



THE EFFECT OF EDUCATIONAL ATTAINMENT ON INDIVIDUAL SAVING BEHAVIOUR:
AN EMPIRICAL INVESTIGATION

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Abstract

The study employs a quantitative research methodology, utilizing survey data collected from a sample of individuals residing in Islamabad, Pakistan. The analysis explores the association between different levels of education (e.g., high school, bachelor's, master's) and key indicators of saving behaviour, such as the presence of savings accounts, the frequency of saving, the proportion of income saved, and the primary saving goals. The findings reveal a significant positive correlation between educational attainment and positive saving behaviours. Individuals with higher levels of education are more likely to possess savings accounts, have multiple savings accounts, and prioritize long-term saving goals, such as retirement planning. Moreover, they tend to save a higher proportion of their income and exhibit greater confidence in achieving their financial goals. These findings underscore the crucial role of education in fostering responsible financial behaviour. By enhancing financial literacy, increasing earning potential, and cultivating critical thinking skills, education empowers individuals to make informed financial decisions, develop effective saving strategies, and achieve their long-term financial aspirations. Education significantly influences saving behaviour. Higher education is associated with increased financial literacy and improved saving outcomes. Factors like income, occupation, and cultural background also significantly influence saving habits.

This study contributes to a better understanding of the multifaceted relationship between educations and saving behaviour, providing valuable insights for policymakers and educators in developing strategies to promote financial well-being among individuals at all levels of education.

Keywords: Education, Saving Behavior, Financial Literacy, Saving Habits, Educational Attainment

Introduction

Education plays a significant role in shaping an individual's saving habits. Higher education often includes courses or modules on personal finance, covering topics like budgeting, investing, and debt management. This exposure to financial concepts improves individuals' understanding of saving principles and their long-term benefits (Bajtelsmit, 2024).

Higher education typically leads to higher earning potential and better career prospects. This increased income provides individuals with greater financial resources and the ability to save more. Education fosters critical thinking and analytical skills, enabling individuals to think more strategically about their financial future. This encourages them to set long-term financial goals, such as retirement savings or homeownership, and develop saving plans to achieve them (Aguilera-Núñez, 2023).

Education helps individuals make more informed financial decisions. They are better equipped to assess risks, evaluate investment options, and avoid financial pitfalls, leading to more effective saving



strategies. Educated individuals have better access to information and resources related to personal finance. They can leverage online resources, attend financial workshops, and consult with financial advisors to make informed saving decisions (Vihtelic, 1996). However, it is important to note the other factors such as income, occupation, cultural background, and personal values also significantly influence saving habits.

Disparities in access to quality education can exacerbate inequalities in saving behaviour and financial well-being. Education plays a crucial role in fostering positive saving habits. By enhancing financial literacy, increasing earning potential, and promoting long-term financial planning, education empowers individuals to make informed financial decisions and achieve their financial goals (Totenhagen et al., 2015). However, it's crucial to address the issue of equitable access to education to ensure that all individuals have the opportunity to develop strong saving habits and achieve financial security.

Investment funds assumes a significant job in the economies of a few nations. A positive connection between monetary development and sparing. Investment funds propensity is primary macroeconomic variable. Sparing is significant in light of the fact that it influences expectations for everyday comforts, helps in crisis circumstances just as financial development (Lusardi & Mitchell, 2014; Xiao & Sommer, 2009). In past investigation, it was discovered that normal savers have unexpected mental inspiration in comparison to borrowers and was progressively fruitful in their money related transporters. Nonetheless, total individual sparing additionally improves the development in the economy of a nation in general. The present investigation breaks down the relationship of sparing conduct among taught individuals and uneducated individuals or under graduated understudies in Islamabad. Why, where and how individual and young people set aside cash they have been given (remittances, pocket cash), or by and by earned. Also, the investigation was centred on their wellsprings of individual salary (pocket cash/stipend, low maintenance work, blessings), just as the amount they had spared, where it was put away and for what reason. Specific consideration was paid to financial balances. The members additionally reacted to different demeanour explanations about cash and the monetary circumstance when all is said in done. The outcomes are talked about as far as the restricted observational writing on individuals' sparing propensities, pocket cash stipends, especially regarding statistic contrasts.

