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## \$240 for Illinois Avenue, please: Economic inequality increases preference for personal control appeals

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### ABSTRACT

Economic inequality is rising globally, yet its impact on consumer behavior remains poorly understood. In five studies, we show that economic inequality increases the preference for personal control appeals—advertising appeals encouraging consumers to reclaim their sense of agency and control. This effect emerged when economic inequality was objectively measured or experimentally manipulated. We also identify the mechanism underlying this effect by showing that higher economic inequality triggers a sense of financial threat, which reduces consumers' sense of control. These aversive psychological states subsequently increase the preference for personal control appeals. Furthermore, we demonstrate that a momentary boost in the sense of control or a stronger dispositional belief in economic mobility effectively mitigates psychological threats of higher economic inequality, thereby attenuating the preference for personal control appeals. Overall, our findings offer a more nuanced understanding of the motivational effects of economic inequality in shaping consumer behavior.

### 1. Introduction

Economic inequality—the concentration of more wealth in fewer hands—is a “defining issue of our time,” as Barack Obama described it back in 2013. Not much has changed since then. The past decade has witnessed a surge in economic inequality globally, with the wealthiest 1 % experiencing substantial growth in their fortunes while the rest of the population has consistently lost wealth (United Nations, 2020). Corroborating this alarming trend, the recent Oxfam report on inequality reveals that as billionaires' wealth increased by 12 % in 2018, the staggering 3.8 billion poorest people lost 11 % of their wealth (Oxfam, 2019). Economic inequality has far-reaching consequences for societies, leading to poorer performance on a wide range of outcomes. For instance, higher economic inequality has been linked to a decrease in life expectancy, educational aspirations, and political participation, as well as higher prevalence of corruption, crime rates, and mental and physical health issues, including anxiety, alcohol consumption, and obesity (Choe, 2008; Elgar & Aitken, 2011; Elgar et al., 2005; Kawachi et al., 1997; Offer et al., 2012; Solt, 2008; Wilkinson & Pickett, 2017).

Despite recent advancements in elucidating the effects of economic inequality on various aspects of life, including health, education, and political behaviors, a notable gap still exists in our understanding of its impact on consumer behavior, especially in the context of advertising and marketing communications. The present work aims to bridge this

gap by investigating how economic inequality affects the persuasiveness of advertising appeals. Advertising is marketers' and policymakers' gateway to shaping consumers' attitudes, behaviors, and preferences. Well-crafted advertisements have the power to sway consumer decision-making, pique interest, and prompt desired actions, whether it is purchasing a product, endorsing a public policy initiative, or casting a vote for a political party. Identifying the type of content and mechanisms through which ads resonate with consumers in environments marked by high economic inequality is not only timely due to the global rise in economic inequality, but also essential in light of recent research showing that highly unequal economies foster a climate of mistrust and conspiracy beliefs among citizens (Casara et al., 2022; Elgar & Aitken, 2011). These factors may render the persuasive efforts of marketers and policymakers futile, even when pursued with the best of intentions to improve societal well-being. This research represents the first step in tackling this issue. We identify one type of content that resonates more with consumers in high economic inequality and delineate *when* and *how* this effect occurs.

Drawing on recent findings on the social psychology of economic inequality, compensatory control, and the functional theory of attitudes, we propose and empirically demonstrate that higher (vs. lower) levels of economic inequality systematically increase the preference for personal control appeals. By *personal control appeals*, we mean advertising appeals inviting consumers to reclaim their sense of control and agency. Such

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**Table 1**  
Summary of existing research on various consequences of economic inequality and the current paper's contribution to this literature.

| Authors and Publication Year           | Domain / Implication                    | Economic Inequality |           | Main Dependent Variable(s)                                       | Main Finding   |
|--|---|---------------------|-----------|--|--|
|  |   | Actual              | Perceived |  |  |
| Oishi, Kesebir, & Diener (2011)        | Health and societal well-being          | ✓                   |           | Happiness, perceived fairness, and general trust                 | Higher economic inequality predicts reduced interpersonal trust and increased perceived unfairness, which in turn, negatively predict happiness.   |
| Elgar et al. (2005)                    | Health and societal well-being          | ✓                   |           | Alcohol consumption and episodes of drunkenness                  | Higher economic inequality is associated with the use of alcohol among younger adolescents.  |
| Kawachi et al. (1997)                  | Health and societal well-being          | ✓                   |           | Mortality rate   | Higher economic inequality is associated with a higher mortality rate via disinvestment in social capital  |
| Casara, Suitner, Jetten (2022)         | Socio-political behavior                | ✓                   | ✓         | Conspiracy beliefs   | Higher economic inequality increases conspiracy beliefs, and an increased sense of anomie fully mediates this effect.  |
| Sprong et al. (2019)                   | Socio-political behavior                | ✓                   | ✓         | Wish for a strong leader   | Higher economic inequality enhances the wish for a strong leader, and increased perceptions of anomie mediate this relationship.   |
| Soit (2008, 2010)                      | Socio-political behavior                | ✓                   |           | Electoral participation and political engagement                 | Citizens of states with higher economic inequality are less likely to vote, show less political interest, and engage less in political discussions.  |
| Sands (2017)                           | Socio-political behavior                |                     | ✓         | Willingness to support redistribution policy                     | Higher income individuals exposed to economic inequality are less willing to support redistributive policies.  |
| Côté, House, & Willer (2015)           | Resource sharing and prosocial behavior | ✓                   | ✓         | Generosity   | Higher-income individuals are less generous when living in highly unequal economies.   |
| Nishi et al. (2015)                    | Resource sharing and prosocial behavior |                     | ✓         | Cooperation and resource sharing                                 | The visibility of wealth in economically unequal conditions reduces resource sharing and cooperation in public good games.   |
| Walasek & Brown (2015)                 | Luxury consumption and status anxiety   | ✓                   |           | Search for positional goods                                      | Residents of high-inequality states search more for luxury goods, suggesting a greater concern about displaying signals of status.   |
| Walasek, Bhatia, & Brown (2018)        | Luxury consumption and status anxiety   | ✓                   |           | Online chatter about high-status brands                          | People living under higher levels of inequality are more likely to engage in status-seeking behaviors, such as talking about status-oriented goods on social media.  |
| Wang, Jetten, & Steffens (2023)        | Luxury consumption and status anxiety   | ✓                   | ✓         | Desire for wealth and status                                     | Higher economic inequality creates an environment of restlessness in which both the poor (due to self-improvement concerns) and the rich (due to social comparison concerns) feel obliged to seek wealth and status.   |
| Payne, Brown-Iannuzzi, & Hannay (2017) | Myopic and impulsive behavior           |                     | ✓         | Risk-taking  | Higher economic inequality increases risk-taking to achieve higher payoffs.  |
| Hannay, Payne, & Brown-Iannuzzi (2021) | Myopic and impulsive behavior           | ✓                   | ✓         | Time spent and risk-taking in pursuit of pleasure                | Higher economic inequality increases risk-taking and time spent in pursuit of pleasure.  |
| Bak & Yi (2020)                        | Myopic and impulsive behavior           | ✓                   | ✓         | Intertemporal choice   | Higher economic inequality increases present-oriented behavior.  |
| <b>Current research</b>                | Advertising and marketing communication | ✓                   | ✓         | Choice, attitudes, behavioral intentions, and willingness to pay | Higher economic inequality increases the preference for personal control appeals. This effect is serially mediated by perceived financial threat and lack of control. The effect is attenuated when people have an opportunity to restore their sense of control or when they strongly believe in upward mobility. |

appeals are frequently used in advertising of various products and services. For instance, BMW's tagline "Always in Command," Charles Schwab's "Own Your Tomorrow," OXO's "Control the Chaos," and Armani's "Take Control of Your Style," are just a few illustrative examples demonstrating how brands leverage such ad appeals to influence consumers.

By identifying personal control appeals as one type of content that can gain traction with consumers living in high economic inequality, our research makes several important contributions. First, we contribute to the marketing literature by recognizing economic inequality as a novel factor that shapes consumers' response to advertising. Existing research in advertising has predominantly concentrated on individual-level factors, like people's political orientation and self-construal, neglecting the influence of macro-level phenomena, such as economic inequality, on consumer responses to advertising and marketing communications. To our knowledge, the present work is the first to expand upon this literature by investigating the impact of economic inequality, a macro-level phenomenon, on the effectiveness of advertising appeals. Second, we contribute to the emerging literature on economic inequality by moving beyond well-being and sociopolitical outcomes that are the typical focus of this literature, and demonstrating its systematic influence on people's response to advertising (see Table 1 for a summary of existing literature and the present work's contribution). Third, we uncover the psychological mechanism underlying this effect by showing that higher economic inequality provokes a feeling of financial threat, which diminishes consumers' sense of control. As a result, higher (vs. lower) economic inequality triggers a compensatory response manifested in consumers' increased preference for products with personal control appeals. Finally, we identify a critical boundary condition for this effect by showing that the partiality toward personal control appeals under higher economic inequality is attenuated when consumers strongly believe in upward economic mobility.

## 2. Theoretical framework and hypotheses development

### 2.1. Economic inequality and perception of financial threat

In Monopoly, the board game designed to teach about economic inequality and its consequences, avid board gamers know that to avoid becoming victims of economic inequality, they should acquire critical properties that produce higher earnings. One way to achieve this is to buy the most frequently landed-on, high-earning property on the board, Illinois Avenue. This property generates an exceedingly lopsided revenue distribution to its owner's advantage that, over time, substantially widens the wealth gap between the owner and other players. Little by little, as the owner's wealth and capital share grow disproportionately, so do other players' fear and preoccupation with their financial security and stability, which ultimately drain their sense of control over the game's outcomes.

Much can be learned from this epigraph on Monopoly about economic inequality and its psychological consequences. As opposed to the fleeting prospects of financial threat in a game of Monopoly, real-world inequality can be far more threatening to consumers. Recent research suggests that higher economic inequality creates a normative climate where wealth becomes a salient category in people's minds. Specifically, higher levels of economic inequality stimulate frequent comparisons of one's resources with those at the top of the wealth hierarchy (Cheung & Lucas, 2016; Wilkinson & Pickett, 2017). When economic inequality is higher, such comparisons make people feel financially inferior due to perceiving a larger gap between their resources and those of the wealthiest individuals. Therefore, in economies characterized by higher inequality, people often feel their financial resources are eroding and shrinking (Sánchez-Rodríguez et al., 2019).

Building on these insights, we propose that one direct consequence of living in economies with higher inequality is the experience of financial threat. The feeling of financial threat is defined as the degree to which

consumers are concerned, worried, ruminate, and preoccupied with their financial security and stability (Marjanovic et al., 2013). Consistent with our proposition, prior research has demonstrated that consumers feel financially threatened during recessions and economic downturns, situations in which, similar to conditions of economic inequality, people feel their financial resources are being eroded (Greenglass et al., 2013).

