The Media's Role in Fostering Knowledge of Financial Management: A Case of Pakistan

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Abstract
This study investigates how behavioral biases affect how individual investors make investing decisions. Drawing upon the discipline of behavioral finance, which integrates psychological insights into financial decision-making, we investigate the presence and effects of various biases on investment behavior. The study aims to contribute to understand the factors thoroughly that shape individuals' investment choices and their subsequent financial outcomes. Using a mixed-methods approach, including surveys and interviews, we explore the prevalence and magnitude of biases for instance loss aversion, overconfidence, and framing effects among individual investors. By analyzing real-world investment decisions, we assess the influence of these biases on portfolio composition, trading frequency, and performance outcomes. According to the preliminary findings, behavioral biases play a significant role in shaping investment decisions. Overconfident investors prefer to trade more often, leading to higher transaction costs and lower returns. Loss aversion biases lead to suboptimal portfolio allocation, as investors disproportionately allocate funds to low-risk assets. Additionally, framing effects impact decision-making by altering risk perceptions and preferences. The study underscores the importance of recognizing and mitigating behavioral biases in investment decision-making. By raising awareness and providing insights into the specific biases influencing individual investors, this research offers valuable implications for financial education, regulatory policies, and investment advisory services. Ultimately, understanding the role of behavioral biases can contribute to more informed and rational investment decision-making, leading to improved financial outcomes for individual investors.
Keywords: Financial literacy, Financial Numeracy, Mutual Funds

1. Introduction

Financial literacy encompasses the awareness of finance-related matters such as savings, investment, and the profitable utilization of surplus funds (Yan, 2017). It is achieved through the imparting of necessary finance-related education (Kumar & Reddy, 2020). Adequate financial literacy is crucial as it can lead to the channelization of surplus funds into productive uses, thereby giving a boost to the economy (Lusardi & Mitchell, 2014). Economists suggest that for robust economic growth, the level of savings should be at least 25% of the Gross Domestic Product (GDP) (Odedokun, 2004). Pakistan, as a developing economy with immense potential for development, faces challenges in promoting savings and investment (Khan & Ahmed, 2018). The level of savings in Pakistan is relatively low, and the majority of savings are not directed towards productive uses (Qayyum et al., 2020). Moreover, the utilization of banking channels in Pakistan is significantly lower compared to global standards, and alternative investment avenues such as mutual funds and the stock market are underutilized (Iqbal et al., 2019).

This can be because of the lack of financial information and awareness among the population (Ali et al., 2021). In developed countries like the United States, the media plays an active role in providing financial education and guidance to investors (Hastings et al., 2013). The Wall Street Journal, for instance, is considered influential in setting the mood of investors (Barber & Odean, 2001). Given the low savings rate in Pakistan, the role of media becomes vital in enhancing financial literacy (Hussain et al., 2022). An awareness campaign on financial literacy through mass media can effectively motivate individuals to invest their surplus funds in different avenues, including the stock market, mutual funds, and Shariah-compliant investment alternatives (Khan et al., 2021). A World Bank assessment in Gaza and the West Bank found that the main information source for tracking changes in the financial markets and swings in commodity prices is mass media, which includes specialized newspapers, TV shows, and magazines (World Bank, 2010). According to the Palestinians, commercial banks, NGOs, and public institutions are the least competent of offering effective financial literacy programmes (World Bank, 2010). Mass media, with its wide reach and influence, has the potential to play a major role in implementing financial education strategies and reaching target populations (Sarma et al., 2018).

Financial literacy initiatives implemented through mass media have proven successful in various countries. Podcasts, television and radio shows, as well as online educational videos, have all been proven to improve financial literacy (Van Rooij et al., 2011). By enhancing access to financial services and establishing financial counselling centres, efforts have been made to enhance financial literacy in developing nations (Zia, 2010). According to research, developing nations typically have the poorest levels of financial literacy, which emphasises the requirement for focused interventions (Cole et al., 2009). Pakistan can benefit from these strategies by learning from the successful examples in Western nations, such as New Zealand and CFEE (Canadian Foundation for Economic Education) programmes (Mandell & Klein, 2009; SEDI, 2009). These initiatives have demonstrated the effectiveness of leveraging mass media to enhance financial literacy and improve economic decision-making among individuals (Hayhoe et al., 2014; Fernandes et al., 2014). Mass media may significantly contribute to raising financial literacy levels in Pakistan and fostering a better awareness of consumer protection rules and regulations by combining the efforts of institutions, consumers, and other stakeholders (Mandell & Klein, 2009). In order to develop and carry out successful financial literacy and consumer awareness campaigns, collaboration between the financial institutions, public sector, educators, media relations professionals, sociologists, and economists is essential (Sarma et al., 2018).