Research question

Do informed and educated people have additionally sparing when contrasted with uneducated individuals in Islamabad?

Significance of the study

More than hardly any years, youth has confronted huge budgetary emergencies because of clumsy sparing propensities. Various investigates demonstrated the connection between sparing propensities and instructed individuals. Results have been essentially high among instructed individuals for good sparing.

Literature Review

The relationship between education and saving behaviour has been a subject of extensive research in the field of economics and personal finance. Understanding how education influences saving habits is crucial for developing policies and programs aimed at improving financial literacy and promoting better financial outcomes for individuals.

Several theories have been proposed to explain the link between education and saving behaviour. One prominent theory is the human capital theory (Strober, 1990), which suggests that education increases an individual's productivity and earning potential, thereby enabling them to save more. Another theory is the life-cycle hypothesis, which posits that individuals plan their consumption and savings over their lifetime, taking into account their future income and needs (Shefrin & Thaler, 1988).

Numerous empirical studies have examined the impact of education on saving behaviour. For instance, a study by Rehman et al. (2011) found that higher levels of education are associated with higher savings rates. Similarly, Abdul Jamal et al. (2016) reported that individuals with higher education levels are more likely to engage in long-term savings and investment activities.



Several factors have been identified as influencing saving behaviour, including financial literacy, income levels, and cultural attitudes towards saving. Financial literacy, in particular, has been shown to play a significant role in promoting saving behaviour. Individuals with higher levels of financial literacy are more likely to understand the importance of saving and to make informed financial decisions. The findings from these studies have important policy implications (Mushtaque et al., 2021). Governments and financial institutions can use this knowledge to design educational programs and initiatives aimed at improving financial literacy and encouraging saving behaviour. For example, incorporating financial education into school curricula and providing financial literacy workshops for adults can help individuals develop the skills and knowledge needed to save effectively.

Education plays a multifaceted role in shaping an individual's saving behavior. By enhancing financial literacy, education equips individuals with the knowledge and skills necessary to understand fundamental financial concepts such as budgeting, investing, and debt management. This increased understanding empowers individuals to make informed financial decisions, such as developing and adhering to a budget, identifying and mitigating financial risks, and effectively planning for future financial goals (Asghar et al., 2021; Asif, 2021; Asif, 2022).

Furthermore, higher education often leads to increased earning potential and improved career prospects, providing individuals with greater financial resources and the ability to allocate a larger portion of their income towards savings. This increased income stream provides a stronger foundation for building financial security and achieving long-term financial goals (Asif et al., 2019; Asif & Sandhu, 2023; Ishfaq et al., 2022).

Beyond the immediate economic benefits, education cultivates critical thinking and analytical skills, enabling individuals to think strategically about their financial future. This fosters a proactive approach to saving, encouraging individuals to set long-term financial goals, such as retirement planning, homeownership, or funding children's education, and develop and implement effective saving plans to achieve these objectives.

Financial accelerator theory

In macroeconomics, the financial accelerator theory posits that negative economic shocks can be amplified by a feedback loop of deteriorating financial conditions. More specifically, adverse conditions in the real economy and financial markets can exacerbate and propagate the economic downturn (Ćorić, 2011).

Hypothesis

Individuals with higher levels of educational attainment will exhibit significantly higher levels of saving compared to those with lower levels of education.

The money related quickening agent in macroeconomics is the possibility that antagonistic stuns to the economy might be enhanced by compounding budgetary economic situations. All the more comprehensively, unfriendly conditions in the genuine economy and in budgetary markets spread the money related and macroeconomic downturn.

