Slow fashion or self-signaling? Sustainability in the fashion industry

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ABSTRACT

There has been a noteworthy rise in sustainability awareness in the fashion industry. However, the motivation to adopt such behaviors is unclear, making it relevant to consider which identity self-signals influences consumers' perceptions towards slow fashion. Findings from two experimental studies suggest that consumers hold a higher word of mouth (WOM) and status perceptions when non-conformity, pro-environmental, and frugality signals are highlighted. This research further shows the importance of increasing ownership through customization, which increases status. The findings provide key implications for researchers and practitioners regarding fashion industry sustainability.

1. Introduction

The fashion industry is one of the major industries contributing to environmental degradation, due to fast fashion practices and cheaply manufactured clothing (Grazzini et al., 2021). For instance, nearly three-quarter of fast fashion apparel ends up in landfills (Legere and Kang, 2020). To uplift sustainable consumption patterns, slow fashion and thrift shopping arise as alternatives to fast fashion systems (Legere and Kang, 2020).

There is an imperative need for companies to engage in sustainable production processes as consumers are getting increasingly aware of environmental issues (Blasi et al., 2020). Accordingly, consumers obtain moral satisfaction by adapting their purchasing behaviors, from reducing waste and extending the clothing lifecycle (Lo et al., 2019). Thus, companies with the ability to adapt to consumers' sustainability demands are more likely to succeed in the long term (White et al., 2019).

However, there are still many barriers to sustainable fashion, as fast fashion is still popular among consumers (Peters et al., 2021). In particular interest to this research, fashion is directly connected with the urge to express a self-concept (e.g., a trendy self-image), whereas slow fashion is mostly connected with the idea of moral identity. Yet,

research does not provide a clear picture of other self-signaling reasons induced by slow fashion, such as self-signaling and status.

Although sustainable products are gaining more followers and are associated with status (Bellezza et al., 2016), research shows that sustainable fashion products can lead to a lack of ownership (Loussaïef et al., 2019). Extant research fails to capture how slow fashion helps to reinforce consumers' identity and how ownership influences this relationship. Thus, the present study aims to assess which self-signaling motives underlie slow fashion consumption, and how this is associated with altruism or self-interest to signal their identities (Grewal et al., 2019).

By doing so, this research makes at least three contributions to the sustainable consumption literature and practice. We extend the literature by examining a novel intersection between four substantive areas — slow fashion, self-signaling, ownership, and status. Specifically, in two experimental studies, we provide evidence that slow fashion activates self-signaling associated with nonconformity, pro-environmental and frugal identities. In Study 1, we extend the understanding of what stands behind consumers' choice for slow fashion by introducing self-signaling (i.e., non-conformity and pro-environmental) as a process for our main effect. As consumption enables consumers to communicate about themselves (Grewal et al., 2019), this research reveals how consumers' self-signaling increases word of mouth (WOM) (Study 1).

In Study 2, we provide evidence that slow fashion increases status perceptions, reinforcing previous studies on sustainability (Amatulli et al., 2020). We add to the literature by providing evidence that

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symbolic signals (i.e., frugal) induced by slow fashion practices, elevate strong status perceptions. Further, when evidencing ownership, higher frugality self-signaling is activated, increasing people's status perceptions.

Our prepositions are based on the assumptions that fast fashion is a liquid form of consumption as the product cycle is short, following the seasonal fashion trends (Bardhi et al., 2020). This raises questions about where consumer value resides in the cycle of consumption. In a society in transition, movements such as slow fashion are an attempt to seek the dislocation of liquidity, as it provides pieces with a longer life cycle. In this sense, this research presents a new relationship of ownership with slow fashion and status, as our results show that frugality self-signaling increase status with the moderation of ownership.

The feeling of ownership is an important strategy for the slow fashion area as it increases positive emotions and reinforces consumers' self-signaling. For fast fashion the ownership phenomenon is not considered essential by consumers, since it provides clothes at affordable prices, capturing trends more immediately, and can be quickly discarded (Lamberton and Goldsmith, 2020). However, for slow fashion, ownership can diminish consumers' beliefs of "negative contamination" existent on sharing and second-hand products (Loussaïef et al., 2019). In sum, we add to the fashion and sustainability literature by showing that consumers' sense of ownership can increase self-signaling motives and status perception.

The reminders of this research are as follows. First, we initiate by discussing our main concepts of self-signaling, ownership, and status. Second, we show our methodology and experimental results. Further, we discuss our theoretical and managerial contributions. Finally, we conclude by exposing proposals for future research intended to inspire the development of cumulative knowledge of sustainable fashion literature.

2. Literature review and hypothesis development

We first conducted a literature review to identify empirical studies examining the constructs of self-signaling ownership and sustainable consumption. We found 26 empirical studies, three papers that connected sustainability with self-signaling, none integrating the three theoretical axes (see Table S1 of the Supplementary material). Thus, previous studies have failed to examine the joint effects of self-signaling on sustainability with the influence of ownership. In the previous sessions, we discuss our main theoretical axes of self-signaling and slow fashion; WOM, status motives, and ownership.