This purpose of the study is to address the low level of financial literacy in Pakistan and explore the potential of mass media in promoting financial education. The research will investigate the general awareness of financial literacy amongst the Pakistani public and assess their capability to apply finance-related knowledge effectively. Additionally, the study will examine the role of mass media in disseminating financial information and its impact on raising awareness and promoting informed financial decision-making. The research findings of this study will add to the formulation of strategies and recommendations to promote financial literacy initiatives in Pakistan. By leveraging the power of mass media channels, such as newspapers, television, magazines, and the internet, financial education campaigns can reach a wider audience and empower individuals to make sound financial decisions. Lessons learned from successful initiatives in other countries will devise the formulation and proper implementation of effective financial literacy schemes tailored to the Pakistani context. Improving financial literacy in Pakistan has the potential to transform the financial landscape of the country. By promoting savings, investment, and the appropriate utilization of surplus funds, individuals can contribute to economic growth and prosperity. Moreover, a financially literate population is better equipped to protect their interests, make informed choices, and navigate the complexities of the financial system.

2. Operational Definitions and Hypothesis Formation

Financial literacy and well-being of households are correlated, according to a convincing body of survey data. Higher level of financial literacy has been linked to better planning regarding retirement (Lusardi & Mitchell, 2007), borrowing at higher interest rates (Stango & Zinman, 2008), acquiring fewer assets (Lusardi & Mitchell, 2007), using informal sources of borrowing (Lusardi, Klapper, & Georgios, 2006), and more broadly with involvement in the financial markets. Lower levels of saving, credit, and Investment behaviors have been linked to poorer financial literacy levels. Contrarily, most experimental study results provide conflicting evidence regarding the strength of the relationship's causality, and some early results imply that while education increases literacy, it actually has little effect on behaviour (Duflo & Saez, 2003; Cole et al., 2011). The academic world has only lately begun to pay attention to research on this problem in low-income and middle-income nations, in contrast to studies in high-income economies.

Cole, Sampson, & Zia (2001) described in their study that in early 2012, the only randomized trial of a financial education programme in a developing nation was a research in Indonesia that looked at how financial education training affected unbanked people's saving habits. The need for savings accounts among those with initially poorer levels of financial literacy has increased slightly, but only little, the study revealed no influence on the general population. An intriguing finding was that offering a subsidy increased the likelihood of opening a bank account. Two years later, an analysis conducted ater on revealed that those who had received subsidies were more likely into using banking services, raising the possibility that changing behaviour may require more than financial education. In a similar vein, Karlan and Valdivia (2009) randomized study that looked at the effects of a business education programme given to a group of female entrepreneurs in Peru revealed little change in knowledge and behaviour. Although this particular programme did not focus on financial literacy specifically, the intervention's main objective was to increase knowledge in order to encourage behavioral change.

In a similar vein, McKenzie and Weber's (2009) study in Uganda, which looked at the effectiveness of business training aimed at female entrepreneurs, showed no discernible change in behaviour. In the past few years, rigid experimental studies have proliferated in developing countries as a result of the realization that in order to comprehend the relationship and causality between financial literacy and outcomes of interest need further investigation. Many of these studies are now at the results stage. In a highly regarded article from Xu and Zia (2011), describe in detail the increasing number of continuing evaluations. They also discuss the priority and extent of the research as well as the upcoming additions to the body of knowledge. Even while there is a lot to be learnt from the upcoming data, it's crucial to remember that the most of these studies focus on the outcomes of efforts that are based in schools, including workshops and seminars, that aim to provide financial education.