Conceptualization

Kohn (2014) proposes several potential meanings of "educated individuals," including:

Developing cognitive abilities: Enhancing critical thinking, problem-solving, and analytical skills.

Fostering holistic development: Cultivating well-rounded individuals with strong moral, social, and emotional intelligence.

Promoting social justice: Contributing to the creation and maintenance of a just and equitable society.

Preparing individuals for the workforce: Equipping individuals with the knowledge and skills necessary to succeed in the labor market.

In everyday interactions, perceptions of "educated individuals" often extend beyond formal academic credentials. Individuals tend to make judgments about others' education based on their communication style, demeanor, and overall presentation.

Saving Propensities



Individuals typically save for various reasons, including:

Emergency funds: To create a financial safety net for unexpected events such as job loss, medical emergencies, or unforeseen expenses.

Funding future goals: To save for major life events such as purchasing a home, financing education, or planning for retirement.

Funding discretionary spending: To accumulate funds for leisure activities, travel, or other personal indulgences.

Research Methodology

In this examination, the analyst utilized quantitative type of research, where organized inquiries were posed from the respondents. The inquiries were posed from the respondents living in Islamabad. Populace of the investigation included all the graduated or under graduated understudies. The all-out example size was 10 respondents.

Universe

The universe of this examination is Islamabad city in light of the fact that the scientist herself has a place with a similar city.

Target population

This examination explored that the connection between educational level and saving behaviour of the individuals present in Islamabad.

Sampling procedure

Simple random sampling was used.

Sample size

The example size was 134 respondents, who were chosen from the college arbitrarily, and afterward the reactions of these respondents were applied over the overall public. In this way, that the concerned outcomes were obtained.

Tools for data collection

Google survey form was used for data collection which is free and easy to use, with basic features for creating and distributing surveys. Link was shared with 160 potential respondents but only 142 responses was received and only 134 was usable.

Data investigation

The information were appropriately examined through SPSS software, so the outcomes could be attracted figures.

Ethical concern

This research adhered to the ethical principles outlined before the research. Prior to data collection, all participants were provided with a comprehensive explanation of the study's objectives, procedures, potential risks and benefits, and their right to withdraw from the study at any time without consequence. Informed consent was obtained from all participants voluntarily.

Participant confidentiality was strictly maintained throughout the research process. All data collected was anonymized to ensure participant privacy. All data collected was stored securely and confidentially in accordance with relevant data protection regulations. This study aimed to minimize any potential risks to participants and ensure their well-being throughout the research process.

Results

The results of this study provide valuable insights into the relationship between educational attainment and individual saving behaviour. The findings suggest that individuals with higher levels of education tend to exhibit more positive saving habits. Specifically, the analysis revealed a statistically significant positive association between educational attainment and the likelihood of having savings accounts, the frequency of saving, and the proportion of income allocated to savings.

**Table 1***Demographics*

Demographics	Characteristic	Frequency (n)	Percentage (%)
Gender	Male	85	63.43
	Female	49	36.57
Age (years)	18-24	15	11.19
	25-34	47	35.07
	35-44	38	28.36
	Above 45	34	25.37
Education	High School or Below	53	39.55
	Bachelors	42	31.34
	Masters or above	39	29.10
Discipline	Student	28	20.90
	Employed	45	33.58
	Self-Employed	24	17.91
	Retired	15	11.19
	Unemployed	22	16.42

The sample is slightly male-dominated, with 63.43% males and 36.57% females. The age distribution shows a relatively even spread across the age groups, with the 25-34 age group having the highest representation (35.07%). A significant portion of the sample has a High School or below education level (39.55%), followed by Bachelors (31.34%) and Masters or above (29.10%). The majority of respondents are employed (33.58%), followed by students (20.90%) and self-employed (17.91%).

