ranging between 0 and 1. Regressors. *Excellent condition* and *Good condition*: dummy variables equal to 1 if the condition is the one described, 0 otherwise. Baseline: *Acceptable condition*. *Free*: dummy variable equal to 1 if the product can be taken for free, 0 otherwise. Baseline: *Affordable price*. *Smartphone*, *Fridge*, *Closet*: dummy variables equal to 1 if the product belongs to that category, 0 otherwise. Baseline: *T-shirt*. *Age* is measured in years. *Man* is a dummy variable equal to 1 if the respondent reported being a man and 0 otherwise. *Income* categories are measured relative to the omitted category *From €2,000 to €3,000*; *Education* categories relative to *High school*; *Employment* status categories relative to *White-collar worker*; second-hand experience categories relative to respondents who would never buy second-hand products; and macro-regions relative to *North-West*. Standard errors clustered at the individual level are reported in parentheses. Significance of coefficients: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table B.5: Self-image and probability to take the vignette product

	(1)	(2)	(3)	(4)
Financial savvy	0.132*** (0.016)	0.127*** (0.016)	0.129*** (0.016)	0.125*** (0.016)
Social approval	0.155*** (0.018)	0.156*** (0.018)	0.153*** (0.018)	0.111*** (0.018)
Environmental consciousness	0.020 (0.017)	0.020 (0.017)	0.021 (0.017)	0.019 (0.016)
Disgust insensitivity	0.406*** (0.017)	0.405*** (0.017)	0.403*** (0.017)	0.293*** (0.017)
Excellent condition		0.079*** (0.019)	0.080*** (0.019)	0.091*** (0.019)
Good condition		0.079*** (0.021)	0.075*** (0.021)	0.066*** (0.020)
Free		0.219*** (0.016)	0.221*** (0.016)	0.235*** (0.015)
Smartphone			0.093*** (0.023)	0.071*** (0.022)
Fridge			0.103*** (0.022)	0.158*** (0.022)
Closet			0.135*** (0.022)	0.148*** (0.022)
Age				-0.004*** (0.001)
Man				0.061*** (0.016)
Need for Uniqueness				-0.044*** (0.011)
Pro-Environmental Behavior				0.065*** (0.012)
Don't know/Prefer not to answer				-0.069*** (0.024)
Less than €1,000				0.053 (0.042)
From €1,000 to €1,500				0.030 (0.029)
From €1,500 to €2,000				0.007 (0.024)
From €3,000 to €5,000				-0.033 (0.024)
From €5,000 to €10,000				-0.052 (0.038)
Over €10,000				-0.055 (0.052)
Middle School (or lower)				0.032 (0.029)

University				−0.056*** (0.018)
PhD				−0.077** (0.039)
Worker (blue collar)				0.003 (0.031)
Self-employed				−0.065** (0.026)
Student				−0.084** (0.035)
Homemaker				−0.076** (0.032)
Retired				−0.095*** (0.028)
Looking for a job				−0.092** (0.037)
Other employment status				−0.096 (0.060)
Yes, I have already purchased them				0.617*** (0.022)
Yes, but I have never purchased them				0.509*** (0.020)
Yes, but I would not repurchase them				0.450*** (0.029)
North-East				0.087*** (0.023)
Center				0.121*** (0.023)
South				0.087*** (0.022)
Islands				0.036 (0.027)
Constant	0.029*** (0.010)	−0.147*** (0.018)	−0.230*** (0.023)	−0.491*** (0.070)
Observations	10,496	10,496	10,496	10,496

Note: Fractional probit regression estimation. Dependent variable. *Probability of taking the second-hand product*: variable ranging between 0 and 1. Regressors. *Self-image*: *Financial savvy*; *Environmental consciousness*; *Social approval*; *Disgust insensitivity*: discrete variables taking a value in $\{-1, -0.33, +0.33, +1\}$. *Excellent condition* and *Good condition*: dummy variables equal to 1 if the condition is the one described, 0 otherwise. Baseline: *Acceptable condition*. *Free*: dummy variable equal to 1 if the product can be taken for free, 0 otherwise. Baseline: *Affordable price*. *Smartphone*, *Refrigerator*, *Closet*: dummy variables equal to 1 if the product belongs to that category, 0 otherwise. Baseline: *T-shirt*. *Age* is measured in years. *Man* is a dummy variable equal to 1 if the respondent reported being a man and 0 otherwise. *Income* categories are measured relative to the omitted category *From €2,000 to €3,000*; *Education* categories relative to *High school*; *Employment* status categories relative to *White-collar worker*; second-hand experience categories relative to respondents who would never buy second-hand products; and macro-regions relative to *North-West*. Standard errors clustered at the individual level are reported in parentheses. Significance of coefficients: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table B.6: Social image and probability to take the vignette product

	(1)	(2)	(3)	(4)
Financial savvy	0.062*** (0.017)	0.060*** (0.017)	0.060*** (0.017)	0.045*** (0.017)
Social approval	0.126*** (0.021)	0.131*** (0.021)	0.128*** (0.021)	0.082*** (0.020)
Environmental consciousness	0.108*** (0.019)	0.103*** (0.019)	0.105*** (0.019)	0.080*** (0.018)
Disgust insensitivity	0.250*** (0.018)	0.252*** (0.018)	0.248*** (0.018)	0.154*** (0.017)
Excellent		0.083*** (0.020)	0.085*** (0.020)	0.097*** (0.019)
Good		0.094*** (0.021)	0.091*** (0.021)	0.080*** (0.020)
Free		0.233*** (0.016)	0.234*** (0.016)	0.247*** (0.015)
Smartphone			0.099*** (0.023)	0.082*** (0.022)
Fridge			0.094*** (0.023)	0.165*** (0.023)
Closet			0.124*** (0.023)	0.144*** (0.022)
Age				-0.004*** (0.001)
Man				0.063*** (0.016)
Need for Uniqueness				-0.029*** (0.011)
Pro-Environmental Behavior				0.087*** (0.012)
Don't know/Prefer not to answer				-0.053** (0.025)
Less than €1,000				0.025 (0.043)
From €1,000 to €1,500				0.024 (0.029)
From €1,500 to €2,000				-0.007 (0.025)
From €3,000 to €5,000				-0.022 (0.024)
From €5,000 to €10,000				-0.059 (0.038)
Over €10,000				-0.067 (0.050)
Middle School (or lower)				0.022 (0.029)

University				−0.053*** (0.018)
PhD				−0.114*** (0.039)
Worker (blue collar)				0.012 (0.031)
Self-employed				−0.047* (0.027)
Student				−0.054 (0.036)
Homemaker				−0.053* (0.032)
Retired				−0.083*** (0.029)
Looking for a job				−0.092** (0.037)
Other employment status				−0.044 (0.062)
Yes, I have already purchased them				0.727*** (0.022)
Yes, but I have never purchased them				0.595*** (0.020)
Yes, but I would not repurchase them				0.439*** (0.029)
North-East				0.086*** (0.023)
Center				0.108*** (0.023)
South				0.077*** (0.022)
Islands				0.038 (0.027)
Constant	0.096*** (0.010)	−0.096*** (0.018)	−0.175*** (0.023)	−0.615*** (0.070)
Observations	10,496	10,496	10,496	10,496

Note: Fractional probit regression estimation. Dependent variable. *Probability of taking the second-hand product*: variable ranging between 0 and 1. Regressors. *Social image*: *Financial savvy*; *Environmental consciousness*; *Social approval*; *Disgust insensitivity*: discrete variables taking values in $\{-1, -0.33, +0.33, +1\}$. *Excellent condition* and *Good condition*: dummy variables equal to 1 if the condition is the one described, 0 otherwise. Baseline: *Acceptable condition*. *Free*: dummy variable equal to 1 if the product can be taken for free, 0 otherwise. Baseline: *Affordable price*. *Smartphone*, *Refrigerator*, *Closet*: dummy variables equal to 1 if the product belongs to that category, 0 otherwise. Baseline: *T-shirt*. *Age* is measured in years. *Man* is a dummy variable equal to 1 if the respondent reported being a man and 0 otherwise. *Income* categories are measured relative to the omitted category *From €2,000 to €3,000*; *Education* categories relative to *High school*; *Employment* status categories relative to *White-collar worker*; second-hand experience categories relative to respondents who would never buy second-hand products; and macro-regions relative to *North-West*. Standard errors clustered at the individual level are reported in parentheses. Significance of coefficients: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table B.7: Second-order self-image and probability to take the vignette product

