

# Getting Ahead of the Joneses: When Equality Increases Conspicuous Consumption among Bottom-Tier Consumers

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It is widely believed that increasing the equality of material possessions or income in a social group should lead people at the bottom of the distribution to consume less and save more. However, this prediction and its causal mechanism have never been studied experimentally. Five studies show that greater equality increases the satisfaction of those in the lowest tier of the distribution because it reduces the possession gap between what they have and what others have. However, greater equality also increases the position gains derived from status-enhancing consumption, since it allows low-tier consumers to get ahead of the higher proportion of consumers clustered in the middle tiers. As a result, greater equality reduces consumption when consumers focus on the narrower possession gap, but it increases consumption when they focus on the greater position gains (i.e., when consumption is conspicuous, social competition goals are primed, and the environment is competitive).

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**T**horstein Veblen coined the term “conspicuous consumption” to describe the acquisition and display of possessions with the intention of gaining social status (1899). It is well established that poorer households save a smaller fraction of their income than richer households (1% for households in the lowest U.S. income quintile vs. 24% for those in the highest quintile) and that people at the bottom of the income or material

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possession distribution spend more on conspicuous and inconspicuous consumption (Bloch, Rao, and Desai 2004; Duesenberry 1949; Dynan, Skinner, and Zeldes 2004; Moav and Neeman 2008). Despite evidence that low savings and high consumption, especially conspicuous consumption, are most harmful to low-income households (Bagwell and Bernheim 1996; Knell 1999), this pattern has intensified over the past 20 years because of growing income and consumption inequality (Christen and Morgan 2005; Zhu, forthcoming).

The most common explanation for why inequality decreases saving and increases consumption—especially conspicuous consumption—among the least well-off consumers is that these consumers are trying to “keep up with the Joneses” (Christen and Morgan 2005; Drèze and Nunes 2009; Frank 1985a). In essence, the argument goes that consumers at the bottom of the distribution spend a larger proportion of their budget on status-conferring consumption in order to reduce the dissatisfaction they feel with their current level of possessions due to the widening gap between what they have and what others have (Dupor and Liu 2003; Elster 1991; Solnick and Hemenway 1998). Although there is little doubt that equality and consumption are linked, at least four im-

portant issues remain unaddressed in the current literature. The first issue concerns the oft-repeated recommendation that governments increase equality by imposing measures such as progressive consumption taxes, which penalize high levels of consumption but not high levels of savings, or luxury taxes, which penalize specific status-conferring consumption such as purchases of high-end cars or boats (Becker, Murphy, and Werning 2005; Frank 1985b). While a few theoretical models have examined these ideas (Duncan and Sabirianova Peter 2008; Hopkins and Kornienko 2004), there is to date no direct experimental evidence that increasing equality does indeed increase savings and reduce consumption. Second, existing studies have looked at the effects of inequality on the overall level of consumption rather than on the consumption decisions of consumers at the bottom of the distribution, those who are most at risk if they overspend. Third, existing empirical analyses linking equality and consumption have not distinguished between conspicuous (status-related) and inconspicuous (status-neutral) consumption. Finally, prior research has relied on a simplified model of social comparisons that focuses on the role of the “possession gap” (the difference between what one person has and what other people have), and it has neglected the role of the “position gains” (the increase in social rank) provided by consumption.

The main objective of this research is to test experimentally the effects of increasing equality on the conspicuous and inconspicuous consumption of consumers at the bottom of the distribution. Consistent with prior research, which found that social comparisons are mostly made with a limited number of individuals who are highly relevant and similar to the self (Festinger 1954), we focus on the effects of equality at the level of people’s immediate social group (and not, say, at the national level) and study how spending decisions affect one’s status within this small group. Following Drèze and Nunes (2009), we define “status” as one’s relative position (or rank) in a social group, where position can be broadly construed and unobservable (e.g., in terms of income) or more narrowly construed and observable (e.g., in terms of one’s endowment with specific status-granting possessions). Because endowment is often only observed at an ordinal level (e.g., whether one owns a Coach or a Chanel bag), we measure the equality of the distribution as the relative proportion of people in the middle versus the extreme tiers. We consider that the equality of a distribution increases when, *ceteris paribus*, the number of people in the middle tiers increases while the number of people in the top tiers decreases. Equality therefore decreases when people are more uniformly distributed across all tiers because there are fewer people in the middle and more people at the extremes. Clearly, there are other ways in which the equality of a distribution may be increased. For example, taking from the rich to give to the poor increases equality by narrowing the range of the distribution and increasing the endowment of the poor. However, by maintaining a constant range and endowment for the target group, our operationalization of greater equality captures the effects of policies such as luxury taxes and progressive consumption taxes and allows us to isolate the effects of two

important mediators—possession gap and position gain—while ruling out other mechanisms.

Using these definitions we build a framework of the effect of equality on the preference for conspicuous or inconspicuous consumption over saving of people at the base of the distribution. This framework clarifies the dual effects of equality on the possession gap and the position gain provided by consumption and the way these two factors influence consumption decisions. In a series of five experiments we test our key hypothesis that increasing equality actually increases consumption when people at the bottom of the distribution care about social position, that is, when purchasing status-enhancing (vs. status-neutral) products, when social competition (vs. social indifference) goals are activated, and in a competitive (vs. cooperative) social environment. In the general discussion we review the implications of these findings for consumer research on the effects of status and for the debate on the value of redistribution policies such as consumption and luxury taxes as a means of improving the welfare of those at the base of the pyramid.

## THE EFFECTS OF EQUALITY ON CONSUMPTION

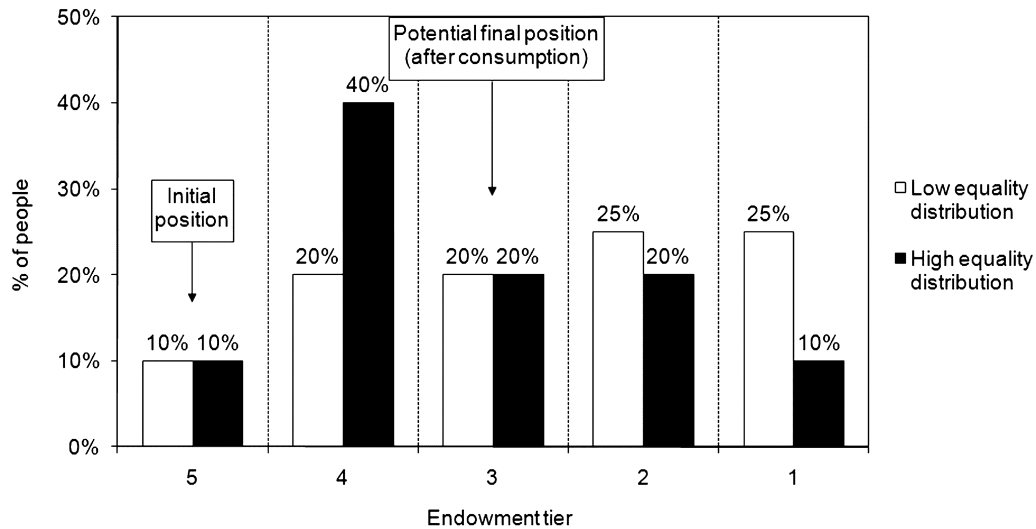
There is a large body of research in economics, social psychology, and consumer research on the effects of status and social comparisons on consumption (Amaldoss and Jain 2005; Berger and Heath 2007; Drèze and Nunes 2009; Frank 1985a; Griskevicius et al. 2007; Leclerc, Hsee, and Nunes 2005; Mandel, Petrova, and Cialdini 2006; Richins 1994; Rucker and Galinsky 2008). In this section we introduce our research question with a stylized example that allows us to explain how we implement and measure increasing equality. We then review existing studies on the role of social envy and dissatisfaction caused by possession gaps that suggest that increasing equality within a social group should reduce consumption among people at the bottom of the distribution. Finally, we present new hypotheses on the role of the social position gains provided by conspicuous consumption, which suggest the opposite.

