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Higher Economic Inequality, Lower Preference for Uncertain Consumption: The Role of Just World Belief and Sense of Control

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Abstract
With the global craze for the blind box, uncertain consumption as an emerging consumption pattern is gradually entering people's lives. Uncertain consumption preference refers to individuals' preference for products, services, and promotional methods that contain uncertainty. Existing research indicates that individual characteristics and product features have an impact on this preference. Given the importance of the external economic environment in the consumption process, this paper focuses on the role of individuals' perception of economic inequality on their uncertain consumption behavior. Through four studies, this paper finds that perceived economic inequality negatively affects individuals' uncertain consumption preferences. That is, when individuals perceive a high level of economic inequality in their environment, they are less willing to choose uncertain consumption. This is mainly due to the fact that economic inequality undermines their belief in a just world. Additionally, individuals' sense of control plays a moderating role in the impact of the belief in a just world on uncertain consumption preferences. Specifically, compared to individuals with a lower sense of control, those with a higher sense of control tend to show a higher level of preference for uncertain consumption as their belief in a just world increases. These findings not only enrich the research on the impact of perceived economic inequality in consumption research but also provide a broader perspective for examining the antecedent variables of uncertain consumption preferences.
Keywords: perceived economic inequality; preference for uncertain consumption; belief in a just world; sense of control

1. Introduction

To better attract consumers, the renowned travel service website Hotwire.com introduced a new type of hotel booking model in 2000, in which consumers could book a room at a discounted price without knowing the hotel's name, but the hotel they ultimately stayed at might be a random one from the many options provided by the website (as shown in Figure 1). As a marketing strategy, existing businesses often create an air of mystery and a sense of surprise around a product by hiding some of its

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information, thereby stimulating consumers' curiosity and willingness to purchase to a certain extent (Lee et al., 2025). For example, the globally popular Bubble Mart is a model of success.

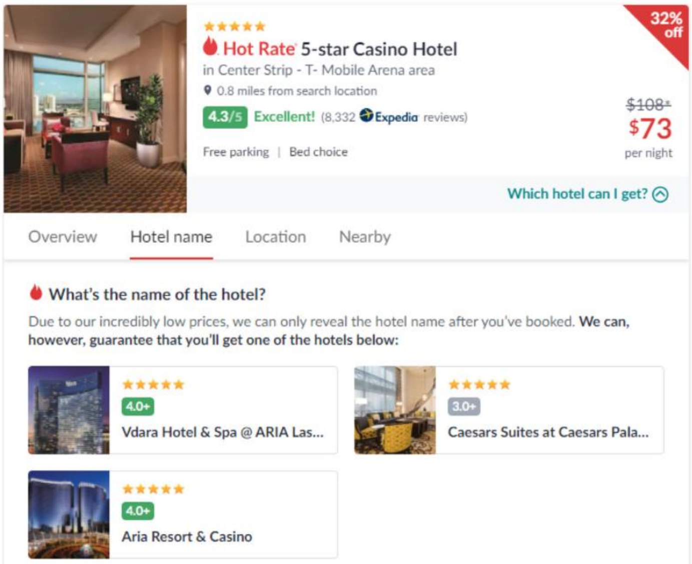

Figure 1. Hotel Booking on Hotwire

It is not difficult to find that the core characteristic of this mysterious consumption method is uncertainty (Guo et al., 2023). Individuals' preference for products, services, and promotional methods that contain uncertainty can be collectively referred to as "preference for uncertain consumption" (Fay & Xie, 2008). Given the various forms of existing uncertain consumption, Buechel and Li (2023) categorize them into two broad types based on the different focuses of uncertainty in consumption: horizontal uncertainty and vertical uncertainty. Horizontal uncertainty, also known as content uncertainty, primarily refers to the fact that different individuals receive different products and outcomes after consumption, focusing on the specific content. Common examples of horizontal uncertainty include blind boxes, lucky bags, and hidden menus in restaurants. Vertical uncertainty, also known as intensity uncertainty, mainly refers to the differences in the extent of discounts received by different individuals during the consumption process, focusing on outcomes with different objective advantages. For instance, lottery tickets, scratch cards and gambling are regarded as special forms of vertical uncertainty. Although uncertain consumption may appear similar to risk-taking or gambling, they are fundamentally distinct. General risk-taking refers to decisions involving probabilistic outcomes and potential losses (Weber et al., 2002), whereas uncertain consumption is domain-specific and occurs in ordinary market exchanges where consumers choose between known products and those with hidden or randomized attributes, including horizontal uncertainty (unknown content) and vertical uncertainty (random outcome magnitude; Buechel & Li, 2023). Unlike gambling, which typically involves wagering money on negative expected-value outcomes driven by monetary gain, arousal, or affect regulation (Lopes, 1987), uncertain consumption (e.g., blind boxes, mystery menus) involves purchasing goods or services with often neutral or positive expected value, and is primarily driven by anticipatory affect, surprise, and hedonic experience (Buechel & Li, 2023; Zhang & Zhang, 2022). Prior research has also explicitly distinguished probabilistic goods and opaque selling from gambling (Fay & Xie, 2008; Huang & Yu, 2014). Therefore, examining its relation to perceived economic inequality extends beyond existing research on inequality–risk and inequality–gambling links.

Given that uncertain consumption has emerged as a pivotal marketing strategy for businesses (Akhmad & Astuti, 2026), scholarly attention has increasingly focused on identifying the underlying drivers of this phenomenon amidst its growing prevalence and diversification. On one hand, existing studies have examined the positive impacts of uncertain consumption on businesses and consumers. Specifically, compared to traditional consumption methods, the uncertain choices in the consumption process can not only increase business profitability (Fay & Xie, 2008) but also provide emotional value to consumers (Zhang & Zhang, 2022; Cruz et al., 2025; Zhou et al.,2025), reduce their price sensitivity (Mazar et al., 2017), and make them more willing to share their consumption experiences with others (Kovacheva & Wiener, 2024). The sense of mystery surrounding consumption in times of uncertainty also increases people's propensity to purchase products (Liu, 2026). Recently, researchers have also analyzed why consumption under uncertainty is more appealing from the perspective of the PIEL (Probabilistic–Intentional–Exclusive–Low stake) framework (Lim et al., 2026). On the other hand, more studies have focused on the antecedent variables that influence individual preferences for uncertain consumption. For example, consumer individual characteristics (such as loneliness, sense of control, conspicuous consumption, innovativeness motivation and rationality) (Chen & Zheng, 2015; Ding & Han, 2024; Sun et al., 2024; Chang, 2026; Huang & Yu, 2014), types of rewards (competitions vs. lotteries) and decision types (cognitive vs. emotional) (Shen & Ming, 2022; Laran & Tsiros, 2013), product characteristics and methods of measuring uncertainty (Hill et al., 2016; Moon & Nelson, 2020). However, consumers are not completely isolated individuals, social environment also has an important impact on their consumption (Dahl, 2013). Although some scholars have begun to pay attention to external environmental variables in the current research, such as the impact of social density and social exclusion on individual preferences for uncertain consumption (Fan & Jiang, 2018; Fan, 2018), relevant studies are still relatively scarce. At the same time, although economic factors are important drivers in the consumption process, no research has explored the impact of external economic environment variables on individual preferences for uncertain consumption. In order to address these gaps, this paper will take individuals' perception of their economic environment as a starting point, focusing on the impact of perceived economic inequality on individual preferences for uncertain consumption, as well as its psychological mechanisms and boundary conditions.

This research contributes to the literature in three important ways. First, it extends the literature on economic inequality by identifying preference for uncertain consumption as a novel consumer consequence of perceived economic inequality. While prior studies have primarily examined how economic inequality influences status consumption, luxury consumption, and risk-taking behavior, little is known about its impact on consumers' willingness to engage in uncertainty-based consumption. Second, this research enriches the uncertain consumption literature by shifting attention from individual traits and product characteristics to the broader socioeconomic environment. Specifically, we demonstrate that consumers' preferences for uncertain consumption are shaped not only by personal and product-related factors but also by perceptions of the surrounding economic context. Third, drawing on Just World Theory and Compensatory Control Theory, we uncover the underlying psychological process through which perceived economic inequality influences uncertain consumption preferences. We show that belief in a just world mediates this relationship, while sense of control serves as an important boundary condition. Together, these findings provide a more comprehensive understanding of how macro-level social perceptions influence consumer responses to uncertainty.

