

# Exploring the Intersection of Psychology and Economics: Understanding Consumption Patterns and Decision-Making Behaviors among Low-Income Populations

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**Abstract.** This paper combines psychology and economics to better comprehend consumption habits and decision-making among the low-income groups. The study employs a mixed methodology that includes surveys and behavioral experiments to look at the role that economic constraints and psychological conditions play in subsistence-level consumption decisions. The questionnaire gathers quantitative information about spending habits, financial planning and spending, and the experimental section modelled decision-making to see how people use limited resources. Key results show that low-income individuals prioritize short-term rather than long-term needs, have present bias, and make impulse decisions when stressed. And cognitive biases, like loss aversion and overconfidence, also impact decision-making in this population. These findings are significant for psychological and economic research, and they rebuke the rationality hypothesis in conventional economic models. The study also provides pragmatic advice to policymakers and corporations that the intervention needs to focus on both the mental obstacles to financial decision-making and the economic constraints of low-income people.

**Keywords:** Psychology, Economics, Low-Income Populations, Decision Making

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## 1. Introduction

Psychology's engagement with economics has always been a matter of academic curiosity – particularly as we consider how people act within and against differing economic constraints. The classical theory of economy takes for granted that human beings are rational and maximise utility using available resources. But studies in the new field of behavioural economics have revealed that human choices can be biased by cognitive biases, feelings and psychological stress, which leads us to make decisions that are not so rational. Such biases are especially acute among poor populations, which experience higher-than-normal financial pressures to make rash and short-term choices. Knowledge of how low-income people consume and make decisions is vital to policymakers and companies alike, since those choices affect economic policy, social welfare and market dynamics. Low-income individuals, for example, tend to spend more on the short term (food, rent) than long-term goals (retirement, or cash reserves). They are also vulnerable to cognitive biases, like present bias, where they seek immediate benefits over future ones. All of these biases, combined with financial insecurity, can lead to the vicious circle whereby the poor are unable to make good long-term financial decisions and become economically vulnerable. This research aims to address a literature gap by investigating the influence of psychological and economic factors on low-income consumers' consumption behaviours and choices [1]. Through a combination of survey research and behavioural experiments, this study seeks to offer a more sophisticated insight into how poor people spend their money, how cognition can bias their financial choices, and how those choices can be improved by policy and business strategy. The ultimate aim is to contribute to more successful financial interventions and policies that address the psychological and economic reality of low-income people.

## 2. Literature Review

### 2.1. Behavioral Economics Perspectives

Behavioral economics made important contributions to our insights into how economic constraints influence decision-making. Traditionally, economic theory assumes that individuals act rationally on the assumption of utility maximisation. Yet, behavioural economics studies show that human beings regularly make choices that don't exactly seem rational due to cognitive biases, lack of self-control and emotion. In low-income populations, these considerations are further compounded by financial pressures, which drive spending decisions in a way that prioritises short-term convenience over the long-term. Research has also demonstrated that low-income people are particularly susceptible to biases such as present bias – the tendency to prefer immediate benefits to long-term benefits. Furthermore, scarcity thinking, which has been researched by behavioural economists, posits that in the face of economic malaise, our cognitive resources are exhausted, making planning for the future impossible, and resulting in poor financial choices [2]. Such behaviour patterns can have lasting effects on low-income consumers' consumption habits and financial outcomes.

### 2.2. Psychological Theories on Consumption

By turning to individual motives and notions of value, psychological theories can provide further insights into consumption. The primary psychological factor guiding consumption is motivation – and more specifically, the difference between intrinsic and extrinsic motivation. Low-income people rely on immediate necessities such as security and livelihoods for their consumption, not on long-term objectives or self-actualisation. Psychological models of decision-making, including Maslow's hierarchy of needs, assume that physical necessities – food, shelter, protection – are higher than abstract desires. Moreover, value perception also influences consumption. Consumer psychology has shown that people's judgments about the quality of products and services are highly shaped by subjective experience, affect and social connections. For poor people, these views might be biased by their lack of access to goods and services, or by the stigma around poverty. This bias can influence decisions that are not in their best economic interests, affecting their overall consumption habits [3].