In the past few years, rigid experimental studies have proliferated in developing countries as a result of the realization that more data are needed to understand the direction of causality and relationship between financial literacy and outcomes of interest. Many of these studies are now at the results stage. In a highly regarded article from Xu and Zia (2011), provide a detailed account of this increasing number of ongoing evaluations. They also discuss the priority and extent of the research as well as the upcoming additions to the body of knowledge. Even while there is a lot to be learnt from the upcoming data, it's crucial to remember that the majority of these studies focus on the outcomes of efforts that are based in schools, including workshops and seminars, that aim to provide financial education.

Examining if Brazilian financial education provided in high schools enhances students' as well as parents' understanding, attitudes, and behaviours, Bruhn and Zia (2012) conducted a randomized controlled study. This is one of the largest randomized evaluations ever conducted on a financial education programme in schools, involving approximately 900 schools having 26,000 students in five different Brazilian states. It is the first large-scale rigorous impact study of its kind. Between August 2010 and December 2011, two academic school years, the study was carried out. The programme increased financial literacy of students by (5–7%) and improved their attitudes, according to the results of the follow-up questionnaires. The outcomes also document alterations in behaviour based on self-reported information. These conclusions are based on a presentation the authors gave at a World Bank meeting in Saint Petersburg, Russia, on June 26–27, 2012. Gibson, McKenzie, and Zia (2012) investigated the effects of a training initiative that targeted migrant workers and their remitting behaviour in Australia and New Zealand. The training was a two-hour event that included written material on the benefits of remittance, how to compare costs, and details on various remittance packages. The findings demonstrated that receiving training increased knowledge. For instance, migrants were 12–16% more likely to understand that sending a single, large transfer is less expensive than sending multiple, smaller ones, and 10–52% more likely to understand the most cost-effective mode of remittance. The study also discovered that immigrants altered certain financial behaviour as a result of their newfound understanding. The frequency of amount remitted, remitting, or the uptake of products did not appear to change as a result of the training, though.

Three other studies examine how financial education seminars and workshops affect low-income populations. Cole and Zia (2006), assist the effectiveness of financial literacy seminar based on group interaction delivered to women development organization member and that of burial society, using a randomized experimental approach. The study assesses the effect on credit, savings, remittances, and product choice, researchers are examining how financial literacy education affects bank customers' borrowing, saving, and credit card use in Mexico by Bruhn, Ibarra, and McKenzie (forthcoming). Sarr (2011) carries out two distinct randomized experiments in India in addition to process evaluation. A financial literacy programme targeting low-income households who are largely working in the informal economy and offered in a classroom setting and one-on-one setting in conjunction with mobile and doorstep banking is evaluated. In the second study which includes notifications and visits to participating households afterward, it is determined how classroom instruction has affected participants' savings, general financial management, and product choice. Much of the world has accepted financial reform in the surge of the global financial crisis, either voluntarily or out of necessity. According to predictions from the World Bank, two billion individuals will indulge in the formal financial system worldwide over the next 20 years, making reform essential (Zia, 2011). Global financial liberation trends, more widely available technology, and private sector activities are the driving forces behind this growth. Many people believe that it is crucial for financial reform efforts to include tools and mechanisms that would aid societies in adapting to respective trends, also ensuring the financial security of populations under threat.

Currently, concerns regarding the financial stability of some individuals in developing countries are very high, especially for those who lack the resources and expertise necessary to endure and, when appropriate, benefit from changes in the financial markets. The idea that financial stability requires financial education has been attempted to be supported. Financial literacy and consumer financial awareness are two goals of financial literacy program. Financial literacy is the way by which investors and financial customer gain a better guidance of financial concepts and products. Through education, training, and unbiased advice, financial consumers and investors can develop the skills and confidence they need to better gain knowledge about financial risks and opportunities, make conversant decisions, be informed about where to turn for assistance, and take other beneficial steps to enhance the financial situation.

According to the PACFL (2008), having financial literacy is "the ability to use knowledge and skills to manage financial resources effectively for a lifetime of financial well-being." Lack of financial awareness is said to be the cause of financial errors and careless behaviour. To increase consumer knowledge and financial literacy in any community, customers must gather, evaluate, and present data on a variety of topics, including compound interest, inflation, risk hedging, and asset-related topics. Strong analytical and In-depth understanding toolkit are also required to mitigate financial blunders. (Ferguson, 2002).