2.1. Self-signaling and the adoption of slow fashion

As a response to the fast economy and its harm to the environment, several movements against this system have emerged intending to uplift sustainable production and consumption patterns. The first movement in this direction, Slow Food, was coined in Italy and focused on sustainable and local food. Following this example, several U.K designers have claimed to slow down the fashion cycle from the fast production and fast consumption loop to increase sustainability. In this way, the slow fashion movement, first coined by Kate Fletcher, promotes diversity, prioritizes local producers, practices fair trade, and maintains its production between small and medium scales (Jung and Jin, 2014).

Many slow fashion companies reuse materials from old clothing, such as the case of the Brazilian fashion brand *Insecta Shoes*, which produces shoes with recyclable materials. However, it is important to note that not all slow fashion companies incorporate material recycling in their production. In this way, slow fashion differs from fast fashion by producing timeless pieces of clothing, which are not highly influenced by seasonal fashion trends (Fletcher, 2010). Consequently, the price is generally higher as it covers social and environmental costs, as well as the use of high-quality materials, such as organic cotton.

As consumers often purchase products to benefit from symbolic values that can contribute to their ideal, social, or personal identity (Grewal et al., 2019), self-signaling is a central concept for the understanding of slow fashion endorsement and to our framework. Self-signaling is conceptualized here as the motivation that people must signal a specific quality, ability, and self-concept towards actions such as consumption (Dhar and Wertenbroch, 2012). This signaling can be to themselves or for society. Thus, signaling allows people to spread information about themselves without overtly stating that information to others (Bennett and Chakravarti, 2009).

Based on self-signaling theory, we suggest that the decision to embrace slow fashion, rather than fast fashion, is primarily associated with a positive self-signaling of non-conformity, pro-environmental, and frugality. We base this assumption revealing an underlying disposition that an individual is responsible and morally good instead of selfish and careless (Dixon and Mikolon, 2020). Primary support for this assertion comes from a growing body of sustainability research that points to consumers' identity associations with products and the relation of sustainability purchase as a manner to nourish an identity (Costa Pinto et al., 2014).

That said, we predict that Slow Fashion fosters strong feelings of symbolic signals, meaning that consumers, by adopting a sustainable fashion, feel that they are doing something that others do not and that they are caring about the environment. The more individuals are altruistically oriented, the more they are self-determined, therefore with higher intentions to act pro-environmentally (Groot and Steg, 2010). Especially amid the COVID-19 pandemic, consumers are becoming even more aware regarding the benefits of sustainable fashion (Vătămănescu et al., 2021).

Based on this, we investigate the connection between adopting sustainable fashion behavior and symbolic signals. Specifically, we hypothesize that the strength of symbolic signals is magnified with individuals' association to Slow Fashion when compared to Fast Fashion. More formally, we predict that:

H1. Individuals' association with Slow Fashion increases the strength of symbolic signals, compared to Fast Fashion.

Next, we focus on two key consequences of self-signaling by the endorsement of slow fashion products. Those downstream consequences relate to the social identity in order to enrich our analysis regarding consumers' reasons to use and support slow fashion. In this sense, we theorize that consumers are likely to endorse slow fashion products to socially express their self-signaling reasons, increasing status, and WOM.

2.2. Word-of-mouth and status motives

Consumers' choices signal something about their character and personality to themselves or are used to affirm a self-identity (Dhar and Wertenbroch, 2012; Townsend and Sood, 2015). As consumption is a social act, which affords individuals the ability to express their identity (Gardner et al., 2004), we believe the endorsement of slow fashion increases status and WOM by the process of self-signaling.

While sustainability seems like an altruistic behavior, previous studies reveal self-signaling reasons behind actions towards a common good (Savary and Goldsmith, 2020), as self-interest is the main motivational force central to human behavior (Khan et al., 2020). Even though people can live in cooperation, their primary reasons can be egoistic or self-serving (White and Peloza, 2009). Thus, social signaling is an urge to signal people's qualities and abilities to receive benefits in return (Griskevicius et al., 2007). In such cases, consumers can approach sustainability not properly based on benefits to the environment, but for social identity construction. This is explained as self-interest is considered the main motivational force to human behavior (Khan et al., 2020). Thus, even though people can end up helping others, their primary reasons can be egoistic or self-serving (White and Peloza, 2009).

With sustainability becoming mainstream, it is vital to understand which self-signaling reasons behind slow fashion consumption are associated with altruistic or self-interest motives. For this mean, we predict that self-signaling of pro-environmental, frugality, and non-conformity is related to a positive WOM and status. This can be potentialized as in a technology-connected world individuals increasingly seek to show their identity online, as "consumption is a social act, which affords individuals the ability to express their identity" (Johnson and Chattaraman, 2018, p. 2). Further, consumers call on WOM to learn about product quality and its features (Joshi and Musalem, 2021).

Regarding status, previous research demonstrates the connection of status with initiatives in favor of sustainability, as environmental consciousness, has become a new symbol of status (Amatulli et al., 2020). This is reinforced by the idea that status works as a means of social affirmation (Bellezza et al., 2016) which leads to acquiring products to enhance individuals' characteristics among the society. Additionally, engaging in altruistic gestures contributes to enhancing one's reputation, since they can signal to an audience that can afford extra costs of a sustainable product (Aspara and Wittkowski, 2018). Further, as slow fashion provides pieces with a longer life cycle than fast fashion, we posit that this category holds particular importance for consumers' identity signaling. Thus, we analyze if the self-signaling associated with slow fashion is mere for personal identity or also for the endorsement of social identity. More formally, we propose that:

H2. Symbolic signals mediate the relation between Slow Fashion (vs. Fast Fashion) and both (a) WOM and (b) status motives.