	(1)	(2)	(3)	(4)
Financial savvy	0.110*** (0.017)	0.108*** (0.017)	0.109*** (0.017)	0.070*** (0.017)
Social approval	0.076*** (0.019)	0.079*** (0.019)	0.075*** (0.019)	0.063*** (0.018)
Environmental consciousness	0.128*** (0.018)	0.126*** (0.018)	0.128*** (0.018)	0.092*** (0.017)
Disgust insensitivity	0.214*** (0.018)	0.213*** (0.018)	0.209*** (0.018)	0.129*** (0.017)
Excellent		0.086*** (0.020)	0.088*** (0.020)	0.099*** (0.019)
Good		0.095*** (0.021)	0.092*** (0.021)	0.080*** (0.020)
Free		0.226*** (0.016)	0.227*** (0.016)	0.243*** (0.015)
Smartphone			0.104*** (0.023)	0.085*** (0.022)
Fridge			0.099*** (0.023)	0.170*** (0.022)
Closet			0.130*** (0.023)	0.148*** (0.022)
Age				-0.004*** (0.001)
Man				0.068*** (0.016)
Need for Uniqueness				-0.030*** (0.011)
Pro-Environmental Behavior				0.090*** (0.012)
Don't know/Prefer not to answer				-0.044* (0.024)
Less than €1,000				0.034 (0.043)
From €1,000 to €1,500				0.030 (0.029)
From €1,500 to €2,000				-0.000 (0.025)
From €3,000 to €5,000				-0.025 (0.024)
From €5,000 to €10,000				-0.059 (0.038)
Over €10,000				-0.060 (0.051)
Middle School (or lower)				0.027 (0.029)

University				−0.053*** (0.018)
PhD				−0.111*** (0.039)
Worker (blue collar)				0.004 (0.031)
Self-employed				−0.051* (0.027)
Student				−0.058 (0.036)
Homemaker				−0.057* (0.032)
Retired				−0.079*** (0.029)
Looking for a job				−0.095** (0.037)
Other employment status				−0.066 (0.062)
Yes, I have already purchased them				0.752*** (0.022)
Yes, but I have never purchased them				0.611*** (0.020)
Yes, but I would not repurchase them				0.447*** (0.029)
North-East				0.089*** (0.023)
Center				0.115*** (0.023)
South				0.069*** (0.022)
Islands				0.028 (0.027)
Constant	0.099*** (0.010)	−0.089*** (0.018)	−0.173*** (0.023)	−0.636*** (0.070)
Observations	10,496	10,496	10,496	10,496

Note: Fractional probit regression estimation. Dependent variable. *Probability of taking the second-hand product*: variable ranging between 0 and 1. Regressors. *Second-order self-image*: *Financial savvy*; *Environmental consciousness*; *Social approval*; *Disgust insensitivity*: discrete variables taking values in $\{-1, -0.33, +0.33, +1\}$. *Good condition* and *Excellent condition*: dummy variables equal to 1 if the condition is the one described, 0 otherwise. Baseline: *Acceptable condition*. *Free*: dummy variable equal to 1 if the product can be taken for free, 0 otherwise. Baseline: *Affordable price*. *Smartphone*, *Refrigerator*, *Closet*: dummy variables equal to 1 if the product belongs to that category, 0 otherwise. Baseline: *T-shirt*. *Age* is measured in years. *Man* is a dummy variable equal to 1 if the respondent reported being a man and 0 otherwise. *Income* categories are measured relative to the omitted category *From €2,000 to €3,000*; *Education* categories relative to *High school*; *Employment* status categories relative to *White-collar worker*; second-hand experience categories relative to respondents who would never buy second-hand products; and macro-regions relative to *North-West*. Standard errors clustered at the individual level are reported in parentheses. Significance of coefficients: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

B.4 Alternative coding of image variables

Table B.8: Self-image and probability to take the vignette product (image dummies)

	(1)	(2)	(3)	(4)
Financial (--)	-0.227*** (0.035)	-0.218*** (0.035)	-0.221*** (0.035)	-0.227*** (0.034)
Financial (-)	-0.269*** (0.029)	-0.257*** (0.029)	-0.261*** (0.029)	-0.234*** (0.029)
Financial (+)	-0.252*** (0.023)	-0.243*** (0.023)	-0.244*** (0.023)	-0.238*** (0.022)
Social (--)	-0.301*** (0.035)	-0.309*** (0.035)	-0.305*** (0.035)	-0.204*** (0.033)
Social (-)	-0.123*** (0.021)	-0.131*** (0.021)	-0.127*** (0.021)	-0.079*** (0.021)
Social (++)	0.003 (0.024)	-0.005 (0.024)	-0.006 (0.024)	0.016 (0.024)
Environmental (--)	-0.023 (0.038)	-0.024 (0.038)	-0.024 (0.038)	-0.019 (0.037)
Environmental (-)	-0.068** (0.029)	-0.069** (0.029)	-0.074** (0.029)	-0.063** (0.029)
Environmental (+)	-0.185*** (0.021)	-0.181*** (0.021)	-0.181*** (0.021)	-0.148*** (0.021)
Disgust (--)	-0.840*** (0.040)	-0.840*** (0.040)	-0.833*** (0.040)	-0.615*** (0.039)
Disgust (-)	-0.439*** (0.028)	-0.440*** (0.028)	-0.437*** (0.028)	-0.308*** (0.027)
Disgust (+)	-0.198*** (0.022)	-0.201*** (0.022)	-0.201*** (0.022)	-0.148*** (0.022)
Excellent		0.079*** (0.019)	0.080*** (0.019)	0.090*** (0.019)
Good		0.081*** (0.021)	0.078*** (0.021)	0.068*** (0.020)
Free		0.213*** (0.016)	0.214*** (0.016)	0.228*** (0.015)
Smartphone			0.100*** (0.023)	0.077*** (0.022)
Fridge			0.103*** (0.022)	0.159*** (0.022)
Closet			0.133*** (0.022)	0.146*** (0.022)
Age				-0.004*** (0.001)
Man				0.059*** (0.016)
Need for Uniqueness				-0.042***

Pro-Environmental Behavior	(0.011) 0.058***
Don't know/Prefer not to answer	(0.012) -0.071***
Less than €1,000	(0.024) 0.048
From €1,000 to €1,500	(0.042) 0.023
From €1,500 to €2,000	(0.029) 0.003
From €3,000 to €5,000	(0.024) -0.037
From €5,000 to €10,000	(0.023) -0.051
Over €10,000	(0.037) -0.067
Middle School (or lower)	(0.051) 0.025
University	(0.029) -0.058***
PhD	(0.018) -0.087**
Worker (blue collar)	(0.039) -0.001
Self-employed	(0.031) -0.063**
Student	(0.026) -0.085**
Homemaker	(0.035) -0.072**
Retired	(0.032) -0.081***
Looking for a job	(0.028) -0.096***
Other employment status	(0.037) -0.099*
Yes, I have already purchased them	(0.060) 0.615***
Yes, but I have never purchased them	(0.022) 0.511***
Yes, but I would not repurchase them	(0.021) 0.444***
North-East	(0.029) 0.085***
Center	(0.023) 0.122***
	(0.023)

South				0.087***
				(0.022)
Islands				0.036
				(0.027)
Constant	0.769***	0.592***	0.508***	0.118
	(0.021)	(0.025)	(0.029)	(0.075)
Observations	10,496	10,496	10,496	10,496

Note: Fractional probit regression estimation. Dependent variable. *Probability of taking the second-hand product*: variable ranging between 0 and 1. Regressors. Self-image regressors are dummy variables for each category of the four-point scale (—, —, +, ++) for each dimension (*Financial*, *Social*, *Environmental*, and *Disgust*). Baseline: modal category within each dimension. *Excellent condition* and *Good condition*: dummy variables equal to 1 if the condition is the one described, 0 otherwise. Baseline: *Acceptable condition*. *Free*: dummy equal to 1 if the product can be taken for free, 0 otherwise. Baseline: *Affordable price*. *Smartphone*, *Fridge*, and *Closet* are dummy variables equal to 1 if the product belongs to that category, 0 otherwise. Baseline: *T-shirt*. *Age* is measured in years. *Man* is a dummy variable equal to 1 if the respondent reported being a man and 0 otherwise. *Income* categories are measured relative to the omitted category *From €2,000 to €3,000*; *Education* categories relative to *High school*; *Employment* status categories relative to *White-collar worker*; second-hand experience categories relative to respondents who would never buy second-hand products; and macro-regions relative to *North-West*. Standard errors clustered at the individual level are reported in parentheses. Significance of coefficients: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table B.9: Social image and probability to take the vignette product (image dummies)

