

Nudging for Good: Can Behavioral Economics Improve Teenagers' Saving Habits?

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Abstract: Teenagers' saving habits are crucial for their financial well-being in adulthood, yet poor saving behaviors among adolescents have become a prevalent global issue. Traditional financial education often fails to effectively change teenagers' actual behaviors due to their limited self-control and cognitive biases. Behavioral economics, with its focus on "nudging"-subtle, non-coercive interventions that guide choices-provides a new perspective for addressing this problem. This paper systematically explores the application of behavioral economics in shaping teenagers' saving habits, analyzing the behavioral characteristics of teenagers that hinder saving, the theoretical basis of nudging interventions, and practical cases of effective nudges. The research finds that teenagers are prone to present bias, lack of future orientation, and mental accounting fallacies, which undermine their saving intentions. Nudging strategies such as default options, goal setting, and feedback mechanisms can effectively mitigate these biases and promote positive saving behaviors. Finally, the paper puts forward suggestions for constructing a multi-dimensional nudging system involving families, schools, and financial institutions to help teenagers develop sustainable saving habits, laying a solid foundation for their long-term financial health.

Keywords: Behavioral Economics, Nudging, Teenagers, Saving Habits, Financial Well-being.

1. Introduction

In an era of consumerism and easy access to credit, teenagers are increasingly exposed to temptation to spend, leading to widespread insufficient saving and irrational consumption behaviors. Studies show that less than 30% of teenagers worldwide have a regular saving habit, and most lack the ability to plan their finances for the future [1]. Traditional approaches to promoting saving mainly rely on financial knowledge education, emphasizing the rational calculation of costs and benefits. However, teenagers, as a special group with immature cognitive abilities and weak self-control, often fail to translate financial knowledge into actual saving behaviors.

Behavioral economics challenges the assumption of full rationality in traditional economics, arguing that individuals' decisions are heavily influenced by cognitive biases and psychological factors [2]. Nudging, a core concept in behavioral economics proposed by Thaler and Sunstein, refers to designing choice architectures to guide people toward better decisions without restricting freedom of choice [3]. This approach has been successfully applied in public policy areas such as public health and environmental protection, but its application in improving teenagers' saving habits remains under-explored. This paper aims to analyze the feasibility and effectiveness of nudging strategies in shaping teenagers' saving behaviors, providing theoretical and practical references for promoting adolescent financial literacy and well-being.

2. Behavioral Barriers to Teenagers' Saving: Theoretical Analysis

Teenagers' low saving rates are not merely due to lack of financial knowledge, but more importantly, are rooted in inherent behavioral biases and psychological characteristics that hinder rational saving decisions.

2.1. Present Bias and Lack of Future Orientation

Present bias, a typical time inconsistency problem, refers to individuals' tendency to overvalue immediate rewards while underestimating long-term benefits [4]. Teenagers are in a stage of psychological development where they focus more on current pleasure and instant gratification. For example, they are more likely to spend money on trendy clothing or entertainment rather than saving for college tuition or future emergencies. Neuroscientific research shows that the prefrontal cortex, which is responsible for long-term planning and self-control, is not fully developed in teenagers, making them more susceptible to impulsive consumption and less able to adhere to long-term saving plans [5].

2.2. Mental Accounting Fallacies

Mental accounting, a concept proposed by Thaler, describes how individuals categorize money into different "mental accounts" and treat them differently [3]. Teenagers often have irrational mental accounting habits: they may view pocket money from parents as "free money" to be spent casually, while ignoring the opportunity cost of not saving. Additionally, they tend to separate small amounts of money into "spendable" accounts, failing to recognize that consistent

small savings can accumulate into significant funds over time. This cognitive bias leads to fragmented financial decision-making and hinders the formation of systematic saving habits [6].

2.3. Social Norms and Peer Influence

Teenagers are highly sensitive to social norms and peer pressure, which significantly impact their consumption and saving behaviors [7]. In an environment where peers prioritize conspicuous consumption, teenagers may follow suit to gain social acceptance, even if it means giving up saving. Social comparison tendencies make them more likely to imitate others' spending patterns rather than making independent, rational saving decisions. This herd behavior further exacerbates their poor saving habits and weakens their ability to resist consumption temptation [8].

3. Nudging Strategies for Improving Teenagers' Saving Habits: Practical Insights

Based on the behavioral barriers analyzed above, targeted nudging interventions can be designed to guide teenagers toward better saving behaviors without coercing them. These strategies leverage psychological mechanisms to align their immediate choices with long-term financial goals.

3.1. Default Options: Simplifying Saving Decisions

Default options work by leveraging individuals' inertia and tendency to accept the status quo [3]. For teenagers, setting automatic saving as the default can significantly increase their saving rates. For example, parents or financial institutions can design savings accounts where a fixed percentage of pocket money or part-time income is automatically transferred to a savings account, with the option to opt out if needed. A study conducted in the United States found that when teenagers' part-time income was automatically deducted 10% into a savings account, their monthly saving rate increased by 47% compared to the group with no automatic deduction [9]. This strategy reduces the cognitive effort required for saving and avoids the impact of impulsive consumption decisions.