H3. Symbolic signals induced by Slow Fashion practices, elevate both (a) positive WOM and (b) strong status motives.

Our model also anticipates that strong symbolic signals induced by slow fashion can result in higher status perception since people use their possessions to influence how others view them (Pierce et al., 2003). Thus, the next session conceptualizes the moderation role of ownership for our framework.

2.3. The role of ownership on slow fashion consumption

Product ownership has been associated with status symbols (Bellezza et al., 2016) and encloses strong psychological and behavioral effects (Morewedge et al., 2020; Pierce et al., 2003). Due to the rapid growth of technological innovations, society is facing a consumption evolution, in which individuals are shifting from legal ownership of goods to temporary access to goods and services owned and used by others (Morewedge et al., 2020). Thus, a growing number of consumers are keen on using rental clothing services, being captivated by non-ownership consumption (Shrivastava et al., 2021). However, contamination worries are relevant for consumers especially because of the COVID-19 pandemic. Consumers' assumption that slow fashion relates to reuse can reduce the benefits of this fashion segment. Thus, with this current increase in sharing economies, such as clothing rental and thrift shops, we seek to analyze how slow fashion perceptions (i.e., status) shift when consumers perceive higher ownership for their slow fashion pieces.

Ownership construct is a relevant concept to our framework as consumers can have a halo effect by perceiving all sustainable fashion products as being from others. However, this belief needs to be revised as, mainly for slow fashion brands, there must be a bond between the piece and the consumer capable of preventing early disposal (Watson and Yan, 2013). As previous research had shown that consumers can increase ownership by customizing products (Jami et al., 2020), we examine that ownership has direct implications on how consumers perceive Slow Fashion. For instance, in comparison with slow fashion, on fast fashion, the ownership phenomenon is associated with fewer consumer bonds as products are quickly discarded (Lamberton and Goldsmith,

2020). Further, the sustainable practice of clothing renting, differently from slow fashion, has shown to not be associated with materialism (Lang and Armstrong, 2018).

We assert that the feeling of ownership increases positive emotions and self-signaling. That is, increasing ownership of slow fashion clothes will reinforce consumers' self-signaling as the exclusive pieces correlate strongly to personal identity. Our research is in line with previous studies that show that ownership generates greater satisfaction and happiness (Belk, 1985). As slow fashion consumers make purchases based on sustainability and the desire to obtain exclusive and atemporal products (Jung and Jin, 2014), consumers see quality over quantity, which potentially expresses a frugal way of consumption.

Thus, slow fashion differs from this type of sustainable consumption, and we show that the emphasis on ownership reinforces feelings of self-signaling, which reinforces and re-signifies status for the fashion world. Thus, slow fashion relation with ownership is considered as important and unique, which can diminish the gap between attitudes and behavior.

Previous research shows that ownership can increase status (Bellezza et al., 2016), but here we posit that for slow fashion this correlation is related to the frugality of being sustainable. That is, our moderated-mediation analysis shows that by having symbolic signaling of frugality, consumers in slow fashion increase their status. Importantly, slow fashion induces status by broking the liquid consumption on fashion. Indeed, to be frugal includes using items from brands with long-term use, which is one of the characteristics of Slow Fashion apparel.

In capitalist society status signaling is related to materialism and possession of goods, however, nowadays social status is changing. Why might this be so? A broad body of research (Lindenmeier et al., 2017) suggest that consumers can be guilty of overconsuming. With the increasing awareness of climate issues and the fashion industry warm for the environment, the frugality of quality over quantity is considered the new status.

Thus, ownership has a strong connection with the adoption of a conscious fashion behavior, once possessions have a major role in the owner's identity, to a point where they become part of their extended self (Pierce et al., 2003). Particularly, we argue that individuals' association with Slow Fashion increases the strength of symbolic signals (compared to Fast Fashion), under the moderation role of ownership. This leads to our Hypothesis 4:

H4. Ownership acts as a moderator between fashion practices (Slow Fashion vs. Fast Fashion) and symbolic signaling.

3. Research methodology

Our framework was tested by conducting two as predicted pre-registered experimental studies (Aspredicted #51654 for Study 1 and #59038 for Study 2). Experimental research is extensively used in behavioral science as a method for testing causal relationships. To validate our main hypotheses, we applied two between-factor experimental studies. That is, subjects are randomly selected from the population using Qualtrics software, and then randomly assigned to one treatment each.

We test our framework and conceptual model depicted in Fig. 1 (please also see the Supplementary material – Fig. S1) in two experimental studies. All main effect analyses were performed by using a one-way ANOVA procedure to verify the differences between groups. Mediation and Moderation analyses were made with PROCESS Macro (Hayes et al., 2017).