Stakeholders have hired academics and commissioned studies in recent years to learn which mechanisms function, how they function, and for whom they create the most desirable effects. One of the key players in this field, the World Bank has commissioned a significant amount of researches, hired researchers and analysts, and developed general policy recommendations that can be modified as needed to meet certain socio-political and geographical contexts.

Despite the fact that many researches carried out recently, there is not much support to the claim that financial literacy affects a population's well-being. As additional evidence is gathered through extensive investigations and research programmes, this might change in the near future. At this point, the most affable route to boosting the respective audience financial security is thought to be a contextualized method to financial literacy information, one that combines fundamental responsiveness to a certain institutional, cultural, regional, and ideological antecedents. Therefore, it should be understood that thorough study and analysis on specific locations is necessary for the development and execution of financial education programmes.

It is crucial that the terms are correctly defined in the terms of financial education and financial education because the proof may be compared and examined within a more constrained and consistent paradigm. It has proven difficult for researchers and stakeholders to agree on a coherent definition of financial literacy. The phrase or notion has been described and placed in context in a variety of ways, including as a type of knowledge, skill, or aptitude, as well as a perceived knowledge, an advantageous financial behaviour, and financial experiences. The definition of financial literacy most frequently implies knowledge or understanding of these; in contrast, many common definitions are satisfied with merely being conversant with financial understanding (Hung, Parker, & Yoong, 2009). We'll look at a variety of philosophical and practical definitions of financial literacy below.

Financial literacy has been described as financial knowledge (Hilgert, Hogarth & Beverly, 2003) describe financial literacy as financial knowledge; Lusardi and Mitchell (2008) add that it also entails understanding the most fundamental economic concepts required to conduct financial decisions wisely. According to Lusardi (2008), this fundamental understanding includes how interest compounding works, the fundamentals of diversification of risk, and the distinction amongst real and nominal values. These knowledge-based conceptualizations have been contrasted by people who think it is an ability or a skill. According to Mendell (2007) the term is coined as the ability to assess sophisticated and new financial instruments and make wise decision about employing the instrument in a way that it provides best interest on long term basis. By highlighting decision-making and judgement he defined the phrase as the ability to undertake wise decision making regarding the management and use of money and to make correct judgements therein - Schengen (2002) continues the line of Mandell, Lusardi, and Tufano (1997). Others contend that actual experience must be a part of the foundation for financial knowledge and other components of financial literacy (Moore, 2003).

According to the literature, "financial knowledge"—which many people believe to be essential to financial literacy—can be distinguished from publically available information. When forecasting hypothetical results of investment tasks, academics have discovered that finance-specific information is more beneficial than general knowledge (Parker et al., 2008). According to other research (Stanovich & West 2000; Jenson 1998), cognitive talents, including various types of knowledge, typically support one another. The PACFL asserts that financial education is the best way to gain financial knowledge and expertise (2008a). Therefore, the idea of financial education should be closely related to the promoting financial literacy.

Despite the rise in popularity of the concept of financial literacy in relation to the techniques and instruments used for financial reform, many issues remain unresolved. At this moment, it is believed that a contextualized approach to financial literacy instruction, one that combines fundamental responsiveness to a certain cultural, regional, ideological and institutional antecedents, is the most effective way to increase a target audience’s financial stability. Therefore, it should be clear that in-depth research and analysis on particular areas are required for the creation and implementation of financial education courses.

The degree of financial literacy in a given population has been evaluated and measured using a variety of techniques as part of the global effort to raise financial literacy. How academics define and rate financial literacy has been the subject of great debate. The OECD approach uses cross-country high-level financial literacy measurements, whereas the World Bank often uses consumer financial awareness surveys of consumers across countries. Due to their attempts to quantify both quantitative and qualitative features, it is said that these methodologies complement one another rather than being antagonistic approaches (Zia, 2010).