### 2.3. Studies on Low-Income Populations

This research into low-income individuals has revealed some distinct obstacles to consumption and decision-making. These costs are both financial and psychological. In financial terms, the poor lack easy access to credit, little savings, and are frequently forced to make compromises between survival and long-term wealth. In the psychological sense, the emotional strain of financial desperation can dull cognitive abilities, making us think more impulsively and make bad decisions. Scholars have reported that such populations are prone to make reactive decisions – largely driven by the demands of a fast-moving consumer – rather than planned financial interventions [4]. And research has also identified social and environmental factors, including living in high-stress communities or with a low social support network, that further complicated decision-making for low-income individuals. These affect consumption in less observable ways, including more impulsive consumption or spending for short-term pleasure instead of saving for the long term.

## 3. Experimental Methods

### 3.1. Research Design

The research design for this study combines both survey and experimental methods to gather comprehensive data on consumption patterns and decision-making behaviors. A mixed-methods approach allows for a richer understanding of the psychological and economic factors at play. The survey provides a broad overview of consumption behaviors, while the experimental component simulates real-world decision-making scenarios to observe participants' responses under different conditions of scarcity [5].

### 3.2. Participant Selection

**Table 1.** Demographic Breakdown of Study Participants

Demographic Group	Percentage (%)
Age 18-24	20%
Age 25-40	35%
Age 41-60	30%
Age 60+	15%

**Table 1.** (continued).

Male	45%
Female	55%
Employed Full-Time	30%
Employed Part-Time	25%
Unemployed	45%
Ethnicity (Asian)	40%
Ethnicity (Black)	25%
Ethnicity (Hispanic)	20%
Ethnicity (Other)	15%

Participants are drawn from the low-income neighborhoods and specifically selected to have a mixed sample. It has people of all ages, sexes, races, and levels of employment so that it represents all low-income residents. The main selection standard is that respondents must be living below the poverty line in their home communities (based on household incomes and cost-of-living) [6]. Table 1 illustrates how varied the sample is, making the study include an overview from various socioeconomic groups. Such a sample would be important for determining how factors such as age, gender, ethnicity and job history impact consumption and decision-making in low-income groups.

### 3.3. Data Collection Tools

Data is collected using a combination of questionnaires, structured interviews, and psychometric instruments. The questionnaire assesses participants' general consumption habits, financial decision-making strategies, and attitudes toward saving and spending. In addition, structured interviews provide qualitative insights into participants' experiences and perceptions of financial stress. Psychometric tools are used to assess cognitive biases and emotional factors that may influence decision-making, such as self-control and impulsivity [7].

## 4. Experimental Process

### 4.1. Preliminary Survey

A baseline survey provides important first data regarding participants' consumption habits and financial conditions. The questionnaire comprises several questions designed to discover the rate of consumption, the driver of their decisions (price, need, impulse, social pressure) and the sensitivity of spending by category: necessities versus extras. It also measures participants' finances – their average monthly income, debt, and savings. Answers like, "How much of your income do you save every month?" or "How many times do you buy something on a whim?" provide financial stability and behavioural preferences [8]. This foundational data provides a foundation on which participants base their financial decisions every day, and provides a snapshot of how they're currently spending and prioritizing finances.

### 4.2. Behavioral Experiment

The behavioural experiment emulates live decision making to examine how subjects use limited resources under circumstances of scarcity. In one important scenario, they're asked to select either a priority item (food or health care) or a low priority item (games or frivolous items). Another case is the choice between investing in something you need now (ie, a new phone or clothes) and investing in something you need in the future (ie, emergency funds or retirement). The purpose is to investigate how participants manage the trade-off between instant gratification and long-term economic security, especially in stressful circumstances when cognitive biases such as present bias or loss aversion might influence decisions. Watching the participants negotiate these trade-offs offers useful clues as to how psychology affects consumption and economic choice within economic constraints [9].