Our theorizing about the link between higher economic inequality and perceptions of financial threat aligns with research indicating that consumers in unequal economies are more inclined to accumulate resources to escape dire financial circumstances. For example, higher economic inequality has been associated with a greater preference for immediate smaller monetary rewards (Bak & Yi, 2020), an increased propensity for financial risk-taking (Payne et al., 2017), and a higher tendency to work longer hours to achieve wealth (Bowles & Park, 2005). Furthermore, our proposition is consistent with research on the lay interpretation of economic inequality. The lay interpretation refers to mental associations that consumers have formed over time by observing the socioeconomic contingencies of different economies. Lower inequality economies typically provide stronger social and financial support, reducing the likelihood of severe financial threats (Debus et al., 2012; Hobfoll et al., 1995). In contrast, more unequal economies often have weaker employment protection, limited unemployment benefits, and higher rates of debt, bankruptcy, and corruption (Uslaner, 2007; Zafirovski, 2005). These factors amplify people's perception of ending up in dire financial circumstances in economies with higher inequality.

Based on the reviewed findings, we propose that higher (vs. lower) economic inequality increases consumers' perception of financial threat. In what follows, we argue that this heightened perception of financial threat undermines consumers' sense of control.

### 2.2. Sense of control, compensatory consumption, and the functional theory of attitudes

Sense of control refers to the extent to which consumers feel capable of achieving desired outcomes and steering life events in the most preferred direction (Kay et al., 2009). Consumers who feel financially threatened perceive themselves as less capable of overcoming challenges and actualizing their desired outcomes. Accordingly, experiencing financial threats has been argued to diminish people's sense of control (Cannon et al., 2019). This notion is consistent with findings showing that a diminished sense of control explains the adverse effects of financial threats on various outcomes such as physical pain (Chou et al., 2016), stress (Haushofer & Fehr, 2014), and monetary impatience (Moeini-Jazani et al., 2019). Building on these findings and arguments provided in the previous section, we propose that, relative to lower economic inequality, higher economic inequality undermines consumers' sense of control through perceptions of financial threat.

When consumers' sense of control is threatened, they tend to engage in behaviors that allow them to restore their sense of structure, autonomy, and control over their environment (Kay et al., 2009). For instance, consumers with a threatened sense of control are likelier to reject poor-fitting brand extensions (Cutright et al., 2013) and show an increased preference for brand logos and products with clear boundaries and structure (Cutright, 2012). A lower sense of control also increases preference for high-effort products and services, as exercising effort makes people feel more agentic in achieving their goals (Cutright & Samper, 2014).

Compensatory responses, however, are not limited to the size or type of the products and brands consumers choose but also extend to their responses to advertising content. According to the functional theory of attitudes, when ad appeals are tailored to consumers' salient psychological needs, expressing positive attitudes becomes instrumental in resolving self-deficits and enhancing or preserving desired identities (Teeny et al., 2021). Compensatory responses can, therefore, be expressed through positive attitudes and preferences toward products whose ad appeals match consumers' cognitive, affective, or

**Table 2**  
Results of the robustness check for Study 1.

| Variable              | Model 1  |      |         | Model 2  |       |        |
|-----------------------|----------|------|---------|----------|-------|--------|
|                       | $\gamma$ | SE   | t       | $\gamma$ | SE    | t      |
| Intercept             | -6.14    | 1.44 | 4.28*** | -3.76    | 1.92  | 1.96*  |
| Inequality (Gini)     | 0.13     | 0.03 | 4.29*** | 0.08     | 0.04  | 2.25*  |
| Age                   |          |      |         | 0.001    | 0.004 | 0.36   |
| Gender                |          |      |         | -0.10    | 0.09  | 1.10   |
| Income                |          |      |         | -0.01    | 0.01  | 1.26   |
| Ethnicity             |          |      |         | -0.06    | 0.10  | 0.59   |
| Education Level       |          |      |         | 0.12     | 0.04  | 2.70** |
| Employment Status     |          |      |         | -0.10    | 0.14  | 0.67   |
| Political Orientation |          |      |         | 0.03     | 0.03  | 1.10   |
| Religiosity           |          |      |         | -0.01    | 0.02  | 0.40   |
| Affect                |          |      |         | -0.01    | 0.03  | 0.46   |
| State Median Income   |          |      |         | -0.09    | 0.06  | 1.48   |
| State Population      |          |      |         | 0.01     | 0.01  | 1.59   |
| Crime Rate            |          |      |         | 0.001    | 0.04  | 0.03   |

**NOTE.** — Dependent variable was coded 1 for choosing the personal control appeal and 0 for the neutral appeal. Gender was coded 1 = female, 0 = Other. Ethnicity was coded 1 = European-American and 0 = Other. Employment Status was coded 1 = working full-time, part-time, or self-employed and 0 = Other. Income and State Median Income are divided by 10,000. State Population is divided by 1,000,000. The crime rate was calculated per 10 million inhabitants. \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ .

motivational states (Katz, 1960; Lavine & Snyder, 1996). Accordingly, research shows that consumers have more favorable attitudes toward products with appeals corresponding with their ideal self (Evans & Petty, 2003), self-regulatory orientation (Cesario et al., 2004), salient cultural frame (Uskul & Oyserman, 2010), and political ideologies (Kidwell et al., 2013).

Germane to the present work, responding more positively to personal control appeals becomes instrumental in symbolically resolving the threat to one's sense of control in economies with higher inequality. Put formally, we propose:

**H1:** Higher (vs. lower) economic inequality increases preference for personal control appeals.

**H2:** Increased preference for personal control appeals under higher economic inequality is serially mediated by heightened perceptions of financial threat and lack of control.

### 2.3. The belief in upward mobility buffers the detrimental effects of economic inequality

A recent Gallup poll on economic inequality found that while only 32 % of Americans were satisfied with wealth distribution in the U.S., 63 % were optimistic about upward mobility (Newport, 2018). Simply put, Americans are far more optimistic about upward mobility than economic equality. Emerging literature suggests that dispositional beliefs in upward mobility increase tolerance of economic inequality, leading to supporting the status quo (Davidai & Gilovich, 2015; Day & Fiske, 2017; Shariff et al., 2016). This suggests that stronger beliefs in economic mobility may help buffer against the negative consequences of inequality. Consistent with this notion, research shows that when consumers face economic hardships, stronger beliefs in upward mobility predict the pursuit of educational and career aspirations, reduced distress, and higher well-being, while weaker mobility beliefs lead to negative affect, poorer health, and diminished sense of control (Alcántara et al., 2014; Browman et al., 2017; Jetten et al., 2017; Vaquera & Aranda, 2017; Yoon & Kim, 2018). Related to the present work, this implies that a higher dispositional belief in economic mobility might reduce preference for control appeals by attenuating the psychological threats provoked by higher economic inequality. Conversely, higher economic inequality should be more threatening when consumers have weaker beliefs in economic mobility and feel economically stuck, leading to an increased preference for personal control appeals. Put formally, we propose:

**H3:** Higher economic inequality leads to a more (less) pronounced preference for personal control appeals for consumers with weaker (stronger) dispositional beliefs in upward mobility.

**H4:** Stronger dispositional beliefs in upward mobility mitigate psychological threats posed by higher economic inequality.

## 3. Overview of studies

In five studies ( $N = 5,220$ ; two preregistered) and an additional study in the [Supplementary Material](#), we provide robust and converging evidence that higher economic inequality increases preference for personal control appeals. Study 1 establishes this effect using state-level Gini coefficients as objective measures of economic inequality. Study 2 provides causal evidence for this effect by manipulating perceptions of economic inequality. Study 3 and the additional study in the [Supplementary Material](#) replicate and extend these findings by highlighting the mediating role of financial threat and sense of control. Study 4 further supports the underlying mechanism using the process-by-moderation approach. Specifically, utilizing an incentive-compatible design, we show that boosting consumers' sense of control reduces their preference for personal control appeals under higher economic inequality. Finally, Study 5 tests our theoretically informed boundary condition and demonstrates that stronger beliefs in upward mobility reduce preference for personal control appeals by buffering against the threats posed by higher economic inequality.

We have disclosed all measures and exclusions in our studies. Except for Study 1, which consists of a geographically stratified sample, sample sizes of all studies were determined a priori using G\*Power to have a power of 0.80 and an alpha error probability of 0.05 to detect a small-sized interaction effect ( $f = 0.11$ ). Data and codes for all studies are available on Open Science Framework (<https://osf.io/u69hb/>). Where relevant, we refer to the [Supplementary Material](#), which includes comprehensive information on all stimuli, pretests, and measures employed in our studies, along with the rationale behind sample size determination and additional analyses of our data.

## 4. Study 1

The Gini coefficient is one of the frequently used objective measures of economic inequality. It ranges from 0 to 1, with 0 indicating perfect equality (i.e., everyone has the same wealth) and 1 indicating maximum inequality of wealth distribution within a population (i.e., one person has all the wealth while others have none). Using state-level Gini

coefficients, in this study, we test the hypothesis that American consumers living in states with higher Gini coefficients exhibit a greater preference for personal control appeals.

#### 4.1. Participants and design

We recruited a representative sample of 2,091 U.S. citizens using Cloud Research panel services. The sample was stratified geographically to ensure representation from all U.S. states and their Gini coefficients. After excluding 14 respondents who failed the attention check, data from 2,077 participants were analyzed ( $M_{age} = 36.52$ ,  $SD = 11.62$ ; 1022 females).

##### 4.1.1. Appeal choice

After giving consent, participants participated in a “Product and Advertising Evaluation Task.” They viewed three print ads featuring a different product (a watch, a pen, and a digital camera) without identifying brand information. The ads appeared randomly and one at a time. For each ad, participants chose their preferred appeal from two options provided to complete the ad. The pen and digital camera ads were fillers with two neutral and equally attractive appeals. For example, for the digital camera, participants chose between “*Invisible Assistance. An Eye for Detail*” and “*Invisible Assistance. Precision at all Times*”. In contrast, for the target ad (the watch), participants chose between a personal control appeal, “*Life is about the Here and Now. Be in Command of Every Moment*,” and a neutral appeal, “*Life is about the Here and Now. Enjoy Every Moment*.” Our dependent variable was the participants’ choice between the personal control appeal and the neutral appeal for the target ad. Across all our studies, the focal appeals were pretested to ensure they conveyed personal control while remaining comparable to the neutral appeals on other dimensions such as perceived quality, status, warmth, competence, and effort (see [Supplementary Material](#) for information on the stimuli and pretests).

##### 4.1.2. Demographic variables and economic inequality

Participants provided information on their age, gender, annual income, education level, employment status, ethnicity, political orientation, and religiosity. These demographic characteristics were included as control variables for a robustness check of our findings. Participants also reported their state of residence, allowing us to gather the most recent state-level Gini coefficients from the 2018 American Community Survey by the United States Census Bureau. The Gini coefficients ranged from 0.4269 (Utah) to 0.5130 (New York). We also obtained state median income, population size, and crime rate as additional state-level data for the robustness check. Participants rated their affective state using three 7-point bipolar scales (sad/happy, stressed/relaxed, angry/calm,  $\alpha = 0.89$ ) and completed an attention check question before being debriefed, thanked, and compensated (see [Supplementary Material](#) for information on measures used in this study.).