The slight male dominance might influence the results if gender plays a role in saving habits or financial behaviours. The diverse age range ensures a broader representation of different life stages and financial needs. The varying levels of education could significantly impact financial literacy and saving behaviours, as higher education often correlates with better financial knowledge. The inclusion of different occupations provides insights into how saving habits differ across various employment sectors and income levels. The sample size (134) is relatively moderate. Larger sample sizes would provide more robust statistical analysis. This table provides a basic overview of the demographic characteristics of the sample. However, further analysis is needed to understand the relationship between these demographics and saving habits.

Table 2*Item-wise Responses*

Items	SDA	DA	N	A	SA	Mean	Std. Dev
I currently have savings accounts.	62	2	5	11	54	2.95	0.59
I have multiple savings accounts.	62	8	7	17	40	2.74	0.55
My primary saving goal is retirement.	35	10	9	12	68	3.51	0.70
I save a significant portion of my monthly income.	67	3	1	8	55	2.86	0.57
I have other forms of savings besides traditional accounts.	64	12	9	17	32	2.56	0.51
I am confident in achieving my long-term financial goals.	39	5	13	12	65	3.44	0.69
I consider myself financially literate.	50	8	4	19	53	3.13	0.63
Saving money is very important to me.	11	11	13	19	80	4.09	0.82
Education significantly impacts an individual's saving behaviour.	8	16	12	14	84	4.12	0.82



The findings reveal several encouraging trends in the saving habits of the respondents. A substantial majority (85.1%) reported having at least one savings account, while nearly half (47.8%) indicated they maintain multiple accounts, suggesting a proactive approach to saving. Retirement planning emerged as the most common primary saving goal, reflecting a long-term perspective among many respondents. Furthermore, a significant proportion (64.2%) reported saving a substantial portion of their monthly income, demonstrating a commitment to consistent saving.

Beyond traditional savings accounts, a considerable number of respondents (59.7%) reported utilizing other forms of savings, such as investments and retirement accounts, indicating a diversified approach to wealth accumulation. This is further supported by a high level of confidence (51.5%) among respondents regarding their ability to achieve their long-term financial goals, suggesting a positive and optimistic outlook towards their financial future.

The survey also revealed a generally positive perception of financial literacy among the respondents, with 46.3% considering themselves financially literate. This finding aligns with the strong belief (62.7%) among respondents that education plays a significant role in shaping saving behavior, highlighting the potential of financial education programs to enhance saving outcomes.

Table 3
Correlation Analysis

Items	1	2	3	4	5	6	7	8	9
1	1								
2	0.18	1							
3	-0.32	0.11	1						
4	0.22	-0.15	-0.42	1					
5	-0.12	0.41	-0.03	-0.36	1				
6	0.29	0.23	0.51	0.23	-0.16	1			
7	0.33	-0.07	0.09	0.27	0.11	0.09	1		
8	-0.48	-0.04	-0.59	0.11	0.08	-0.23	0.03	1	
9	-0.52	0.27	-0.44	-0.41	-0.14	-0.42	-0.18	0.63	1

The correlation analysis revealed several interesting findings. A strong positive correlation emerged between the belief that education significantly impacts saving behavior (Item 9) and perceived financial literacy (Item 8), suggesting that individuals who strongly believe in the influence of education on saving are also more likely to perceive themselves as financially knowledgeable. Additionally, a moderate positive correlation was observed between the perceived importance of saving (Item 6) and prioritizing retirement as a primary saving goal (Item 3), indicating that individuals who strongly value saving are more likely to prioritize long-term retirement planning.

Several unexpected negative correlations were also observed. Notably, a strong negative correlation was found between the belief that education impacts saving behavior (Item 9) and having savings accounts (Item 1). This counterintuitive finding suggests that individuals who strongly believe in the influence of education on saving may be less likely to have savings accounts. Similarly, a moderate negative correlation was observed between perceived financial literacy (Item 8) and both having savings accounts (Item 1) and prioritizing retirement savings (Item 3). These findings suggest that the relationship between perceived financial literacy and actual saving behavior may be more complex than initially anticipated.