2. Literature Review and Hypothesis Development

2.1 Perceived Economic Inequality

Perceived economic inequality, also known as subjective economic inequality, is used to describe individuals' perceptions of whether the economy is fair in their society and living environment (Schmalor & Heine, 2022). It reflects the objective economic inequality in individuals' living environments on the one hand, and is influenced by situational factors such as reference groups, social comparisons, and precipitating events in people's lives on the other hand (García–Castro et al., 2019). Research on perceived economic inequality has accumulated a wealth of findings, but overall, they tend to bring about some negative consequences. Specifically, a strong perception of economic inequality not only undermines people's life satisfaction and well-being (Delhey & Dragolov, 2014; Park et al., 2021), but the competitive atmosphere exacerbated by an unequal social environment also brings about a range of physiological and psychological health issues for individuals (Choi et al., 2015; Ryan et al., 2021; Stancato et al., 2024). Additionally, the negative impacts of perceived economic inequality are also evident in individual behaviors and intergroup interactions. For instance, Yang and Konrath (2023) conducted a meta-analysis on the relationship between economic inequality and various forms of prosocial behaviors (such as charitable giving, volunteering, informal helping behaviors, etc.), finding a significant negative correlation at the overall level. In interpersonal interactions, when individuals perceive a high degree of economic inequality in their social environment, they tend to show less trust in others and may even exhibit violent tendencies (Kirkland et al., 2023; Stancato et al., 2024; Contreras et al., 2015). Furthermore, similar behaviors can escalate to groups and races, leading to more stigmatization, discrimination, and exploitation (Marinucci et al., 2023; Lisnek et al., 2024; Hastings, 2018).

As research evolves, scholars have begun to pay attention to the changes in individual consumption behaviors in environments of economic inequality. Compared to the impact of perceived economic inequality on other aspects of individuals, its influence in the realm of consumption tends to be more positive. This is mainly because the unequal external environment triggers a strong tendency for social comparison among individuals, prompting them to reduce savings and increase consumption (Drechsel–Grau & Schmid, 2014), which also leads them to purchase more status products and luxury goods (Sweet, 2010; Oishi et al., 2022; Kurt & Gino, 2023; Du et al., 2022). However, do the external environment of economic inequality and individuals' perception of it necessarily have a positive impact on their consumption activities? This paper argues that this is not the case. When individuals make consumption choices, they often face decision-making scenarios that involve uncertain information. Due to the uncertainty and opacity of the product content and its objective advantages, individuals necessarily face certain risks when participating in such consumption activities, meaning that the consumption behavior may not yield satisfactory results. Then, in the face of such uncertain consumption scenarios, does an individual's perception of economic inequality promote or inhibit their consumption preferences? This paper will conduct in-depth research around this question.

2.2 The Mediating Role of the Belief in a Just World

Perceived economic inequality among consumers may reduce their preference for uncertain consumption by diminishing their belief in a just world. Belief in a just world refers to the belief that one's world is just, holding that one's actions will yield corresponding outcomes, that one can achieve success through effort, and that good deeds will be rewarded (Lerner, 1965, 1980). However, Lerner (1998), the proponent of this concept, also pointed out that the belief in a just world is a "fundamental delusion," meaning that the real world is not as ideal as people imagine and is often challenged by random unfair events in the external environment. The shattered assumptions theory proposed by Janoff-Bulman (1992) suggests that individuals form certain basic assumptions about the world, including the belief that they live in a predictable and just world. But after experiencing negative life events, individuals will become more pessimistic about the fairness of the society in which they live (Schuler & Boals, 2016). This paper argues that economic inequality, as a typical manifestation of adverse external social conditions, significantly affects individuals' perception of the justness of the entire world. Specifically, a socially unequal environment creates an atmosphere of competition and comparison. In the process of comparing themselves to others, people gain a clearer understanding of their own and others' social status and resources, recognizing the widespread nature of inequality. Furthermore, this strong perception of inequality makes them fully aware that effort and contribution in their society are not proportionate, ultimately leading to a decline in their belief in a just world. Barreiro et al. (2019) provided initial evidence for the negative impact of perceived economic inequality on the belief in a just world through their study on Argentine adolescents. They found that when Argentine adolescents perceived that social resources were unequally distributed, their perception of the overall fairness of society was also more negative.

According to the just world theory (Lerner & Simmons, 1966; Hafer & Begue, 2005), the belief in a just world can be a personal resource. When individuals hold a high belief in a just world, the richness of this inner resource also increases their optimism (Dalbert, 2009). Conversely, when individuals lack the psychological resource of believing the world is just, they become more sensitive to potential risks in the external environment and show a general decrease in trust towards related entities and organizations (Mariss et al., 2022; Kiral Ucar et al., 2022; Hadarics, 2024; Cheng et al., 2024). Wilson and Darke (2012) also provided similar evidence in the field of consumer research, indicating that a lower belief in a just world damages consumers' trust in sellers to some extent, leading them to be prone to more conservative to avoid potential risks in the purchasing process. Similarly, we suggest that weakened belief in a just world reduces consumers' perceived predictability and legitimacy of market exchanges, leading them to prone to more conservative and cautious consumption decisions. Since uncertain consumption inherently carries some risk, as consumers cannot be certain of obtaining satisfactory goods. Therefore, the decrease in individuals' belief in a just world brought about by the perception of economic inequality will further have a negative impact on their preference for uncertain consumption. In summary, the research hypothesis of this paper is proposed:

H1: Perceived economic inequality negatively affects individual preference for uncertain consumption.

H2: Belief in a just world plays a mediating role in the impact of perceived economic inequality on individual preference for uncertain consumption.

2.3 The Moderating Role of Sense of Control

In fact, an individual's preference for uncertain consumption not only decreases due to the diminishing belief in a just world, but this effect is also largely influenced by their level of sense of control. Sense of control, as a fundamental human need and a primary driver of behavior, is defined as the belief in one's ability to predict, influence, and guide current or future events (Kay et al., 2008). Although both belief in a just world and sense of control concern perceptions of predictability, they represent conceptually distinct psychological systems. Belief in a just world is an ideological belief concerning the moral order of the world (Lerner, 1965, 1980). In contrast, sense of control is a self-referential belief concerning one's capacity to influence events and outcomes (Pearlin & Schooler, 1978). Grounded in Compensatory Control Theory (Landau et al., 2015), these systems may compensate for one another under threat, yet belief in a just world does not causally generate sense of control. Consequently, rather than functioning as a sequential mediator through which belief in a just world affects consumption preferences, sense of control is better understood as a boundary condition that determines whether belief in a just world is translated into behavioral choices under uncertainty. A high sense of personal control is produced when an individual believes that their efforts can lead to desired outcomes or prevent undesired outcomes from occurring. Conversely, personal control is reduced when one believes that individual efforts are unrelated to the occurrence of any outcomes. According to the Compensatory Control Theory proposed by Landau et al. (2015), a lack of control leads to feelings of anxiety and unease, prompting individuals to seek compensation in various aspects of their lives. Existing research indicates that consumption serves as a key mechanism for restoring personal control, a phenomenon exemplified by consumers' preference for products featuring high-effort information (Cutright & Samper, 2014; Hamerman & Johar, 2013). Additionally, consumers with lower control are inclined to avoid uncertainty and risk in the consumption process, seeking predictable consumption experiences (Jami, 2019). For instance, the study by Faraji-Rad et al. (2017) found that consumers' sense of control negatively affects their preference for new products, as they believe trying unknown new products may bring negative impacts beyond their control. Similarly, the research by Min and Schwarz (2022) also showed that new products often imply more risk, and consumers lacking control perceive this unpredictability as a threat, which largely damages their intention to choose new products.