#### 4.2. Results

We analyzed participants’ choices for the target ad, coding “1” for personal control appeal and “0” for neutral appeal. Using hierarchical linear modeling (HLM), we regressed the choices on the state-level Gini coefficient. As predicted, results showed a significant positive association ( $\gamma = 0.13$ ,  $SE = 0.03$ ,  $t(2075) = 4.29$ ,  $p < .001$ , 95%  $CI_{\gamma}$  [0.07, 0.19],  $OR = 1.14$ ), indicating that higher economic inequality increased the odds of choosing the personal control appeal by 14%. This effect was not observed for the filler ads ( $ps > 0.59$ ).

Next, we controlled for all individual- and state-level variables in the model (Model 2, [Table 2](#)). The Gini coefficient remained a significant predictor of appeal choice, confirming the robustness of our findings.

#### 4.3. Discussion

Using a large sample, representative of all U.S. states, we provided evidence for the robust association between Gini coefficients and the preference for personal control appeals. Residents in states with higher economic inequality were more inclined to choose an appeal imbued with personal control. This association persisted even after accounting for various individual- and state-level factors that could influence preference. Despite these promising results, Study 1 comes with a caveat. Specifically, although using the Gini coefficient as an objective measure of economic inequality increases the external validity of our findings, the correlational nature of Study 1’s findings limits our ability to establish causality. We address this critical point in Study 2 by manipulating perceptions of economic inequality.

### 5. Study 2

#### 5.1. Participants and design

Participants ( $N = 737$  U.S. citizens; Cloud Research) took part in a 2 (economic inequality: low vs. high)  $\times$  2 (appeal type: personal control vs. neutral) between-subjects study for a \$1.5 compensation fee. Eighteen participants were excluded before analysis for meeting at least one of the following exclusion criteria: (1) not following the writing instructions, (2) failing comprehension check questions (details below), or (3) failing the attention check. The final sample consisted of 719 participants ( $M_{age} = 38.88$ ,  $SD = 12.19$ ; 374 female).

##### 5.1.1. Economic inequality manipulation

Using a well-established procedure, we manipulated participants’ perception of economic inequality in their home state (see [Côté et al., 2015](#); [Davidai, 2018](#)). Specifically, after providing information on demographics and their state of residence, participants were randomly assigned to either a high or low economic inequality condition. They viewed a pie chart displaying fictitious data on wealth distribution in their state, which, depending on the experimental condition, depicted either a relatively *high* or *low* degree of economic inequality (see the [Supplementary Material](#) for details). To enhance the perceived credibility of our stimuli, participants were told that the provided information was based on the most recent nationally representative survey of U.S. households conducted by the United States Census Bureau. While viewing the chart, participants answered three comprehension-check questions to assess their understanding of the provided information. Subsequently, to reinforce the effectiveness of our manipulation, we asked participants to write about the implications of living in a state with high or low economic inequality, depending on their experimental conditions. Participants then rated their perceived equality of wealth distribution in their home state (0 = *extremely equal*, 10 = *extremely unequal*) and reported their affective state on three 7-point bipolar scales (sad/happy, stressed/relaxed, angry/calm;  $\alpha = 0.91$ ).

**5.1.1.1. Appeal type.** After the economic inequality manipulation, participants engaged in a supposedly independent study on “Product and Advertisement Evaluation.” They were randomly assigned to one of two appeal conditions where they evaluated a print ad for a pen (see the pretest and stimuli in the [Supplementary Material](#)). In the *personal control appeal* condition, the appeal read, “*For those who want to be in charge of their writing. Expression In Motion*.” In the *neutral appeal* condition, the appeal read, “*For those who want to experience smoothness in writing. Expression In Motion*.” Participants rated their attitudes toward the advertised product using 7-point bipolar scales (unfavorable/favorable, unappealing/appealing, bad/good, not likeable/likeable, negative/positive, do not like at all/like very much, unpleasant/pleasant; [Crites et al., 1994](#)). These items were averaged for an overall attitude score ( $\alpha = 0.96$ ). Behavioral intentions were assessed using two

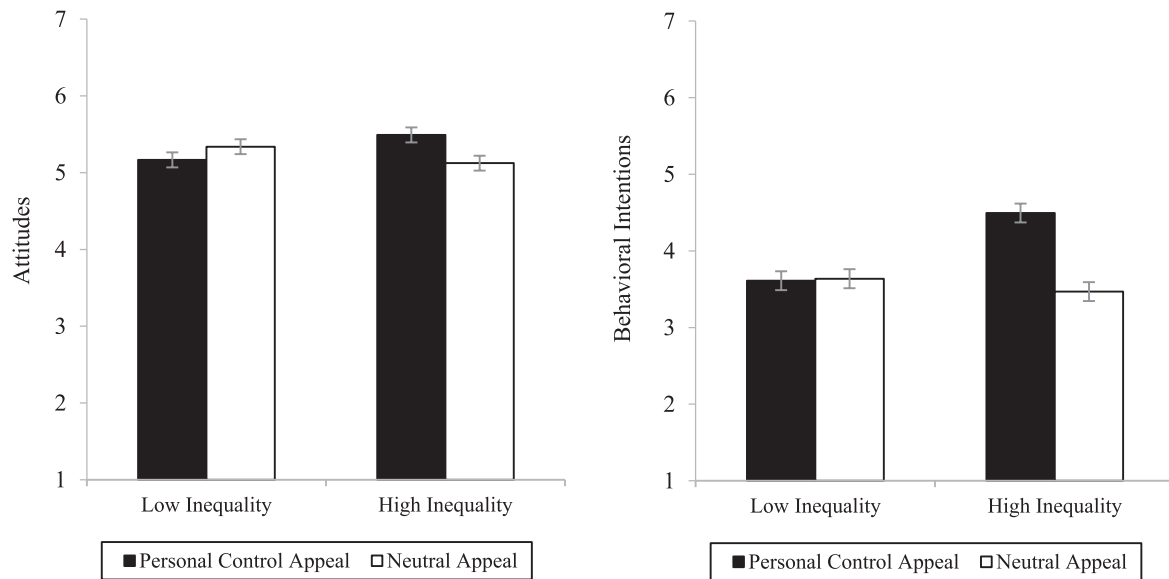


Fig. 1. Attitudes (left) and behavioral intentions (right) based on perceived economic inequality and appeal type (Study 2).

questions from Wheeler et al. (2005) regarding the likelihood of purchasing the pen and recommending it to others, measured on 7-point scales (1 = not at all likely, 7 = extremely likely) and averaged for an overall score ( $\alpha = 0.90$ ). Finally, participants answered an attention check question, and were then debriefed, thanked and paid.

## 5.2. Results

### 5.2.1. Manipulation check

Participants in the high economic inequality condition perceived significantly higher economic inequality in their home state ( $M = 8.62$ ,  $SD = 2.07$ ) than did participants in the low economic inequality condition ( $M = 5.59$ ,  $SD = 2.28$ ;  $F(1, 717) = 347.17$ ,  $p < .001$ ,  $\eta_p^2 = 0.33$ ), indicating that our manipulation was successful.

### 5.2.2. Attitudes toward the advertised product

A 2 (economic inequality: high vs. low)  $\times$  2 (appeal type: personal control vs. neutral) between-subjects ANOVA on attitudes revealed only a significant interaction between these factors, ( $F(1, 715) = 7.66$ ,  $p = .006$ ,  $\eta_p^2 = 0.01$ ; see Fig. 1, left panel). No other effect was significant ( $F_s < 1.01$ ,  $p_s > 0.32$ ). As expected, in the personal control appeal condition, high economic inequality led to more favorable attitudes ( $M = 5.49$ ,  $SD = 1.20$ ) than did low economic inequality ( $M = 5.17$ ,  $SD = 1.35$ ;  $F(1, 715) = 5.57$ ,  $p = .019$ ,  $\eta_p^2 = 0.01$ , 95 %  $CI_{diff}$  [0.05, 0.60]). However, in the neutral appeal condition, attitudes did not significantly differ between high ( $M = 5.12$ ,  $SD = 1.38$ ) and low economic inequality ( $M = 5.34$ ,  $SD = 1.28$ ;  $F(1, 715) = 2.42$ ,  $p = .121$ ).

Looked at differently, when economic inequality was perceived as high, the personal control appeal resulted in more favorable attitudes ( $M = 5.49$ ,  $SD = 1.20$ ) than did the neutral appeal ( $M = 5.12$ ,  $SD = 1.38$ ;  $F(1, 715) = 7.12$ ,  $p = .008$ ,  $\eta_p^2 = 0.01$ , 95 %  $CI_{diff}$  [0.10, 0.64]). However, when economic inequality was perceived as low, attitudes did not differ between the appeal type conditions ( $M_{personal\ control\ appeal} = 5.17$ ,  $SD = 1.35$  vs.  $M_{neutral\ appeal} = 5.34$ ,  $SD = 1.28$ ;  $F(1, 715) = 1.56$ ,  $p = .213$ ).

### 5.2.3. Behavioral intentions

A 2 (economic inequality: high vs. low)  $\times$  2 (appeal type: personal control vs. neutral) between-subjects ANOVA on behavioral intentions revealed a main effect of economic inequality ( $F(1, 715) = 8.37$ ,  $p = .004$ ,  $\eta_p^2 = 0.01$ ), a main effect of appeal type ( $F(1, 715) = 16.30$ ,  $p$

$< .001$ ,  $\eta_p^2 = 0.02$ ), and a critical interaction between these factors ( $F(1, 715) = 18.02$ ,  $p < .001$ ,  $\eta_p^2 = 0.02$ ; see Fig. 1, right panel). In the personal control appeal condition, high economic inequality led to higher behavioral intentions ( $M = 4.49$ ,  $SD = 1.75$ ) than did low economic inequality ( $M = 3.61$ ,  $SD = 1.64$ ;  $F(1, 715) = 25.44$ ,  $p < .001$ ,  $\eta_p^2 = 0.03$ , 95 %  $CI_{diff}$  [0.54, 1.23]). However, in the neutral appeal condition, behavioral intentions did not significantly differ between economic inequality conditions ( $M_{high} = 3.47$ ,  $SD = 1.51$  vs.  $M_{low} = 3.64$ ,  $SD = 1.72$ ;  $F < 1$ ,  $p = .339$ ).

Looked at differently, in the high economic inequality condition, the personal control appeal resulted in higher behavioral intentions ( $M = 4.49$ ,  $SD = 1.75$ ) than did the neutral appeal ( $M = 3.47$ ,  $SD = 1.51$ ;  $F(1, 715) = 34.34$ ,  $p < .001$ ,  $\eta_p^2 = 0.05$ , 95 %  $CI_{diff}$  [0.68, 1.37]). However, in the low economic inequality condition, behavioral intentions did not differ significantly based on the appeal type participants viewed ( $M_{personal\ control\ appeal} = 3.61$ ,  $SD = 1.64$  vs.  $M_{neutral\ appeal} = 3.64$ ,  $SD = 1.72$ ;  $F < 1$ ,  $p = .883$ ).

### 5.2.4. Exploring the role of affect

A 2 (economic inequality: low vs. high)  $\times$  2 (appeal type: personal control vs. neutral) between-subjects ANOVA on affect revealed a significant main effect of economic inequality, with participants in the low economic inequality condition reporting more positive affect ( $M = 5.47$ ,  $SD = 1.29$ ) than did those in the high economic inequality condition ( $M = 5.12$ ,  $SD = 1.49$ ;  $F(1, 715) = 11.56$ ,  $p < .001$ ,  $\eta_p^2 = 0.02$ ). No other effect was significant ( $F_s < 1.54$ ,  $p_s > 0.21$ ).