We posit that self-signaling, ownership, WOM, and status can help explain the primary considerations that underlie consumers' shift in behavior towards sustainable fashion. Study 1 demonstrates that
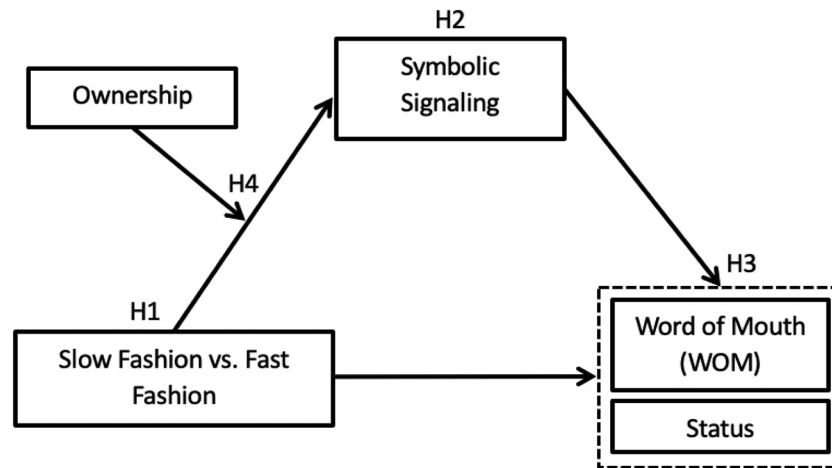
Fig. 1. Conceptual model for experimental Studies 1 and 2.

individuals that engage in Slow Fashion have stronger symbolic signal feelings than the ones embracing Fast Fashion. We further show that those symbolic signals mediate the relation between Slow Fashion practices and WOM. Study 2 tested the moderation role of ownership concerning fashion practices (Slow Fashion vs. Fast Fashion) and symbolic signaling. Finally, we delve into the relation between symbolic signals, WOM, and status motives, demonstrating that symbolic signals induced by sustainable fashion elicit positive WOM towards such causes and elevate strong status motives.

3.1. Research methodology for Study 1

Study 1 goal is twofold. First, we analyzed the main effect of Shopping in the fashion industry on WOM. Second, we show the underlying process of self-signaling. For this, we applied a one factor three level design, where respondents were randomly exposed to three different ways of shopping in the fashion industry. To compare the three types of fashion business we applied a between-subject design, where participants were only exposed to one of the three experimental groups. The first group was exposed to a Slow-Fashion scenario (stores that sell only sustainable, with conscious production processes, clothes); the second group was exposed to a Fast-Fashion scenario (regular shops that sell cheaply manufactured clothing for low prices) and the third group to Thrift Shops scenario (selling high quality, second-handed clothing). Please see Supplementary material for complete detailed questionnaire. The three groups were compared by using ANOVA statistical procedures. After manipulation, participants assessed their self-signaling reasons (Aspara and Wittkowski, 2018) and word of mouth (Fuchs et al., 2010) (see Table S2 of the Supplementary material for scenarios and measurements). We obtained a total of 177 validated responses from European students (63.8% female, $M_{age} = 39.85$, $SD = 14.47$).

3.2. Research methodology for Study 2

Study 2 was designed to manipulate ownership through the customization of a clothing item (adapted from Jami et al., 2020). Customizing an item presupposes that a self-investment was made, increasing feelings of ownership towards a product (Kirk et al., 2017). This study was based on two factors (2 × 2 study): 2 ownership (ownership vs. control) vs. 2 fashion industry (slow fashion vs. fast fashion) between-subjects design. That is, participants first were randomly distributed to one of two manipulation scenarios for fashion industry and, after were also randomly exposed to one of the ownership manipulation levels. Groups were compared by using ANOVA statistical procedures. In each

of the condition's respondents saw a text introducing them to the scenario where they should imagine they went to a Slow Fashion (vs. a Fast Fashion) store. Next, they were exposed to one of the two levels of ownership. In the ownership condition, participants were asked to imagine that they could customize one item of their choice that they would buy for themselves and were submitted to an open-ended answer task where they were asked to describe how they would feel by wearing the customized item. However, participants exposed to the control condition were told that they could customize the item to make brand's products more attractive and increase the chance that people would buy its products (not them), being asked to write what they liked or disliked about the item they customized. After manipulation, participants assessed their self-signaling motives (Aspara and Wittkowski, 2018), ownership (Fuchs et al., 2010) and status (White and Peloza, 2009) (see Table S3 of the Supplementary material for scenarios and measurements). Participants were recruited through Amazon Mechanical Turk in exchange for a monetary compensation. We obtained 214 valid answers (42.1% female, $M_{age} = 62.8$, $SD = 1.69$) from American consumers.

4. Results

The present section presents the results of our proposed framework. In both experimental studies, we conducted ANOVA statistical procedures to compare experimental groups. In addition, Study 2 includes a mediation analysis using the PROCESS SPSS macro (Model 4; Hayes, 2020). In sum, our findings suggest that consumers hold a more positive word of mouth (WOM) and higher status perceptions when nonconformity, pro-environmental, and frugality signals are highlighted.