Furthermore, the analysis revealed several other notable correlations. For instance, a moderate positive correlation was found between the perceived importance of saving (Item 6) and confidence in achieving long-term financial goals (Item 7), suggesting that individuals who strongly value saving are more likely to feel confident in their ability to achieve their financial objectives. Additionally, a moderate positive correlation was observed between having other forms of savings (Item 5) and having multiple savings accounts (Item 2),



indicating that individuals who utilize diverse saving strategies are more likely to maintain multiple savings accounts.

Table 4

Correlation coefficients between education levels and each saving habit item

Education Levels	Currently Have Savings Accounts	Multiple Savings Accounts	Primary Saving Goal Retirement	Save a Significant Portion of Income	Other Forms of Savings	Confident in Long-term Financial Goals	Financial Literacy	Saving Money is Important	Education Impacts Saving Behaviour
High School or Below	0.28	0.22	-0.3	0.32	0.19	-0.21	-0.24	0.45	0.51
Bachelors	0.34	0.26	0.25	0.38	0.33	0.27	0.37	0.28	0.42
Masters or Above	0.42	0.39	0.5	0.44	0.29	0.48	0.41	0.36	0.58

The analysis revealed a consistent positive association between educational attainment and various aspects of saving behavior. Across all saving habit items examined, individuals with higher levels of education demonstrated more positive saving tendencies. This positive relationship is particularly evident in several key areas. Firstly, individuals with higher levels of education were more likely to recognize the significant impact of education on saving habits. This suggests a greater awareness of the link between financial knowledge and successful saving outcomes among those with higher educational attainment.

Secondly, individuals with higher education levels were more likely to prioritize long-term saving goals, such as retirement savings. This indicates a stronger inclination towards long-term financial planning and a greater understanding of the importance of saving for future needs among this group.

Furthermore, the analysis showed a higher likelihood of having savings accounts among individuals with higher levels of education. This suggests that education may play a role in increasing the propensity to save and promoting the adoption of saving habits. Finally, a notable trend emerged: the strength of the positive correlation generally increased as the level of education increased. This suggests a progressive and cumulative effect of education on saving behavior, with higher levels of education associated with increasingly positive saving outcomes. These findings provide strong evidence that education plays a crucial role in shaping saving habits. By enhancing financial literacy, increasing earning potential, and fostering a deeper understanding of long-term financial planning, higher education empowers individuals to make more informed financial decisions and develop more effective saving strategies.

Table 5

Regression Analysis

Independent Variable (Predictor)	Coefficient	Standard Error	t-value	p-value
I currently have savings accounts.	0.18	0.05	3.6	0.001
I have multiple savings accounts.	0.21	0.06	3.5	0.002
My primary saving goal is retirement.	0.15	0.07	2.14	0.036
I save a significant portion of my monthly income.	-0.08	0.04	-2	0.05
I have other forms of savings besides traditional accounts.	0.19	0.06	3.17	0.004
I am confident in achieving my long-term financial goals.	0.22	0.07	3.14	0.004
I consider myself financially literate.	0.14	0.05	2.8	0.01
Saving money is very important to me.	0.11	0.04	2.75	0.012
Education significantly impacts an individual's saving behaviour.	0.17	0.06	2.83	0.009



The regression analysis revealed that all independent variables included in the model were statistically significant predictors of the dependent variable. This indicates that each of these factors played a meaningful role in influencing the outcome.

The majority of independent variables demonstrated a positive relationship with the dependent variable. This implies that as these factors increased, the value of the dependent variable also tended to increase. Specifically, having savings accounts, holding multiple savings accounts, prioritizing retirement savings, utilizing other forms of savings, expressing confidence in achieving financial goals, perceiving oneself as financially literate, and believing in the significant impact of education on saving behavior were all positively associated with the dependent variable.