We conducted a moderated mediation analysis using Hayes Process Macro (2018; Model 14) to investigate the potential mediating role of affect. Economic inequality (0 = low, 1 = high) was the independent variable, affect was the mediator, and participants' attitudes served as the dependent variable. The appeal type (0 = neutral, 1 = personal control) was the moderator for the relationship between affect and attitudes. Results revealed no significant interaction between affect and appeal type ( $b = -0.01$ ,  $SE = 0.07$ ,  $t(714) = 0.10$ ,  $p = .92$ , 95 %  $CI$  [-0.14, 0.13]) and the moderated mediation index for the overall model was not significant ( $index = 0.002$ ,  $SE = 0.03$ , 95 %  $CI$  [-0.05, 0.06]).

A similar model with behavioral intentions as the dependent variable showed no significant interaction between affect and appeal type ( $b = 0.04$ ,  $SE = 0.09$ ,  $t(714) = 0.51$ ,  $p = .61$ , 95 %  $CI$  [-0.13, 0.22]), and the moderated mediation index was not significant ( $index = -0.02$ ,  $SE =$

**Table 3**  
Robustness checks with attitudes and behavioral intentions as the dependent variable (Study 2).

| Variable                 | DV: Attitudes |      |          |         |       |          | DV: Behavioral Intentions |      |          |         |      |         |
|--------------------------|---------------|------|----------|---------|-------|----------|---------------------------|------|----------|---------|------|---------|
|                          | Model 1       |      |          | Model 2 |       |          | Model 1                   |      |          | Model 2 |      |         |
|                          | b             | SE   | t        | b       | SE    | t        | b                         | SE   | t        | b       | SE   | t       |
| Intercept                | 5.34          | 0.10 | 54.76*** | 4.00    | 0.38  | 10.62*** | 3.64                      | 0.12 | 29.33*** | 2.84    | 0.48 | 5.89*** |
| Inequality               | -0.21         | 0.14 | 1.55     | -0.15   | 0.13  | 1.17     | -0.17                     | 0.17 | 0.96     | -0.14   | 0.17 | 0.81    |
| Appeal Type              | -0.17         | 0.14 | 1.25     | -0.17   | 0.13  | 1.28     | -0.03                     | 0.17 | 0.15     | -0.06   | 0.17 | 0.34    |
| Inequality × Appeal Type | 0.54          | 0.20 | 2.77**   | 0.55    | 0.19  | 2.93**   | 1.05                      | 0.25 | 4.24***  | 1.12    | 0.24 | 4.66*** |
| Age                      |               |      |          | 0.01    | 0.004 | 1.14     |                           |      |          | -0.01   | 0.01 | 1.35    |
| Gender                   |               |      |          | 0.11    | 0.10  | 1.14     |                           |      |          | -0.03   | 0.12 | 0.23    |
| Annual Income            |               |      |          | -0.01   | 0.01  | 1.02     |                           |      |          | -0.02   | 0.02 | 1.03    |
| Ethnicity                |               |      |          | -0.15   | 0.11  | 1.37     |                           |      |          | -0.25   | 0.14 | 1.75    |
| Education                |               |      |          | -0.10   | 0.05  | 2.15*    |                           |      |          | -0.12   | 0.06 | 1.95    |
| Employment Status        |               |      |          | 0.14    | 0.15  | 0.94     |                           |      |          | 0.14    | 0.19 | 0.74    |
| Political Orientation    |               |      |          | 0.01    | 0.03  | 0.16     |                           |      |          | -0.02   | 0.04 | 0.59    |
| Religiosity              |               |      |          | 0.08    | 0.02  | 3.41***  |                           |      |          | 0.11    | 0.03 | 3.59*** |
| Affect                   |               |      |          | 0.23    | 0.03  | 6.61***  |                           |      |          | 0.26    | 0.04 | 5.95*** |

**NOTE.** — Economic inequality was coded 1 = high inequality, and 0 = low inequality. The appeal type was coded 1 = personal control appeal and 0 = neutral appeal. Ethnicity was coded 1 = European–American and 0 = others. Employment status was coded 1 = full-time, part-time, or self-employed, and 0 = unemployed and others. Gender was coded 1 = female and 0 = other. Annual income was divided by 10,000. \**p* < .05, \*\**p* < .01, \*\*\**p* < .001.

0.03, 95 % CI [-0.08, 0.05]). Overall, these analyses demonstrate that affect did not explain the effect of economic inequality on preference for personal control appeals in this study.<sup>1</sup>

5.2.5. Robustness check

To test the robustness of our main findings, we conducted additional regressions while controlling for participants’ demographic characteristics (Model 2). This model was compared with our basic model (Model 1), which included economic inequality, appeal type, and their interaction as predictors of attitudes and behavioral intentions (see Table 3). The results confirmed that the critical interaction effect remained significant even after controlling for those variables, highlighting the robustness of our main finding.<sup>2</sup>

5.3. Discussion

Study 2 conceptually replicates the findings of Study 1, providing causal evidence that high (vs. low) economic inequality increases preference for personal control appeals. Importantly, this increase in preference was not observed for the same product advertised with a neutral appeal, ruling out the possibility that economic inequality leads to more extreme response tendencies or heightened liking for any product irrespective of their psychological function. These results underscore the symbolic and compensatory nature of participants’ responses to personal control appeals in the context of high economic inequality. Furthermore, similar to Study 1, these findings remained robust when controlling for participants’ demographic characteristics and were not explained by their affective state.

<sup>1</sup> In Studies 3–5, we conducted similar analyses to examine the role of affect, and the findings indicated that affect did not explain any of our observed effects. Details of these analyses can be found in the Supplementary Material.

<sup>2</sup> Similar robustness checks were conducted in the subsequent studies and reported in the Supplementary Material. Across all studies, our main findings remained significant after controlling for participants’ demographic characteristics and affective states. Furthermore, we explored the moderating role of income in this and subsequent studies. Income did not moderate our main findings in none of the studies, suggesting that the effect of high (vs. low) economic inequality on the preference for personal control appeals was consistent across income brackets in our samples. Details of income-related analyses can be found in the Supplementary Material.

6. Study 3

In Study 3, we aimed to replicate the findings of Study 2 using a different product category, namely a fitness app, and to expand upon our previous findings by testing the mediating role of financial threat and the sense of control as the underlying mechanisms of our effect. The hypothesis, design, and analytical plan for this study were preregistered before data collection ([https://aspredicted.org/PFR\\_HGC](https://aspredicted.org/PFR_HGC)).

6.1. Participants and design

A total of 831 U.S. citizens (Cloud Research) participated in a 2 (economic inequality: low vs. high) × 2 (appeal type: personal control vs. neutral) between-subjects design. Participants received \$2 as compensation for their involvement. Ten participants were excluded from the analysis based on the preregistered exclusion criteria, resulting in a final sample of 821 participants (*M*<sub>age</sub> = 39.66, *SD* = 13.04; 419 female).

6.1.1. Economic inequality manipulation and process measures

We measured participants’ demographic characteristics and manipulated their perceptions of economic inequality using the same procedure outlined in Study 2. Using well-established scales, participants then rated their perceived financial threat and sense of control. Specifically, we assessed perceptions of financial threat using a 5-item (*α* = 0.93) financial threat scale from Marjanovic et al. (2013) on a 7-point scale (1 = not at all; 7 = very much). Sample items included “how uncertain do you feel about your financial situation?” and “how much do you worry about your financial situation?” Items were averaged to form an overall score, where higher scores indicated a higher perception of financial threat. Sense of control was assessed using the 12-item scale (*α* = 0.94) from Lachman and Weaver (1998) on a 7-point scale (1 = strongly disagree; 7 = strongly agree). Sample items included “I can do just about anything I really set my mind to” and “I have little control over the things that happen to me” (reverse coded). Items were averaged to form an overall score, with higher scores indicating a higher sense of control.

Following our preregistered plan and as a stringent test for our proposed mediation mechanism, we counterbalanced the order by which financial threat and sense of control scales were presented to participants. This was done to minimize order-related biases, which may occur in the measurement-of-mediation design (Spencer et al., 2005). Finally, we assessed participants’ affective state on six 7-point bipolar scales (negative/positive, sad/happy, stressed/relaxed, anxious/calm, aroused/still, and bad/good; *α* = 0.94). Note that we chose to measure



the mediators before the dependent variable as endorsing control-related advertisements has the potential to satiate the proposed compensatory process operating in our studies.

### 6.1.2. Appeal type

In a “Market Research Task,” participants assessed a print advertisement featuring the Peloton App, a versatile workout and fitness application available across multiple devices and platforms. To enhance data quality and participants’ engagement with the task, we provided participants with an additional incentive tied to the advertised product. Along with their standard fee, participants were informed that 25 individuals would be randomly chosen at the study’s end to receive a 3-month full-access subscription to the Peloton App. Participants were randomly assigned to either a personal control or a neutral appeal condition. In the personal control appeal condition, the ad emphasized people’s full control over their workout routines and being in charge of their well-being journey. In the neutral appeal condition, the ad highlighted people’s access to workout routines and pursuing their well-being journey (see the [Supplementary Material](#) for pretest and stimuli details).

To bolster our “Market Research Task” cover story, we asked participants to respond to filler questions about the ads’ background color and content suitability for the sports magazines and websites. We measured our main dependent variable by asking participants to indicate the percentage of free time they would be willing to exercise using the app if they win the raffle on a scale ranging from 0 % to 100 %. Participants were explicitly told that their answers to this question would not affect their chances of winning the raffle. Finally, participants indicated how important exercising is to them on a 7-point scale (1 = *not at all*, 7 = *very much*), a measure used to control for the robustness of our findings. Lastly, participants answered an attention check question and were debriefed, thanked, and paid (see the [Supplementary Material](#) for robustness checks and all measures used in this study).

## 6.2. Results

### 6.2.1. Manipulation check

Participants in the high economic inequality condition believed that economic inequality was higher in their home state ( $M = 8.79$ ,  $SD = 2.11$ ) than did participants in the low economic inequality condition ( $M = 5.32$ ,  $SD = 2.40$ ;  $F(1, 819) = 483.76$ ,  $p < .001$ ,  $\eta_p^2 = .37$ ), indicating that our manipulation was successful.

### 6.2.2. Free time allocation for exercising

A 2 (economic inequality: low vs. high)  $\times$  2 (appeal type: personal control vs. neutral) between-subjects ANOVA on participants’ allotted time for exercise revealed a significant main effect of appeal type ( $F(1, 817) = 3.99$ ,  $p = .046$ ,  $\eta_p^2 = .01$ ), while the main effect of inequality was not significant ( $F < 1$ ,  $p = .32$ ). Importantly, the expected interaction effect between these factors was significant ( $F(1, 817) = 9.32$ ,  $p = .002$ ,  $\eta_p^2 = .01$ ). As predicted, in the personal control appeal condition, high economic inequality led to a higher percentage of free time allotted for exercise ( $M = 29.14$ ,  $SD = 28.00$ ) than did low economic inequality ( $M = 21.94$ ,  $SD = 24.60$ ;  $F(1, 817) = 8.26$ ,  $p = .004$ ,  $\eta_p^2 = 0.01$ , 95 %  $CI_{diff}$  [2.28, 12.10]). However, in the neutral appeal condition, there was no significant difference in the percentage of free time allotted for exercise between high ( $M = 20.16$ ,  $SD = 21.32$ ) and low inequality conditions ( $M = 23.82$ ,  $SD = 26.92$ ;  $F(1, 817) = 2.10$ ,  $p = .147$ ).