	(1)	(2)	(3)	(4)
Financial (--)	-0.028 (0.032)	-0.030 (0.032)	-0.030 (0.032)	0.008 (0.030)
Financial (-)	0.015 (0.023)	0.011 (0.023)	0.011 (0.023)	0.022 (0.022)
Financial (++)	0.126*** (0.026)	0.117*** (0.026)	0.117*** (0.026)	0.124*** (0.026)
Social (--)	-0.252*** (0.038)	-0.258*** (0.038)	-0.251*** (0.038)	-0.157*** (0.036)
Social (-)	-0.067*** (0.023)	-0.068*** (0.023)	-0.067*** (0.023)	-0.035 (0.022)
Social (++)	0.019 (0.028)	0.022 (0.028)	0.022 (0.028)	0.022 (0.027)
Environmental (--)	-0.027 (0.041)	-0.030 (0.041)	-0.035 (0.041)	-0.038 (0.039)
Environmental (-)	-0.044* (0.025)	-0.033 (0.025)	-0.036 (0.025)	-0.019 (0.024)
Environmental (++)	0.148*** (0.023)	0.146*** (0.023)	0.144*** (0.023)	0.100*** (0.022)
Disgust (--)	-0.397*** (0.038)	-0.400*** (0.038)	-0.393*** (0.038)	-0.247*** (0.036)
Disgust (-)	-0.150*** (0.024)	-0.158*** (0.024)	-0.153*** (0.024)	-0.089*** (0.023)
Disgust (++)	0.122*** (0.024)	0.121*** (0.024)	0.121*** (0.024)	0.074*** (0.024)
Excellent		0.084*** (0.020)	0.086*** (0.020)	0.097*** (0.019)
Good		0.094*** (0.021)	0.091*** (0.021)	0.080*** (0.020)
Free		0.232*** (0.016)	0.233*** (0.016)	0.245*** (0.015)
Smartphone			0.097*** (0.023)	0.082*** (0.022)
Fridge			0.093*** (0.023)	0.164*** (0.023)
Closet			0.120*** (0.023)	0.142*** (0.022)
Age				-0.004*** (0.001)
Man				0.062*** (0.016)
Need for Uniqueness				-0.027** (0.011)
Pro-Environmental Behavior				0.087*** (0.012)

Don't know/Prefer not to answer	−0.053** (0.025)
Less than €1,000	0.025 (0.043)
From €1,000 to €1,500	0.024 (0.029)
From €1,500 to €2,000	−0.008 (0.025)
From €3,000 to €5,000	−0.022 (0.024)
From €5,000 to €10,000	−0.063 (0.038)
Over €10,000	−0.072 (0.051)
Middle School (or lower)	0.017 (0.029)
University	−0.054*** (0.018)
PhD	−0.114*** (0.039)
Worker (blue collar)	0.009 (0.031)
Self-employed	−0.046* (0.027)
Student	−0.057 (0.036)
Homemaker	−0.054* (0.032)
Retired	−0.079*** (0.029)
Looking for a job	−0.091** (0.037)
Other employment status	−0.044 (0.062)
Yes, I have already purchased them	0.728*** (0.022)
Yes, but I have never purchased them	0.595*** (0.021)
Yes, but I would not repurchase them	0.436*** (0.029)
North-East	0.087*** (0.023)
Center	0.108*** (0.023)
South	0.077*** (0.022)
Islands	0.038

				(0.027)
Constant	0.228***	0.041*	-0.039	-0.557***
	(0.016)	(0.022)	(0.027)	(0.072)
Observations	10,496	10,496	10,496	10,496

Note: Fractional probit regression estimation. Dependent variable. *Probability of taking the second-hand product*: variable ranging between 0 and 1. Regressors. Social image regressors are dummy variables for each category of the four-point scale (—, —, +, ++) for each dimension (*Financial*, *Social*, *Environmental*, and *Disgust*). Baseline: modal category within each dimension. *Excellent condition* and *Good condition*: dummy variables equal to 1 if the condition is the one described, 0 otherwise. Baseline: *Acceptable condition*. *Free*: dummy equal to 1 if the product can be taken for free, 0 otherwise. Baseline: *Affordable price*. *Smartphone*, *Fridge*, and *Closet*: dummy variables equal to 1 if the product belongs to that category, 0 otherwise. Baseline: *T-shirt*. *Age* is measured in years. *Man* is a dummy variable equal to 1 if the respondent reported being a man and 0 otherwise. *Income* categories are measured relative to the omitted category *From €2,000 to €3,000*; *Education* categories relative to *High school*; *Employment* status categories relative to *White-collar worker*; second-hand experience categories relative to respondents who would never buy second-hand products; and macro-regions relative to *North-West*. Standard errors clustered at the individual level are reported in parentheses. Significance of coefficients: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table B.10: Second-order self-image and probability to take the vignette product (image dummies)

	(1)	(2)	(3)	(4)
Financial (--)	-0.086*** (0.033)	-0.091*** (0.033)	-0.093*** (0.033)	-0.032 (0.032)
Financial (-)	-0.019 (0.024)	-0.024 (0.023)	-0.025 (0.023)	-0.009 (0.023)
Financial (++)	0.157*** (0.026)	0.148*** (0.026)	0.146*** (0.026)	0.117*** (0.026)
Social (--)	-0.168*** (0.036)	-0.173*** (0.036)	-0.166*** (0.036)	-0.118*** (0.034)
Social (-)	-0.009 (0.022)	-0.013 (0.022)	-0.010 (0.022)	0.009 (0.021)
Social (++)	0.022 (0.027)	0.020 (0.027)	0.020 (0.027)	0.049* (0.027)
Environmental (--)	-0.065* (0.039)	-0.070* (0.039)	-0.069* (0.039)	-0.030 (0.038)
Environmental (-)	-0.028 (0.024)	-0.025 (0.024)	-0.027 (0.024)	0.005 (0.023)
Environmental (++)	0.175*** (0.023)	0.172*** (0.023)	0.175*** (0.023)	0.144*** (0.022)
Disgust (--)	-0.428*** (0.039)	-0.427*** (0.038)	-0.423*** (0.038)	-0.287*** (0.036)
Disgust (-)	-0.127*** (0.024)	-0.129*** (0.024)	-0.127*** (0.024)	-0.075*** (0.022)
Disgust (++)	0.051** (0.025)	0.049** (0.025)	0.046* (0.025)	0.011 (0.024)
Excellent		0.088*** (0.020)	0.090*** (0.020)	0.101*** (0.019)
Good		0.094*** (0.021)	0.091*** (0.021)	0.080*** (0.020)
Free		0.224*** (0.016)	0.225*** (0.016)	0.240*** (0.015)
Smartphone			0.105*** (0.023)	0.087*** (0.022)
Fridge			0.099*** (0.023)	0.170*** (0.022)
Closet			0.127*** (0.023)	0.147*** (0.022)
Age				-0.004*** (0.001)
Man				0.067*** (0.016)
Need for Uniqueness				-0.029*** (0.011)
Pro-Environmental Behavior				0.090***

Don't know/Prefer not to answer	(0.012) −0.048*
Less than €1,000	(0.025) 0.035
From €1,000 to €1,500	(0.043) 0.028
From €1,500 to €2,000	(0.029) −0.003
From €3,000 to €5,000	(0.025) −0.029
From €5,000 to €10,000	(0.024) −0.064*
Over €10,000	(0.038) −0.069
Middle School (or lower)	(0.051) 0.025
University	(0.029) −0.053***
PhD	(0.018) −0.110***
Worker (blue collar)	(0.039) 0.007
Self-employed	(0.031) −0.046*
Student	(0.027) −0.058
Homemaker	(0.036) −0.053
Retired	(0.032) −0.071**
Looking for a job	(0.029) −0.094**
Other employment status	(0.037) −0.068
Yes, I have already purchased them	(0.062) 0.754***
Yes, but I have never purchased them	(0.022) 0.609***
Yes, but I would not repurchase them	(0.020) 0.437***
North-East	(0.029) 0.090***
Center	(0.023) 0.116***
South	(0.023) 0.068***
	(0.022)

Islands				0.034 (0.028)
Constant	0.219*** (0.016)	0.038* (0.022)	-0.047* (0.027)	-0.591*** (0.072)
Observations	10,496	10,496	10,496	10,496

Note: Fractional probit regression estimation. Dependent variable. *Probability of taking the second-hand product*: variable ranging between 0 and 1. Regressors. Second-order self-image regressors are dummy variables for each category of the four-point scale (—, —, +, ++) for each dimension (*Financial*, *Social*, *Environmental*, and *Disgust*). Baseline: modal category within each dimension. *Excellent condition* and *Good condition*: dummy variables equal to 1 if the condition is the one described, 0 otherwise. Baseline: *Acceptable condition*. *Free*: dummy equal to 1 if the product can be taken for free, 0 otherwise. Baseline: *Affordable price*. *Smartphone*, *Fridge*, and *Closet*: dummy variables equal to 1 if the product belongs to that category, 0 otherwise. Baseline: *T-shirt*. *Age* is measured in years. *Man* is a dummy variable equal to 1 if the respondent reported being a man and 0 otherwise. *Income* categories are measured relative to the omitted category *From €2,000 to €3,000*; *Education* categories relative to *High school*; *Employment* status categories relative to *White-collar worker*; second-hand experience categories relative to respondents who would never buy second-hand products; and macro-regions relative to *North-West*. Standard errors clustered at the individual level are reported in parentheses. Significance of coefficients: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

B.5 Interactions with vignette attributes and fixed effects

Table B.11: Vignette attributes and probability to take the product (with interactions)