Building on the aforementioned research, scholars have begun to use this as a typical psychological mechanism to explain how individual characteristics and external social environments influence consumers' preferences for uncertain consumption. For instance, studies have shown that higher levels of loneliness, crowded social environments, and negative experiences of social exclusion all have a negative impact on individuals' sense of control, which in turn leads to a decrease in their preference for uncertain consumption (Chen & Zheng, 2015; Fan & Jiang, 2018; Fan, 2018). Additionally, Ding and Han (2024) directly examined the negative impact of sense of control on preferences for uncertain consumption in their research. They found that personal sense of control negatively affects subsequent uncertain consumption activities by reducing individuals' liking for uncertainty. Although existing research has paid sufficient attention to the important role of sense of control in the process of individual uncertain consumption, no scholars have yet incorporated it as a potential boundary condition in the exploration of related issues. This paper argues that while individuals' beliefs about the fairness of the world and society can influence their preferences for uncertain consumption, the degree of influence varies for people with different levels of control sense. Specifically, compared to individuals with lower control sense, those with higher control sense are more likely to view the belief in a just world as a psychological resource when facing uncertainty. This resource deepens their cognition that they can effectively cope with life's challenges and uncertainties, thereby prompting them to be more willing to accept uncertain consumption. To summarize, the research hypotheses of this paper are proposed as follows:

H3: Sense of control moderates the effect of belief in a just world on individual preferences for uncertain consumption. Specifically, individuals with a high sense of control will show an increased preference for uncertain consumption as their belief in a just world strengthens, whereas individuals with a low sense of control will not have their preference for uncertain consumption influenced by changes in their belief in a just world.

In summary, the assumptions summarized in this paper are shown in Table 1 and this paper proposes the theoretical model illustrated in Figure 2.

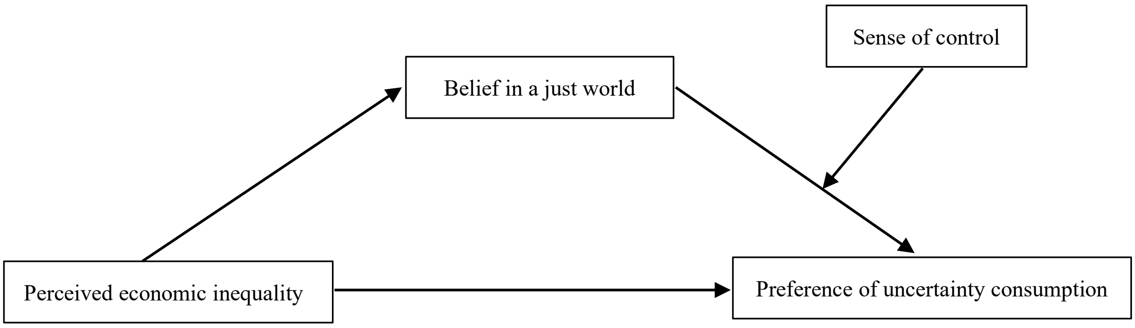

Figure 2. The Theoretical Model Diagram of the Impact of Perceived Economic Inequality on Uncertain Consumption Preferences

Table 1. Summary of Hypotheses

Hypotheses Number	Study	Content
H1	Study 1 Study 2a Study 2b Study 3	Perceived economic inequality negatively affects individual preference for uncertain consumption.
H2	Study 2a Study 2b	Belief in a just world plays a mediating role in the impact of perceived economic inequality on individual preference for uncertain consumption.
H3	Study 3	Sense of control moderates the effect of belief in a just world on individual preferences of uncertain consumption. Specifically, individuals with a high sense of control will show an increased preference for uncertain consumption as their belief in a just world strengthens, whereas individuals with a low sense of control will not have their preference for uncertain consumption influenced by changes in their belief in a just world.

3. Study 1: The Main Effect of Perceived Economic Inequality on Individual's Uncertain Consumption Preferences

3.1 Subject

Study 1 will verify the main effect of perceived economic inequality on individual uncertain consumption. Given the Credamo platform's convenience, efficiency, and high-quality data collection (Yao et al., 2025), all experiments in this study utilized the Credamo platform for data collection. Study 1 recruited 240 online participants from the Credamo platform to complete a questionnaire survey. Of these, 113 were females (47.1%) and 127 were males (52.9%), with an average age of 32.01 ± 6.18 years.

3.2 Research Tool

Perceived economic inequality. This study employed the "Perceived Economic Inequality in Daily Life Scale" developed by García-Castro et al. (2019) to measure the participants' perceived economic inequality (see Appendix A for details). The original scale consists of 12 items, such as "Among the people around me, some live in luxurious houses, while others live in humble surroundings," and "Among the people around me, some have substantial savings, while others struggle to make ends meet at the end of the month." Given that item 11 from the original scale, "I know people who can afford enough heating for their homes, and others who cannot," is not applicable to the Chinese context, it was removed from this study. The remaining 11 items ($\alpha = 0.98$) do not include reverse-scored items and were rated using a Likert 7-point scale, where 1 = strongly disagree and 7 = strongly agree.

Uncertain consumption preference. This study used certain situations to measure the participants' preference for uncertain consumption. Specifically, the study designed 10 virtual consumption scenarios ($\alpha = 0.90$), consisting of 4 vertical uncertainty consumption scenarios and 6 horizontal uncertainty consumption scenarios (see Appendix B for details). In the horizontal uncertainty consumption scenarios, participants were asked to choose between consumption methods with fixed and variable content. For example, "It's a hot day, and you want to buy ice cream to cool off. You happen to have a gift voucher for an ice cream shop that allows you to participate in a promotional event. The shop offers eight flavors of ice cream. There are two promotional options available: one is to exchange the voucher for the shop's best-selling classic milk-flavored ice cream bar; the other is to exchange the voucher for a 'mystery box' ice cream, which you will randomly receive one of the eight flavors shown in the picture. Which consumption method would you prefer?"

In the vertical uncertainty consumption scenarios, participants were asked to choose between consumption methods with fixed and variable prices. For example, "Suppose you want to buy a water bottle. There is a promotion by a certain brand, where the store offers an 80 yuan gift voucher and provides two consumption options: one is to directly exchange the voucher for a water bottle priced at 80 yuan, and the other is to use the voucher to enter a lottery where you have an equal chance of winning a water bottle valued at 100 yuan, 80 yuan, or 60 yuan. Which consumption method would you tend to choose?"

3.3 Result

The results of Harman's single-factor test indicate that 35.314% of the total variance can be explained by the first principal component, which is below the critical value of 40%. This suggests that common method bias does not unduly affect the data obtained from the questionnaire survey, and the statistical analysis can proceed as shown in Table 2.

Table 2. Harman's Single-Factor Test

Component	Total	% of Variance	Cumulative %
1	14.126	35.314	35.314

The regression analysis results shown in Table 3 indicate that after controlling for participants' gender, age, and monthly income, perceived economic inequality significantly negatively affects their preference for uncertain consumption ($\beta = -0.307$, $p < 0.001$, 95% CI: –0.435 to –0.185). This means that the higher an individual's level of perceived economic inequality, the less willing they are to engage in uncertain consumption. Furthermore, this result is consistent whether examining horizontal and vertical uncertainty consumption separately or calculating the total score of both. For all specific data, please refer to the attachment https://doi.org/10.17605/OSF.IO/CYJ6H.

Table 3. Regression Analysis Results for Study 1 (N = 240)

	Uncertain Consumption Preference		Horizontal		Vertical	
	β	p	β	p	β	p
Control variables						
Sex (male = 0, female = 1)	–0.035	0.577	–0.017	0.789	0.055	0.396
Age	–0.124	0.056	–0.112	0.084	–0.123	0.060
Income	0.185**	0.005	0.169*	0.011	0.183**	0.006
Independent variable						
Perceived economic inequality	–0.307***	0.000	–0.304***	0.000	–0.271***	0.000

Note: *p < 0.05; ***p < 0.001.