### A Stylized Example: Effects of Equality on Consumption

Consider someone who is preparing for her 10-year high school reunion. She needs to decide whether to take her old unbranded bag or to buy a new handbag with a prestigious brand. (Note that this example could be readily applied to a masculine fashion accessory, such as a watch.) Figure 1 shows the consumer’s expectation of the proportion of other women attending the reunion who will have one of five types of bags, from tier 5 (consisting of unbranded handbags) to tier 1 (consisting of limited-edition bags from prestige luxury brands). In the low-equality distribution, people are roughly uniformly spread across all tiers (10% of the people are in tier 5, 20% in tier 4, 20% in tier 3, 25% in tier 2, and 25% in tier 1). In the high-equality distribution,

FIGURE 1

STYLIZED EXAMPLE: HIGH VERSUS LOW EQUALITY OF MATERIAL POSSESSIONS IN A SOCIAL GROUP



there are fewer people in the top tiers and more people in the middle tiers (10% of the people are in tier 5, 40% in tier 4, 20% in tier 3, 20% in tier 2, and 10% in tier 1). The high-equality distribution is more concentrated (Herfindahl H index = .26 vs. .22 for the low-equality distribution), and the concentration occurs around the middle tiers. (Note that we use the H index to measure the equality of possession distributions because, unlike the GINI index that we use for income distributions, it does not require an interval scale and can therefore be applied to ordered categorical data such as the quality and prestige of handbag brands. The H index is not a perfect measure of equality either, because it does not take into account the fact that the type of possessions can be ordered. For example, a more equal distribution with 40% of people in two adjacent middle tiers has the same H index as one with 40% of people in the top and bottom tiers. This is why our definition of greater equality requires more concentration in the middle tiers.)

The difference between low- and high-equality distributions in figure 1 mirrors the growing inequality of income distribution in the United States over the past 30 years (Nunes, Johnson, and Breene 2004). More importantly, it captures the effects of policies frequently used to increase equality, including luxury taxes (which would be applied to only the most expensive handbags) and progressive consumption taxes (which kick in at high spending levels). Both taxes reduce the number of people buying high-status bags and increase the number of people buying cheaper bags. For example, the introduction of a luxury tax on expensive boats in the United States in the 1990s reduced the demand for boats costing above \$100,000 by 93% (Hyder 1991). A similar shift would occur in the case of restrictive quotas on imports of specific high-status products (e.g., Australia's restrictive import quotas

on high-end wines and spirits), which, unlike taxes, do not directly affect product prices. Therefore, in figure 1 and in the experiments we manipulate equality by changing the shape of the distribution but not the range of prices. This allows us to focus on the effects of changes in the distribution of people across tiers while controlling for the effects of price.

Note that the range (five tiers) and the proportion of people (10%) in the fifth (bottom) tier are identical in the two distributions shown in figure 1 as well as those used in our studies. This is consistent with the effects of luxury and progressive consumption taxes, which only influence what happens in the middle and top tiers but not in the bottom tier. Keeping the range of the distribution and the percentile position of the target consumer constant is also important because it allows us to control for the well-known effects of these two factors on people's evaluation of their current level of possessions (Parducci 1965). In the general discussion we consider the effects of different redistribution policies that shrink the range of the distribution or increase the endowment of the bottom tier instead of simply changing the equality of the distribution (e.g., taking from the rich to give to the poor).

### Keeping up with the Joneses: The Effects of the Possession Gap

What predictions would existing studies make about the effects of such an equality increase on consumption? Social comparison theory argues that people have an inherent tendency to compare themselves to others in order to judge how well they are doing (Festinger 1954). Although people engage in both upward (unfavorable) and downward (favorable) comparisons, upward comparisons occur faster (Wood 1989) and

arise by default for self-evaluation purposes (Collins 1996). Unfavorable comparisons with what others have lead to envy and feelings of inferiority, which in turn motivate people with lower levels of possessions to “keep up with the Joneses” by attaining and publicly displaying the same level of possessions as those who are better off (Christen and Morgan 2005; Clark and Oswald 1998; Dupor and Liu 2003; Elster 1991; Feinberg, Krishna, and Zhang 2002; McCormick 1983). However, although envy is thought to be a key motivation for “keeping up with the Joneses,” it is a complex construct, and its effects on consumption are not completely understood (Miceli and Castelfranchi 2007; Smith and Kim 2007).

A related stream of research (Frank 1989, 2007; Hsee, Rottenstreich, and Xiao 2005) focuses on the role of satisfaction with one’s current possessions (which is different from envy) and of learning from the behavior of others (as opposed to competing with them). The key argument is that, when equality is low, people at the bottom of the distribution infer from the higher number of people with high levels of possessions that acquiring possessions will lead to greater increases in their satisfaction with their possession even if envy or competition are irrelevant to the particular product (Frank 2007). Conversely, when equality is high, people at the bottom of the distribution infer from the higher number of people in the middle tiers who own products that are not that different from theirs that upgrading would not increase their satisfaction as much. For example, owners of the basic version of computer software should be more likely to upgrade to the full version if more people own the full version because they would infer that it signals that the full version is significantly better even if this particular product is consumed privately and is neither a source of pride nor envy.

To summarize, existing research builds on the general premise that people are subject to social comparisons and focuses on the role of the possession gap between what the target consumer has and what others have. Importantly, these studies have not always specified who the others providing the reference level are, and hence they have used different measures of central tendency of the distribution (mean or median levels of possession) to measure possession gaps (Alpizar, Carlsson, and Johansson-Stenman 2005; Clark and Oswald 1998; Duesenberry 1949; Festinger 1954; Knell 1999). For our purposes, and since we are studying the impact of small groups of relevant others (e.g., neighbors, former classmates at a high school reunion), we assume that the entire distribution is relevant when making social comparisons and that it does not matter which particular measure of central tendency (mean or median) is used as long as increasing equality reduces both of them, which is the case in our stylized example and all our experiments. Returning to our stylized handbag example, figure 1 shows that the possession gap for people in the fifth (bottom) tier is narrower in the high-equality condition because the type of bag that they own is closer to the mean or median handbag in the high-equality distribution than in the low-equality distribution. Existing research would therefore predict that increasing equality should reduce the spending of lowest-tier

consumers because it reduces their possession gap and hence makes them more satisfied with their original bag and less willing to upgrade to a higher-status bag.

### Getting Ahead of the Joneses: The Effects of the Position Gains

We propose that conspicuous consumption decisions are not only influenced by the size of the possession gap but also by the status or position gain in the distribution that consumption would provide. This is consistent with Veblen’s original argument that consumption can be driven by the “desire of every one to excel every one else in the accumulation of goods [where] the end sought by accumulation is to rank high in comparison with the rest of the community in points of pecuniary strength” (1899, 39). In other words, people are not merely satisfied to be on a par with their peers by eliminating the possession gap; they take into consideration the improvement in their rank in the distribution, or position gain, that they can obtain through consumption (i.e., the return on status consumption).

Taking into account improvement in status, or position gain, rather than just the possession gap leads to markedly different predictions regarding the effects of increasing equality for bottom-tier consumers. This is because while increasing equality indeed narrows the possession gap for these consumers, it also increases the percentage of people that can be surpassed and hence the potential position gains that can be obtained through conspicuous consumption. Consider again the handbag example shown in figure 1. If a fifth- (bottom-) tier consumer decides to buy a third- (middle-) tier bag, she will get ahead of the people in tiers 5 and 4. Since tier 4 comprises 40% of the people in the high-equality distribution but only 20% of people in the low-equality distribution, the same conspicuous spending offers twice the position gain when equality is high than when it is low. More generally, conspicuous consumption provides greater position gains for low-tier consumers when equality is high (rather than low). Indeed, in the extreme case of perfect equality, even the smallest conspicuous consumption will guarantee the top status position, and hence the position gain hypothesis would predict maximum conspicuous consumption. In contrast, existing studies would predict that the motivation to consume should disappear under perfect equality when the possession gap is eliminated (McCormick 1983).