Alternatively, in the high economic inequality condition, the personal control appeal resulted in a higher percentage of time allotted for exercise ( $M = 29.14$ ,  $SD = 28.00$ ) than did the neutral appeal ( $M = 20.16$ ,  $SD = 21.32$ ;  $F(1, 817) = 13.08$ ,  $p < .001$ ,  $\eta_p^2 = 0.02$ , 95 %  $CI_{diff}$  [4.10, 13.85]). However, in the low economic inequality condition, there was no significant difference in the percentage of intended exercise time between the personal control appeal ( $M = 21.94$ ,  $SD = 24.60$ ) and the neutral appeal conditions ( $M = 23.82$ ,  $SD = 26.92$ ;  $F < 1$ ,  $p = .46$ ).

### 6.2.3. Testing the underlying mechanism

Using Hayes Process Macro (2018; Model 90, v 4.1), we tested a moderated serial mediation model where economic inequality (low = 0, high = 1) served as the independent variable, with the financial threat (first mediator) and sense of control (second mediator) as serial mediators, and percentage of free time allotted for exercise as the dependent variable. Appeal type (neutral = 0, personal control = 1) served as the moderator on the relationship between the sense of control and the dependent variable (see [Fig. 2](#)).

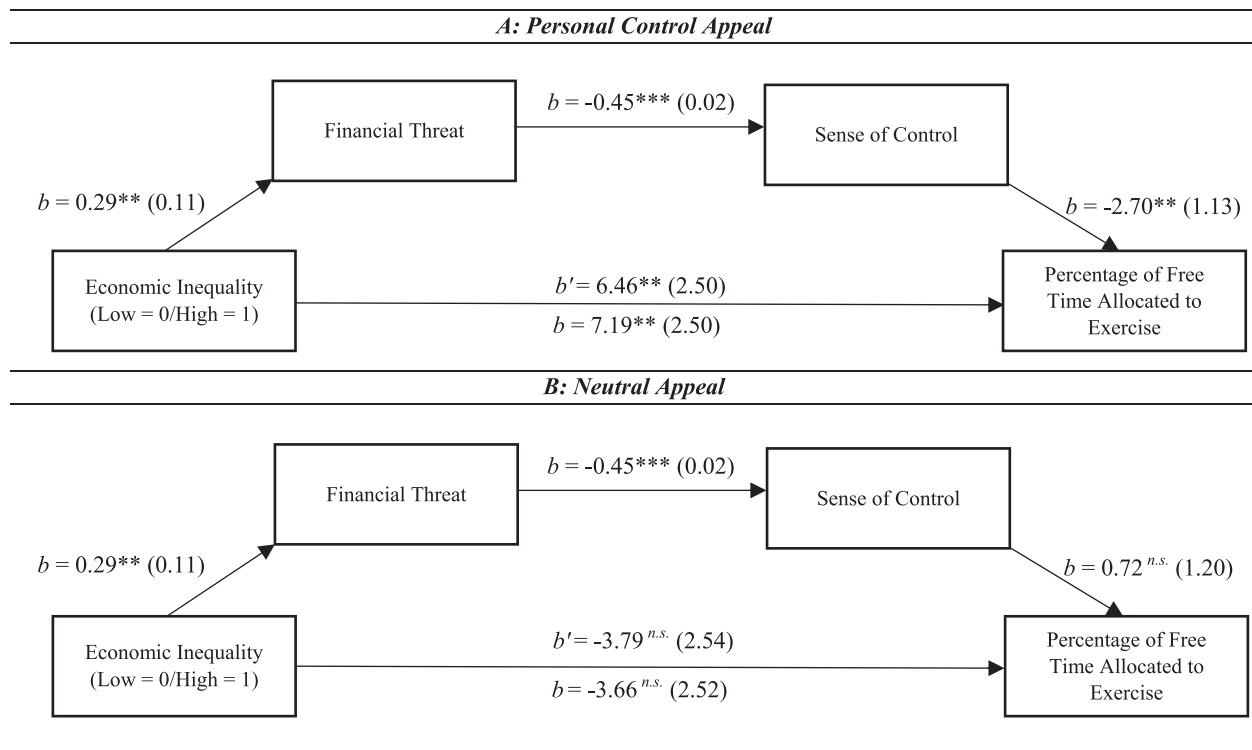
As expected, high (vs. low) economic inequality increased perceived financial threat ( $b = 0.29$ ,  $SE = 0.11$ ,  $t(819) = 2.63$ ,  $p = .009$ , 95 %  $CI$  [0.07, 0.50]). A higher feeling of financial threat predicted a decrease in sense of control ( $b = -0.45$ ,  $SE = 0.02$ ,  $t(818) = 20.37$ ,  $p < .001$ , 95 %  $CI$  [-0.49, -0.40]). Importantly, sense of control interacted with appeal type in predicting the dependent variable ( $b = -3.42$ ,  $SE = 1.46$ ,  $t(814) = 2.34$ ,  $p = .020$ , 95 %  $CI$  [-6.299, -0.54]). As predicted, in the personal control appeal condition, a lower sense of control predicted a greater percentage of free time one was willing to allocate to exercising using the app ( $b = -2.70$ ,  $SE = 1.13$ ,  $t(814) = 2.40$ ,  $p = .017$ , 95 %  $CI$  [-4.91, -0.49]). However, in the neutral appeal condition, there was no significant association between sense of control and the percentage of free time allotted to exercising ( $b = 0.72$ ,  $SE = 1.20$ ,  $t(814) = 0.61$ ,  $p = .545$ , 95 %  $CI$  [-1.62, 3.06]).

A 5,000-resampled bootstrap analysis showed that high economic inequality’s effect on the dependent variable was serially mediated by perceived financial threat and lack of control in the personal control appeal condition (*indirect effect* = 0.35,  $SE = 0.22$ , 95 %  $CI$  [0.02, 0.88]), but not in the neutral appeal condition (*indirect effect* = -0.09,  $SE = 0.16$ , 95 %  $CI$  [-0.46, 0.20]). The overall index of the moderated serial mediation was significant (*index* = 0.44,  $SE = 0.28$ , 95 %  $CI$  [0.03, 1.13]).

We also examined a moderated serial mediation model with the reversed order of the two mediators, where the sense of control served as the first mediator and financial threat as the second mediator. Critically, neither the interaction effect between appeal type and financial threat (second mediator) reached significance ( $b = 1.22$ ,  $SE = 1.13$ ,  $t(814) = 1.08$ ,  $p = .28$ , 95 %  $CI$  [-1.00, 3.44]), nor did the moderated serial mediation index of the model (*index* = 0.26,  $SE = 0.28$ , 95 %  $CI$  [-0.22, 0.88]). In summary, these results indicate that the influence of economic inequality on the preference for personal control appeals can be more parsimoniously accounted for by our proposed sequence of process variables (i.e., financial threat  $\rightarrow$  sense of control) and dismiss the alternative order as an unlikely explanation for the observed effect.

### 6.2.4. Auxiliary Analysis

We conducted two additional analyses to further investigate potential order effects in our data. First, a 2 (economic inequality: low vs. high)  $\times$  2 (appeal type: personal control vs. neutral)  $\times$  2 (mediator order: financial threat first vs. sense of control first) between-subjects factorial design on the dependent variable revealed only a significant two-way interaction between economic inequality and appeal type,  $F(1, 813) = 10.03$ ,  $p = .002$ . Critically, the three-way interaction was not significant ( $F(1, 813) = 2.10$ ,  $p = .15$ ), suggesting that the focal two-way interaction on the dependent variable was robust to the order by which mediators were measured. Second, a 2 (economic inequality: low vs. high; between-subjects)  $\times$  2 (mediating order: financial threat first vs. sense of control first; between-subjects)  $\times$  (mediating variable: financial threat vs. sense of control; within-subjects) mixed design ANOVA also yielded a nonsignificant three-way interaction effect ( $F < 1$ ,  $p = .42$ ). Together, these analyses indicate that the order in which participants answered the mediating variables did not have a systematic influence on their responses to either the outcome variable or the mediating variables. Therefore, we can more confidently ascertain our proposed sequence of process variables as the true mechanism underlying the observed effect.



**Fig. 2.** The mediating effect of financial threat and sense of control (Study 3). \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ , *n.s.* = non-significant. The standard error of estimates is in parentheses.

### 6.3. Discussion

Study 3 further supported our hypothesis on the impact of higher economic inequality on personal control appeals. It also sheds light on the mechanism underlying this effect. Consistent with our theoretical framework, higher economic inequality led to increased perceptions of financial threat, which in turn reduced individuals' sense of control. Consequently, a diminished sense of control amplified responses to a personal control appeal, while no such effect was found for a neutral appeal. Once again, these findings underscore the compensatory nature of consumers' preference for personal control appeals in the context of high economic inequality.

Similar to our previous studies, our main findings remained significant even after controlling for participants' affective states and demographic characteristics. Additionally, affect did not mediate the effect of inequality on the dependent variable. Moreover, our proposed moderated serial mediation model remained significant even after controlling for affect, which suggests the effect of economic inequality is different from those of general negative affect, providing further support for the robustness of the proposed mechanism (see the [Supplementary Material](#) for robustness checks).

Finally, we replicated the results of Study 3 in an additional study presented in the [Supplementary Material](#). Notably, using a different product category, namely lightbulbs, and attitudes and purchase intentions as dependent variables, we found the same serial mediation mechanism (i.e., financial threat  $\rightarrow$  sense of control) operating as the underlying process for the observed effect in that study.

## 7. Study 4

The aim of this study was twofold. First, we aimed to ascertain the underlying process by manipulating one of the mediating variables: the sense of control. We chose to manipulate this variable because of its fundamental role in motivating human behavior and its potential to

offer a unifying explanation for various findings in the economic inequality literature, a point to which we return in the general discussion. Based on our theoretical framework, we hypothesized that offering (vs. not offering) an opportunity for people to restore their sense of control would attenuate the impact of economic inequality on the preference for personal control appeals.

Our second objective in this study was to use a more consequential dependent variable that goes beyond attitudinal and intention measures to enhance the implications and generalizability of our findings. Accordingly, in this study, we utilized an incentive-compatible behavioral task where participants expressed their willingness to pay (WTP) for a target product using the money they could win in a lottery. Moreover, since our previous studies showed no significant effect of economic inequality on participants' preference for neutral ad appeals, we exclusively exposed all participants to an ad featuring a personal control appeal in this study. Our hypothesis, design, and analytical plan for this study were preregistered before data collection ([https://aspr.edicted.org/3Q5\\_YRK](https://aspr.edicted.org/3Q5_YRK)).