3.4 Summary

Study 1 used a questionnaire survey to preliminarily establish the negative impact of perception of economic inequality on individuals' preference for uncertain consumption, and it was found that the influence of participants' perception of economic inequality on both horizontal and vertical uncertain consumption was consistent. In addition, we found that an individual's income level positively predicts a preference for uncertain consumption, which is consistent with previous research. For example, a field experiment found that the higher an individual's income, the more willing they are to take financial risks, demonstrating that income positively predicts high-risk tolerance (Hopland et al., 2016). However, since the questionnaire method cannot reveal causal relationships between variables, Study 2 will further investigate the causal relationship between the perception of economic inequality and the preference for uncertain consumption by manipulating the independent variable.

4. Study 2: The Mediating Role of Belief in a Just World

Building on Study 1, Study 2 will further validate the main effect of perceived economic inequality on individuals' uncertain consumption preferences by manipulating participants' perceptions of economic inequality. Secondly, Study 2 will also employ a causal chain approach, manipulating the independent variable and the mediating variable separately, to verify the mediating role of belief in a just world.

4.1 Study 2a: The Impact of Economic Inequality on Belief in a Just World and Uncertain Consumption

4.1.1 Design and Subject

Study 2a employed a single-factor between-subjects experimental design (low economic inequality vs. high economic inequality) and recruited 200 online participants from the Credamo platform. Of these, 111 were female (55.5%) and 89 were male (44.5%), with an average age of 33.11 ± 11.21 years.

4.1.2 Procedure

Study 2a used a pie chart paradigm (Côté et al., 2015) to manipulate participants' perceptions of economic inequality (see Appendix C for details). Specifically, participants were shown a pie chart depicting the wealth distribution across five social classes, along with descriptions of the conditions of each class. In the high economic inequality condition, there was a large wealth gap between the highest and lowest classes; whereas in the low economic inequality condition, the gap between the two classes was smaller. After reading the materials, participants were asked to describe their experiences and feelings of living in such a country (at least 50 words). Finally, participants completed a manipulation check item: “How unequal do you think this country is? (1 = very equal, 7 = very unequal).”

Subsequently, Study 2a measured participants’ preferences for horizontal and vertical uncertain consumption through two scenarios (see Appendix D). After measuring participants’ uncertain consumption preferences, Study 2a used the “Global Belief in a Just World Scale” developed by Lipkus (1991) to measure participants’ belief in a just world (see Appendix E). The scale consists of seven items ($\alpha = 0.93$), such as “You feel that most people get what they deserve,” and “You feel that a person’s efforts will be noticed and rewarded accordingly.” The scale uses a Likert 7-point scoring system, where 1 = strongly disagree and 7 = strongly agree, with higher scores indicating a higher level of belief in a just world.

4.1.3 Result

Manipulation Check. The manipulation check scores for the high economic inequality group ($M = 6.09$, $SD = 0.77$, $n = 100$) were significantly higher than those for the low economic inequality group ($M = 2.25$, $SD = 0.78$, $n = 100$), $t(198) = –35.03$, $p < 0.001$, Cohen’s $d = 4.95$, indicating that the manipulation of economic inequality was successful.

Main Effects and Mediation Effects. First, the results of the linear regression analysis showed that after controlling for demographic variables, perceived economic inequality negatively affected participants’ belief in a just world ($\beta = –0.589$, $p < 0.001$, 95% CI: –2.070 to –1.402) and their preference for uncertain consumption ($\beta = –0.137$, $p = 0.053$). At the 95% confidence level, the effect of perceived economic inequality on consumption under uncertainty is marginally significant; however, at the 90% confidence level, the effect is significant (90% CI: –1.097 to –0.089). This means that the higher the level of economic inequality perceived by individuals, the lower their belief in a just world and the less willing they are to engage in uncertain consumption. Subsequently, Hayes’ (2013) PROCESS macro with Model 4 was used to test the mediating role of belief in a just world. In this model, low and high economic inequality conditions were coded as 0 and 1, respectively, with the preference for uncertain consumption as the dependent variable. The results of 5000 bootstrapped samples and 95% confidence interval calculations revealed a significant mediating effect of belief in a just world (95% CI: -1.120 to -0.464).

4.2 Study 2b: The Impact of Belief in a Just World on Uncertain Consumption

4.2.1 Subject

Study 2b employed a single-factor between-subjects experimental design (low belief in a just world vs. high belief in a just world) and recruited 200 online participants from the Credamo platform. Of these, 123 were females (61.5%) and 77 were males (38.5%), with an average age of 29.19 ± 8.09 years.

4.2.2 Research Tool

Study 2b used a self-developed scenario to manipulate participants’ perceived belief in a just world. Specifically, the researchers informed the participants that they worked in the same company as Wang, who had strong professional skills and good interpersonal relationships. Recently, the position of sales department manager became vacant, and most people believed that Wang was the best candidate for the sales manager position in terms of both work ability and qualifications. In the high belief in a just world condition, participants read the content, “After a comprehensive evaluation by the company’s talent selection department, Wang was appointed as the new sales department manager.” In the low belief in a just world condition, participants read the content, “A person with no work experience and lacking in ability was appointed as the new sales department manager because they are a relative of the company’s leadership.” (See Appendix F for details). Following this, Study 2b used the same vertical and horizontal scenarios as Study 2a to measure participants’ uncertain consumption preferences.

4.2.3 Result

Manipulation Check. The manipulation check scores for the high belief in a just world condition ($M = 5.93$, $SD = 0.76$, $n = 100$) were significantly higher than those for the low belief in a just world condition ($M = 2.44$, $SD = 1.25$, $n = 100$), $t(198) = –23.86$, $p < 0.001$, Cohen’s $d = 3.37$, indicating that the manipulation of belief in a just world was successful.

The Impact of Belief in a Just World on Uncertain Consumption. The results of the linear regression analysis showed that, after controlling for covariates, belief in a just world significantly positively influenced participants’ preference for uncertain consumption ($\beta = 0.160$, $p = 0.023$, 95% CI: 0.078 to 1.095). That is, the higher an individual’s perceived belief in a just world, the more willing they are to engage in uncertain consumption.

4.3 Summary

Study 2 further verified the impact of individuals’ perceived economic inequality on their preference for uncertain consumption through the manipulation of participants’ perceived economic inequality. In addition, the use of the causal chain method and the related results also examined the mediating role of belief in a just world. However, Studies 2a and 2b only focused on the explanatory mechanism of the impact of economic inequality perception on uncertain consumption preferences and did not investigate potential boundary conditions. Therefore, Study 3 will examine the moderating role of sense of control.

5. Study 3: The Moderating Role of Sense of Control

Building on Studies 2a and 2b, the purpose of Study 3 in this paper is twofold: First, we change the manipulation method of perceived economic inequality to further validate the robustness of the impact of individuals’ perceived economic inequality on their uncertain consumption preferences; Second, we will explore the boundary conditions under which perceived economic inequality affects individuals’ uncertain consumption preferences.

5.1 Design and Subject

Study 3 employed a single-factor between-subjects experimental design (low economic inequality vs. high economic inequality) and recruited 310 online participants from the Credamo platform. Of these, 93 were female (30%) and 217 were male (70%), with an average age of 30.90 ± 9.23 years.

5.2 Research Tool

Study 3 first used the “Sense of Control Scale” developed by Lachman and Weaver (1998) to measure participants’ sense of control (see Appendix G for details). The scale consists of 12 items ($\alpha = 0.91$), with some scored positively, such as “You can do the things you really want to do” and “When you really want to do something, you usually find a way to succeed"; others are reverse-scored items, like "For many important things in your life, you have little ability to change" and "Things that happen in your life are often beyond your control." The scale uses a Likert 7-point scoring system, where 1 = strongly disagree and 7 = strongly agree. Higher scores indicate a stronger sense of control.