### Summary and Outline of Experiments

To summarize, we expect that increasing the equality of the endowment distribution will reduce envy and increase satisfaction among people in the lowest tier of the distribution because it narrows the gap between their level of possessions and the possessions of other people in the social group. We also expect that increasing equality will amplify the social position gains provided by conspicuous consumption for people at the bottom of the distribution. Therefore, we expect that increasing equality will reduce con-

sumption when people do not seek status but will increase consumption when people seek status.

We test these hypotheses in five experiments. In study 1, we test our key prediction about the effects of equality on envy and conspicuous spending decisions. In study 2, we directly manipulate people's focus on the possession gap or the position gain and rule out the alternative explanation that people simply want to join the majority. In study 3, we examine the effects of equality on conspicuous and inconspicuous consumption and further examine the process underlying these effects by directly measuring satisfaction and perceived position gains. We test the boundaries of the effects by looking at what happens when people are not motivated to acquire status by priming them with social competition or social indifference goals in study 4A and by manipulating the competitive or the cooperative nature of the social environment in study 4B. Studies 4A and 4B also allow us to test the effects of the equality of income distribution and not simply of the equality of the distribution of specific material possessions. All the participants were recruited near a large urban university, and so most of them, but not all, were university students. We collected demographic data in three of the five experiments (studies 2, 4A, and 4B). Across these studies, 60% of participants were women, the average age was 22, and 84% lived on less than €1,000 per month, suggesting that they could imagine how it feels to have a lower level of income or fewer expensive material possessions than others. There were no effects of gender in any of the studies in which this information was collected.

## STUDY 1: EFFECTS OF EQUALITY OF POSSESSIONS ON SOCIAL ENVY AND CONSPICUOUS CONSUMPTION

### Method

We recruited 73 people outside a large urban university campus and asked them to participate in a study about everyday decisions of home owners in exchange for a meal voucher. The participants read a neighborhood newsletter describing the efforts of a local association to improve the appearance of the neighborhood, which included a pie chart showing the number of houses in the neighborhood with flower gardens. We used this scenario because a pretest had indicated that the appearance of one's garden is a source of social status in middle-class neighborhoods.

The distribution had five tiers: no flowers, one or two flower bushes, three or four flower bushes, five or six flower bushes, and seven or more flower bushes. To manipulate equality, the pie charts showed either the low-equality distribution displayed in figure 1 (in which the proportion of houses in each tier was 10%, 20%, 20%, 25%, and 25%;  $H = .22$ ) or the high-equality distribution (respectively, 10%, 40%, 20%, 20%, and 10%;  $H = .26$ ). Increasing equality thus reduced the number of households in the highest tiers and increased the number of households in the middle tiers of the distribution. As a result, the possession

gap for people in the bottom (fifth) tier was lower in the high-equality condition (where the median possession level was in tier 4) than in the low-equality condition (where it was in tier 3). Conversely, the position gains provided by moving from tier 5 to tier 3 were larger in the high-equality condition (where upgrading enabled tier 5 people to move up in the distribution by 40 percentage points) than in the low-equality condition (where it allowed them to move up by only 20 percentage points).

Participants were then asked to rate whether, after reading the newsletter, a homeowner with no flowers in her garden (and hence in tier 5) would spend €45 on three flower bushes (and thus join tier 3) or whether she would choose to save the money (on a 9-point scale, where 1 = "definitely save" and 9 = "definitely spend"). Participants were also asked to rate how envious this person would be of her neighbors' gardens (from 1 = "not at all" to 9 = "very much"). The order of the two questions was counterbalanced across participants.

### Results and Discussion

We first conducted a pretest to verify that participants understood the impact of the distribution manipulation on the potential position gains. We asked 45 people similar to those who participated in study 1 to rate the extent to which buying the flower bushes would allow the person in the lowest tier to improve her social position (on a 9-point scale, where 1 = "not at all" and 9 = "very much"). As expected, the gain in social position, and thus in status, was rated higher in the high-equality distribution condition ( $M = 6.7$ ) than in the low-equality distribution condition ( $M = 3.7$ ;  $F(1, 43) = 17.6, p < .01$ ), indicating that the equality manipulation was successful.

To test our main predictions in the main study, we conducted two separate ANOVAs on the preference for spending over saving and on social envy with distribution equality as the between-subjects factor. The results showed that envy was significantly lower in the high-equality condition ( $M = 4.7$ ) than in the low-equality condition ( $M = 5.9$ ;  $F(1, 71) = 4.0, p < .05$ ). In contrast, and consistent with our hypothesis, the preference for conspicuous consumption over savings was significantly higher in the high-equality condition ( $M = 6.9$ ) than in the low-equality condition ( $M = 5.8$ ;  $F(1, 71) = 4.1, p < .05$ ).

The results of study 1 support our prediction that increasing equality increases conspicuous consumption among consumers in the lowest tier of the distribution even though it decreases their envy of other people's possessions. This supports our hypothesis that the distribution of possessions influences both envy and the potential position gains conferred by conspicuous consumption and that conspicuous consumption can be motivated by position gains independently of envy.

Study 1 had some limitations. First, it tested the possession gap and the position gain hypotheses indirectly by measuring two separate dependent variables, social envy and conspicuous consumption decisions. It would therefore be important to directly examine the role of the two constructs

by manipulating people's focus on either the possession gap or the position gain in each distribution condition. Second, bottom-tier consumers in study 1 were just below the largest group in the distribution (40% in tier 4), and this may have been responsible for some of the effects if, for example, people do not want to be just below the majority and if instead of getting ahead of others they simply want to join the majority. It remains to be seen whether the results would be replicated if the modal group were somewhere else in the distribution, for example, if bottom-tier consumers were already part of the modal group instead of just below it. We examine these issues in study 2.

## STUDY 2: EFFECTS OF EQUALITY, FOCUS ON POSSESSION GAP OR POSITION GAIN, AND MAJORITY GROUP LOCATION ON CONSPICUOUS CONSUMPTION

In study 2, we further tested the process behind the results of study 1. First, we directed people's attention to either the position gain or the possession gap in the distribution, which allowed us to reverse the effects of equality on conspicuous consumption decisions. Remember that increasing equality reduces the possession gap between the bottom tier and central tendency measures of the distribution, while it increases the position gains provided by conspicuous consumption. Prompting people to focus on the possession gap should therefore confirm the prediction made in previous research that spending will decrease when equality is high and the possession gap is narrow. However, prompting people to focus on the position gain should lead to a replication of the results found (without prompting) in study 1—that spending will increase when equality is high and there are greater position gains available from conspicuous consumption.

The second goal of study 2 was to test the alternative explanation that people may simply want to join the majority group. To achieve this goal, we manipulated the position of the majority group independently of the equality of the distribution by placing it either in tier 5 (bottom) or in tier 2 of the distribution. If the results of study 1 were caused by people's desire to join the majority and not by position gains, the equality manipulation in study 2 should have no effect because bottom-tier consumers are either already part of the majority group (in tier 5), and hence should not want to leave it, or would not be able to reach the majority group (when it is in tier 2) even after upgrading to a third-tier product. If, on the other hand, conspicuous spending is driven by position gains or possession gaps created by equality (which is manipulated independently of the location of the majority group), then the effects of equality should be independent of the location of the majority group.