### 7.1. Participants and design

Participants ( $N = 827$  U.S. citizens; Cloud Research Connect) completed a 2 (economic inequality: low vs. high)  $\times$  2 (control restoration opportunity: present vs. absent) between-subjects study for a \$2 participation fee. We excluded 7 participants before data analysis following our preregistered exclusion criteria. The final analysis included data from 820 participants ( $M_{age} = 38.82$ ,  $SD = 13.23$ ; 401 female).

#### 7.1.1. Economic inequality and financial threat

Upon giving consent, all participants were informed that, in addition to the standard participation fee of \$2, 10 participants would be randomly selected after the study to receive a \$25 Amazon Gift Card. Participants then proceeded to the main study, which they were told

consisted of several independent short parts. In the first part, under the disguise of an economic opinion survey, we manipulated participants' perceptions of economic inequality using the same procedure outlined in Study 3. Subsequently, we measured perceptions of financial threat using the same 5-item financial threat scale ( $\alpha = 0.94$ ) and affect ( $\alpha = 0.92$ ) as in Study 3.

### 7.1.2. Sense of control manipulation

Next, we manipulated participants' sense of control using the well-established recall task (e.g., [Cutright et al., 2013](#)). Participants were randomly assigned to one of the two experimental conditions where an opportunity to restore their sense of control was either *present* or *absent*. In the opportunity *present* condition, participants were asked to recall and write about an incident where they experienced a strong sense of control over an important situation. In the opportunity *absent* condition, participants wrote about their recent grocery shopping trip and thus were not provided with the opportunity to restore their sense of control. After the recall task, all participants responded to a 1-item manipulation check by indicating how much control they felt they had at that moment using a 7-point scale (1 = *not at all*, 7 = *very much*).

### 7.1.3. Behavioral dependent variable

In a "Market Research Task," we presented all participants with a print ad from Narrative Nooks, a brand specializing in crafting bookmarks and reading accessories tailored for book enthusiasts. Critically, aligned with the objective of our study, the ad featured an appeal imbued with a sense of personal control: "*Embark on Your Reading Journey with Narrative Nooks Bookmarks and Take Charge of Your Literary Adventure.*" We told participants that we have partnered with Narrative Nooks to gather people's opinions on its print ad, which would be featured in book-related and lifestyle magazines and on various websites. To bolster our cover story, we asked participants to respond to filler questions about the ads' background color and content suitability for the target outlets.

We measured our target variable by asking participants to indicate the amount they were willing to spend from their Amazon Gift Card to acquire a bookmark from Narrative Nooks in the event of winning the raffle. Participants were informed that their indicated amount would be deducted from their Gift Card balance and transferred to an online voucher. This voucher could be used only to obtain bookmarks from Narrative Nooks without incurring additional costs using a specific promotional code provided to winners. It was emphasized that every participant had an equal chance to win the Amazon Gift Card, irrespective of their indicated amount. Participants then indicated their preferred amount using a slider scale ranging from \$0 (none of my money) to \$25 (all of my money). Employing this incentive-compatible procedure helped elicit participants' real and objective WTP for a product advertised with a personal control appeal.

Finally, participants indicated the extent to which they would consider themselves avid book readers and how important reading physical books to them was on two 7-point scales (1 = *not at all*, 7 = *very much*). We measured these two variables to control as covariates in our robustness checks (see [Supplementary Material](#)). Lastly, participants answered an attention check question and were debriefed, thanked, and paid (see [Supplementary Material](#) for the stimulus, pretest, and measures).

## 7.2. Results

### 7.2.1. Economic inequality manipulation check

Participants in the high economic inequality condition perceived economic inequality in their home state to be higher ( $M = 8.80$ ,  $SD = 1.94$ ) than did participants in the low economic inequality condition ( $M = 5.29$ ,  $SD = 2.36$ ;  $F(1, 818) = 540.45$ ,  $p < .001$ ,  $\eta_p^2 = 0.40$ ), indicating that our manipulation was successful.

### 7.2.2. Sense of control manipulation check

Participants who recalled an episode of being in control of their lives perceived themselves as more in control ( $M = 4.87$ ,  $SD = 1.51$ ) than did participants who recalled an episode of a recent grocery shopping ( $M = 4.64$ ,  $SD = 1.45$ ;  $F(1, 818) = 4.78$ ,  $p = .029$ ,  $\eta_p^2 = 0.01$ ), indicating that our control manipulation worked as intended.

### 7.2.3. Main hypothesis testing

A 2 (economic inequality: low vs. high)  $\times$  2 (control restoration opportunity: present vs. absent) between-subjects ANOVA on WTP revealed only a significant two-way interaction between these factors ( $F(1, 816) = 6.37$ ,  $p = .012$ ,  $\eta_p^2 = 0.01$ ). No other effect was significant ( $F_s < 2.14$ ,  $p_s > 0.14$ ). We examined the conditional effects following our preregistered plan. As expected, in the baseline condition where the opportunity to restore sense of control was absent, high economic inequality led to a higher WTP ( $M = 5.18$ ,  $SD = 6.15$ ) than did low economic inequality ( $M = 3.88$ ,  $SD = 5.25$ ;  $F(1, 816) = 5.89$ ,  $p = .015$ ,  $\eta_p^2 = 0.01$ , 95 %  $CI_{diff}$  [0.25, 2.36]), replicating our findings in the previous studies. Importantly, however, when the opportunity to restore sense of control was present, participants' WTP did not significantly differ between high ( $M = 3.65$ ,  $SD = 5.13$ ) and low economic inequality conditions ( $M = 4.28$ ,  $SD = 5.38$ ;  $F(1, 816) = 1.33$ ,  $p = .249$ ).

Alternatively, when economic inequality was perceived as high, participants in the baseline condition showed a significantly higher WTP ( $M = 5.18$ ,  $SD = 6.15$ ) than did those whose sense of control was resorted ( $M = 3.65$ ,  $SD = 5.13$ ;  $F(1, 816) = 7.77$ ,  $p = .005$ ,  $\eta_p^2 = 0.01$ , 95 %  $CI_{diff}$  [0.45, 2.60]). However, when economic inequality was perceived to be low, WTP did not differ as a function of the opportunity to restore one's sense of control ( $M_{opportunity\ present} = 4.28$ ,  $SD = 5.38$  vs.  $M_{opportunity\ absent} = 3.88$ ,  $SD = 5.25$ ;  $F < 1$ ,  $p = .448$ ).

Overall, these results substantiate our theorizing that enhancing one's sense of control diminishes the desire for products featuring personal control appeals in the context of high economic inequality.

### 7.2.4. Testing the mediating role of financial threat

Following our preregistered plan, after establishing the moderating effect of control restoration on the relationship between economic inequality and WTP, we examined the full process chain using a moderated mediation model ([Hayes, 2018](#), Model 15). In this model, financial threat served as the mediator between economic inequality (high = 1, low = 0) and WTP, and the control restoration opportunity (present = 1, absent = 0) served as the moderator on the relationship between financial threat and WTP.

As expected, high (vs. low) economic inequality increased perceived financial threat ( $b = 0.30$ ,  $SE = 0.12$ ,  $t(818) = 2.57$ ,  $p = .010$ , 95 %  $CI$  [0.07, 0.52]). Importantly, perceived financial threat interacted with the control restoration opportunity in shaping WTP ( $b = -1.04$ ,  $SE = 0.23$ ,  $t(814) = 4.56$ ,  $p < .001$ , 95 %  $CI$  [-1.49, -0.59]). Consistent with our prediction, in the absence of an opportunity to restore one's sense of control, higher financial threat led to higher WTP for the advertised product ( $b = 0.80$ ,  $SE = 0.16$ ,  $t(814) = 4.99$ ,  $p < .001$ , 95 %  $CI$  [0.49, 1.12]). However, when the opportunity to restore one's sense of control was present, no significant association between perceived financial threat and WTP was observed ( $b = -0.24$ ,  $SE = 0.16$ ,  $t(814) = 1.46$ ,  $p = .145$ , 95 %  $CI$  [-0.55, 0.08]).

A 5,000-resampled bootstrap analysis revealed that the effect of high (vs. low) economic inequality on WTP was mediated through perceived financial threat when the opportunity to restore control was absent (i.e., baseline condition) (*indirect effect* = 0.24,  $SE = 0.11$ , 95 %  $CI$  [0.06, 0.48]), but not when this opportunity was present (*indirect effect* = -0.07,  $SE = 0.06$ , 95 %  $CI$  [-0.22, 0.03]). The overall index of the moderated mediation was also significant (*index* = -0.31,  $SE = 0.14$ , 95 %  $CI$  [-0.63, -0.07]). These findings further support our theorizing regarding the psychological basis of the effect of economic inequality on preference for personal control appeals.

### 7.3. Discussion

The results of Study 4 provide several key insights. First, using an incentive-compatible task with a consequential behavioral outcome, we replicated our central hypothesis that high economic inequality increases preference for personal control appeals. Second, utilizing the process-by-moderation approach, we found that this effect was attenuated when participants could restore their sense of control. Lastly, we examined and replicated the full process chain by including perceived financial threat as the mediator in a moderated mediation model. Overall, Study 4 findings underscore the buffering effect of sense of control against the compensatory reaction provoked by experiencing high economic inequality. Similar to our previous studies, our main findings were robust and remained significant even after controlling for participants' affective states and demographic characteristics. In the next study, we examined the role of beliefs in upward mobility as yet another effective buffer against the threats of high economic inequality.

## 8. Study 5

In this study, we examined the role of dispositional beliefs in upward mobility as a buffer against psychological threats of economic inequality to further illustrate when and how economic inequality shapes preference for personal control appeals. We hypothesized that the effect of high economic inequality on preference for personal control appeals is more (less) pronounced when consumers have weaker (stronger) dispositional beliefs in upward mobility. This is because consumers who feel economically stuck (i.e., weaker mobility beliefs) should be more threatened by higher economic inequality and, therefore, engage more in compensatory consumption.

### 8.1. Participants and procedure

We conducted this study in two phases, which were ten days apart. Specifically, we measured participants' dispositional beliefs about upward mobility in the first phase while we conducted the main experiment in the second phase (details below). By adopting this approach, we ensured that our economic inequality manipulation did not affect participants' responses to the focal moderator (i.e., upward mobility scale) and vice versa, minimizing the potential for common method bias (Podsakoff et al., 2003).

#### 8.1.1. First phase

In phase one (\$1 compensation fee), we recruited 900 U.S. citizens via Cloud Research to complete the Perceived Economic Mobility scale (Yoon & Wong, 2017). This scale has eight items capturing consumers' dispositional beliefs about upward economic mobility. Sample items included "There are plenty of opportunities for anyone to go as far as he/she wants" and "Everyone has a fair chance of moving up the economic ladder." Items were measured on a 7-point scale (1 = *not at all agree*; 7 = *very much agree*) and were averaged to form an overall score ( $\alpha = 0.91$ ), with higher scores indicating stronger beliefs in economic mobility. We also collected participants' responses to the ten-item General Self-efficacy scale (Schwarzer & Jerusalem, 2010). Sample items included "I can solve most problems if I invest the necessary effort" and "It is easy for me to stick to my aims and accomplish my goals." Items were measured on a 4-point scale (1 = *not at all agree*; 4 = *very much agree*) and were averaged to form an overall score ( $\alpha = 0.93$ ). We decided to explore the general sense of self-efficacy as an additional boundary condition of our effect because it has been proposed to buffer fear and anxiety across various psychologically threatening contexts (Bandura,

1997).<sup>3</sup>

#### 8.1.2. Second phase

Ten days after the initial phase, all 900 participants were invited to complete a "Market Research Survey." A total of 815 participants (90.5 %) completed this study for a \$2 compensation fee. The study utilized a 2 (economic inequality: low vs. high)  $\times$  2 (appeal type: personal control vs. neutral) between-subjects design. Thirty-two participants were excluded based on the same criteria used in previous studies, resulting in a final analysis conducted on data from 783 participants ( $M_{age} = 38.78$ ,  $SD = 12.78$ ; 431 females).