Next, the Bimboola paradigm developed by Sprong et al. (2019) was used to manipulate participants' perceived level of economic inequality (see Appendix H for details). In the specific experiment, participants were first asked to imagine living in a city called Bimboola, which consists of high, middle, and low income groups, with participants being part of the middle-income group. In the high economic inequality condition, participants were told that the high-income group in the city has an average monthly income of 13,000 BC (BC is the currency unit of the community), the middle-income group has an average monthly income of 7,000 BC, and the low-income group has an average monthly income of only 500 BC. To reinforce the manipulation of economic inequality, the experiment also presented participants with images showing the differences in cars, housing, and vacation conditions among different income groups living in the city. In the low economic inequality condition, participants were told that the high-income group has an average monthly income of 8,000 BC, the middle-income group has an average monthly income of 7,000 BC, and the low-income group has an average monthly income of 6,000 BC. Additionally, the related images only showed minor differences in the living conditions of different income groups. After reading the materials, participants were asked to describe their experiences and feelings of living in such a city (at least 50 words). Finally, participants were required to complete a manipulation check item: "How unequal do you think Bimboola is? (1 = very equal, 7 = very unequal)."

Lastly, Study 3 used the same method as Study 2a to measure participants' belief in a just world (α = 0.87) and their preference for uncertain consumption.

5.3 Result

Manipulation Check. The manipulation check scores for the high economic inequality group (M = 5.75, SD = 1.40, n = 155) were significantly higher than those for the low economic inequality group (M = 2.41, SD = 1.40, n = 155), $t(308) = –20.96$, $p < 0.001$, Cohen's d = 2.39, indicating successful manipulation of economic inequality perceptions.

Main Effects and Mediation Effects. The results of linear regression, controlling for age, gender, and monthly income, showed that perceived economic inequality significantly negatively predicted participants' preference for uncertain consumption ($\beta = –0.175$, $p = 0.002$, 95% CI: –0.910 to –0.202). This means that the higher the level of perceived economic inequality, the lower the preference for uncertain consumption. Subsequently, the mediating effect of belief in a just world was tested using the PROCESS procedure (Model 4; Hayes, 2013). The results of 5000 bootstrapped samples and 95% confidence interval calculations revealed a significant mediating effect of belief in a just world (95% CI: –0.416 to –0.121), indicating that belief in a just world mediated the impact of perceived economic inequality on individuals' preference for uncertain consumption.

Moderated Mediation Effect. To further test the moderating role of sense of control, Study 3 employed Model 14 of the PROCESS procedure for testing moderated mediation effects (Hayes, 2013). The results found a significant moderating effect of sense of control (95% CI: 0.061 to 0.401). Results from a simple slope analysis indicate that, under conditions of low perceived control, the belief in a just world does not significantly influence preferences for uncertain consumption (B=0.182, $t = 1.747$, p = 0.081); however, under conditions of high perceived control, the belief in a just world positively predicts preferences for uncertain consumption (B = 0.687, t = 4.928, $p < 0.001$). The results of the simple slope analysis are presented in Figure 3. This finding suggests that for individuals with a high sense of control, an increase in belief in a just world will lead to a higher preference for uncertain consumption; however, for individuals with a low sense of control, changes in belief in a just world do not have a significant impact on their preference for uncertain consumption.

5.4 Summary

Study 3 further verified the robustness of the negative impact of perceived economic inequality on individuals' preference for uncertain consumption through the Bimboola paradigm. Moreover, the introduction of sense of control expanded the boundary conditions of the above effects from the perspective of individual characteristics. Specifically, compared to those with low sense of control, individuals with higher sense of control were better able to sense changes in belief in a just world, which in turn influenced their preference for uncertain consumption.

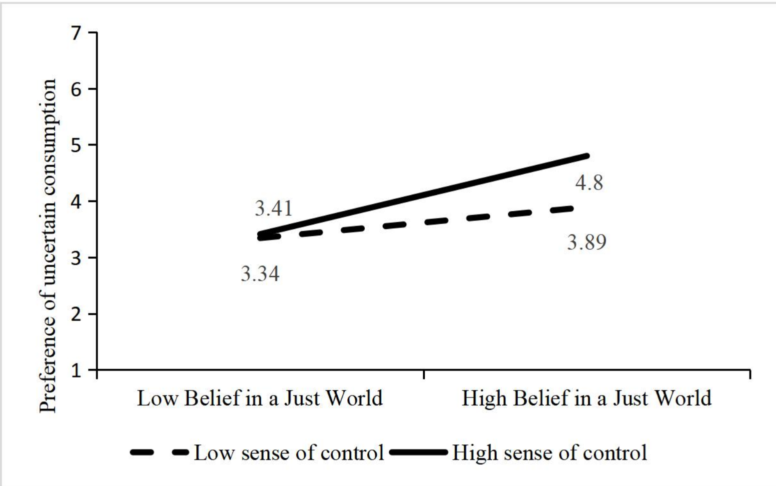

Figure 3. Simple Slope Analysis of Belief in a Just World × Sense of Control

6. General Discussion

6.1 The Impact of Perceived Economic Inequality on Uncertain Consumption Preferences: The Role of Belief in a Just World

This paper, combining the Shattered Assumptions Theory and the Just World Theory, investigates the impact of individuals' perceived economic inequality on their preferences for uncertain consumption through four studies, while demonstrating the mediating role of belief in a just world in this impact. Based on the integration of the two types of uncertain consumption proposed by previous researchers—horizontal uncertainty and vertical uncertainty—the paper fully verifies that a higher level of perceived economic inequality among individuals negatively affects their preference for uncertain consumption by weakening their belief in a just world. Although the process of uncertain consumption involves some risk for consumers due to the opacity of product information and content, the findings of this paper differ from previous research on the impact of economic inequality on risky behavior and risk decision-making. Specifically, previous studies have shown that a socially unequal environment prompts people to engage in more upward social comparisons, leading to a deeper awareness of their own resource inadequacy. Consequently, in risk decision-making scenarios such as gambling, people are more willing to engage in risky behaviors to obtain the resources they need (Payne et al., 2017;

Goya-Tocchetto & Payne, 2022). Similarly, research by Hannay et al. (2021) also indicates that an externally unequal economic environment draws people's attention to the luxurious lifestyles and hedonic experiences of the wealthy, thereby prompting them to exhibit a higher level of risk propensity.

This difference can be explained in terms of both cultural values and the heterogeneity of research contexts. First, there are differences in cultural cognitive models. Risk decision-making among Western participants is driven more by a narrative of "personal agency": inequality is viewed as a signal that social mobility can be achieved through risk-taking, thereby reinforcing risk-seeking behavior (Park et al., 2016). In contrast, Chinese participants, who have long been embedded in a collectivist cultural context, place greater emphasis on loss aversion and long-term stability in their decision-making and exhibit lower tolerance for uncertainty (Kim & Park, 2010). When perceiving economic inequality, individuals tend to scale back risky expenditures and prioritize securing the certainty of basic living needs, rather than pursuing potential gains through uncertain consumption. A second difference lies in is the difference in ecological validity of the research contexts. Previous studies supporting the notion that "inequality increases risk preference" have largely employed abstract monetary gambling paradigms (such as dice games and lottery choice tasks), which strip away the contextual attributes of real-world consumption. In contrast, the scenarios used in this study—such as blind boxes, raffles, and random hotel room bookings—are authentic situations closely aligned with everyday consumption. These scenarios not only involve uncertainty regarding returns but also imply the potential risk of loss: paying a price but failing to obtain the expected product. For ordinary consumers, the uncertainty associated with this type of consumption is closer to a risk of potential loss than a zero-cost gamble for high returns. Therefore, the tendency toward caution under high perceived inequality is more pronounced. This discrepancy demonstrates precisely that the impact of economic inequality on individual behavior is not linear, but rather undergoes systematic shifts depending on cultural context and the characteristics of the behavioral setting, thereby providing a clear direction for future cross-cultural comparative studies.