### Method

We recruited 214 people outside a large urban university campus and asked them to participate in a study about peo-

ple's spending decisions for special occasions in exchange for a meal voucher. We used a  $2 \times 2 \times 2$  between-subjects design in which we manipulated distribution equality (low vs. high), focused on the possession gap or the position gain, and varied the location of the majority group (tier 5 vs. tier 2). The participants read a scenario in which they had to choose a wedding gift for a classmate among products specified in an online wedding registry. The registry included five tiers (personal care products priced between €20 and €59, tableware items at €60–€79, decorative items at €80–€99, home electronics at €100–€199, and furniture items at €200–€599) and allowed people to see how many items in the registry had already been bought by other wedding guests. We used different product categories, and not just different price levels, in different tiers in order to make the scenario more realistic for the participants. We also used wider price ranges at upper-tier product categories than at lower-tier product categories in order to mirror real life (log-normal) price distributions of wedding gifts. The participants were asked to imagine that they had initially decided to buy a €40 bottle of perfume—a bottom-tier product for the couple—but that, after seeing the distribution of other people's gift choices, they were considering spending an additional €50 to purchase a third-tier product (a €90 decorative vase). The scenario was therefore similar to the one used in study 1 except that in study 2 status was derived from gift giving rather than from spending money on oneself.

We manipulated distribution equality by increasing the proportion of people in tier 4 from 15% in the low-equality condition to 30% in the high-equality condition. We independently manipulated the location of the majority group (40%) by placing it in tier 5 or in tier 2. When the majority group was in tier 5, the distribution across the five tiers was 40%, 30%, 15%, 10%, and 5% in the high-equality condition ( $H = .29$ ); in the low-equality condition it was 40%, 15%, 15%, 15%, and 15% ( $H = .26$ ). When the majority group was in tier 2, the distribution was 10%, 30%, 15%, 40%, and 5% in the high-equality condition ( $H = .29$ ) and 10%, 15%, 15%, 40%, and 20% in the low-equality condition ( $H = .26$ ). The average gift (computed using the midpoint of each tier) was less expensive in the high-equality distribution than in the corresponding low-equality distribution (respectively,  $M = €86$  vs.  $M = €123$  when the majority was in tier 5 and  $M = €119$  vs.  $M = €168$  when the majority group was in tier 2). As a result, the possession gap was lower in the high-equality conditions than in the low-equality conditions.

We manipulated the participants' focus on the possession gap or the position gain by asking them to study the implications of their decision on either their rank in the distribution or the type of product that they would offer as a gift. In the position gain focus condition, we asked the participants to report what percentage of guests would have a superior or an inferior gift to their own third-tier gift. In the possession gap focus condition, we simply asked the participants to list the pros and cons of buying a fifth- and a third-tier gift. After this manipulation, the participants in-

licated their preference between both gifts on a 9-point scale anchored at 1 (€40 perfume) and 9 (€90 vase). After completing the questionnaire, the participants were debriefed, handed a meal voucher, and dismissed.

## Results and Discussion

We conducted an ANOVA on the gift preference with distribution equality (low vs. high), focus manipulation (possession gap vs. position gain), majority location (tier 5 vs. tier 2), and all interactions as fixed factors. The results revealed a significant interaction between distribution equality and the focus manipulation ( $F(1, 206) = 8.5, p < .005$ ). As predicted, and as shown in figure 2, when focusing on the position gain people were more likely to spend an additional €50 on a third-tier gift in the high-equality condition than in the low-equality condition ( $M = 5.4$  vs.  $M = 4.4$ ;  $F(1, 206) = 3.9, p < .05$ ), but the opposite results were obtained when participants focused on the possession gap ( $M = 4.3$  vs.  $M = 5.4$ ;  $F(1, 206) = 4.5, p < .05$ ). All other factors were insignificant, including the main effect of the location of the majority group ( $F(1, 206) = .2, p = .67$ ), the main effect of equality ( $F(1, 206) < .1, p = .90$ ), the main effect of focus ( $F(1, 206) < .1, p = .91$ ), the equality by location interaction ( $F(1, 206) = .3, p = .58$ ), the location by focus interaction ( $F(1, 206) < .1, p = .86$ ), and the three-way interaction ( $F(1, 206) = .4, p = .54$ ).

The results of study 2 support our hypotheses. First, we found that the possession gap and the position gain both influence conspicuous spending decisions but that unless people are prompted to focus on the possession gap, higher equality leads to higher conspicuous consumption among people at the bottom of the distribution. Conversely, when people were primed to focus on the possession gap, reducing equality increased the possession gap and therefore motivated people at the bottom of the distribution to reduce this gap by upgrading to a more expensive gift. Taken together with the results of study 1, these results suggest that equality increases spending because bottom-tier consumers spontaneously consider the position gains resulting from spending. Second, study 2 demonstrated that the effects of equality are independent of the location of the majority group in the distribution and that equality makes people want to spend more and surpass—rather than join—a larger percentage of people. When position gains were salient, for example, equality made bottom-tier consumers spend more even if that meant leaving the majority group. This suggests that it is people's desire to be better than others, and not a desire to be just like others, that drives the effect of equality on conspicuous-spending decisions.

Studies 1 and 2 both examined decisions about whether to save money or to engage in conspicuous consumption by acquiring products that conferred social status. In the following three studies, we further test our framework by varying the importance of status and hence the position gains. We do so by manipulating the degree to which the consumed products enhance status (study 3) by priming social competition or social indifference goals (study 4A) and by using

a social context that rewards either cooperation or competition (study 4B). This allows us to further test the position gain mechanism and to examine its boundary conditions.

## STUDY 3: EFFECTS OF EQUALITY ON CONSPICUOUS AND INCONSPICUOUS CONSUMPTION

The main objective of study 3 is to examine whether the effects of equality on consumption are moderated by its conspicuousness. Study 3 also allows us to test another portion of the framework—that increasing equality should increase the satisfaction of low-tier consumers with their current level of possessions (vs. the social envy in study 1) due to their smaller possession gap with others. We expect increasing equality to improve the position gains that consumption provides to low-tier consumers as well as their satisfaction with their initial level of possessions. We also expect the effects of equality enhancement on position gains and satisfaction to be similar for status-neutral and status-enhancing products. In other words, people should realize that equality makes them happier with their lot, yet it increases the position gains from consumption of any type of product. When status matters (conspicuous consumption), position gains motivate consumption decisions, and therefore increasing equality should increase spending among bottom-tier consumers, as found in studies 1 and 2. Conversely, when consumption does not enhance status (inconspicuous consumption), position gains do not matter, and consumption is driven by the possession gap and satisfaction with what one already has. Due to the smaller possession gap and greater satisfaction with what one has in the high-equality distribution, we expect that high equality should reduce inconspicuous consumption among bottom-tier consumers, consistent with the results of the possession gap focus condition of study 2.

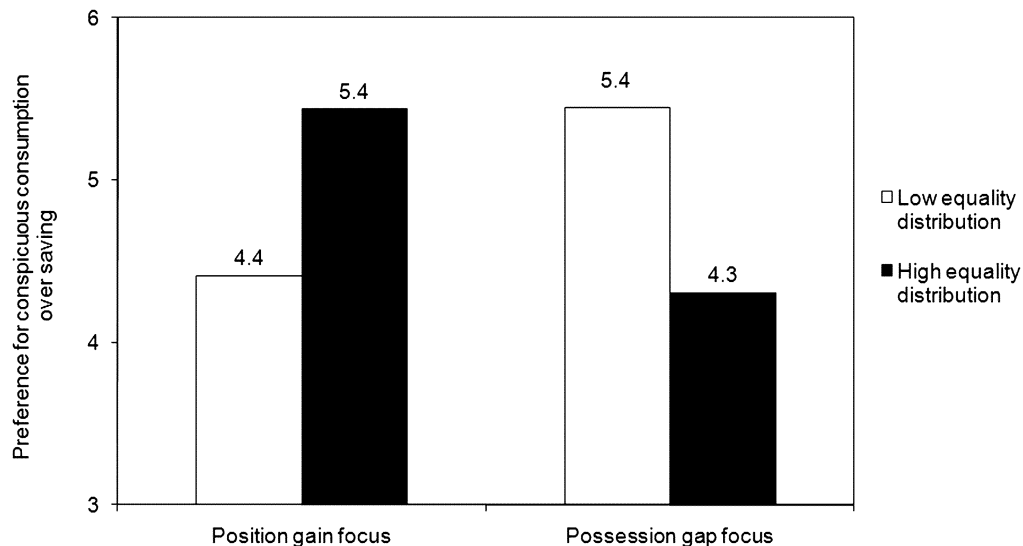
## Method

In study 3, we manipulated the distribution equality (low vs. high) and the conspicuousness of the consumption (low vs. high) between subjects with three product replications (gardens, home decoration, and clothing). We used the same procedure as in study 1 but with three different scenarios to check the robustness of the findings and to manipulate the conspicuousness of the consumption in two different ways: by using different products (flower bushes vs. pine trees in the garden scenario, the size of a TV screen vs. the size of a decorative mirror in the home decoration scenario) and by focusing on two different attributes of the same product (the brand name vs. the type of fabric of a scarf in the clothing scenario).