We first manipulated economic inequality using the same procedure as in Study 2. Participants also responded to the same financial threat ( $\alpha = 0.94$ ) and sense of control ( $\alpha = 0.95$ ) scales as in Study 3 and completed a three-item bipolar affect scale ( $\alpha = 0.88$ ). Next, under a presumably "Advertising and Product Evaluation Task," participants were randomly assigned to one of the two appeal conditions where they evaluated an ad for a scheduling app called Plannex. In the *personal control appeal* condition, the appeal read, "*Be the master of your agenda and lead appointments, meetings, and tasks easily.*" The *neutral appeal* condition read, "*Be engaged with your agenda and book appointments, meetings, and tasks easily.*" As a dependent variable, participants responded to seven items ( $\alpha = 0.93$ ), capturing their behavioral intentions toward the advertised product on a 7-point scale (1 = *not at all*, 7 = *very much*). Sample items included: "I am willing to use this app for scheduling and organizing my tasks" and "I would consider purchasing this app, should I need a scheduling app." Finally, participants answered an attention check question and were debriefed, thanked, and paid (see [Supplementary Material](#) for the pretest, stimuli, and measures).

### 8.2. Results

#### 8.2.1. Economic inequality manipulation check

Participants in the high economic inequality condition perceived economic inequality in their home state to be higher ( $M = 8.44$ ,  $SD = 2.35$ ) than did participants in the low economic inequality condition ( $M = 5.17$ ,  $SD = 2.29$ ;  $F(1, 781) = 387.95$ ,  $p < .001$ ,  $\eta_p^2 = 0.33$ ), indicating that our manipulation was successful.

#### 8.2.2. Effect of economic inequality and appeal type on behavioral intentions

We conducted a 2 (economic inequality: low vs. high)  $\times$  2 (appeal type: personal control vs. neutral) between-subjects ANOVA on behavioral intentions to replicate the basic hypothesized effect. Results yielded a main effect of inequality ( $F(1, 779) = 8.23$ ,  $p = .004$ ,  $\eta_p^2 = .01$ ) and a main effect of appeal type ( $F(1, 779) = 7.69$ ,  $p = .006$ ,  $\eta_p^2 = .01$ ). Importantly, the critical interaction between these factors was significant ( $F(1, 779) = 6.05$ ,  $p = .014$ ,  $\eta_p^2 = .01$ ). As expected, in the personal control appeal condition, high economic inequality led to greater behavioral intentions ( $M = 4.99$ ,  $SD = 1.30$ ) than did the low economic inequality ( $M = 4.47$ ,  $SD = 1.37$ ;  $F(1, 779) = 14.25$ ,  $p < .001$ ,  $\eta_p^2 = 0.02$ , 95 %  $CI_{diff}$  [0.25, 0.79]). However, in the neutral appeal condition, participants' behavioral intentions did not significantly differ between high ( $M = 4.48$ ,  $SD = 1.44$ ) and low economic inequality conditions ( $M = 4.44$ ,  $SD = 1.34$ ;  $F < 1$ ,  $p = .773$ ).

Alternatively, in the high economic inequality condition, personal control appeal led to greater behavioral intentions ( $M = 4.99$ ,  $SD = 1.30$ ) than did the neutral appeal ( $M = 4.48$ ,  $SD = 1.44$ ;  $F(1, 779) = 13.75$ ,  $p < .001$ ,  $\eta_p^2 = 0.02$ , 95 %  $CI_{diff}$  [0.24, 0.78]). However, in the low economic inequality condition, behavioral intentions did not significantly differ between the appeal type conditions ( $M_{personal\ control\ appeal} =$

<sup>3</sup> Self-efficacy did not interact with economic inequality and appeal conditions in our study ( $t < 1$ ,  $p = .59$ ). For brevity, the results of this analysis were presented in the Supplementary Material.

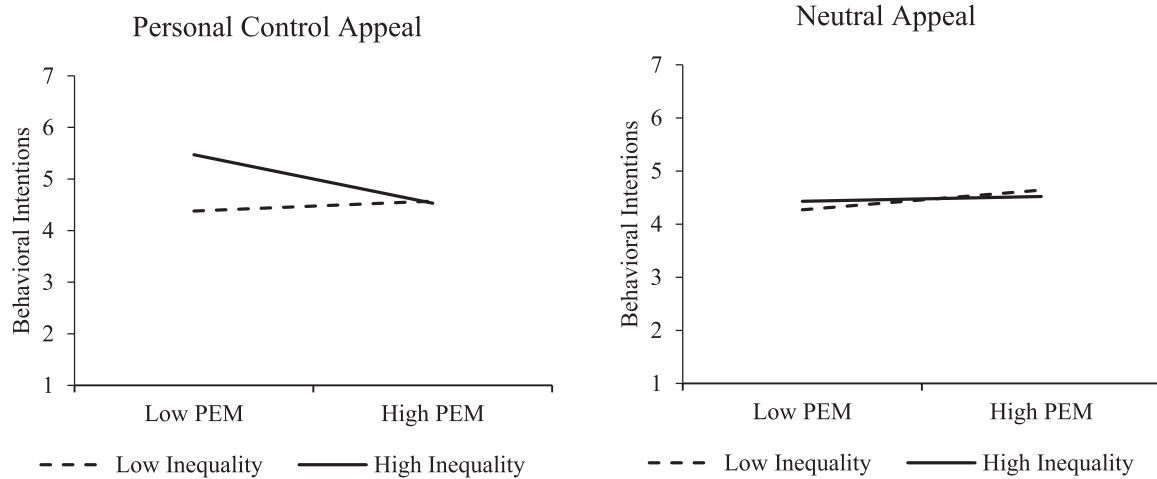


Fig. 3. Behavioral intentions based on economic inequality and dispositional beliefs in economic mobility (PEM) at different levels of appeal type (Study 5).

4.47,  $SD = 1.37$  vs.  $M_{\text{neutral appeal}} = 4.44$ ,  $SD = 1.34$ ;  $F < 1$ ,  $p = .825$ ).

### 8.2.3. The role of dispositional belief in upward economic mobility

We regressed participants' behavioral intentions on economic inequality (0 = low, 1 = high), appeal type (0 = neutral, 1 = personal control), and perceived upward mobility (centered), and their respective two- and three-way interaction terms. Results yielded a significant two-way interaction between economic inequality and appeal type ( $b = 0.50$ ,  $SE = 0.19$ ,  $t(775) = 2.60$ ,  $p = .010$ , 95 % CI [0.12, 0.88]), and the critical three-way interaction between economic inequality, appeal type, and perceived upward mobility ( $b = -0.31$ ,  $SE = 0.14$ ,  $t(775) = 2.22$ ,  $p = .027$ , 95 % CI [-0.58, -0.03]). No other effect was significant ( $t_s < 1.88$ ,  $p_s > 0.061$ ).

We probed the three-way interaction at levels of appeal type to test our propositions (see Fig. 3). As expected, there was a significant inequality  $\times$  mobility interaction in the personal control appeal condition ( $b = -0.41$ ,  $SE = 0.10$ ,  $t(775) = 4.26$ ,  $p < .001$ , 95 % CI [-0.60, -0.22]), but not in the neutral appeal condition ( $b = -0.10$ ,  $SE = 0.10$ ,  $t(775) = 1.00$ ,  $p = .32$ , 95 % CI [-0.30, 0.10]). Probing the two-way interaction in the personal control appeal condition, we found that, consistent with our prediction, when the belief in upward mobility was weak ( $M - 1SD$ ), high (vs. low) economic inequality significantly increased behavioral intentions toward the advertised product ( $b = 1.09$ ,  $SE = 0.19$ ,  $t(775) = 5.75$ ,  $p < .001$ , 95 % CI [0.72, 1.46]). However, when the belief in upward mobility was strong ( $M + 1SD$ ), economic inequality did not affect behavioral intentions ( $b = -0.05$ ,  $SE = 0.19$ ,  $t(775) = 0.24$ ,  $p = .81$ , 95 % CI [-0.42, 0.33]), providing evidence for the predicted attenuation effect.

Probing the observed two-way interaction in the personal control appeal condition from an alternative perspective revealed that, as expected, when economic inequality was high, stronger beliefs in upward mobility predicted lower behavioral intentions towards the advertised product ( $b = -0.34$ ,  $SE = 0.07$ ,  $t(775) = 4.88$ ,  $p < .001$ , 95 % CI [-0.48, -0.20]). However, when economic inequality was low, beliefs in upward mobility did not significantly predict behavioral intentions ( $b = 0.07$ ,  $SE = 0.07$ ,  $t(775) = 1.04$ ,  $p = .299$ , 95 % CI [-0.06, 0.20]).

### 8.2.4. Examining the underlying process

We tested the proposition that the belief in upward mobility buffers psychological threats of economic inequality. To this end, we constructed a customized model using the Hayes Process Macro (2018), where economic inequality (0 = low, 1 = high) predicted behavioral intentions via perceived financial threat (first mediator) and sense of control (second mediator). The belief in upward mobility was introduced as a first-stage moderator on the relationship between economic inequality and financial threat, and appeal type (0 = neutral, 1 =

personal control) as the second-stage moderator on the relationship between sense of control and behavioral intentions.

The results supported our proposition. First, the belief in upward mobility moderated the effect of high (vs. low) economic inequality on the financial threat ( $b = -0.22$ ,  $SE = 0.08$ ,  $t(779) = 2.72$ ,  $p = .007$ , 95 % CI [-0.38, -0.06]). As predicted, when the belief in upward mobility was weak ( $M - 1SD$ ), high (vs. low) economic inequality significantly increased perceived financial threat ( $b = 0.91$ ,  $SE = 0.17$ ,  $t(779) = 5.32$ ,  $p < .001$ , 95 % CI [0.58, 1.25]). However, when the belief in upward mobility was strong ( $M + 1SD$ ), economic inequality did not predict financial threat ( $b = 0.24$ ,  $SE = 0.16$ ,  $t(779) = 1.49$ ,  $p = .14$ , 95 % CI [-0.08, 0.56]), underscoring the buffering effect of mobility beliefs.

Next, as expected, a higher financial threat predicted a lower sense of control ( $b = -0.39$ ,  $SE = 0.02$ ,  $t(781) = 16.48$ ,  $p < .001$ , 95 % CI [-0.44, -0.35]). Furthermore, the interaction between the sense of control and appeal type was significant in predicting behavioral intentions ( $b = -0.23$ ,  $SE = 0.08$ ,  $t(778) = 2.97$ ,  $p = .003$ , 95 % CI [-0.38, -0.08]). Replicating our findings from Study 3, a reduced sense of control was associated with higher behavioral intentions in the personal control appeal condition ( $b = -0.21$ ,  $SE = 0.05$ ,  $t(778) = 3.88$ ,  $p < .001$ , 95 % CI [-0.32, -0.10]), but not in the neutral appeal condition ( $b = 0.02$ ,  $SE = 0.06$ ,  $t(778) = 0.37$ ,  $p = .71$ , 95 % CI [-0.09, 0.13]).