6.2 Differential Performance of Individuals with Varying Levels of Sense of Control

In addition to verifying the negative impact of individuals' perceived economic inequality on their preference for uncertain consumption, this paper further examines the moderating role of individuals' own sense of control in the aforementioned influence. Specifically, while individuals with different levels of sense of control will become more skeptical about the fairness and justice of the world due to an increase in the level of economic inequality in their environment, for those with low sense of control, a decrease in belief in a just world does not significantly affect their preference for uncertain consumption. Conversely, for individuals with high sense of control, their preference for uncertain consumption is enhanced as their belief in a just world increases. This result is mainly because individuals with low sense of control do not place high expectations on their ability to control the external world, and therefore, regardless of whether the world is fair and just, they are unwilling to engage in more activities that involve risk and uncertainty.

However, it is precisely because individuals with high sense of control believe they have the ability to control the external world that the decrease in belief in a just world challenges their psychological resources to some extent. In this situation, faced with uncertain consumption that involves risk, they also begin to believe that related behaviors will not be rewarded fairly, and thus choose to avoid uncertain consumption. Overall, building on previous research, this paper is the first to incorporate the boundary condition of sense of control into the discussion of issues related to uncertain consumption, which also provides a new perspective for subsequent research.

6.3 Research Limitations and Future Prospects

Although this paper has adequately validated the negative impact of perceived economic inequality on individuals' uncertain consumption preferences, as well as its psychological mechanisms and boundary conditions, through four logically progressive studies, there are still several limitations in the research:

First, all the studies included in this paper were conducted within the Chinese cultural context, where participants were influenced by collectivism and conservative values. This may lead to a higher tendency for risk aversion in the same economic inequality environment, resulting in a lesser willingness to choose uncertain consumption methods. Therefore, it remains to be seen whether the findings of this study can be generalized to other countries and regions. Future research should employ cross-cultural designs, recruiting participants from both Western individualistic cultures (e.g., the US or Europe) and Eastern collectivistic cultures to explore the possibility of cultural factors serving as moderators. It is possible that in Western cultures, even under conditions of perceived high economic inequality, people may prefer uncertain consumption because this is driven by personal decision-making styles shaped by cultural and environmental factors. Such comparisons would help determine whether the negative path observed here is attenuated or even reversed in cultural contexts where "getting rich quickly" is a more salient narrative.

Second, the ecological validity of experimental manipulations still needs to be improved and enhanced. Although we utilized real-life consumption scenarios (e.g., blind boxes, hotel bookings), the experiments relied on hypothetical choices rather than actual purchase behavior. In Study 3, participants imagined living in cities with varying levels of inequality (Bimboola paradigm). These imagined scenarios may not fully capture the psychological tension induced by actual lived experiences of inequality. Future studies could address this by employing field experiments or incentive-compatible designs. For instance, researchers could recruit participants from regions with objectively different Gini coefficients or track real-world blind box purchasing records in relation to local macroeconomic fluctuations.

Another limitation is that we treated preference for uncertain consumption as a unitary construct spanning multiple scenario types (e.g., blind boxes, random discounts, scratch cards) without testing measurement invariance across them. These scenarios differ considerably in financial risk, hedonic value, and structural features, which may shape distinct psychological responses. While our main findings held for both horizontal and vertical uncertainty, subsequent studies should formally assess whether the construct functions equivalently across diverse uncertain consumption contexts, and explore scenario-specific boundary conditions.

Finally, regarding individual boundary conditions. While we identified sense of control as a moderator, other individual differences warrant exploration. For example, consumers with high "materialism" or "status-seeking" motives might maintain a high preference for uncertain consumption (especially luxury blind boxes) even under high inequality, viewing them as a shortcut to social status. Additionally, future research could explore the role of digital payment methods; the "pain of paying" is often reduced with mobile payments, which might buffer the inhibitory effect of inequality on uncertain spending.

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Not applicable.

Data Availability Statement

The data used to support the findings of this study are available from the corresponding author upon reasonable request.

Ethics Statement

All procedures conducted in studies involving human participants were in accordance with the ethical standards and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Conflicts of Interest

The authors declare no conflicts of interest.

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Appendix

Appendix A: Perceived Economic Inequality in Daily Life Scale

1. The income levels of the people I know vary widely.
2. Among the people around me, some have access to better healthcare than others.
3. Some of the people around me can afford to travel frequently, while others cannot.
4. Among the people around me, some live in luxurious houses, while others live in humble surroundings.
5. Some people can afford a very expensive, high-quality education, while others can only receive the most basic education.
6. Among the people I know, some are struggling to make ends meet, while others have no financial worries.
7. Among the people around me, some have substantial savings, while others struggle to make ends meet at the end of the month.
8. Among the people I know, some can’t handle unexpected expenses, while others don’t have to worry about such things.
9. Some people have a very high standard of living, while for others, it is out of reach.
10. In my daily life, I’ve noticed a very stark economic inequality.
11. Among the people I know, some are able to make a lot of money with ease, while others are still struggling to make ends meet.

Appendix B: Measurement of Uncertain Consumption Preference

1. *Suppose you want to buy a water bottle. There is a promotion by a certain brand, where the store offers an 80 yuan gift voucher and provides two consumption options: one is to directly exchange the voucher for a water bottle priced at 80 yuan, and the other is to use the voucher to enter a lottery where you have an equal chance of winning a water bottle valued at 100 yuan, 80 yuan, or 60 yuan.*

Which consumption method would you tend to choose? (1 = Get a water bottle worth 80 yuan directly, 7 = Participate in a lottery activity)

2. *Suppose you're getting together with friends and want to buy some nuts. You happen to come across a promotion by a certain brand, and the seller offers two purchase options: one is to buy a nut gift set worth 200 yuan outright, and the other is to buy a surprise nut box for the same price of 200 yuan, but with an equal chance of winning a nut gift set worth 240 yuan, 200 yuan, or 160.*

Which consumption method would you tend to choose? (1 = Purchase a 200-yuan nut gift set directly, 7 = Buy a nut blind box)

3. *Suppose it's a holiday and you want to attend a concert. As a member of a certain platform, the platform offers you two ticket purchase options: one is to buy a ticket directly for 800 yuan; the other is to spend 800 yuan to purchase a random ticket, with an equal chance of winning tickets worth 1,000 yuan, 800 yuan, or 600 yuan.*

Which consumption method would you tend to choose? (1 = Purchase an 800-yuan ticket directly, 7 = Purchase a random ticket for 800 yuan)

4. *Suppose you are shopping at a supermarket and have entered a coupon giveaway. The store offers two ways to claim a coupon: one is to receive a 100-yuan coupon directly; the other is to enter a raffle with equal odds of winning coupons worth 150 yuan, 100 yuan, or 50 yuan.*

Which consumption method would you tend to choose? (1 = Get a 100-yuan voucher directly, 7 = Receive vouchers through a lottery)

5. *It's a hot day, and you want to buy ice cream to cool off. You happen to have a gift voucher for an ice cream shop that allows you to participate in a promotional event. The shop offers eight flavors of ice cream. There are two promotional options available: one is to exchange the voucher for the shop's best-selling classic milk-flavored ice cream bar; the other is to exchange the voucher for a "mystery box" ice cream, where you will randomly receive one of the eight flavors shown in the picture.*

Figure B1. Ice Cream Material

Which consumption method would you prefer? (1 = Choose a classic ice cream flavor, 7 = Choose an ice cream flavor blind box)

6. *You're traveling out of town soon and need to book a room. A four-star hotel is currently running an anniversary promotion. The hotel offers the eight room types shown below, and guests can choose from two promotional options: One option is to stay in the hotel's most popular Classic Business King Room (the first image below) at a 30% discount. The other option is to enter a drawing for a chance to*

win a unique room type. You will be randomly selected from the eight room types shown below (with equal odds) and stay in that room at a 30% discount.