In the garden scenario, participants in the high-conspicuousness condition read the same information as in study 1, describing someone with no flower bushes in her garden, who, upon reading information about the number of houses in the neighborhood with flower bushes in a local newsletter,

FIGURE 2

STUDY 2: EFFECTS OF EQUALITY AND FOCUS ON POSSESSION GAP OR POSITION GAIN ON CONSPICUOUS CONSUMPTION



was considering spending €45 to buy three bushes to be planted in the front garden. Participants in the low-conspicuousness condition read a similar scenario except that it was about pine trees to be planted in the back garden. The five tiers of the distribution were the same in both conditions (zero, one or two, three or four, five or six, and seven or more flower bushes or pine trees). In a pretest, we asked 22 people to rate how much each type of plant influenced one's social status on a 9-point scale (anchored by 1 = "not at all" and 9 = "very much"). As expected, flower bushes were seen as more status enhancing than pine trees ( $M = 4.1$  vs.  $M = 3.3$ ;  $t(21) = 2.2$ ,  $p < .05$ ).

The home decoration scenario described a person who was considering improving the appearance of her living room. In the high-conspicuousness condition, she was considering replacing her 19-inch flat-screen television with a 32-inch flat-screen television. In the low-conspicuousness condition, she was considering replacing a 19-inch antique mirror with a 32-inch mirror. In both conditions, the person had been reading a magazine article that provided information about the popularity of five different sizes of televisions or mirrors (19 inches, 20–31 inches, 32–39 inches, 40–45 inches, and 46 inches and beyond). The pretest confirmed that the size of a television screen had a greater impact on social status than the size of a mirror ( $M = 5.4$  vs.  $M = 3.7$ ;  $t(21) = 2.8$ ,  $p < .01$ ).

The third scenario described a college student going on a class ski trip, who owned a hand-me-down scarf. Undecided about whether to buy a better scarf, she had observed the scarves worn by other students and estimated that there were five categories. In the low-conspicuousness condition, the four categories above hand-me-downs were ranked by

fabric quality (polyester, cotton, wool, and cashmere). In the high-conspicuousness condition, the four other categories were ranked according to the prestige of their brands (H&M, Zara, Ralph Lauren, and Chanel). In both conditions, the decision involved whether to spend €40 on a scarf in the third tier (either a cotton scarf or a Zara scarf). Although both the fabric and the brand name of a scarf were observable, the pretest showed that the brand of a scarf had a greater impact on social status than the quality of the fabric ( $M = 5.6$  vs.  $M = 4.8$ ;  $t(21) = 2.9$ ,  $p < .01$ ).

As in study 1, we manipulated the equality of the distribution across the five tiers using the distributions shown in figure 1: 10%, 40%, 20%, 20%, and 10% in the high-equality condition ( $H = .26$ ) and 10%, 20%, 20%, 25%, and 25% in the low-equality condition ( $H = .22$ ). Just like in study 1 increasing equality reduced the possession gap but increased the position gains obtained by upgrading to a tier 3 product. Participants were then asked to predict whether the bottom-tier person described in the scenario would choose to spend the money or save it (anchored from 1 = "definitely save" to 9 = "definitely spend"). They also indicated how buying the product would increase this person's position in the distribution described in the scenario (from 1 = "not at all" to 9 = "very much"). Finally, they rated how satisfied they believed this person was with her initial position in the fifth tier (from 1 = "very unsatisfied" to 9 = "very satisfied"). The order of the three questions was counterbalanced across participants.

## Results and Discussion

We begin with the analyses of the perceived position gain and satisfaction data, which allow us to check the effec-



tiveness of the manipulations. Because there were no differences across the three scenarios, we pooled the data across the three replications and obtained a total of 153 responses. For perceived position gains, only the main effect of distribution equality was statistically significant ( $F(1, 149) = 29.1, p < .01$ ), while the effects of conspicuousness and its interaction with equality were not ( $F(1, 149) = .1, p = .71$  and  $F(1, 149) = .2, p = .65$ , respectively). As expected, people realized that consumption (conspicuous or not) allowed them to get ahead of more people when equality was high ( $M = 6.2$ ) than when it was low ( $M = 3.8$ ). Similarly, only the main effect of distribution equality was significant for satisfaction ( $F(1, 149) = 10.7, p < .01$ ), and the effects of conspicuousness and its interaction with equality were not statistically significant ( $F(1, 149) = .04, p = .85$  and  $F(1, 149) = .2, p = .66$ , respectively). People indicated that the fifth-tier person would be more satisfied with her initial position when equality was high ( $M = 3.8$ ) than when it was low ( $M = 2.8$ ), regardless of the conspicuousness of the consumption.

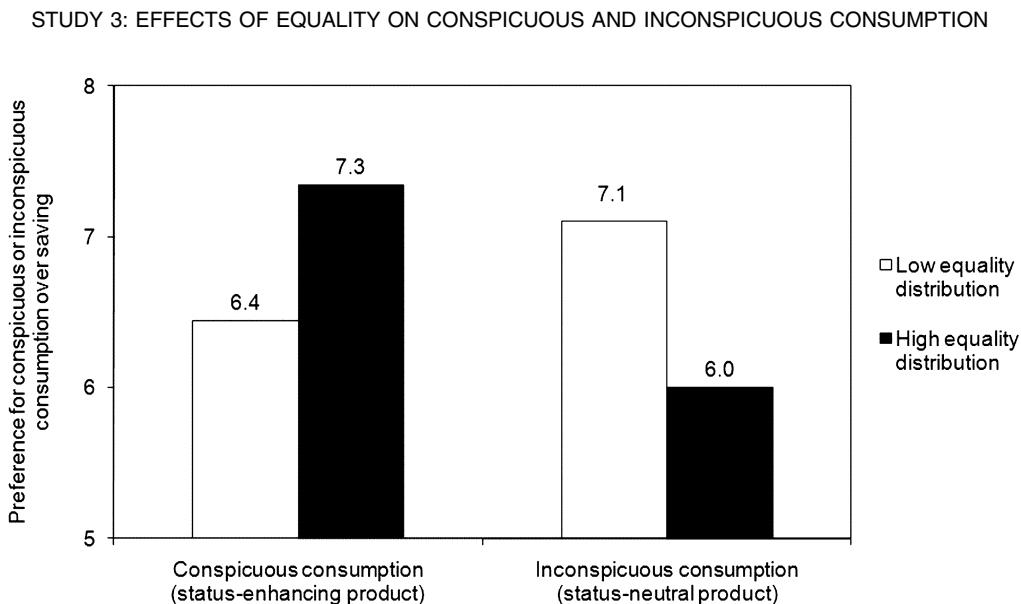
Turning now to the dependent variable, we found that, consistent with our predictions, the main effects of distribution equality and conspicuousness were not statistically significant (respectively,  $F(1, 149) = .1, p = .75$  and  $F(1, 149) = 1.1, p = .29$ ), but their interaction was significant ( $F(1, 149) = 9.4, p < .01$ ). As shown in figure 3, increasing equality boosted spending for status-enhancing products but decreased spending for status-neutral products. Contrast tests further showed that conspicuous consumption was higher in the high-equality condition ( $M = 7.3$ ) than in the low-equality condition ( $M = 6.4$ ;  $F(1, 149) = 3.8, p < .05$ ), which replicated the findings of study 1 and the result of study 2 in the position gain focus condition. For inconspicuous consumption, however,

spending was lower in the high-equality condition ( $M = 6.0$ ) than in the low-equality condition ( $M = 7.1$ ;  $F(1, 149) = 5.8, p < .05$ ), consistent with the results of the possession gap condition of study 2.