4.1. Results for Study 1

4.1.1. Symbolic signaling

There was significant difference between our main independent variable and symbolic signaling ($F(12, 338) = 2.68$, $p = .002$, $\eta p^2 = 0.087$). This statistical relevance was noticed for the items "Nonconformity" ($F(2, 174) = 9.40$, $p = .000$, $\eta p^2 = 0.097$), where Slow Fashion and Thrift Shop ($M = 3.61$, $SD = 1.74$ and $M = 3.46$, $SD = 1.61$, respectively) scored higher than Fast Fashion ($M = 2.40$, $SD = 1.52$) and the item "Pro-Environmental" ($F(2, 174) = 11.30$, $p = .000$, $\eta p^2 = 0.115$), again with Slow Fashion and Thrift Shop scoring higher than Fast Fashion ($M = 5.21$, $SD = 1.66$; $M = 4.76$, $SD = 1.83$ and $M = 3.58$, $SD = 2.24$ respectively). Thereby, a One-Way ANOVA was performed to analyze the behavior of the mentioned items together with the established

conditions. There is significant difference on these items somewhere between the three conditions $F (2,174) = 14.17$, $p = .000$. The Post-Hoc Tests stress the fact that there is a significant difference between Slow Fashion and Fast Fashion conditions considering that $p = .000$ and, in fact, Slow Fashion scored higher than Fast Fashion ($M = 4.41$, $SD = 1.50$ and $M = 2.99$, $SD = 1.51$ respectively). It also lays emphasis on the significant difference between Fast Fashion and Thrift Shop conditions, once $p = .000$ with Thrift Shop ($M = 4.11$, $SD = 1.53$) scoring higher than Fast Fashion ($M = 2.99$, $SD = 1.51$). In addition, Smartness was also significant ($F (2, 174) = 3.67$, $p = .028$, $\eta p^2 = 0.040$), scoring higher for Thrift Shop ($M = 4.07$, $SD = 1.87$) than Fast Fashion ($M = 3.25$, $SD = 1.87$).

4.1.2. Word of mouth

One-Way ANOVA was conducted and confirmed our predictions regarding the impact of Fashion type on WOM ($F (2,174) = 4.98$, $p = .008$). According to the Post-Hoc Tests there was a statistical relevance between Slow Fashion and Fast Fashion conditions ($p = .009$). In fact, Slow Fashion scored higher than Fast Fashion ($M = 4.83$, $SD = 1.54$ and $M = 3.93$, $SD = 1.86$, respectively). There was also significant difference between Fast Fashion and Thrift Shop ($p = .047$) with Thrift Shop ($M = 4.65$, $SD = 1.47$) scoring higher than Fast Fashion ($M = 3.93$, $SD = 1.86$).

4.1.3. Symbolic signaling mediation

A mediation analysis was performed using the PROCESS SPSS macro (Model 4; Hayes, 2020) where, as suggested by Hayes (2020), if zero falls outside the 95% confidence interval (CI), the indirect effect is significant, therefore providing a successful mediation. This analysis followed a bootstrapping procedure that generated a sample size of 5000 to examine the mediation role of the combined variable symbolic signaling. A 95% bootstrap confidence interval for the indirect effect of interaction between the combined conditions Slow Fashion & Thrift Shop, versus Fast Fashion, and WOM through symbolic signaling was significant (indirect effect = -0.72; 95% CI [-1.06, -0.41]; see Fig. 2 – please also see the Supplementary material, Fig. S2), therefore providing support for Hypothesis 2(a). In addition, Hypothesis 1 predicted that individuals' association with Slow Fashion & Thrift Shop increases the strength of symbolic signals (compared to Fast Fashion), which was validated with this analysis (b = -1.27, SE = 0.24, $p < .001$). Finally, corroborating Hypothesis 3(a), symbolic signals induced by Slow Fashion practices, elevate WOM (b = 0.56, SE = 0.07, p < .001). The bootstrapping analysis showed that the conditional direct effect of Slow Fashion & Thrift Shop, versus Fast Fashion, together on WOM was not significantly mediated by symbolic signaling (b = -0.10, SE = 0.24, p = .69).

4.2. Results for Study 2

Regarding the open-ended question answers we considered only answers composed of at least one well-written relevant word, expressing a valid opinion (see Table S4 of the Supplementary material). There were several key words common in each condition: comfort, fit, style, proud, uniqueness, quality, price, colors, fashion. In the Slow Fashion and Ownership conditions, there were considerable answers about how good it would be to own the customized item (e.g.: "I would enjoy owning something that shows who I am") and about the sustainable strand of it, such as "Thinking about sustainability means thinking about your family, your neighbor and yourself". About the Slow Fashion and Control conditions, there were statements about the fabric of the customizable item (e.g.: "I wonder if the functionality/durability will be there if the focus is customization") and, once again, concerning sustainability: "I would like that they were all sustainable clothing options". Concerning the Fast Fashion and Ownership conditions, the majority of respondents mentioned: the feeling of ownership towards the item (e.g.: "Like it was mine, a different kind of ownership"); statement when wearing the item (e.g.: "I can show who I am" and "I feel this expresses me"); and other feelings: "I would feel ordinary and regular" and "I would feel cheap/basic". Finally, on the Fast Fashion and Control conditions, there were verdicts about the price (e.g.: "I liked the price"), durability of the fabrics (e.g.: "Fabrics seemed non-durable"), quality (e.g.: "Poor quality") and sustainability: "Didn't like that it was not environmentally friendly".