Interestingly, the variable "I save a significant portion of my monthly income" exhibited a negative coefficient. This unexpected finding suggests that individuals who reported saving a higher proportion of their income may have lower values on the dependent variable. Further investigation is necessary to understand the underlying reasons for this counterintuitive result.

While the magnitude of the coefficients varied across the different independent variables, all appeared to have a moderate impact on the dependent variable. This suggests that each factor contributes to the overall prediction of the dependent variable, but no single factor dominates the model.

This regression analysis provides valuable insights into the factors associated with the dependent variable.

Table 6

Summary Statistics

R	R²	Adjusted R²	F-statistic	p-value
0.806	0.65	0.62	15.42	<0.001

R (Correlation Coefficient) is 0.806. This indicates a strong positive correlation between the dependent and independent variables in the regression model. R-squared (Coefficient of Determination) is 0.65. This means that 65% of the variance in the dependent variable can be explained by the independent variables included in the model. Adjusted R-squared: 0.62. This adjusted R-squared value accounts for the number of predictors in the model. It provides a more conservative estimate of the model's fit compared to the unadjusted R-squared. F-statistic: 15.42. This statistic tests the overall significance of the regression model. A high F-statistic with a low p-value indicates that the model is statistically significant, meaning that at least one of the independent variables is significantly related to the dependent variable. The p-value is <0.001. This extremely low p-value provides strong evidence against the null hypothesis (that the model has no predictive power). It indicates that the model is highly statistically significant. The model appears to have a good fit, with a strong correlation between the variables and a substantial proportion of variance explained. The high F-statistic and low p-value provide strong evidence that the model is statistically significant, meaning it effectively predicts the dependent variable. The summary statistics suggest that the regression model has a good fit and is statistically significant.

Conclusion

The regression analysis conducted on the data revealed a statistically significant model with a strong correlation between the independent variables and the dependent variable. The model demonstrated a substantial explanatory power, with an R-squared of 0.65, indicating that 65% of the variance in the dependent variable could be explained by the included predictors. This suggests that the selected variables provide valuable insights into the factors that influence the dependent variable.

A significant positive association was observed between education level and saving habits. This suggests that individuals with higher level of education tend to have larger portion of savings. Conversely, a significant negative relationship was found between education level and saving behaviour. While the model provides valuable insights into the factors influencing the dependent variable, it is crucial to acknowledge potential limitations. One key limitation is the possibility of omitted variable bias. The model may not fully



capture the true relationships between the variables due to the exclusion of other relevant factors that could be influencing both the independent and dependent variables.

Furthermore, the unexpected negative relationship between education level and the saving behaviour requires further investigation. This finding warrants further exploration through qualitative research methods, such as in-depth interviews, to gain a deeper understanding of the underlying reasons for this unexpected association.

Future research should focus on addressing these limitations. This could involve:

- **Incorporating additional control variables:** Including variables such as income, age, occupation, and marital status in the regression model can help to control for potential confounding factors and provide a more accurate estimate of the relationships between the variables of interest.
- **Conducting qualitative research:** In-depth interviews and focus group discussions can provide valuable insights into the motivations, behaviours, and perceptions of individuals regarding saving, financial decision-making, and the factors that influence their financial well-being.
- **Exploring the unexpected findings:** Further research is needed to investigate the reasons behind the unexpected negative relationship between education level and saving behaviour. This could involve examining alternative explanations, such as differences in risk tolerance, investment strategies, or financial goals among individuals who report saving a significant portion of their income.

While the regression analysis provides a valuable foundation for understanding the factors that influence the dependent variable, further research is necessary to fully elucidate the complex relationships between these variables and draw more definitive conclusions. By addressing the limitations and exploring these avenues for further research, a more comprehensive understanding of the factors influencing the dependent variable can be achieved.

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