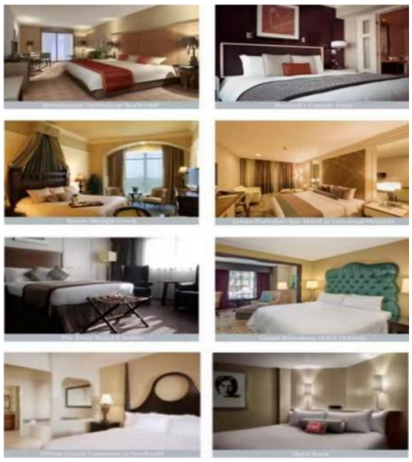

Figure B2. Rooms Material

Which consumption method would you prefer? (1 = Choose a Classic King Room, 7 = Stay in a randomly selected specialty room)

7. *It's currently a shopping festival on a certain platform, and you're looking to buy a new pair of slippers. You happen to come across a merchant running a promotion, offering the eight styles of slippers shown in the image below. You have claimed a 30-yuan shopping coupon on the platform, which can be applied to purchases from this merchant. The merchant offers two ways to use the coupon: one option is to use the coupon directly to purchase the classic black-and-white slippers (the first image below), and the other option is to have one pair randomly selected from the eight styles.*

Figure B3. Slippers Material

Which consumption method would you prefer? (1 = Purchase classic black and white slippers, 7 = Choose random delivery)

8. *Imagine you're about to move into a new home and want to buy three different landscape paintings to decorate the room. Just then, you come across a store running a promotion, offering a selection of picture frames featuring the nine designs shown below. The store offers two purchase options: one allows you to freely choose the three landscape paintings you want, while the other*

involves purchasing a "mystery box" of landscape paintings, in which the store randomly selects three from the nine options below and ships them to you.

Figure B4. Paintings Material

Which consumption method would you prefer? (1 = Choose three landscape paintings to buy by myself, 7 = Purchase the merchant's landscape painting blind box)

9. *Imagine it's almost Mid-Autumn Festival, and you're planning to buy some mooncakes. Just then, you come across an online shop selling handmade mooncakes that offers the nine flavors shown in the image below. The vendor is currently offering two "family pack" promotions: one allows customers to freely select three flavors of mooncakes to be shipped in a family-sized gift box, while the other lets customers purchase a "blind box" of mooncakes at the same price, meaning three flavors will be randomly selected from the nine options below and shipped.*

Figure B5. Mooncakes Material

Which consumption method would you prefer? (1 = Choose and purchase mooncakes in three flavors myself, 7 = Buy a mooncake blind box)

10. *Imagine you need to buy three notebooks for work. You happen to come across a stationery store online that sells the nine types of notebooks shown below. The store currently offers two purchasing options: one allows customers to freely select three notebooks; the other lets you purchase a "blind*

box" of notebooks for the same price, meaning you'll receive a random selection of three notebooks from the nine styles below.

Figure B6. Notebooks Material

Which consumption method would you prefer? (1 = Choose three notebooks of different colors to buy myself, 7 = Buy a laptop blind box)

Appendix C: Manipulation of Participants' Perceptions of Economic Inequality

High Perceptions of Economic Inequality group:

If we rank all households in a city by wealth from lowest to highest, they can be divided into five tiers: the bottom tier, the second tier, the third tier, the fourth tier, and the top tier. Imagine you live in the city shown below, where the distribution of household wealth is illustrated in the pie chart below. The pie chart is divided into five sections, each representing the proportion of wealth held by one-fifth of the households.

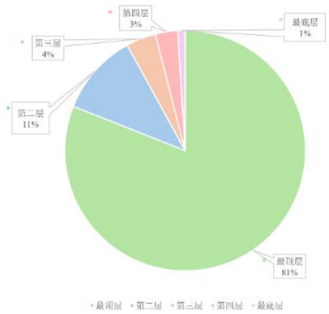

Figure C1. High Perceptions of Economic Inequality

As the pie chart shows, there is a vast disparity in wealth between the top 20% of households and the bottom 20% of households in this city. The wealth of the top 20% of households is a full 81 times that of the bottom 20%. The children of the city's wealthiest families receive the best education, and their families have access to the highest-quality healthcare. Furthermore, these families live in luxurious mansions, drive flashy sports cars, and have ample time and money to enjoy life in the most fascinating places around the world. The middle-class families in this city live in ordinary homes, own their own cars, and choose to relax by traveling when they have the time and money, enjoying average *educational resources and healthcare services. The poorest families in this city can only live in dilapidated small houses, ride old bicycles, and can barely afford the cost of travel and leisure. Their families do not have access to good healthcare, and their children rarely have the opportunity to receive a quality education.*

1. Imagine that you live in this city and your family's wealth is in the third tier. Imagine what life is like for you in this city and describe your genuine feelings. (At least 50 words) [Fill in the blank]

2. Imagine you live in this city. Do you think wealth is distributed fairly in this city? (very equal or very unequal)

Low Perceptions of Economic Inequality group:

If we rank all households in a city by wealth from lowest to highest, they can be divided into five tiers: the bottom tier, the second tier, the third tier, the fourth tier, and the top tier. Imagine you live in the city shown below, where the distribution of household wealth is illustrated in the pie chart below. The pie chart is divided into five sections, each representing the proportion of wealth held by one-fifth of the households.

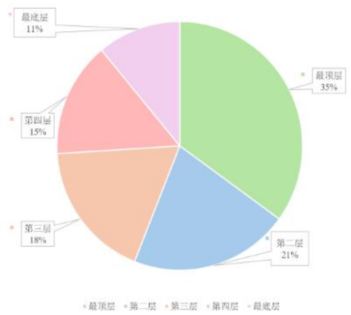

Figure C2. Low Perceptions of Economic Inequality

As shown in the pie chart, the wealth gap between the top and bottom quintiles of households in this city is not significant. The wealth held by the top 20% of households is three times that of the bottom 20%. Furthermore, regardless of their socioeconomic status, all households in this city have access to similar healthcare services and the same social security benefits. Children from the lowest-income families receive the same education as those from the highest-income families. Although there are wealth disparities among households across different socioeconomic strata, all families own their own homes and cars, and all are able to travel during their leisure time to enjoy life.

1. Imagine that you live in this city and your family's wealth is in the third tier. Imagine what life is like for you in this city and describe your genuine feelings. (At least 50 words) [Fill in the blank]

2. Imagine you live in this city. Do you think wealth is distributed fairly in this city? (very equal or very unequal)

Appendix D: Measurement of Participants' Preferences for Horizontal and Vertical Uncertain Consumption

1. *Imagine your favorite chocolate brand is launching nine new flavors and hosting a tasting event. There are two ways to purchase: you can either choose a specific flavor, or opt for a mystery box, which contains one random flavor from the nine available.*

Figure C3. Chocolate Material

Which purchasing method do you prefer? (1 = Pick a flavor by myself, 7 = Buy a blind box of chocolates)

2. *Suppose you are buying a cell phone worth 8,000 yuan at a mobile phone store. At checkout, the staff informs you that there are two ways to receive a discount: one is a direct discount of 500 yuan, and the other is to participate in a lucky wheel activity, where you have an equal chance of winning a discount of 300, 400, 500, 600, or 700 yuan.*

Which type of discount do you prefer? (1 = Get an instant discount of 500 yuan, 7 = Participate in a lucky wheel activity)

Appendix E: Global Belief in a Just World Scale

1. You feel that most people get what they deserve.
2. You feel that a person's efforts will be noticed and rewarded accordingly
3. You believe that whether people receive rewards or punishments, they deserve them.
4. You believe that most of the misfortunes people encounter are the result of their own actions.
5. You believe that people will eventually get what they deserve.
6. You believe that all rewards and punishments in the world are fair.
7. You think this world is basically still very fair.

Appendix F: Manipulation of Participants' Perceived Belief in A Just World

High perceived belief in a just world group:

Please read the following article carefully:

Wang works at the same company as you. He has been with the sales department for five years and has consistently ranked first in the department in quarterly performance evaluations. Wang works very hard and is always eager to help his colleagues, both at work and in his personal life. Recently, the former sales manager was transferred to another branch as part of the company's overall restructuring, leaving the sales manager position vacant. Most of Wang's colleagues believe that, based on both his professional competence and experience, he is the ideal candidate for the role. Ultimately, after a comprehensive evaluation by the company's talent selection department, Wang was appointed as the new sales department manager.