4.2.1. Symbolic signaling

After computing the symbolic signaling construct items in a new dependent variable, there was significant difference between the conditions (Slow Fashion & Fast Fashion vs. Ownership & Control) when considered jointly on the symbolic signaling variable ($F (1,215) = 5.17$, $p = .024$, $\eta p^2 = 0.023$). The item "Frugal" was the lowest on the Slow Fashion and Ownership conditions ($M = 3.88$, $SD = 1.84$) – the only statistical relevant item on the Multivariate analysis that comprehends the whole construct ($p = .012$) – which means that respondents consider that customizing an item that would posteriorly be bought by them in a Slow Fashion store is something that would make them look like they live simply and economically. Indeed, to be frugal includes using items from brands with long term use, which is one of the characteristics of Slow Fashion apparel.

4.2.2. Status

Finally, status items combined with age as a control variable, was statistically significant ($F (1,214) = 5.05$, $p = .026$, $\eta p^2 = 0.023$). The adoption of certain behavior (for example embracing Slow Fashion)
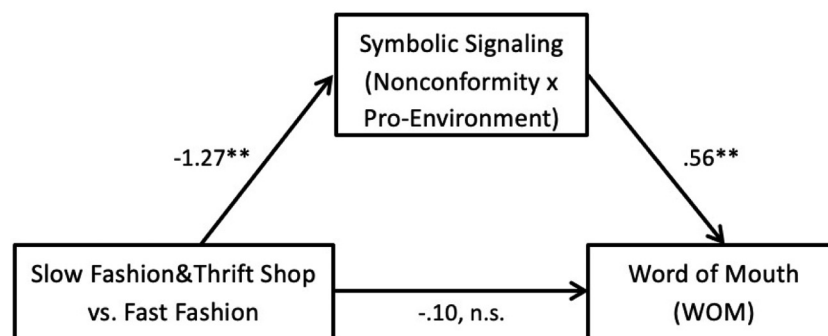
Note: *p<.05; **p<.001, n.s. = not significant

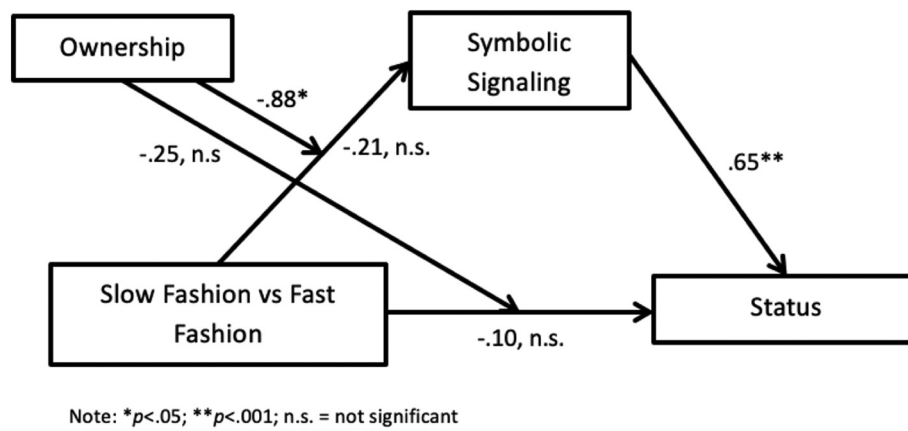**Fig. 2.** Mediation analysis model for experimental Study 1.

Fig. 3. Moderated mediation analysis for Study 2.

can be influenced by status motives, people seem to adopt those behaviors because they care about how positively others view them. Slow Fashion and Control conditions were higher ($M = 5.30$, $SD = 1.23$) than the Fast Fashion and Control conditions ($M = 4.66$, $SD = 1.39$).

A moderated mediation analysis was conducted using PROCESS SPSS macro (Model 8; Hayes, 2020). If zero falls outside the 95% confidence interval (CI), the indirect effect is significant, therefore providing a successful moderated mediation. In this analysis we used 5000 bootstrapped samples, to examine the moderated mediation role of the variable ownership (ownership versus control conditions) and the combined variable symbolic signaling, with age as a covariance variable. A 95% bootstrap confidence interval for the moderated indirect effect of interaction between the combined conditions Slow Fashion versus Fast Fashion and status was statistically significant (indirect effect $= -0.57$; 95% CI [-1.06, -0.13]; see Fig. 3 – please also see the Supplementary material, Fig. S3). The interaction term was also significant ($p = .012$), indicating that the direct effect of the type of fashion (Slow vs Fast) on the combined variable symbolic signaling was moderated by ownership. The moderated mediation analysis got us to the conclusion that symbolic signals induced by Slow Fashion practices, elevate strong status motives ($b = 0.65$, $SE = 0.06$, $p < .001$). The bootstrapping analysis showed that the conditional direct effect of Slow Fashion versus Fast Fashion together on status motives was not significantly mediated (n.s.) by symbolic signaling ($b = -0.10$, $SE = 0.15$, $p = .480$).

5. Discussion

The present research sheds light on the role of slow fashion in influencing consumers' self-signaling. Across two experiments, we examined how slow fashion prompts self-singling associated with non-conformity, pro-environmental and frugal identities.