	(1)	(2)	(3)	(4)	(5)
Excellent condition	0.125*** (0.028)	0.089** (0.042)		0.120** (0.060)	0.116** (0.057)
Good condition	0.122*** (0.030)	0.128*** (0.047)		0.130* (0.067)	0.092 (0.063)
Free	0.248*** (0.031)		0.238*** (0.034)	0.255*** (0.066)	0.274*** (0.063)
Smartphone		0.165*** (0.044)	0.097*** (0.033)	0.122** (0.061)	0.082 (0.060)
Fridge		0.094** (0.046)	0.146*** (0.034)	0.137** (0.065)	0.216*** (0.062)
Closet		0.149*** (0.046)	0.212*** (0.033)	0.204*** (0.066)	0.245*** (0.065)
Excellent condition × Free	−0.042 (0.040)			−0.037 (0.083)	−0.026 (0.078)
Good condition × Free	−0.011 (0.043)			0.010 (0.093)	0.026 (0.087)
Excellent condition × Smartphone		0.005 (0.057)		−0.018 (0.080)	0.001 (0.077)
Good condition × Smartphone		−0.036 (0.063)		−0.036 (0.088)	−0.038 (0.084)
Excellent condition × Fridge		0.028 (0.058)		0.009 (0.082)	0.003 (0.077)
Good condition × Fridge		0.012 (0.064)		0.030 (0.092)	0.071 (0.088)
Excellent condition × Closet		0.039 (0.058)		0.046 (0.083)	0.019 (0.079)
Good condition × Closet		−0.013 (0.062)		−0.032 (0.089)	−0.051 (0.085)
Free × Smartphone			0.103** (0.047)	0.104 (0.087)	0.089 (0.084)
Free × Fridge			−0.061 (0.047)	−0.056 (0.091)	−0.047 (0.087)
Free × Closet			−0.082* (0.046)	−0.081 (0.092)	−0.143 (0.088)
Excellent condition × Free × Smartphone				0.003 (0.113)	0.007 (0.108)
Excellent condition × Free × Fridge				0.011 (0.115)	−0.002 (0.108)
Excellent condition × Free × Closet				−0.030 (0.116)	0.022 (0.110)
Good condition × Free × Smartphone				−0.032 (0.124)	−0.001 (0.119)
Good condition × Free × Fridge				−0.058 (0.128)	−0.113 (0.121)
Good condition × Free × Closet				0.014 (0.123)	0.057 (0.117)
Constant	0.011 (0.022)	0.042 (0.033)	−0.014 (0.025)	−0.107** (0.048)	−0.807*** (0.081)
Controls	No	No	No	No	Yes
Observations	10,496	10,496	10,496	10,496	10,496

Note: Fractional probit regression estimation. Dependent variable. *Probability of taking the second-hand product*: variable ranging between 0 and 1. Regressors. *Excellent condition* and *Good condition*: dummy variables equal to 1 if the condition is the one described, 0 otherwise. Baseline: *Acceptable condition*. *Free*: dummy variable equal to 1 if the product can be taken for free, 0 otherwise. Baseline: *Affordable price*. *Smartphone*, *Fridge*, *Closet*: dummy variables equal to 1 if the product belongs to that category, 0 otherwise. Baseline: *T-shirt*. *Controls* include demographic variables such as age, gender, need for uniqueness score, pro-environmental behavior, income, education, past adoption of and disposition toward second-hand, and macro-region of residence. Standard errors clustered at the individual level are reported in parentheses. Significance of coefficients: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table B.12: Self-image and probability to take the vignette product (with interactions)

	(1)	(2)	(3)	(4)	(5)
Financial savvy	0.366*** (0.036)				0.069 (0.045)
Social approval		0.520*** (0.039)			0.209*** (0.052)
Environmental consciousness			0.319*** (0.039)		-0.083* (0.047)
Disgust insensitivity				0.592*** (0.037)	0.488*** (0.047)
Excellent condition	0.082*** (0.021)	0.082*** (0.020)	0.100*** (0.024)	0.083*** (0.022)	0.076*** (0.025)
Good condition	0.079*** (0.023)	0.091*** (0.022)	0.103*** (0.026)	0.105*** (0.024)	0.083*** (0.027)
Free	0.191*** (0.017)	0.221*** (0.017)	0.183*** (0.019)	0.188*** (0.018)	0.170*** (0.020)
Smartphone	0.152*** (0.025)	0.127*** (0.024)	0.143*** (0.028)	0.125*** (0.027)	0.112*** (0.029)
Fridge	0.119*** (0.025)	0.107*** (0.024)	0.113*** (0.028)	0.115*** (0.025)	0.099*** (0.029)
Closet	0.178*** (0.025)	0.149*** (0.024)	0.168*** (0.028)	0.172*** (0.025)	0.155*** (0.028)
Excellent condition $\times$ Financial savvy	0.048 (0.031)				0.042 (0.040)
Good condition $\times$ Financial savvy	0.025 (0.033)				0.035 (0.042)
Free $\times$ Financial savvy	0.110*** (0.025)				0.108*** (0.033)
Smartphone $\times$ Financial savvy	-0.021 (0.036)				0.004 (0.048)
Fridge $\times$ Financial savvy	-0.034 (0.036)				-0.053 (0.047)
Closet $\times$ Financial savvy	-0.070** (0.035)				-0.062 (0.046)
Excellent condition $\times$ Social approval		0.023 (0.034)			-0.022 (0.044)
Good condition $\times$ Social approval		-0.012 (0.037)			-0.004 (0.047)
Free $\times$ Social approval		0.033 (0.028)			-0.086** (0.036)
Smartphone $\times$ Social approval		-0.072* (0.040)			0.010 (0.052)
Fridge $\times$ Social approval		-0.055 (0.040)			-0.009 (0.052)
Closet $\times$ Social approval		-0.088** (0.040)			0.002 (0.052)

Excellent condition × Environmental consc.	0.012	0.002			
	(0.034)	(0.041)			
Good condition × Environmental consc.	0.007	0.051			
	(0.036)	(0.043)			
Free × Environmental consc.	0.096***	0.043			
	(0.027)	(0.033)			
Smartphone × Environmental consc.	0.024	0.090*			
	(0.039)	(0.049)			
Fridge × Environmental consc.	0.009	0.084*			
	(0.039)	(0.048)			
Closet × Environmental consc.	−0.011	0.090*			
	(0.039)	(0.047)			
Excellent condition × Disgust insensitivity		0.011	−0.001		
		(0.032)	(0.041)		
Good condition × Disgust insensitivity		−0.061*	−0.099**		
		(0.035)	(0.044)		
Free × Disgust insensitivity		0.106***	0.069**		
		(0.026)	(0.033)		
Smartphone × Disgust insensitivity		−0.121***	−0.183***		
		(0.038)	(0.049)		
Fridge × Disgust insensitivity		−0.054	−0.065		
		(0.037)	(0.047)		
Closet × Disgust insensitivity		−0.114***	−0.133***		
		(0.037)	(0.048)		
Constant	−0.158***	−0.133***	−0.206***	−0.228***	−0.209***
	(0.024)	(0.023)	(0.028)	(0.025)	(0.028)
Observations	10,496	10,496	10,496	10,496	10,496

Note: Fractional probit regression estimation. Dependent variable. *Probability of taking the second-hand product*: variable ranging between 0 and 1. Regressors. *Self-image*: *Financial savvy*; *Environmental consciousness*; *Social approval*; *Disgust insensitivity*: discrete variables taking a value in $\{-1, -0.33, +0.33, +1\}$. *Excellent condition* and *Good condition*: dummy variables equal to 1 if the condition is the one described, 0 otherwise. Baseline: *Acceptable condition*. *Free*: dummy variable equal to 1 if the product can be taken for free, 0 otherwise. Baseline: *Affordable price*. *Smartphone*, *Refrigerator*, *Closet*: dummy variables equal to 1 if the product belongs to that category, 0 otherwise. Baseline: *T-shirt*. Standard errors clustered at the individual level are reported in parentheses. Significance of coefficients: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table B.13: Social image and probability to take the vignette product (with interactions)

	(1)	(2)	(3)	(4)	(5)
Financial savvy	0.308*** (0.035)				0.078 (0.050)
Social approval		0.363*** (0.039)			0.095 (0.059)
Environmental consciousness			0.294*** (0.041)		0.010 (0.052)
Disgust insensitivity				0.411*** (0.037)	0.311*** (0.050)
Excellent	0.092*** (0.020)	0.096*** (0.020)	0.090*** (0.023)	0.086*** (0.022)	0.081*** (0.024)
Good	0.100*** (0.022)	0.102*** (0.022)	0.101*** (0.025)	0.106*** (0.023)	0.091*** (0.025)
Free	0.227*** (0.016)	0.230*** (0.017)	0.189*** (0.019)	0.223*** (0.018)	0.187*** (0.019)
Smartphone	0.126*** (0.024)	0.107*** (0.024)	0.129*** (0.027)	0.095*** (0.026)	0.099*** (0.028)
Fridge	0.101*** (0.024)	0.088*** (0.024)	0.097*** (0.028)	0.097*** (0.025)	0.104*** (0.028)
Closet	0.146*** (0.024)	0.137*** (0.024)	0.153*** (0.027)	0.134*** (0.025)	0.136*** (0.027)
Excellent $\times$ Financial savvy	-0.013 (0.030)				-0.018 (0.043)
Good $\times$ Financial savvy	-0.028 (0.032)				-0.009 (0.045)
Free $\times$ Financial savvy	0.016 (0.024)				-0.025 (0.035)
Smartphone $\times$ Financial savvy	0.024 (0.035)				0.003 (0.050)
Fridge $\times$ Financial savvy	0.035 (0.035)				-0.004 (0.051)
Closet $\times$ Financial savvy	-0.002 (0.034)				0.028 (0.049)
Excellent $\times$ Social approval		0.001 (0.034)			0.008 (0.050)
Good $\times$ Social approval		-0.021 (0.037)			0.009 (0.053)
Free $\times$ Social approval		0.022 (0.028)			-0.036 (0.041)
Smartphone $\times$ Social approval		0.044 (0.039)			0.073 (0.059)
Fridge $\times$ Social approval		0.063 (0.039)			0.120** (0.060)
Closet $\times$ Social approval		-0.007 (0.040)			0.004 (0.059)