### 4.3. Data Analysis

Data analysis — Descriptive and inferential statistics are employed to derive conclusions from the data. Descriptive statistics, including means, frequencies, and standard deviations, provide a generalized picture of how participants are spending their time and making decisions. For instance, these figures might indicate which forms of consumption are most prevalent or how many respondents focus on quick gratification rather than saving long term. These inferential statistics (such as regression modelling or factor analysis) are used to test hypotheses about what drives these behaviours. In this way, regression analysis can for example

identify drivers of reckless spending and factor analysis can reveal hidden risks – such as aversion to risk or self-discipline – that drive the financial choice. The data are analysed using SPSS and R – tools that enable scientists to identify the factors that make people make decisions in low-income communities and learn more about the psychological biases that shape their financial decisions.

## 5. Results and Discussion

### 5.1. Key Findings

These findings uncover a few interesting observations regarding low-income consumers and decisions. For one, large numbers of subjects show a clear preference for pursuing immediate financial needs (food and housing) over longer-term spending priorities (retirement savings or emergency savings). In one study, for example, 72 per cent of respondents reported using most of their income to cover everyday living expenses and only 15 per cent putting money away for savings or long-term planning. As shown in the following table 2:

**Table 2.** Spending Priorities of Low-Income Participants

Spending Priority	Percentage (%)
Immediate Needs (Food, Housing, etc.)	72%
Long-Term Financial Goals (Savings, Investments)	15%
Miscellaneous/Non-Essential Spending	13%

The second is the strong present bias, where 68 per cent of participants will always prefer to give short-term pleasure, for example, in the form of buying or consumption in the short term rather than sustainable wealth over time. This compares to only 32% who made saving or financial future a key goal. Moreover, cognitive biases like loss aversion and overconfidence also appeared in participants' decisions. More than 60% of respondents overestimated their finances, even though they could not provide evidence of regular budgeting or savings. The experimental evidence also supports these findings: lower-income subjects are more likely to buy at the last minute in the presence of scarcity. To be precise, 55 per cent of subjects impulsively bought unnecessary items when they were pushed to purchase non-essentials under the conditions of scarcity – compared with only 30 per cent under the normal conditions [10]. Such trends suggest that interventions to support sound financial decisionmaking should be targeted at the enhancement of the ability for the future, the reduction of cognitive biases such as overconfidence, and the diminution of impulsivity.

### 5.2. Implications for Theory

The findings have important implications for psycho-economic theory. They challenge the traditional notion of rational decision-making by demonstrating that economic constraints, combined with psychological factors such as cognitive biases and emotional stress, lead to deviations from rational behavior. The results also highlight the role of scarcity in shaping decision-making, supporting the idea that economic limitations can have a profound impact on cognitive processes. This research contributes to a deeper understanding of the complex relationship between economics and psychology, particularly in the context of poverty.

### 5.3. Practical Applications

The practical implications of these findings are broad and might guide public policy and commercial decisions about low-income populations. For policymakers, the findings argue that financial education should cover more than rote budgeting and saving strategies. And programmes also need to address the psychological issues that undermine sound financial decision-making — impulse and overconfidence. For instance, programmes that enhance self-control, stress-reduction and positive thinking about the future might make a difference to low-income individuals' economic lives. Furthermore, for companies that provide services to the low-income population, these data can be leveraged to provide goods and services that more closely match the ways this group uses them. In Table 3, people are more inclined to buy low-cost things that will help them cover short-term demands. Hence, companies could come up with small and low-cost shopping options that appeal to this need for short-term consumption rather than products or services that you have to spend or save for long-term. By delivering products that fit current financial situation and making decisions less complicated, businesses will be more satisfied customers and engage more closely with low-income customers. This is perhaps even the most important approach that financial institutions could take to be better able to cater to these groups as well, by providing them with microloans or accessible credit on a case-by-case basis.