Study 3 showed that the effect of equality on the preference for spending over saving among low-tier consumers differs for conspicuous and inconspicuous consumption. First, it replicated in two new scenarios the main result—that increasing equality encourages bottom-tier consumers to spend on conspicuous consumption because it allows them to get ahead of more people. More importantly, study 3 showed that increasing equality reduces spending on inconspicuous consumption because it increases people's satisfaction with their current level of possessions. Even though buying status-neutral products provides the same improvement in position as buying status-enhancing products, position gains matter less than the possession gap for products that do not contribute to status. Study 3 therefore shows a boundary condition for the effect of increasing equality on spending versus saving decisions.

An interesting question that arises from the results of studies 1–3 is whether these results would carry over to a more general setting in which endowment is more broadly construed and less directly observable (e.g., income level vs. the size of one's TV screen). This is important because in much of the research on status and on conspicuous consumption, status is determined more broadly by people's relative wealth or income (Chao and Schor 1998; Duesenberry 1949). In addition, it is important to further test the hypothesized moderating role of the importance of status seeking found in study 3 by directly priming status-seeking goals rather than by using different product categories. Finally, studies 1–3 examined the trade-offs that people make

FIGURE 3



between consumption and savings. It remains to be seen whether the effects found in these studies also apply to trade-offs between conspicuous and inconspicuous consumption. We examine these issues in the following two studies.

### STUDIES 4A AND 4B: EFFECTS OF INCOME EQUALITY AND SOCIAL COMPETITION GOALS ON PREFERENCES FOR CONSPICUOUS VERSUS INCONSPICUOUS CONSUMPTION

In studies 4A and 4B, we manipulated the equality of income distribution to examine whether it influences the trade-offs between conspicuous and inconspicuous consumption. We also tested the moderating role of status importance in two different ways—either by priming social competition or social indifference goals (study 4A) or by varying the degree of competitiveness of the social group (study 4B). Using these two different mechanisms allows us to test the robustness of the moderating effect of status goal importance with manipulations exhibiting either a higher degree of internal validity (unconscious priming) or a higher degree of external validity (scenarios about different social groups). We expect the results to be replicated regardless of the method used to manipulate status goal importance.

Research has shown that activation of competition-related concepts leads to more competitive behavior (Kawada et al. 2004). For example, Griskevicius et al. (2007) showed that activating mating motives leads men to engage more in conspicuous consumption. Similarly, Rucker and Galinsky (2008) showed that people compensate for feelings of social powerlessness with a higher willingness to pay for status goods. Other studies have shown that people seek to overtake others and to maximize position gains more when the social group is competitive than when it is collaborative (Frank 1985b; Frank and Cook 1995). Therefore, activating social competition goals or a competitive social environment should motivate people to maximize position gains. Since choosing a status-enhancing option can help one achieve this goal more successfully when equality is high (and position gains are higher), we expect increasing equality to increase the preference for conspicuous over inconspicuous consumption when social competition goals have been activated (study 4A) or when the group is competitive (study 4B). Conversely, activating social indifference and group assimilation goals should encourage people to focus on personal satisfaction and to avoid position gains that would exacerbate differences with the rest of the group when people seek to avoid them. Because lowest-tier individuals are more satisfied with their lot and would gain larger unwanted position gains through consumption when equality is high (as demonstrated in study 3), we expect increasing equality to reduce the preference for conspicuous over inconspicuous consumption when social indifference goals have been activated (study 4A) or in a collaborative group (study 4B).

### Method

Both studies used a  $2 \times 2$  between-subjects design with the equality of the income distribution (low vs. high) and goal prime (study 4A: social competition vs. social indifference; study 4B: competitive vs. collaborative group) as fixed factors. We recruited people near a large urban university campus to fill out a questionnaire in exchange for a voucher for a movie ticket. We obtained 69 usable responses in study 4A and 70 in study 4B.

In study 4A and in the competitive scenario of study 4B, participants were asked to imagine that the human resources department of the firm at which they had been working for 3 years prepared a report on the salary distribution of people who had been hired at the same time as they had. There were nine tiers of net after-tax monthly income (less than €1,500, €1,500–€1,999, €2,000–€2,499, €2,500–€2,999, €3,000–€3,499, €3,500–€3,999, €4,000–€4,499, €4,500–€4,999, and €5,000 or more). The distribution was 5%, 15%, 35%, 15%, 10%, 5%, 5%, 5%, and 5% in the high-equality condition and 5%, 15%, 15%, 15%, 15%, 10%, 10%, 10%, and 5% in the low-equality condition. The GINI index (computed using the midpoint of each tier and €6,500 as the upper bound) was lower in the high-equality distribution (21.6%) than in the low-equality distribution (22.1%). The equality manipulation therefore reproduced the effects of a mild progressive income tax that reduced the number of people in the top income tiers and increased the number in the middle tiers. The mean and the median salaries were lower in the high-equality condition (respectively,  $M = €2,750$  and median = €2,499) than in the low-equality condition (respectively,  $M = €3,100$  and median = €2,999); hence, the possession gap was lower in the high-equality condition than in the low-equality condition.

Participants were asked to imagine that their net after-tax monthly income was €1,900, which placed them in the eighth tier (20th percentile) of the distribution, just behind 35% of people in tier 7 in the high-equality condition or behind only 15% of people in tier 7 in the low-equality condition. Participants in study 4A and in the competitive scenario of study 4B were then asked to imagine that they were planning to meet for dinner with a coworker and had to indicate their preference between a trendy new Asian restaurant with a €45 fixed-price menu (status-enhancing option) and a traditional bistro with a €15 fixed-price menu (status-neutral option) on a 9-point scale item anchored at 1 for “traditional bistro” and 9 for “trendy restaurant.” A pretest showed that the trendy Asian restaurant would have a stronger impact on social status than the bistro ( $M = 6.7$  vs.  $M = 4.2$ ;  $t(21) = 5.4$ ,  $p < .01$ ). After completing the questionnaire, the participants were debriefed, handed a voucher, and dismissed.

Status importance was manipulated before participants read the scenario with the income equality manipulation. In study 4A, participants completed a scrambled sentence task (Bargh and Chartrand 2000) presented as a verbal aptitude test. In the social competition prime condition, the participants created four five-word sentences that highlighted the importance of social competition and comparisons (e.g.,

“success is a relative concept”). In the social indifference prime condition, the sentences highlighted the importance of following one’s own preference and ignoring others’ (e.g., “true happiness comes from within”). Both conditions also included three neutral sentences. In study 4B, there was no scrambled sentence. Instead, we relied on existing research showing that people are more likely to engage in cooperative behaviors when primed with a “friend” concept than when primed with a “coworker” concept (Fitzsimons and Bargh 2003). The competitive condition therefore used the same scenario as in study 4A, describing the income distribution of coworkers. In the cooperative condition, however, the income distribution information was provided in a community newsletter and applied to friends in the community and participants were asked to imagine that they would meet for dinner with community friends.