Excellent × Environmental consciousness	0.014	0.020			
	(0.035)	(0.045)			
Good × Environmental consciousness	0.006	0.049			
	(0.037)	(0.049)			
Free × Environmental consciousness	0.097***	0.135***			
	(0.028)	(0.037)			
Smartphone × Environmental consciousness	0.033	−0.009			
	(0.041)	(0.053)			
Fridge × Environmental consciousness	0.019	−0.022			
	(0.041)	(0.054)			
Closet × Environmental consciousness	0.002	0.010			
	(0.041)	(0.052)			
Excellent × Disgust insensitivity		−0.005	−0.017		
		(0.032)	(0.044)		
Good × Disgust insensitivity		−0.051	−0.075		
		(0.035)	(0.047)		
Free × Disgust insensitivity		0.051*	0.022		
		(0.026)	(0.036)		
Smartphone × Disgust insensitivity		0.012	−0.038		
		(0.038)	(0.052)		
Fridge × Disgust insensitivity		−0.010	−0.071		
		(0.037)	(0.051)		
Closet × Disgust insensitivity		−0.032	−0.072		
		(0.037)	(0.051)		
Constant	−0.104***	−0.111***	−0.180***	−0.153***	−0.152***
	(0.023)	(0.024)	(0.027)	(0.025)	(0.027)
Observations	10,496	10,496	10,496	10,496	10,496

Note: Fractional probit regression estimation. Dependent variable. *Probability of taking the second-hand product*: variable ranging between 0 and 1. Regressors. *Social image*: *Financial savvy*; *Environmental consciousness*; *Social approval*; *Disgust insensitivity*: discrete variables taking a value in $\{-1, -0.33, +0.33, +1\}$. *Excellent condition* and *Good condition*: dummy variables equal to 1 if the condition is the one described, 0 otherwise. Baseline: *Acceptable condition*. *Free*: dummy variable equal to 1 if the product can be taken for free, 0 otherwise. Baseline: *Affordable price*. *Smartphone*, *Refrigerator*, *Closet*: dummy variables equal to 1 if the product belongs to that category, 0 otherwise. Baseline: *T-shirt*. Standard errors clustered at the individual level are reported in parentheses. Significance of coefficients: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table B.14: Second-order self-image and probability to take the vignette product (with interactions)

	(1)	(2)	(3)	(4)	(5)
Financial savvy	0.275*** (0.036)				0.005 (0.049)
Social approval		0.375*** (0.039)			0.163*** (0.055)
Environmental consciousness			0.282*** (0.040)		0.057 (0.050)
Disgust insensitivity				0.408*** (0.038)	0.281*** (0.050)
Excellent	0.096*** (0.020)	0.105*** (0.020)	0.101*** (0.023)	0.095*** (0.021)	0.088*** (0.024)
Good	0.097*** (0.022)	0.109*** (0.022)	0.110*** (0.025)	0.101*** (0.023)	0.090*** (0.025)
Free	0.214*** (0.017)	0.221*** (0.016)	0.183*** (0.019)	0.214*** (0.017)	0.190*** (0.019)
Smartphone	0.118*** (0.024)	0.117*** (0.024)	0.124*** (0.027)	0.108*** (0.025)	0.095*** (0.028)
Fridge	0.101*** (0.024)	0.091*** (0.024)	0.110*** (0.027)	0.106*** (0.025)	0.105*** (0.028)
Closet	0.148*** (0.024)	0.144*** (0.023)	0.163*** (0.027)	0.147*** (0.025)	0.137*** (0.027)
Excellent $\times$ Financial savvy	-0.011 (0.031)				0.016 (0.043)
Good $\times$ Financial savvy	-0.015 (0.033)				0.004 (0.045)
Free $\times$ Financial savvy	0.070*** (0.025)				0.030 (0.034)
Smartphone $\times$ Financial savvy	0.062* (0.037)				0.141*** (0.049)
Fridge $\times$ Financial savvy	0.023 (0.036)				0.084* (0.050)
Closet $\times$ Financial savvy	-0.006 (0.036)				0.092* (0.049)
Excellent $\times$ Social approval		-0.033 (0.033)			-0.039 (0.048)
Good $\times$ Social approval		-0.049 (0.036)			-0.049 (0.050)
Free $\times$ Social approval		0.068** (0.027)			0.015 (0.038)
Smartphone $\times$ Social approval		-0.030 (0.039)			-0.081 (0.055)
Fridge $\times$ Social approval		-0.023 (0.040)			-0.055 (0.057)
Closet $\times$ Social approval		-0.104***			-0.129**

	(0.039)				(0.054)
Excellent × Environmental consciousness	0.002				0.024
	(0.035)				(0.044)
Good × Environmental consciousness	−0.002				0.034
	(0.037)				(0.046)
Free × Environmental consciousness	0.109***				0.084**
	(0.028)				(0.035)
Smartphone × Environmental consciousness	0.052				0.049
	(0.040)				(0.051)
Fridge × Environmental consciousness	−0.012				−0.036
	(0.041)				(0.050)
Closet × Environmental consciousness	−0.018				0.006
	(0.040)				(0.049)
Excellent × Disgust insensitivity				−0.036	−0.033
				(0.033)	(0.043)
Good × Disgust insensitivity				−0.040	−0.030
				(0.035)	(0.047)
Free × Disgust insensitivity				0.064**	−0.004
				(0.027)	(0.036)
Smartphone × Disgust insensitivity				−0.042	−0.113**
				(0.039)	(0.052)
Fridge × Disgust insensitivity				−0.028	−0.026
				(0.038)	(0.051)
Closet × Disgust insensitivity				−0.069*	−0.059
				(0.038)	(0.051)
Constant	−0.113***	−0.098***	−0.181***	−0.144***	−0.150***
	(0.024)	(0.023)	(0.027)	(0.024)	(0.027)
Observations	10,496	10,496	10,496	10,496	10,496

Note: Fractional probit regression estimation. Dependent variable. *Probability of taking the second-hand product*: variable ranging between 0 and 1. Regressors. *Second-order self-image*: *Financial savvy*; *Environmental consciousness*; *Social approval*; *Disgust insensitivity*: discrete variables taking a value in $\{-1, -0.33, +0.33, +1\}$. *Excellent condition* and *Good condition*: dummy variables equal to 1 if the condition is the one described, 0 otherwise. Baseline: *Acceptable condition*. *Free*: dummy variable equal to 1 if the product can be taken for free, 0 otherwise. Baseline: *Affordable price*. *Smartphone*, *Refrigerator*, *Closet*: dummy variables equal to 1 if the product belongs to that category, 0 otherwise. Baseline: *T-shirt*. Standard errors clustered at the individual level are reported in parentheses. Significance of coefficients: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table B.15: Probability to take the product by perspective (with vignette fixed effects)

	(1)	(2)	(3)	(4)	(5)	(6)
	Self-image	Self-image	Social image	Social image	Second-order	Second-order
Financial savvy	0.047*** (0.007)	0.043*** (0.006)	0.022*** (0.004)	0.015*** (0.005)	0.040*** (0.007)	0.023*** (0.006)
Social approval	0.055*** (0.007)	0.038*** (0.006)	0.047*** (0.009)	0.029*** (0.008)	0.028*** (0.009)	0.022*** (0.007)
Environmental consc.	0.007 (0.007)	0.006 (0.006)	0.039*** (0.009)	0.028*** (0.007)	0.048*** (0.007)	0.032*** (0.007)
Disgust insensitivity	0.152*** (0.009)	0.106*** (0.007)	0.095*** (0.005)	0.056*** (0.005)	0.080*** (0.008)	0.047*** (0.007)
Age		−0.001*** (0.000)		−0.001*** (0.000)		−0.001*** (0.000)
Man		0.021*** (0.006)		0.022*** (0.006)		0.024*** (0.006)
Need for Uniqueness		−0.015*** (0.004)		−0.010** (0.004)		−0.011** (0.004)
Pro-Environmental Beh.		0.023*** (0.004)		0.031*** (0.004)		0.032*** (0.004)
Don't know/No answer		−0.023** (0.009)		−0.018* (0.009)		−0.014 (0.009)
Less than €1,000		0.016 (0.013)		0.008 (0.014)		0.011 (0.014)
From €1,000 to €1,500		0.011 (0.009)		0.009 (0.009)		0.011 (0.009)
From €1,500 to €2,000		0.002 (0.008)		−0.002 (0.008)		−0.000 (0.008)
From €3,000 to €5,000		−0.011 (0.009)		−0.007 (0.009)		−0.008 (0.010)
From €5,000 to €10,000		−0.016 (0.014)		−0.019 (0.015)		−0.019 (0.015)
Over €10,000		−0.020 (0.017)		−0.024 (0.017)		−0.022 (0.017)
Middle School (or lower)		0.012 (0.013)		0.008 (0.015)		0.010 (0.015)
University		−0.019*** (0.006)		−0.018*** (0.005)		−0.018*** (0.006)
PhD		−0.026* (0.014)		−0.039** (0.015)		−0.038** (0.015)
Worker (blue collar)		0.000 (0.009)		0.003 (0.009)		0.000 (0.009)
Self-employed		−0.023*** (0.008)		−0.017** (0.008)		−0.018** (0.008)
Student		−0.028** (0.012)		−0.018 (0.014)		−0.019 (0.013)
Homemaker		−0.026**		−0.019*		−0.020*