This section includes the discussion for Study 1 and Study 2. Further, we present our theoretical contributions and managerial implications. Finally, we present the research limitation and an agenda for future research.

5.1. Discussion for Study 1

Results of Study 1 proposed that participants have positive WOM towards Slow Fashion and Thrift Shop, but, at the same time, low purchase intentions. There was a strong positive correlation between the variables "Nonconformity" and "Pro-Environmental", from symbolic signaling construct. Individuals consider that by choosing sustainable ways of shopping for fashion items, they are doing something that other people do not do (Nonconformity) and caring for the environment at the same time (Pro-Environmental), providing support for Hypothesis 1. Also, items from this construct mediate the relationship between the

condition (Slow Fashion & Thrift Shop vs. Fast Fashion) and WOM in this model – validating Hypothesis 2(a). The more they have those pro-environmental and nonconformity feelings, the higher their intentions of sharing positive WOM regarding Slow Fashion and Thrift Shop items will be, hence corroborating Hypothesis 3(a). This analysis adds to Jacobs et al. (2018), as they demonstrate that attitude is a key antecedent of behavior in what respects sustainable clothing, along with the fact that it is essential to place high importance on positive attitudes towards social ecological clothing standards, also including the altruistic values of sustainable clothing buyers. In Study 2 we further examine the moderating role of ownership to deepen the relation between fashion practices and the dependent variable.

5.2. Discussion for Study 2

Results from Study 2 provide support for the hypothesis that symbolic signals induced by Slow Fashion practices elevate strong status motives (Hypothesis 3b), meaning that individuals use products for status signaling. Individuals' association with Slow Fashion increases the strength of symbolic signals (compared to Fast Fashion), under the moderation role of ownership, as predicted, therefore corroborating Hypothesis 4. Specifically, our moderated-mediation analysis shows that by having symbolic signaling of frugality, consumers in slow fashion increase their status. Importantly, slow fashion induces status by broking the liquid consumption on fashion. Indeed, to be frugal includes using items from brands with long-term use, which is one of the characteristics of Slow Fashion apparel.

Accordingly, respondents exposed to the ownership condition opened-ended question, manifested about how amazing it would feel to own the customized item, where this feeling increased when we were referring to a sustainable item. The same feeling of ownership happened for the Fast Fashion condition, but participants also reported that they would feel "regular" and "cheap" owning the item.

In the following sections, we discuss our theoretical and managerial contributions and present the limitations and possible future research directions.

5.3. Theoretical contributions

Fashion helps consumers to express their self-concept; however, previous studies failed in establishing which concepts connected with consumers' identity can be activated by slow fashion purchases. Two experimental studies suggest that slow fashion increases self-singling associated with nonconformity, pro-environmental and frugal identities.

In Study 1, we extend the understanding of what stands behind consumers' choice for slow fashion by introducing self-signaling (i.e., nonconformity and pro-environmental) as a process for our main effect.

Thus, self-signaling reasons are the process which Slow fashion (vs. thrift shop and fast fashion) impacts WOM. That occurs because individuals consider that by consuming slow fashion, they are doing something that other people do not do (i.e., Nonconformity) and caring for the environment at the same time (i.e., Pro-Environmental). Further, the more people feel symbolic signaling reasons, the higher their willingness to share positive WOM about sustainable fashion products. This adds to the existing literature since WOM arises when individuals have strong feelings towards a particular experience and can motivate other consumers to engage in a specific behavior (Moise et al., 2019). Previous research shows that when individuals engage in green behavior, they feel like they can signal information about themselves to an audience (Bellezza et al., 2014). Our findings add to the conceptual sense for consumers' green behavior, showing that self-signaling of non-conformity and pro-environment increases WOM.

One salient concern exposed by our first study is that individuals have positive WOM towards sustainable fashion, but, at the same time, purchase intentions were not significant. This conducts us to a preliminary conclusion where individuals engage in a false competitive altruism behavior (Khan et al., 2020), as they hold intentions to share but not necessarily to buy it. In this sense, we acknowledge that there are many barriers to sustainability in the fashion industry, such as price (Henninger et al., 2016), and this reinforces the necessity of accumulative knowledge on factors that can potentially diminish those barriers. That being said, we believe that reinforcing self-signaling reasons that are important for consumers' identity can be a way to diminish the gap between attitude and behavior.

To this end, Study 2 analyzed ownership moderation, as a mean of increasing self-signaling reasons that slow fashion can induce. As possessions are a central aspect of contemporary life (Jami et al., 2020), sustainability risk backfires if it expresses a sense of contamination (Loussaïef et al., 2019). Specifically, by being exposed to an ownership condition, where consumers made customization of their slow fashion clothes, higher frugality signaling is activated as well as higher positive emotions, when compared to fast fashion. The moderated mediation analysis from Study 2 posits that symbolic signals induced by Slow Fashion practices, elevate strong status motives.

Despite sustainability products being associated with status (Griskevicius et al., 2010), research shows that sustainable fashion products can be automatically associated with contamination and lack of ownership due to the idea of material reuse (Loussaïef et al., 2019). Thus, to the best of our knowledge, this research is the first to unveil the importance of ownership on slow fashion consumption and self-signaling.