## Results and Discussion

We first tested the effectiveness of the two status manipulations. In the first pretest, 47 people were primed with a social competition or a social indifference goal using the same scrambled sentence task as in study 4A. Afterward they engaged in a word-search task—a well-established measure of goal activation (Bargh and Chartrand 2000; Bargh et al. 2001). The word pool contained eight words related to social competition (e.g., “domination”), eight words related to indifference (e.g., “independence”), and eight neutral words. In the social competition prime condition participants found more words related to competition than to indifference ( $M = 2.8$  vs.  $M = 1.2$ ;  $t(20) = 2.2$ ,  $p < .05$ ), but the opposite was true in the social indifference prime condition, where people found more words related to indifference than to competition ( $M = 2.6$  vs.  $M = 1.7$ ;  $t(25) = 5.7$ ,  $p < .01$ ). In the second pretest, we asked 53 participants how important they felt it was to “do better than others” or to “assimilate to others” when these others are coworkers versus community friends (1 = “not at all” and 9 = “very much”). The results showed that it was more important to do better than others among rivals ( $M = 5.5$ ) than among friends ( $M = 3.6$ ,  $t(52) = 6.2$ ,  $p < .001$ ) but that it was more important to assimilate to others among friends ( $M = 7.6$ ) than among rivals ( $M = 3.7$ ;  $t(52) = 9.8$ ,  $p < .001$ ).

To analyze the effects on the dependent variable in study 4A, we conducted an ANOVA with income equality (low vs. high), goal prime (social competition vs. social indifference), and their interaction as fixed factors. The two main effects were not significant ( $F(1, 65) = .3$ ,  $p = .62$  for equality and  $F(1, 65) = 2.8$ ,  $p = .10$  for goal), but their interaction was statistically significant ( $F(1, 65) = 11.3$ ,  $p < .01$ ). As shown in figure 4A, in the social competition prime condition people were more likely to choose the status-enhancing trendy restaurant when equality was high ( $M = 6.0$ ) than when it was low ( $M = 4.4$ ;  $F(1, 65) = 4.2$ ,  $p < .05$ ). The opposite was observed in the social indifference prime condition: people were less likely to choose

the trendy restaurant when equality was high ( $M = 3.1$ ) than when it was low ( $M = 5.3$ ;  $F(1, 65) = 7.3$ ,  $p < .01$ ).

We used the same procedure to analyze the data from study 4B and conducted an ANOVA with income equality (low vs. high), social context (competitive vs. cooperative), and their interaction as fixed factors. As in study 4A, the two main effects were not significant ( $F(1, 66) < .1$ ,  $p = .98$  for income equality and  $F(1, 66) = .9$ ,  $p = .36$  for group competitiveness), but their interaction was statistically significant ( $F(1, 66) = 8.5$ ,  $p < .01$ ). As predicted and shown in figure 4B, participants in the competitive condition were more likely to choose conspicuous dining when income equality was high ( $M = 5.4$ ) than when it was low ( $M = 3.6$ ;  $F(1, 66) = 4.3$ ,  $p < .05$ ). Conversely, in the cooperative condition participants were less likely to choose conspicuous dining when equality was high ( $M = 3.0$ ) than when it was low ( $M = 4.8$ ;  $F(1, 66) = 4.2$ ,  $p < .05$ ).

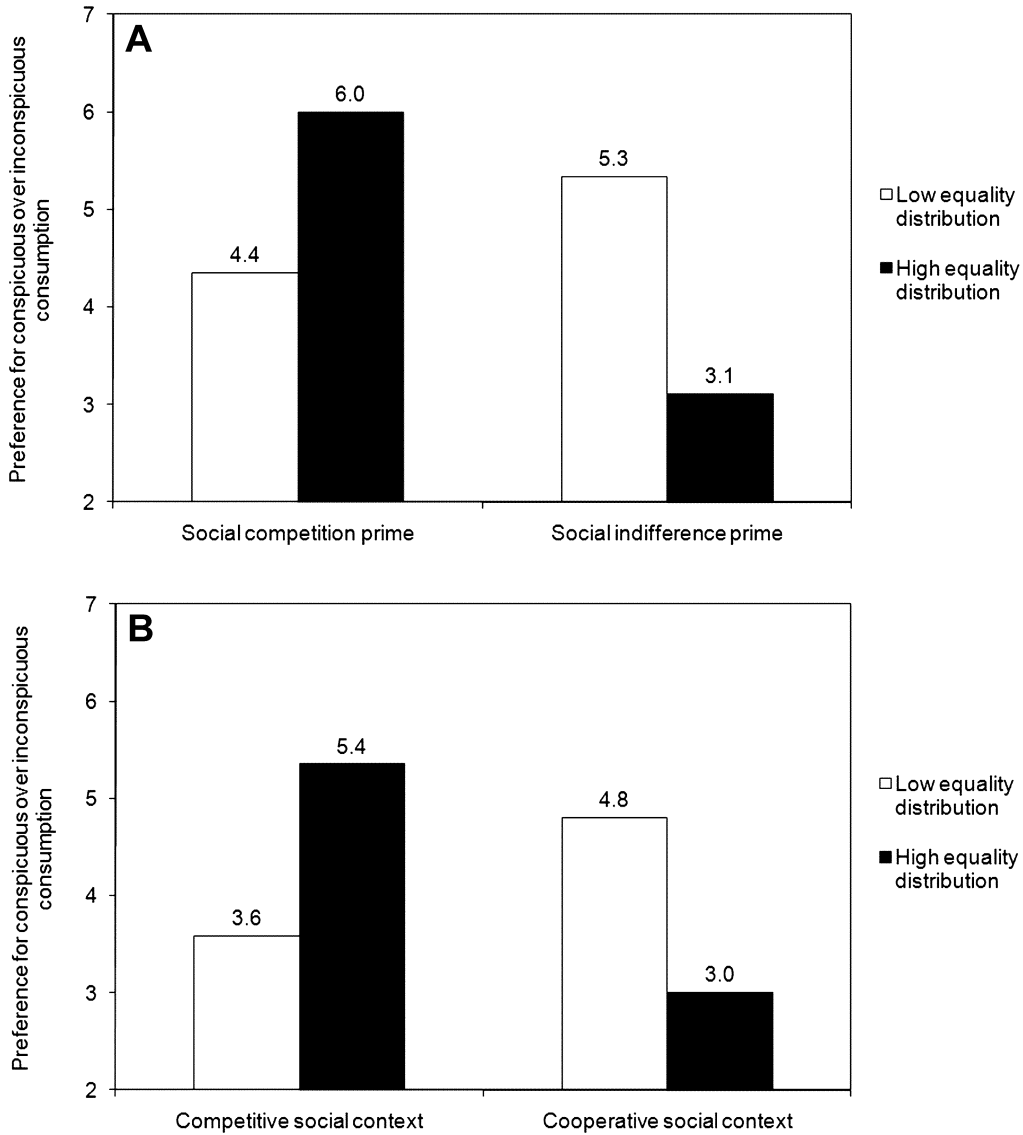
Overall, studies 4A and 4B show that the effect of equality on the preferences of low-income consumers for conspicuous over inconspicuous consumption depends on how much they care about status. When people care about status, either because competition goals have been primed or because they are among competitors, we replicate the findings of studies 1–3. Again, we find that equality fuels conspicuous consumption among bottom-tier consumers even when equality applies to general income level rather than ownership of particular possessions and when the decision involves choosing between different consumption options (vs. choosing whether to spend at all or not). However, when people do not care about status, either because they have been primed to be indifferent to others or because they are in a collaborative social group, equality reduces low-income consumers’ preference for conspicuous consumption. Finally, the results of studies 4A and 4B reinforce the conclusion of the other studies that increasing equality does not necessarily reduce conspicuous consumption by people at the bottom of the distribution when social rank matters. They also suggest that redistribution policies may be effective when the social environment downplays competition for status and promotes cooperation.