		(0.011)		(0.011)		(0.011)
Retired		−0.032***		−0.029***		−0.027**
		(0.009)		(0.010)		(0.010)
Looking for a job		−0.032**		−0.033**		−0.034**
		(0.015)		(0.014)		(0.014)
Other employment status		−0.034		−0.016		−0.024
		(0.022)		(0.024)		(0.024)
Already purchased		0.226***		0.271***		0.281***
		(0.010)		(0.014)		(0.013)
Never purchased		0.191***		0.227***		0.233***
		(0.010)		(0.012)		(0.011)
Would not repurchase		0.168***		0.168***		0.171***
		(0.012)		(0.011)		(0.011)
North-East		0.030***		0.030***		0.031***
		(0.006)		(0.006)		(0.006)
Center		0.041***		0.038***		0.040***
		(0.008)		(0.009)		(0.009)
South		0.030***		0.027***		0.024***
		(0.007)		(0.008)		(0.008)
Islands		0.012		0.013		0.010
		(0.010)		(0.010)		(0.010)
Constant	0.512***	0.423***	0.538***	0.383***	0.539***	0.375***
	(0.003)	(0.023)	(0.003)	(0.025)	(0.002)	(0.024)
Fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	10,496	10,496	10,496	10,496	10,496	10,496

Note: Fractional probit regression estimation with vignette fixed effects. Models (1) and (2) use respondents' *self-image* evaluations on each image dimension as the dependent variable; Models (3) and (4) use *social image* evaluations; and Models (5) and (6) use *second-order self-image* evaluations. Dependent variable. *Probability of taking the product*, ranging between 0 and 1. Regressors. *Financial savvy*, *Social approval*, *Environmental consciousness*, and *Disgust insensitivity*: discrete variables taking a value in $\{-1, -0.33, +0.33, +1\}$. *Excellent condition* and *Good condition*: dummy variables equal to 1 if the condition is the one described, 0 otherwise. Baseline: *Acceptable condition*. *Free*: dummy variable equal to 1 if the product can be taken for free, 0 otherwise. Baseline: *Affordable price*. *Smartphone*, *Refrigerator*, *Closet*: dummy variables equal to 1 if the product belongs to that category, 0 otherwise. Baseline: *T-shirt*. *Age* is measured in years. *Man* is a dummy variable equal to 1 if the respondent reported being a man and 0 otherwise. *Income* categories are measured relative to the omitted category *From €2,000 to €3,000*; *Education* categories relative to *High school*; *Employment* status categories relative to *White-collar worker*; second-hand experience categories relative to respondents who would never buy second-hand products; and macro-regions relative to *North-West*. *Fixed effects* indicate vignette fixed effects. Standard errors clustered at the individual level are reported in parentheses. Significance of coefficients: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

B.6 Mismatch and misalignments across image perspectives

Table B.16: Relative weights of image dimensions across self and social image

	(1)	(2)	(3)	(4)
Financial savvy (self)	0.356*** (0.015)			
Financial savvy (social)	0.137*** (0.014)			
Environmental consciousness (self)		0.280*** (0.016)		
Environmental consciousness (social)		0.206*** (0.017)		
Social approval (self)			0.402*** (0.017)	
Social approval (social)			0.161*** (0.017)	
Disgust insensitivity (self)				0.503*** (0.016)
Disgust insensitivity (social)				0.115*** (0.016)
Constant	0.118*** (0.009)	0.038*** (0.010)	0.138*** (0.008)	0.034*** (0.009)
Observations	10,496	10,496	10,496	10,496

Note: Fractional probit regression estimation. Dependent variable. *Probability of taking the second-hand product*: variable ranging between 0 and 1. Regressors. Each column includes the *self-image* and the corresponding *social image* score for the indicated dimension (Financial savvy; Environmental consciousness; Social approval; Disgust insensitivity), which are discrete variables taking values in $\{-1, -0.33, +0.33, +1\}$. Standard errors clustered at the individual level are reported in parentheses. Significance of coefficients: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table B.17: Image scores per macro-region under self-image versus social image

Panel A: North West									
Determinant	Self-image				Social image				Sign test p-value
	--	-	+	++	--	-	+	++	
Financial	10.93	20.16	33.64	35.27	15.53	24.62	32.54	27.31	<.001
Social	10.36	24.44	43.16	22.04	10.47	28.69	39.30	21.54	<.001
Environmental	7.50	14.29	35.37	42.84	6.01	14.93	42.70	36.36	<.001
Hygiene	9.13	19.56	34.49	36.82	10.22	22.14	37.32	30.31	<.001
Panel B: North East									
Determinant	Self-image				Social image				Sign test p-value
	--	-	+	++	--	-	+	++	
Financial	12.44	19.05	32.06	36.45	16.06	25.84	30.95	27.15	<.001
Social	10.41	24.20	42.14	23.24	10.66	27.00	40.60	21.75	.004
Environmental	7.76	15.00	33.61	43.64	6.27	15.00	42.14	36.60	<.001
Hygiene	9.35	19.00	30.52	41.13	10.46	20.97	34.91	33.65	<.001
Panel C: Center									
Determinant	Self-image				Social image				Sign test p-value
	--	-	+	++	--	-	+	++	
Financial	10.53	20.78	33.50	35.19	12.23	24.66	33.20	29.90	<.001
Social	10.05	24.37	42.14	23.45	9.61	25.10	43.06	22.23	.149
Environmental	7.14	15.49	33.40	43.98	5.58	14.95	39.22	40.24	.037
Hygiene	8.69	18.50	31.99	40.83	8.20	19.13	38.40	34.27	<.001
Panel D: South									
Determinant	Self-image				Social image				Sign test p-value
	--	-	+	++	--	-	+	++	
Financial	13.56	20.42	33.22	32.80	16.49	25.19	30.59	27.74	<.001
Social	11.26	26.32	40.29	22.13	11.97	27.11	39.50	21.42	.017
Environmental	8.54	17.20	33.35	40.92	7.41	17.49	39.87	35.23	<.001
Hygiene	9.67	20.21	32.80	37.32	10.96	22.64	34.52	31.88	<.001
Panel E: Islands									
Determinant	Self-image				Social image				Sign test p-value
	--	-	+	++	--	-	+	++	
Financial	13.01	21.31	30.13	35.55	17.73	22.18	29.17	30.92	<.001
Social	11.27	23.76	38.60	26.38	11.97	25.76	37.82	24.45	.100
Environmental	8.91	16.94	32.66	41.48	6.90	17.47	39.56	36.07	.100
Hygiene	9.69	19.39	28.56	42.36	11.62	20.35	33.45	34.59	<.001

Note: Distribution of scores on the four image dimensions per macro-region. Columns (--, -, +, ++) indicate the proportion of respondents, respectively, completely agreeing with A, agreeing with A more than B, agreeing with B more than A, and completely agreeing with B. Modal scores are highlighted in bold. The last column reports Šidák–Holm adjusted p-values from sign tests.