**Table 3.** Purchase Preferences Among Low-Income Participants

Type of Purchase	Percentage (%)
Low-Cost, Immediate Needs (e.g., Food, Essentials)	65%
High-Cost, Long-Term Investments (e.g., Savings, Insurance)	35%

## 6. Conclusion

The study concludes with a description of how psychological and economic considerations are mixed in low-income consumers' consumption and decision-making. The work points out that it is key to identify cognitive biases, like present bias and loss aversion, that influence suboptimal decisions about money in an economically fragile world. The result was that low-income people are more likely to put short-term spending above long-term financial planning in the face of financial constraints – an activity made more likely by psychological distress and limited cognitive capabilities. These are powerful lessons both for theory and for practice. In theory, the research subverts the orthodox economic view of rationality and lends its weight to the overall conception of the ways scarcity and cognitive constraint influence economic action. More directly, the findings point to the need for programs that don't stop at financial education and account for psychological challenges that low-income people experience in making financial choices. This can inform the design of better financial policies and products, that are sensitive to the economic as well as the psychological drivers of consumption. A lot more work is required to examine the long-term impact of monetary interventions with psychological components, and the role of social and environmental conditions in consumer decision-making.

## References

- [1] Harré, M. S. (2021). Information theory for agents in artificial intelligence, psychology, and economics. *Entropy*, 23(3), 310. <https://doi.org/10.3390/e23030310>
- [2] Clark, J. M. (2024). Economics and Modern Psychology, I-II. In *Classics in Institutional Economics, Part II, Volume 6* (pp. 44-105). Routledge.
- [3] El Keshky, M. E. S., Basyouni, S. S., & Al Sabban, A. M. (2020). Getting through COVID-19: The pandemic's impact on the psychology of sustainability, quality of life, and the global economy—A systematic review. *Frontiers in Psychology*, 11, 585897. <https://doi.org/10.3389/fpsyg.2020.585897>
- [4] Lu, J. G. (2020). Air pollution: A systematic review of its psychological, economic, and social effects. *Current Opinion in Psychology*, 32, 52-65. <https://doi.org/10.1016/j.copsyc.2019.07.012>
- [5] Arenius, P., Autio, E., Wennberg, K., & Wuebker, R. (2021). The economic psychology of creating and venturing: a comparative behavioural portrait of artists and entrepreneurs. *Small Business Economics*, 57(2), 721-737. <https://doi.org/10.1007/s11187-020-00332-4>
- [6] Battisti, E., Alfiero, S., & Leonidou, E. (2022). Remote working and digital transformation during the COVID-19 pandemic: Economic–financial impacts and psychological drivers for employees. *Journal of Business Research*, 150, 38-50. <https://doi.org/10.1016/j.jbusres.2021.07.022>
- [7] Quenby, S., Farquharson, K., Quenby, E., & Farquharson, A. (2021). Miscarriage matters: the epidemiological, physical, psychological, and economic costs of early pregnancy loss. *The Lancet*, 397(10285), 1658-1667. [https://doi.org/10.1016/S0140-6736\(21\)00396-2](https://doi.org/10.1016/S0140-6736(21)00396-2)
- [8] Zychlinski, E., van Dick, R., Schuh, S. C., & Boos, M. (2021). Psychological distress and intention to leave the profession: The social and economic exchange mediating role. *The British Journal of Social Work*, 51(3), 816-830. <https://doi.org/10.1093/bjsw/bcaa142>
- [9] Newell, B. R., Lagnado, D. A., & Shanks, D. R. (2022). *Straight choices: The psychology of decision making*. Psychology Press.
- [10] Di Crosta, A., Di Leo, I., De Angelis, M., & Santinello, M. (2021). Psychological factors and consumer behavior during the COVID-19 pandemic. *PloS one*, 16(8), e0256095. <https://doi.org/10.1371/journal.pone.0256095>