Please briefly describe your genuine feelings about this passage: (at least 50 words) [Fill in the blank]

Low perceived belief in a just world group:

Please read the following article carefully:

Wang works at the same company as you. He has been with the sales department for five years and has consistently ranked first in the department in quarterly performance evaluations. Wang works very hard and is always eager to help his colleagues, both at work and in his personal life. Recently, the former sales manager was transferred to another branch as part of the company's overall restructuring, leaving the sales manager position vacant. Most of Wang's colleagues believe that, based on both his professional competence and seniority, he is the best candidate for the role. However, in the end, a person with no work experience and lacking in ability was appointed as the new sales department manager because they are a relative of the company's leadership.

Please briefly describe your genuine feelings about this passage: (at least 50 words) [Fill in the blank]

Appendix G: Sense of Control Scale

1. You can do the things you really want to do.
2. When you really want to do something, you usually find a way to succeed.
3. Whether you get what you want is entirely up to you.
4. Your future depends largely on you.
5. In most cases, other people decide what you can and cannot do.*
6. For many important things in your life, you have little ability to change.*
7. When dealing with some of life's challenges, you often feel helpless.*
8. Things that happen in your life are often beyond your control.*
9. There are always many things that keep you from doing what you want to do.*
10. You have almost no control over what happens to you.*
11. You can't solve every problem in your life.*
12. Sometimes you feel like you're being manipulated in life. *

Appendix H: Manipulation of Participants' Perceived Level of Economic Inequality

Group with a high perception of economic inequality:

Imagine you live in a city called Bimboola, where the population is divided into three income groups: the high-income group earns 130,000 BC per month, the middle-income group earns 7,000 BC per month, and the low-income group earns 500 BC per month.

高收入群体	130000 BC/月
中收入群体	7000 BC/月
低收入群体	500 BC/月

Figure H1. High Perceptions of Economic Inequality

If you look closely at the image below, you'll see that people with different income levels lead completely different lives in this city. Those earning 130,000 a month live in luxurious villas, drive flashy sports cars, and have plenty of time and money to enjoy life in the most exciting places around the world. Those earning 7,000 a month live in ordinary houses and own a car; when they have the time and money, they also choose to relax by going on trips. Meanwhile, those earning 500 a month can only live in dilapidated little houses, ride old bicycles, and can barely afford the cost of travel and leisure activities.

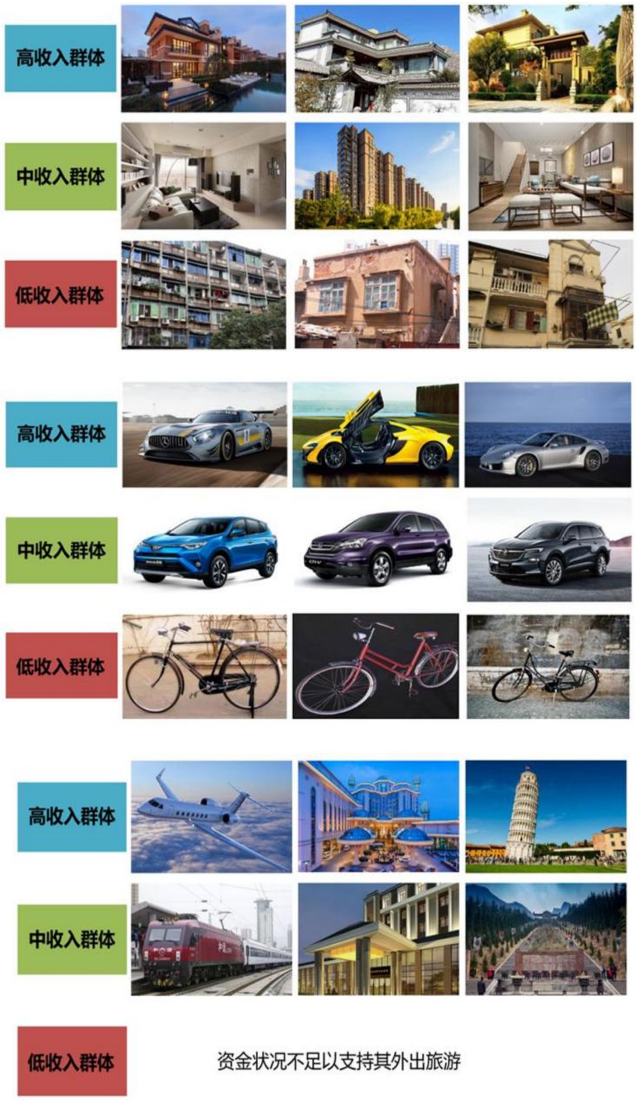

Figure H2. Social Conditions in a Society with High Economic Inequality

Assuming you are part of the middle-income group, please describe your genuine feelings after viewing the image (at least 50 words).____

1. How unequal do you think Bimboola is? (1 = very equal , 7 = very unequal)

2. Which income bracket do you fall into on Bimboola? (A: High-income group, B: middle-income group, C: low-income groups)

Group with a low perception of economic inequality:

Imagine you live in a city called Bimboola, where the population is divided into three income groups: the high-income group earns 8,000 BC per month, the middle-income group earns 7,000 BC per month, and the low-income group earns 6,000 BC per month.

高收入群体	8000 BC/月
中收入群体	7000 BC/月
低收入群体	6000 BC/月

Figure H3. Low Perceptions of Economic Inequality

If you look closely at the picture below, you'll notice that even though there are income disparities among different groups in this city, they all own their own homes and cars, and are able to travel in their free time to enjoy life.

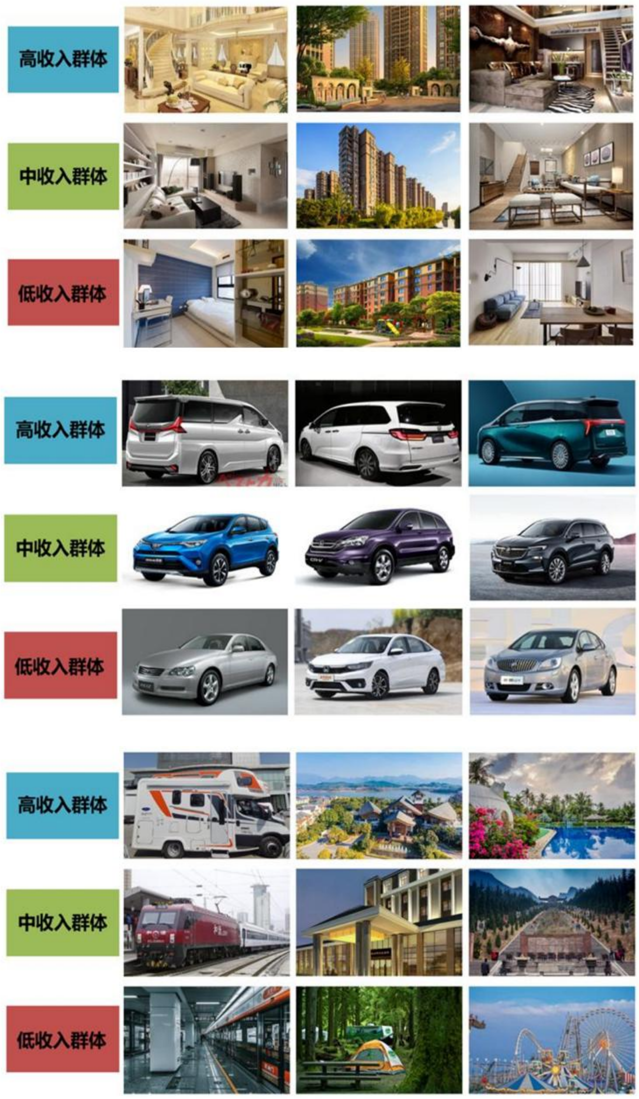

Figure H4. Social Conditions in a Society with Low Economic Inequality

Assuming you are part of the middle-income group, please describe your genuine feelings after viewing the image (at least 50 words).____

1. How unequal do you think Bimboola is? (1 = very equal , 7 = very unequal)

2. Which income bracket do you fall into on Bimboola? (A: High-income group, B: middle-income group, C: low-income groups)

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