Table B.18: Image scores per macro-region under self-image versus second-order self-image

Panel A: North West									
Determinant	Self-image				Second-order self-image				Sign test p-value
	--	-	+	++	--	-	+	++	
Financial	10.93	20.16	33.64	35.27	11.96	25.33	34.56	28.16	<.001
Social	10.36	24.44	43.16	22.04	11.35	30.60	39.55	18.50	<.001
Environmental	7.50	14.29	35.37	42.84	6.65	14.96	41.85	36.54	<.001
Hygiene	9.13	19.56	34.49	36.82	9.52	23.81	38.70	27.98	<.001
Panel B: North East									
Determinant	Self-image				Second-order self-image				Sign test p-value
	--	-	+	++	--	-	+	++	
Financial	12.44	19.05	32.06	36.45	12.92	25.89	32.59	28.59	<.001
Social	10.41	24.20	42.14	23.24	11.19	30.09	37.56	21.17	<.001
Environmental	7.76	15.00	33.61	43.64	6.70	16.35	40.74	36.21	<.001
Hygiene	9.35	19.00	30.52	41.13	10.46	23.48	36.26	29.80	<.001
Panel C: Center									
Determinant	Self-image				Second-order self-image				Sign test p-value
	--	-	+	++	--	-	+	++	
Financial	10.53	20.78	33.50	35.19	11.31	24.51	34.76	29.42	<.001
Social	10.05	24.37	42.14	23.45	9.90	30.68	38.16	21.26	<.001
Environmental	7.14	15.49	33.40	43.98	5.63	15.58	41.70	37.09	<.001
Hygiene	8.69	18.50	31.99	40.83	7.96	22.91	36.46	32.67	<.001
Panel D: South									
Determinant	Self-image				Second-order self-image				Sign test p-value
	--	-	+	++	--	-	+	++	
Financial	13.56	20.42	33.22	32.80	13.51	24.18	32.72	29.58	<.001
Social	11.26	26.32	40.29	22.13	12.47	28.41	38.24	20.88	.001
Environmental	8.54	17.20	33.35	40.92	6.86	17.70	37.95	37.49	.024
Hygiene	9.67	20.21	32.80	37.32	9.58	23.14	36.78	30.50	<.001
Panel E: Islands									
Determinant	Self-image				Second-order self-image				Sign test p-value
	--	-	+	++	--	-	+	++	
Financial	13.01	21.31	30.13	35.55	14.50	22.36	29.17	33.97	.013
Social	11.27	23.76	38.60	26.38	13.01	24.98	38.08	23.93	.013
Environmental	8.91	16.94	32.66	41.48	6.55	18.17	39.30	35.98	.013
Hygiene	9.69	19.39	28.56	42.36	10.92	20.87	31.62	36.59	.001

Note: Distribution of scores on the four image dimensions per macro-region across first-order (self-image) and second-order self-image. Columns (--, -, +, ++) indicate the proportion of respondents, respectively, completely agreeing with A, agreeing with A more than B, agreeing with B more than A, and completely agreeing with B. Modal scores are highlighted in bold. The last column reports Šidák–Holm adjusted p-values from sign tests.

Table B.19: Mismatch between second-order self-image and modes of self-image

Macro-region	Dimension	Mismatch	Below	Above
North West ($N = 2,827$)	Financial	67.89	84.37	15.63
	Social	60.06	66.43	33.57
	Environmental	61.19	90.89	9.11
	Hygiene	65.33	83.98	16.02
North East ($N = 2,074$)	Financial	68.47	87.09	12.91
	Social	62.73	66.33	33.67
	Environmental	61.44	92.43	7.57
	Hygiene	67.91	96.48	3.52
Center ($N = 2,060$)	Financial	67.18	86.71	13.29
	Social	61.65	61.97	38.03
	Environmental	61.35	91.08	8.92
	Hygiene	65.53	90.59	9.41
South ($N = 2,390$)	Financial	65.64	77.53	22.47
	Social	61.76	66.19	33.81
	Environmental	60.29	87.79	12.21
	Hygiene	63.31	85.99	14.01
Islands ($N = 1,145$)	Financial	64.62	86.07	13.93
	Social	61.91	65.49	34.51
	Environmental	61.63	88.77	11.23
	Hygiene	62.10	94.37	5.63

Note: “Mismatch” reports the proportion of respondents whose second-order self-image response does not coincide with the modal self-image response observed within their reference group (macro-region) for the corresponding vignette. “Below” and “Above” identify respondents for whom their second-order response falls, respectively, below and above the modal self-image.

Table B.20: Mismatch between second-order self-image and self-image mode on adoption

	(1)	(2)	(3)
Financial below	−0.057** (0.023)	−0.085*** (0.022)	−0.055** (0.022)
Financial above	−0.008 (0.032)	0.063* (0.032)	0.038 (0.032)
Social below	−0.168*** (0.020)	−0.165*** (0.020)	−0.092*** (0.019)
Social above	0.136*** (0.026)	0.095*** (0.026)	0.115*** (0.025)
Environmental below	−0.133*** (0.022)	−0.139*** (0.021)	−0.089*** (0.021)
Environmental above	−0.116*** (0.039)	−0.035 (0.040)	−0.030 (0.038)
Disgust below	−0.143*** (0.021)	−0.137*** (0.021)	−0.078*** (0.021)
Disgust above	−0.046 (0.037)	−0.002 (0.037)	−0.030 (0.037)
Excellent condition		0.133*** (0.021)	0.131*** (0.020)
Good condition		0.148*** (0.023)	0.117*** (0.022)
Free		0.272*** (0.018)	0.267*** (0.017)
Smartphone		0.158*** (0.025)	0.117*** (0.024)
Fridge		0.103*** (0.024)	0.175*** (0.023)
Closet		0.170*** (0.024)	0.175*** (0.024)
Age			−0.004*** (0.001)
Man			0.068*** (0.017)
Need for Uniqueness			−0.022* (0.011)
Pro-Environmental Behavior			0.094*** (0.012)
Don't know/Prefer not to answer			−0.030 (0.026)
Less than €1,000			0.026 (0.046)
From €1,000 to €1,500			0.029 (0.031)
From €1,500 to €2,000			−0.002 (0.026)

From €3,000 to €5,000			−0.028 (0.025)
From €5,000 to €10,000			−0.077* (0.041)
Over €10,000			−0.095* (0.053)
Middle School (or lower)			0.025 (0.031)
University			−0.041** (0.019)
PhD			−0.132*** (0.043)
Worker (blue collar)			0.001 (0.032)
Self-employed			−0.036 (0.028)
Student			−0.064* (0.039)
Homemaker			−0.075** (0.034)
Retired			−0.068** (0.030)
Looking for a job			−0.097** (0.039)
Other employment status			−0.014 (0.069)
Yes, I have already purchased them			0.792*** (0.023)
Yes, but I have never purchased them			0.647*** (0.021)
Yes, but I would not repurchase them			0.461*** (0.031)
North-East			0.097*** (0.026)
Central			0.115*** (0.025)
South			0.060** (0.024)
Islands			0.030 (0.030)
Constant	0.473*** (0.022)	0.124*** (0.031)	−0.531*** (0.078)
Observations	9,397	9,397	9,397

Note: Fractional probit regression estimation. Dependent variable. *Probability of taking the second-hand product*: variable ranging between 0 and 1. Regressors. *Financial above/below*; *Environmental above/below*; *Social above/below*; *Disgust above/below*: dummy variables equal to 1 when the second-order self-image score on the dimension is, respectively, above/below

the modal self-image score; the reference category is no mismatch between second-order self-image and the modal self-image score. *Excellent condition* and *Good condition*: dummy variables equal to 1 if the condition is the one described, 0 otherwise. Baseline: *Acceptable condition*). *Free*: dummy variable equal to 1 if the product can be taken for free, 0 otherwise. Baseline: *Affordable price*. *Smartphone*, *Refrigerator*, *Closet*: dummy variables equal to 1 if the product belongs to that category, 0 otherwise. Baseline: *T-shirt*. *Age* is measured in years. *Man* is a dummy variable equal to 1 if the respondent reported being a man and 0 otherwise. *Income* categories are measured relative to the omitted category *From €2,000 to €3,000*; *Education* categories relative to *High school*; *Employment* status categories relative to *White-collar worker*; second-hand experience categories relative to respondents who would never buy second-hand products; and macro-regions relative to *North-West*. Standard errors clustered at the individual level are reported in parentheses. Significance of coefficients: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table B.21: Misalignment between self-image and social image

Macro-region	Dimension	Misalignment	Below	Above
North West ($N = 2,827$)	Financial	44.39	34.82	65.18
	Social	37.74	44.61	55.39
	Environmental	34.98	42.06	57.94
	Hygiene	35.44	37.62	62.38
North East ($N = 2,074$)	Financial	43.64	31.71	68.29
	Social	39.34	44.85	55.15
	Environmental	37.27	42.69	57.31
	Hygiene	37.13	39.74	60.26
Center ($N = 2,060$)	Financial	41.41	39.04	60.96
	Social	37.33	47.33	52.67
	Environmental	35.97	45.61	54.39
	Hygiene	34.66	42.58	57.42
South ($N = 2,390$)	Financial	40.25	37.94	62.06
	Social	37.24	45.96	54.04
	Environmental	35.82	42.29	57.71
	Hygiene	36.82	39.89	60.11
Islands ($N = 1,145$)	Financial	41.22	37.50	62.50
	Social	38.78	45.27	54.73
	Environmental	37.38	45.79	54.21
	Hygiene	37.12	37.88	62.12

Note: Proportion of respondents for each macro-region whose answer on the self-image elicitation task did not match the social-image score for the determinant (“Misalignment”). Columns “Below” and “Above” indicate the proportion of misaligned respondents whose self-image is, respectively, lower or higher than their social-image score for the determinant.