## GENERAL DISCUSSION

The objective of this research was to test in an experimental setting the oft-repeated prediction that increasing equality of income or possession would decrease conspicuous and inconspicuous consumption among consumers at the bottom of the distribution. Our main conclusion is that increasing equality does indeed reduce inconspicuous (status-neutral) consumption and conspicuous (status-relevant) consumption for people at the bottom of the distribution when they do not care about status, for example, in a cooperative social context. However, we find that increasing equality actually fuels conspicuous consumption when people at the bottom of the distribution care about their social position. This is because greater equality increases the percentage of people in the middle of the distribution and therefore increases the gain in social position, and hence status, that a given spending on

FIGURE 4

STUDY 4A (A) AND STUDY 4B (B): EFFECTS OF INCOME EQUALITY AND STATUS IMPORTANCE ON PREFERENCE FOR CONSPICUOUS CONSUMPTION



conspicuous consumption offers to consumers at the base of the pyramid.

We find that these effects are robust regardless of whether status is unobservable and broadly construed (as income) or observable and more narrowly construed (as endowment with specific status-conferring possessions), whether status is derived from publicly spending on the self or acquired through gift giving, and whether the decision is a trade-off between spending and saving or between spending on a status-enhancing or a status-neutral option.

### Implications for Policy Makers and Marketers

Our results suggest innovative ways for marketers and policy makers to influence conspicuous consumption decisions. First, they show that we cannot simply assume that increasing equality will reduce consumption and that marketers and policy makers should build a more holistic view of redistribution policies and their consequences. Specifically, our results suggest that the implications of redistribution policies need to be reconsidered for different social environments. For example,

we find that increasing income equality succeeds in reducing conspicuous consumption in cooperative environments and when people are indifferent to the social context. This suggests that redistribution policies may be particularly effective if supplemented with policies to promote resistance to social pressure, which focus on relationships with friends and family. Echoing Putnam (2007), the promotion of a broad sense of “we” through popular culture, national symbols, education, and common experiences may not only increase trust but could also reduce conspicuous arms races.

In this article we have examined the effects of redistribution policies that reduce the number of people in the upper tiers and increase the number of people in the middle tiers of the distribution while keeping the number in the lowest tier constant. This was done to rule out the alternative explanation that equality effects may be driven by changes in the endowment of low-tier consumers, by changes in the range of the distribution, or by changes in the price and availability of products in each tier. It would be interesting to examine what would happen if equality were increased through redistribution policies that take from the rich to give to the poor and hence increase the endowment of people in the bottom tiers. It would also be interesting to examine the net effects of different types of redistribution policies, because they often do not just change the distribution of the population across tiers but also change product prices and availability as well as consumers’ wealth and access to credit (e.g., interest rate regulations). Since redistribution policies may affect consumers’ spending and welfare in many ways—directly by changing possession gaps and position gains and indirectly by funding new programs using the new tax revenues (e.g., education, health care)—it would be important to study the net effects of redistribution policies on the decisions and welfare of bottom-tier consumers.

Our research also has important implications for marketers. First, marketers could enhance the perceived status benefits of their products or services by highlighting not just their exclusivity but their status improvement benefits. For example, companies could provide consumers with information about their rank or percentile and the proportion of consumers at each status level (e.g., “You are among the 30% of our customers with gold status and with three extra flights you would join the top 10% of our customers in the elite platinum tier”). Marketers could also take into account the degree of equality in their customer base when making pricing decisions. For example, they could charge more for deluxe product variants in markets with a more homogeneous consumer base and a competitive social environment. Instead of using a traditional pyramidal structure with a linear reduction in the number of people in each consecutive status tier, they could structure their loyalty programs to match the most profitable upgrades with the highest position gains.

Our results also advance understanding of the intensity of competition among people and organizations with similar performance levels. Lehmann (2001) argued that one reason why market shares are exponentially distributed may be that

managers care about market share ranks and compete more intensely when the gap between their market share and that of their closest competitor is small; hence, ranks are less susceptible to change when the gap is large and more difficult to bridge. Our results suggest that Lehmann’s results could be generalized by looking at the equality of the market share distribution rather than simply the proximity of the closest competitor. Following the results of Leclerc et al. (2005), who found that the importance of status diminishes when true product quality is easy to evaluate, these effects should be particularly strong when only ordinal information is readily available.

### Implications for Consumer Research on Status

The existing literature on status in consumer research has tended to focus on social envy and dissatisfaction with one’s current endowment, two negative and backward-looking factors. Our research aims to contribute to this literature by highlighting the importance of social position changes as a positive and forward-looking antecedent of conspicuous consumption decisions. Our findings also have implications beyond status research. For example, they suggest that range-frequency theory (Parducci 1965) should incorporate people’s expectations about changes in percentile position, and not just the initial percentile position, when evaluating their current position and the actions that would shift them from the initial to the final position. They also suggest that optimal distinctiveness theory (Brewer 1991) may take into account the fact that differentiation is influenced not just by the size of the group to which one belongs but also by the size of the group of people in the social hierarchy that could be surpassed. In addition, our finding about the moderating role of status gain may help in understanding why people sometimes engage in conspicuous consumption to differentiate themselves from their peers—the snob effect—while at other times they do so to affiliate with their peers—the bandwagon effect (Amaldoss and Jain 2005; Berger and Heath 2007; Leibenstein 1950). Our results may suggest that the desire to maximize position gains may be linked to downward social comparisons and dissociative motives (Han, Nunes, and Drèze 2010; White and Dahl 2006, 2007), just like the desire to minimize possession gaps is linked to upward social comparisons and associative motives (Escalas and Bettman 2003). It would be interesting to examine these links in the future.

Our findings also have direct implications for understanding status perceptions. Drèze and Nunes (2009) showed that adding a lower tier in a customer loyalty program increases the perceived status of people in top tiers. Our study extends their work by examining the effects of the distribution of people in each tier (vs. the number of tiers), by looking at people in the bottom tiers (vs. just the top tiers), and by examining effects on consumption (vs. status perceptions). An important difference between our work and existing work on status (including the work by Drèze and Nunes) is that the position gain hypothesis is independent of the status level and the magnitude of the upgrade (i.e., the number of tiers surpassed). It makes the same prediction regardless of

status level and magnitude of the upgrade, as long as the percentage of people that can be surpassed is identical. For example, in figure 1 our theory would predict that people in the middle tier (tier 3) would be less motivated to spend to reach the top tier in the high-equality distribution because it provides smaller position gains than the low-equality distribution. Still, it would be interesting to test whether being positioned at the extreme ends of the distribution leads to specific behaviors, either diminishing or increasing sensitivity to status change. More generally, it would be interesting to extend our work to examine the effects of status change and not just the effects of change in the distribution of status. For example, positive and negative changes in status may have asymmetric effects and their effects may be different if they are driven by changes in one's income (other people's income remaining constant) or by changes in other people's income (one's income remaining constant). These two issues are particularly relevant given the recent transition from a long period of economic expansion to a period of economic recession and overall income stagnation.

Finally, it would be useful for future research to test the central assumption of inequality research that people have an accurate perception of the status distribution within their social group. This is important because the generalizability of our findings rests on the assumption that people have, if not an accurate representation of the endowment distribution, at least the ability to notice changes in the equality of this distribution as we define them (i.e., more people in the middle and fewer people at the extremes). Although previous studies have shown that people have a sophisticated and fine-grained understanding of social categories within their social groups (Kraus et al. 1993), they may be subject to systematic biases depending on their position in the distribution, and we do not know how accurately they perceive the equality of a distribution nor what measure of central tendency they use most frequently. More generally, it would be interesting to examine whether it is the actual or perceived position or the actual and perceived level of endowment that best predicts saving and spending decisions.

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