Overall, our findings underscore the importance of reinforcing self-signaling motives and ownership in slow fashion. Frugality self-signaling induced by slow fashion increases status perception, adding to sustainability literature that associates green products as being a signal of wealth (Amatulli et al., 2020). We go further by showing a novelty relation between symbolic signals of frugality and status when activated by a slow fashion condition. Together, these insights advance our conceptual understanding of consumers' identity associations with slow fashion.

5.4. Managerial implications

As the production of sustainable products gradually becomes the norm, understanding which are the factors that impact consumers' perceptions of slow fashion gains relevance. Thus, our research benefits sustainability in the fashion industry by providing a unique lens by which companies can nudge consumers. Slow Fashion is related to symbolic signals of pro-environmentally, nonconformity, and frugality, identity factors that should be highlighted by companies. Thus, by using our results, companies could increase the importance of self-signaling motives (i.e., pro-environmentally, nonconformity, and frugality) to boost consumers' bond with slow fashion products.

For instance, marketers can promote sustainability awareness, sharing information concerning the damage of the fashion industry to the environment. Similarly, by providing production tracking, reporting how much they are saving on wasted materials and energy, and exposing their ecological footprint, marketers can nudge sustainable self-signaling motives.

Further, as Gleim et al. (2013) suggested: "consumers not only need to be told about green products and the relevant benefits but also what makes the product environmentally friendly". Thus, fashion practitioners should provide trustful information that communicates their production processes, exposing certifications (e.g., B.Company) and being transparent. Those actions are relevant, especially for consumers that don't want to conform with the mainstream of the fashion industry.

One of the potential challenges of sustainable fashion is the higher price when compared with fast fashion clothing (Wang et al., 2022). A possible manner to overcome this is to highlight ownership and status motives. For instance, the slow fashion brand, *Tricoma*, increases customization and creates a singular bond with customers and its clothing by selling pieces made of national acrylic wool, in limited productions, out of stock. The knits are numbered and made to order, designed one by one for each client. Another possible manner to emphasize ownership is by using self-signaling of non-conformity with social causes. For instance, conscious apparel companies, such as the North American brand *Older brother*, had explored the "without gender" brand concept.

With increasing awareness of climate challenges, there's a resurgence of new status concepts related to consuming ethically and sustainably. Thus, marketers can emphasize ownership by promoting customization, as shown in Study 2. This strategy can also revoke the connection of slow fashion with non-trendy clothes (Legere and Kang, 2020).

5.5. Limitations and future research

These findings offer ample directions for future work on social signaling, ownership, and slow fashion. The present research shows the importance of ownership to increase self-signaling, which raises questions about further ways to activate ownership in the conscious fashion area. For instance, future work could analyze ways to increase a possession feeling in a thrift shop context. Shopping for second-handed clothing is one of the most sustainable ways of using apparel (Shrivastava et al., 2021), thus, we recommend the analysis of which self-signaling reasons are associated with this equation.

Future work could focus on different age range from samples since this research's sample included mostly individuals from middle to older ages as sustainability is associated with a higher acquisitive power. Thus, there is a particular interest in studying this sample in terms of its size and indeed purchasing power, as it remains an under-researched segment for many areas (Riley et al., 2012).

However, we acknowledge the importance of the younger generations' analysis and sustainable purchasing habits (Vătămănescu et al., 2021). Consumers from the millennial generation are increasing their sustainable awareness and looking to reduce, or even eliminate new purchases and are mainly focused on reselling used products (Johnson and Chattaraman, 2018). Thus, future studies could develop experiments with younger consumer samples.

Comprehending liquidity in the investigation could highly enrich an extension of this work. Previous research has already proven that fashion cycles are becoming progressively shorter, thus reducing the volume of clothing production and consumption would bring numerous benefits on environmental, social, and individual levels (Burcikova, 2019). Thus, future research could explore liquidity perception and how it impacts our model.

Additionally, future studies could assess if consumers reveal feelings of guilt derived from consuming unsustainable apparel. Previous research has shown that feelings of guilt can elicit fear and shame, is

possible that these activate a repair behavior in individuals, positively affecting their intention to adopt green behaviors (Amatulli et al., 2020).

Another avenue for future research could be to examine the costly signaling theory and investigate how individuals would behave when shopping in public or in private settings (Griskevicius et al., 2010). This approach would be important to capture if consumers' desire for sustainability would increase in a public situation or not, depending on costly signals and observation by others (Bellezza et al., 2014).

6. Conclusion

Across two experimental studies, this research provides evidence that individuals are more inclined to engage in positive WOM of sustainable fashion brands when they have stronger symbolic signaling motives associated with the product. Further, we empirically show that these feelings induced by Slow Fashion impact consumers' status motives. This research addresses the gap between consumers' actual attitudes towards fashion sustainability and the reasons why they are acquiring such behaviors concerning self-signaling and status.

Overall, this research contributes to the literature on status self-signaling and WOM, by shedding light on a belief that shapes sustainable purchases. An important question that emerges with our results is the possibility to increase self-signaling as pro-environmental, frugality, and non-conformity to increase status and a positive WOM. Together, these insights advance literature and companies' understanding of not only sustainability in the fashion industry but how self-signaling, status and ownership are currently shaping green habits.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.spc.2022.03.024.

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