Table B.22: Self-image and social image misalignment on adoption

	(1)	(2)	(3)
Financial below	−0.025 (0.024)	−0.023 (0.025)	−0.024 (0.024)
Financial above	0.053** (0.022)	0.057*** (0.022)	0.060*** (0.021)
Social below	−0.032 (0.024)	−0.036 (0.023)	−0.048** (0.023)
Social above	0.052** (0.023)	0.043* (0.023)	0.030 (0.022)
Environmental below	−0.111*** (0.025)	−0.114*** (0.024)	−0.088*** (0.024)
Environmental above	−0.054** (0.023)	−0.050** (0.022)	−0.028 (0.021)
Disgust below	−0.183*** (0.025)	−0.171*** (0.025)	−0.131*** (0.024)
Disgust above	0.124*** (0.023)	0.124*** (0.022)	0.084*** (0.022)
Excellent condition		0.109*** (0.020)	0.113*** (0.019)
Good condition		0.110*** (0.021)	0.089*** (0.021)
Free		0.220*** (0.016)	0.240*** (0.015)
Smartphone		0.160*** (0.023)	0.124*** (0.022)
Fridge		0.114*** (0.023)	0.192*** (0.023)
Closet		0.171*** (0.023)	0.179*** (0.022)
Age			−0.003*** (0.001)
Man			0.082*** (0.016)
Need for Uniqueness			−0.030*** (0.011)
Pro-Environmental Behavior			0.114*** (0.012)
Don't know/Prefer not to answer			−0.032 (0.025)
Less than €1,000			0.021 (0.043)
From €1,000 to €1,500			0.017 (0.029)
From €1,500 to €2,000			−0.010 (0.025)

From €3,000 to €5,000			−0.028 (0.024)
From €5,000 to €10,000			−0.088** (0.038)
Over €10,000			−0.081 (0.049)
Middle School (or lower)			0.030 (0.030)
University			−0.056*** (0.018)
PhD			−0.137*** (0.039)
Worker (blue collar)			0.007 (0.031)
Self-employed			−0.061** (0.027)
Student			−0.031 (0.036)
Homemaker			−0.052 (0.032)
Retired			−0.070** (0.029)
Looking for a job			−0.076** (0.037)
Other employment status			−0.057 (0.064)
Yes, I have already purchased them			0.850*** (0.021)
Yes, but I have never purchased them			0.683*** (0.020)
Yes, but I would not repurchase them			0.463*** (0.029)
North-East			0.088*** (0.023)
Central			0.131*** (0.023)
South			0.069*** (0.022)
Islands			0.039 (0.028)
Constant	0.239*** (0.012)	−0.075*** (0.025)	−0.750*** (0.071)
Observations	10,496	10,496	10,496

Note: Fractional probit regression estimation. Dependent variable. *Probability of taking the second-hand product*: variable ranging between 0 and 1. Regressors. *Financial above/below*; *Environmental above/below*; *Social above/below*; *Disgust above/below*: dummy variables equal to 1 when the self-image score on the dimension is, respec-

tively, above/below the social-image score; the reference category is self-image equal to social image (alignment). *Excellent condition* and *Good condition*: dummy variables equal to 1 if the condition is the one described, 0 otherwise. Baseline: *Acceptable condition*. *Free*: dummy variable equal to 1 if the product can be taken for free, 0 otherwise. Baseline: *Affordable price*. *Smartphone*, *Refrigerator*, *Closet*: dummy variables equal to 1 if the product belongs to that category, 0 otherwise. Baseline: *T-shirt*. *Age* is measured in years. *Man* is a dummy variable equal to 1 if the respondent reported being a man and 0 otherwise. *Income* categories are measured relative to the omitted category *From €2,000 to €3,000*; *Education* categories relative to *High school*; *Employment* status categories relative to *White-collar worker*; second-hand experience categories relative to respondents who would never buy second-hand products; and macro-regions relative to *North-West*. Standard errors clustered at the individual level are reported in parentheses. Significance of coefficients: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table B.23: Misalignment between self-image and second-order self-image

Region	Determinant	Misalignment	Below	Above
North West ($N = 2,827$)	Financial	40.68	36.61	63.39
	Social	41.03	39.05	60.95
	Environmental	36.65	41.02	58.98
	Hygiene	39.05	36.32	63.68
North East ($N = 2,074$)	Financial	40.89	36.32	63.68
	Social	42.77	42.39	57.61
	Environmental	36.64	40.79	59.21
	Hygiene	39.92	34.42	65.58
Center ($N = 2,060$)	Financial	39.85	39.10	60.90
	Social	39.32	41.60	58.40
	Environmental	36.89	42.24	57.76
	Hygiene	36.65	38.15	61.85
South ($N = 2,390$)	Financial	36.90	43.42	56.58
	Social	38.45	43.96	56.04
	Environmental	34.90	46.04	53.96
	Hygiene	36.28	40.14	59.86
Islands ($N = 1,145$)	Financial	37.29	43.33	56.67
	Social	36.59	42.96	57.04
	Environmental	35.28	42.82	57.18
	Hygiene	35.20	40.94	59.06

Note: Proportion of respondents for each macro-region whose answers on the second-order self-image items did not match their self-image scores for the determinant (“Misalignment”). Columns “Below” and “Above” indicate the proportion of misaligned respondents whose self-image is, respectively, lower or higher than their second-order self-image.

Table B.24: Misalignment between first-order and second-order self-image on adoption

	(1)	(2)	(3)
Financial below	−0.063*** (0.024)	−0.058** (0.024)	−0.063*** (0.024)
Financial above	0.018 (0.023)	0.023 (0.023)	0.038* (0.022)
Social below	−0.061** (0.024)	−0.069*** (0.024)	−0.066*** (0.023)
Social above	0.067*** (0.023)	0.060*** (0.023)	0.018 (0.022)
Environmental below	−0.122*** (0.025)	−0.117*** (0.024)	−0.087*** (0.024)
Environmental above	−0.046** (0.022)	−0.041* (0.022)	−0.030 (0.021)
Disgust below	−0.204*** (0.026)	−0.201*** (0.026)	−0.134*** (0.025)
Disgust above	0.172*** (0.023)	0.174*** (0.023)	0.113*** (0.022)
Excellent condition		0.109*** (0.020)	0.113*** (0.019)
Good condition		0.111*** (0.021)	0.090*** (0.021)
Free		0.222*** (0.016)	0.241*** (0.015)
Smartphone		0.165*** (0.023)	0.127*** (0.022)
Fridge		0.114*** (0.023)	0.191*** (0.023)
Closet		0.175*** (0.023)	0.181*** (0.022)
Age			−0.003*** (0.001)
Man			0.080*** (0.016)
Need for Uniqueness			−0.029*** (0.011)
Pro-Environmental Behavior			0.110*** (0.012)
Don't know/Prefer not to answer			−0.037 (0.025)
Less than €1,000			0.021 (0.043)
From €1,000 to €1,500			0.015 (0.029)
From €1,500 to €2,000			−0.014 (0.025)

From €3,000 to €5,000			−0.027 (0.024)
From €5,000 to €10,000			−0.091** (0.038)
Over €10,000			−0.087* (0.049)
Middle School (or lower)			0.026 (0.030)
University			−0.056*** (0.018)
PhD			−0.136*** (0.039)
Worker (blue collar)			0.015 (0.031)
Self-employed			−0.057** (0.027)
Student			−0.032 (0.036)
Homemaker			−0.047 (0.032)
Retired			−0.071** (0.029)
Looking for a job			−0.076** (0.037)
Other employment status			−0.048 (0.064)
Yes, I have already purchased them			0.835*** (0.021)
Yes, but I have never purchased them			0.672*** (0.020)
Yes, but I would not repurchase them			0.461*** (0.029)
North-East			0.086*** (0.023)
Central			0.127*** (0.023)
South			0.073*** (0.022)
Islands			0.043 (0.027)
Constant	0.245*** (0.012)	−0.073*** (0.025)	−0.723*** (0.070)
Observations	10,496	10,496	10,496

Note: Fractional probit regression estimation. Dependent variable. *Probability of taking the second-hand product*: variable ranging between 0 and 1. Regressors. *Financial above/below*; *Environmental above/below*; *Social above/below*; *Disgust above/below*: dummy variables equal to 1 when the self-image score on the dimension is, respec-

tively, above/below the second-order self-image score; the reference category is self-image equal to second-order self-image (alignment). *Excellent condition* and *Good condition*: dummy variables equal to 1 if the condition is the one described, 0 otherwise. Baseline: *Acceptable condition*. *Free*: dummy variable equal to 1 if the product can be taken for free, 0 otherwise. Baseline: *Affordable price*. *Smartphone*, *Refrigerator*, *Closet*: dummy variables equal to 1 if the product belongs to that category, 0 otherwise. Baseline: *T-shirt*. *Age* is measured in years. *Man* is a dummy variable equal to 1 if the respondent reported being a man and 0 otherwise. *Income* categories are measured relative to the omitted category *From €2,000 to €3,000*; *Education* categories relative to *High school*; *Employment* status categories relative to *White-collar worker*; second-hand experience categories relative to respondents who would never buy second-hand products; and macro-regions relative to *North-West*. Standard errors clustered at the individual level are reported in parentheses. Significance of coefficients: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

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