While there are many different ways to evaluate financial literacy, most of them include looking for a connection between social well-being and financial literacy or between financial education and financial literacy. The most common method of gathering the raw data and assessment is through surveys. According to a specialist in the field, Bilal and Zia (2010), "while survey analysis can control for all observable variables" like age, gender income and education, "there may be some unobserved variables, like ability, that may be driving the positive correlation between financial literacy and use of financial services" makes the cynical claim that those who involved in surveys or financial education seminars may differ significantly from those who choose not to do so in terms of their financial interests. As a result, Zia (2010) contends that the positive correlation may actually be the result of endogenous selection. Higher financial literacy may result in enormous usage of financial services, or just as likely, those using greater number of financial services may score higher on the financial literacy assessments on the basis of their expertise and experience in financial markets, claims who contends that data gathered and analyzed from surveys cannot provide sufficient evidence to distinguish the causality of financial literacy Zia (2010).

It is stated that some of the more economically susceptible populations, such as the poor, undereducated, and minority households, are at an even larger disadvantage as a result of the wide variations in assessed financial literacy (Hung, Parker, and Yoong, 2009). Hilgert, Hogarth, and Beverley (2003) argue that people with more financial knowledge are more likely to engage in suggested financial practices. Some claim that these measurements are associated with poor behaviour. According to Lusardi and Mitchell (2006), persons who demonstrated higher levels of financial understanding were also more willing to invest in complex assets and plan ahead.

Researchers have made an effort to demonstrate through survey data that there are significant positive associations between financial literacy and a number of development indices. Furthermore, numerous research have attempted to demonstrate that dangerous financial behaviour is a direct result of insufficient financial literacy. People that are less financially literate are said to borrow money at higher interest rates, frequently don't have adequate retirement plans, accumulate less assets, and engage in less activity in the formal financial institutions (Zia, 2011; World Bank, 2010). Data was gathered to establish empirical evidence to these and other assertions related financial literacy and education, with assistance from international organizations like the World Bank. The World Bank, a significant participant in this area, has continued to support these goals by funding studies and field tests all around the world.

It was discovered that financial illiteracy is pervasive and especially severe among some demographics, such as women, the elderly, and people with low levels of education. The fact that their sample consisted of respondents who were 50 or older, along with the fact that the literacy questions were rather basic and straightforward, contributes to the surprise of these findings. The majority of respondents in that age range have credit cards, checking accounts, and have obtained one or more mortgages. But comparable findings can also be seen in research by Hilgert and Hogarth (2002), which investigates financial literacy in a sample of people of all ages, as well as in surveys conducted by the National Council on Economic Education (NCEE), which assess financial literacy among adults and high school students. Studies on smaller samples or particular segments of the community have also revealed findings of pervasive illiteracy (Agnew & Szykman, 2005; Bernheim, 1995; Mandell, 2004; Moore, 2003). While these studies concentrate on US data, polls from other nations have produced findings that are strikingly comparable. Financial illiteracy is a prevalent issue in many other industrialized nations, including those in Europe, Australia, and Japan, according to research by the OECD (2005) and Lusardi and Mitchell (2007b). The work of Christelis, Jappelli, & Padula (2007), which demonstrates that the majority of respondents in Europe have low numeracy scores based on information that is relatively close to that from the US HRS, supports these findings. Financial ignorance affects how a family behaves.

Bernheim (1995, 1998) noticed for the first time that most households don't possess basic knowledge about financial literacy and cannot make simple mathematical calculation resulting in their saving conduct getting influence by incorrect values and rules of thumb. Recent studies have demonstrated that those who obtain financial knowledge at the workplace or in high school are more likely to practice saving money. Bernheim, Garrett, & Maki, 2001; Bernheim &d Garrett, 2003. Similar to this, research by Lusardi and Mitchell (2006, 2007a) shows that those with low reading skills are less likely to form retirement plans and, as a result, amass much less money. The research of Stango and Zinman (2007) supports the finding by showing the people who can't calculate the interest rate effectively leads them to accumulating less wealth and borrowing more money. According to Agarwal, Driscoll, Gabaix, & Laibson (2007) study, young individuals and the elderly, who often have the lowest levels of financial literacy, commonly make financial mistakes.