3.2. Goal Setting and Visualization: Enhancing Long-Term Motivation

Clear, specific goals can help teenagers overcome present bias by making long-term benefits more tangible [4]. Nudging interventions can guide teenagers to set personalized saving goals and visualize the outcomes. For instance, schools can organize "future self" visualization activities, where teenagers write down their future goals (such as buying a laptop or studying abroad) and calculate the required savings amount and time. Using digital tools to create progress bars or goal trackers can make the saving process more intuitive—every time they save money, they can see the progress toward their goals, which enhances a sense of achievement and strengthens their motivation to persist [10].

3.3. Feedback and Incentive Mechanisms: Reinforcing Positive Behaviors

Timely feedback and appropriate incentives can effectively reinforce teenagers' saving behaviors by connecting their actions with positive outcomes [11]. Financial institutions can design savings apps that send regular feedback to teenagers,

such as monthly saving summaries, interest earnings, and comparisons with previous periods. Gamification elements can also be incorporated: awarding points or badges for consistent saving, which can be exchanged for small rewards (such as gift cards or financial literacy courses). These incentives turn saving into an engaging activity rather than a tedious task, increasing teenagers' participation and adherence [12].

3.4. Social Nudging: Shaping Pro-Saving Norms

Given the significant impact of social norms on teenagers, social nudging strategies can be used to create a pro-saving environment [7]. Schools can carry out "saving challenge" activities, where students form groups to save together and share their progress, fostering a sense of community and healthy competition. Parents can set a good example by demonstrating regular saving behaviors and discussing family financial plans with their children, which helps shape positive saving norms at home. Additionally, media and social platforms can promote pro-saving role models and stories, guiding teenagers to recognize that saving is a responsible and cool behavior, thereby reducing the influence of conspicuous consumption norms [8].

4. Case Study: Successful Nudging Interventions in Practice

Several practical cases around the world have demonstrated the effectiveness of behavioral economics-based nudging strategies in improving teenagers' saving habits.

In Sweden, a "Youth Saving Program" was launched in middle schools, integrating nudging elements into financial education. Participating students were provided with savings accounts with automatic deduction as the default: 5% of their weekly pocket money was automatically saved, and they could adjust the percentage or opt out at any time. The program also included a digital goal-tracking tool and monthly feedback on saving progress. After one year, the average saving rate of participating students reached 23%, significantly higher than the 8% rate of non-participating students. Moreover, 65% of participants reported that they had developed a regular saving habit and were more willing to plan their finances [13].

In Singapore, a fintech company launched a savings app specifically for teenagers, incorporating gamification and social nudging features. The app allowed users to set saving goals, earn points for consistent saving, and compete with friends on saving leaderboards. It also used "future self" photoshopping tools to let teenagers see what their future lives could be like if they kept saving. Within six months of its launch, the app had over 100,000 teenage users, with an average monthly saving amount 3 times higher than that of traditional savings accounts for teenagers [14].

These cases prove that nudging strategies, when tailored to teenagers' behavioral characteristics, can effectively overcome their saving barriers and promote positive financial behaviors. Compared to traditional financial education, nudging interventions are more engaging, practical, and in line with teenagers' psychological needs [15]

5. Conclusion and Recommendations

5.1. Main Conclusion

This paper explores the application of behavioral economics in improving teenagers' saving habits, focusing on the behavioral barriers to saving and effective nudging strategies. The research finds that teenagers' poor saving behaviors are mainly caused by present bias, mental accounting fallacies, and negative social norms. Nudging strategies such as default options, goal visualization, feedback mechanisms, and social nudging can effectively mitigate these barriers and guide teenagers to develop sustainable saving habits. Practical cases confirm that nudging interventions are more effective than traditional financial education in changing teenagers' actual saving behaviors, as they leverage psychological mechanisms to align immediate choices with long-term financial well-being.

5.2. Policy and Practical Recommendations

To fully exert the role of nudging in improving teenagers' saving habits, a multi-dimensional cooperation system involving families, schools, financial institutions, and the government is needed:

First, strengthen family financial education with nudging elements. Parents should set automatic saving defaults for their children's pocket money and part-time income, and use goal-setting tools to help them clarify saving objectives. They should also serve as role models by demonstrating rational saving and consumption behaviors.

Second, integrate nudging into school financial literacy curricula. Schools can design interactive activities such as saving challenges and financial simulation games, and use digital tools to provide real-time feedback on students' saving progress. This makes financial education more engaging and practical.

Third, encourage financial institutions to develop teenager-friendly nudging products. Financial institutions should launch savings accounts with automatic deduction, gamification, and goal-tracking features, and provide personalized feedback and incentives to enhance teenagers' saving motivation.

Fourth, promote positive social norms through public initiatives. The government and media can carry out public awareness campaigns to highlight the importance of saving, share successful cases of teenage savers, and create a social environment that values rational saving and financial responsibility.

In conclusion, behavioral economics-based nudging provides a powerful tool for improving teenagers' saving habits. By designing targeted choice architectures, we can help teenagers overcome behavioral biases, develop sustainable saving behaviors, and lay a solid foundation for

their long-term financial well-being. The key lies in leveraging the synergy of multiple stakeholders to create a comprehensive nudging ecosystem that guides teenagers toward "good" financial decisions

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