Finally, a 5000-resampled bootstrap analysis revealed that the overall moderated serial mediation model was significant ( $index = -0.02$ ,  $SE = 0.01$ , 95 % CI [-0.05, -0.002]). Specifically, consistent with our theorizing, in the personal control appeal condition, when the belief in upward mobility was weak ( $M - 1SD$ ), high (vs. low) economic inequality increased participants' behavioral intentions via financial threat and lack of control ( $indirect\ effect = 0.08$ ,  $SE = 0.02$ , 95 % CI [0.03, 0.13]). However, when the belief in upward mobility was high ( $M + 1SD$ ), the serial mediation on the relationship between economic inequality and behavioral intentions was no longer significant in the personal control appeal condition ( $indirect\ effect = 0.02$ ,  $SE = 0.02$ , 95 % CI [-0.01, 0.05]). Conversely, in the neutral appeal condition, economic inequality did not predict behavioral intentions via perceived financial threat and lack of control, irrespective of participants' dispositional beliefs in upward mobility (all CIs included 0).

## 8.3. Discussion

Results of Study 5 highlight the critical role of dispositional belief in upward mobility in buffering psychological threats of economic inequality. Importantly, when participants had weaker dispositional beliefs in upward mobility (i.e., believed to be economically stuck), high economic inequality amplified perceptions of financial threat and lack of control, which increased preference for personal control appeals.

However, stronger dispositional beliefs in upward mobility attenuated this effect by neutralizing the threats of economic inequality. These findings were robust to controlling participants' various demographic characteristics and were not attributable to their affective state (see the [Supplementary Material](#) for details).

## 9. General discussion

In six studies (including one in the [Supplementary Material](#)) using different product categories and multiple operationalizations of preference, such as choice, attitudinal measures, and behavioral outcomes with real consequences, we provided robust and converging evidence that higher economic inequality increases the preference for personal control appeals. This effect emerged whether we used Gini coefficients as the objective measure of economic inequality or manipulated perceptions of economic inequality. We also identified the underlying psychological mechanisms of this effect by showing that high (vs. low) economic inequality provokes feelings of financial threat and lack of control, which subsequently increase consumers' preference for personal control appeals. Lastly, we demonstrated that a momentary boost in the sense of control or a stronger dispositional belief in economic mobility effectively buffers psychological threats of higher economic inequality and attenuates preference for personal control appeals.

### 9.1. Theoretical contributions

Firstly, we contribute to the marketing literature by recognizing economic inequality as a novel, macro-level factor influencing consumers' response to advertising. Existing research in advertising has primarily focused on individual-level factors, neglecting how macro-level phenomena, such as economic inequality, might shape consumers' responses to advertising and marketing communications. Our research is the first to address this critical gap by showing that living in environments marked by high economic inequality leads to an increased preference for ad appeals that convey a sense of control and agency. We also contribute to the emerging literature on economic inequality by moving beyond well-being and sociopolitical outcomes, which are the typical focus of this literature, and demonstrating its systematic impact on how consumers navigate the advertising world.

Furthermore, we contribute to the literature by identifying novel psychological mechanisms through which economic inequality shapes consumer behavior. Although research on the consequences of economic inequality is growing, more progress has yet to be made to pinpoint the underlying processes through which economic inequality extends its effects. Existing speculations point to different possibilities. For example, one account proposes perceived unfairness and lack of structural justice as mechanisms for economic inequality effects (Tyler, 2011). A different explanation is the social rank hypothesis—the view that inequality triggers status-enhancing concerns, leading to increased preference for luxury products (e.g., Walasek et al., 2018). Yet another account suggests that economic inequality prompts upward social comparisons that exacerbate financial needs (Payne et al., 2017). From the little we know, it is clear that psychological drivers of economic inequality vary widely and are highly context-dependent. There is no one-for-all mediator that explains the effects of economic inequality on consumer behavior. Consequently, in our attempt to uncover economic inequality mechanisms, we adhered to how economic inequality preoccupies consumers with their financial resources and how such concerns affect fundamental human motives (e.g., desire for control). Our findings, therefore, inform and broaden the current understanding of psychological mechanisms through which economic inequality influences consumer behavior.

Notably, the link between a diminished sense of control and higher economic inequality, as highlighted in our research, may offer a unifying mechanism for the effects of inequality in past research. A lack of control is associated with diminished trust, lower mental and physical well-

being levels, and increased impulsive financial behavior and risk-taking (Lachman & Weaver, 1998; Moeini-Jazani et al., 2019; Scheier et al., 1994). These consequences correspond with those observed in the context of economic inequality (Bak & Yi, 2020; Elgar & Aitken, 2011; Payne et al., 2017; Roth et al., 2017). As such, a lower sense of control in explaining the effects of economic inequality offers a unifying framework consistent with prior findings in the literature.

We also contribute to the literature by empirically showing that dispositional beliefs in upward economic mobility mitigate preference for personal control appeals under high economic inequality. Davidai and Gilovich (2015) state that although Americans are aware of the increasing economic inequality, they do not seem daunted by this information, potentially due to beliefs in upward economic mobility. Our research provides empirical evidence for this conjecture by showing that consumers feel less threatened by macro-level economic inequality when they believe they can rise the economic ladder to improve their financial circumstances. From a broader perspective, our findings on the role of upward mobility beliefs concur with the self-regulatory model of resource scarcity (Cannon et al., 2019), stating that compensatory behavior in response to economic threats is reduced when consumers believe those threats are mutable. Overall, our findings identify the belief in upward mobility as a psychological shield against the adverse effects of economic inequality.

### 9.2. Practical implications

In societies grappling with high economic inequality, trust becomes eroded, and conspiracy beliefs run rampant. These factors can pose a significant challenge to the persuasive endeavors of marketers and policymakers, even when approached with the best of intentions. However, our findings offer a glimmer of hope in addressing these challenges. Specifically, our research reveals that tapping into people's desire for control is an effective approach when designing advertising and communication campaigns, particularly for people living in contexts with high economic inequality. This strategy can be particularly valuable from a consumer empowerment perspective, for instance, in relation to consumers' health and financial behavior.

Given that higher economic inequality is a root cause of severe health problems, including obesity and alcohol consumption (Wilkinson & Pickett, 2017), marketers and health policymakers may enhance the efficacy of their campaigns aimed at promoting healthier lifestyles and habits by integrating appeals that align with consumers' desire for control, especially in societies marked by heightened economic inequality. Our findings from Study 3 partly allude to this notion, as we observed that people in high economic inequality conditions were more willing to dedicate their free time to exercising with a fitness app promoted with a personal control appeal.

Furthermore, higher inequality is associated with short-sighted financial decision-making and increased private debts (Bak & Yi, 2020; Bohoslavsky, 2016). Our findings suggest that financial institutions in these societies can target consumers by running campaigns that appeal to their need for control, encouraging long-term financial behaviors such as retirement savings. Overall, by leveraging the desire for control, marketers and policymakers can navigate the challenges posed by economic inequality and foster positive outcomes in various domains.

### 9.3. Future research directions

While our research emphasized the significance of dispositional beliefs in economic mobility as a crucial factor in mitigating the detrimental consequences of economic inequality, there remains potential for future research to examine additional factors, be they situational or dispositional, that could alleviate the psychological threats induced by higher levels of economic inequality. Culture, in particular, plays a pivotal role in shaping beliefs, attitudes, and perceptions, thereby influencing

consumers' understanding of economic inequality. Power distance beliefs are one aspect of culture that can impact these perceptions. In cultures with high power distance beliefs, there is a greater acceptance of hierarchical structures and inequalities. Individuals in such societies tend to view inequality as a natural and necessary outcome, and are less inclined to question or challenge existing power structures and economic disparities (Winterich & Zhang, 2014). This notion suggests that when power distance beliefs are high, consumers are less likely to exhibit compensatory responses, such as increased preference for personal control appeals, in face of high economic inequality.

However, recent research by Lee and Lalwani (2023) suggests that power distance beliefs induce a general mindset of constraint, prompting consumers to counteract this aversive mindset through compensatory consumption. This finding parallels the effect of economic inequality observed in the present research. Therefore, it is conceivable that power distance beliefs amplify the impact of economic inequality instead of attenuating it. An exciting avenue for future research would be to investigate the circumstances under which power distance beliefs may converge or diverge from the effects observed in our research. We propose that economic mobility beliefs may be key in reconciling these intriguing possibilities. It is plausible that power distance beliefs only increase compensatory responses when people feel economically stuck (i.e., low mobility beliefs). It remains up to future research to explore these captivating avenues and shed light on when and how cultural factors shape the persuasiveness of personal control appeals.

Finally, it is important to note that our studies did not yield any evidence for the moderating effect of income. Conceptually, one could argue both ways for the interactive effect of income. On the one hand, low-income individuals might be more profoundly affected by inequality due to the additional burden it imposes on them (e.g., Oishi et al., 2011). On the other hand, lower-income individuals are already familiar with and habituated to experiencing financial threats, suggesting that the negative effects of inequality may be more pronounced among those with higher incomes (Coté et al., 2015). Putting these two possibilities together, Wilkinson and Pickett (2011) postulate that the effects of inequality transcend the least well-off and uniformly influence individuals across varying income brackets. This is because heightened economic inequality prompts social comparison and status anxiety among high-income individuals while simultaneously raising concerns about potentially losing the little they have among low-income individuals. In line with this perspective, our research found consistent effects of economic inequality on financial concerns, sense of control, and our dependent variables, regardless of income brackets. Furthermore, our findings align with a growing body of social psychological research, which does not find supporting evidence for the moderating role of income (e.g., Davidai, 2018; Sprong et al., 2019; Brown-Iannuzzi et al., 2021). From an empirical standpoint, while we recommend future studies to account for the potential influence of income, we tend to concur that the psychological consequences of economic inequality may operate independently of income-related effects.

## 10. Conclusion

Economic inequality, a macro-level force that cripples societies' health, happiness, and well-being, is rising worldwide. However, less is known about the consequences of economic inequality on consumer behavior. Building on the compensatory control and functional theory of attitudes, we redressed this gap by showing that higher economic inequality increases consumers' preference for personal control appeals. We also highlighted the psychological mechanism of this effect and identified critical boundary conditions attenuating this effect. Our research provides the groundwork for future research to deepen and discern the discourse on *when* and *how* economic inequality shapes consumer behavior.

## CRedit authorship contribution statement

**Sumaya Albalooshi:** Conceptualization, Methodology, Data curation, Formal analysis, Writing – original draft, Writing – review & editing. **Mehrad Moeini-Jazani:** Conceptualization, Methodology, Data curation, Formal analysis, Writing – original draft, Writing – review & editing.

## 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.

## Data availability

We have shared the link to our data and code in the manuscript file.

## Appendix A. Supplementary material

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.jbusres.2023.114380>.

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