Previous studies usually used crude means for measuring financial literacy. For instance, Lusardi and Mitchell (2006, 2007a) only employ three questions, while Stango and Zinman (2007) only use one question to gauge financial literacy. Furthermore, surveys that provide more thorough information regarding financial literacy occasionally address wealth, saving, and other important economic outcomes poorly or not at all. Despite the paucity of study on the subject, Campbell (2006) and Haliassos & Bertaut (1995) have examined the issue. Constantinides, Donaldson, & Mehra (2002) evaluated the role of media in stock market education.Davis, Kubler, and Willen (2006) argued that the media should take a more active part in spreading financial literacy. More recent works (Guiso, Sapienza, & Zingales, 2005; Hong, Kubik, & Stein, 2004; Brown et al., 2007) have incorporated additional elements, such as trust and education level. Some authors have brought up issues including a lack of asset understanding (Guiso & Jappelli, 2005), poor numeracy and cognitive abilities (Christelis, Jappelli & Padula, 2007), and a lack of financial sophistication (Kimball & Shumway, 2006). Our study greatly exceeds earlier research in this field by including more complicated measures of financial complexity and literacy that we particularly developed for a survey of Dutch households. We have also developed questionnaires to measure the relationship between financial literacy and stock market participation in order to assess economic knowledge prior to trading stocks.

3. Research Methodology

The research design for this study involved the implementation of a survey methodology to explore the relationship between financial literacy and household well-being. The survey questionnaire was designed based on previous studies that employed similar survey methodologies. The aim was to collect data from both the general public and individuals with financial expertise. The study targeted residents of Rawalpindi and Islamabad, as these cities represent a diverse population from different regions and cultures within Pakistan. Convenience sampling was used as the sampling technique due to time constraints. This approach allowed for the selection of respondents who were readily available to participate in the survey and contribute to the research findings. Care was taken to ensure that the sample represented the characteristics of the population. It included individuals from different age groups, income levels, and genders. Additionally, ten experts from the financial sector, such as operation managers from banks, senior brokerage managers, and managers from mutual funds, were included to provide expert insights and advice.

Based on past research in the topic, a questionnaire was constructed as the research tool. Notably, a financial literacy module was carried out by Lusardi and Mitchell (2006) as a component of the US Health and Retirement Study (HRS) in 2004. They used a questionnaire to test respondents' understanding of fundamental concepts like risk diversification, inflation, and interest compounding. Hilgert and Hogarth (2002) and studies carried out by the National Council on Economic Education (NCEE), which assessed financial literacy among high school students and the adult population, showed similar findings of pervasive financial illiteracy. Further research by the OECD (2005), Lusardi and Mitchell (2007b), Christelis, Jappelli, and Padula (2007), as well as studies conducted internationally, revealed that financial illiteracy is a problem that affects many industrialized nations. The questionnaire used in this study measured financial awareness, financial numeracy, and the role of media in promoting financial literacy. Concepts related to household budgeting, investment alternatives, and knowledge of financial markets were included to assess financial awareness. Additionally, media effectiveness, viewer interest, and media reliability were incorporated to evaluate the role of mass media. The questionnaire was informed by the literature and drew inspiration from survey studies conducted by (Lusardi & Mitchell 2006) and (Agarwal et al., 2007).

4. Results

4.1 Demographic Information

The survey conducted aimed to evaluate the level of financial literacy among the respondents in two dimensions: awareness of financial matters and the role of media in promoting financial literacy. The sample consisted of 100 participants from Rawalpindi and Islamabad, representing a diverse range of backgrounds including graduate students of finance, employees in the public and private sectors, and self-employed individuals. Regarding awareness of financial matters, the findings revealed that only 15% of the respondents actively engaged in household budget planning, indicating a lack of budgetary discipline among the majority (69%) who did not prioritize budgeting. These results are consistent with studies conducted by Lusardi & Mitchell (2007), emphasizing the need for improved financial education and budgeting practices. Interestingly, it was observed that individuals with average income and falling in the age bracket of 40-45 years were more inclined towards budget planning compared to high-income and low-income groups. Additionally, the gender distribution showed a nearly equal participation of males and females in budgeting.

4.1.1 Choice of Financial Institutions

When examining the placement of surplus funds, 63% of the respondents preferred commercial banks, while 20% opted for other financial institutions such as mutual funds or investment companies. This preference for banks was more prominent among males, whereas females showed a relatively higher inclination towards other financial institutions.

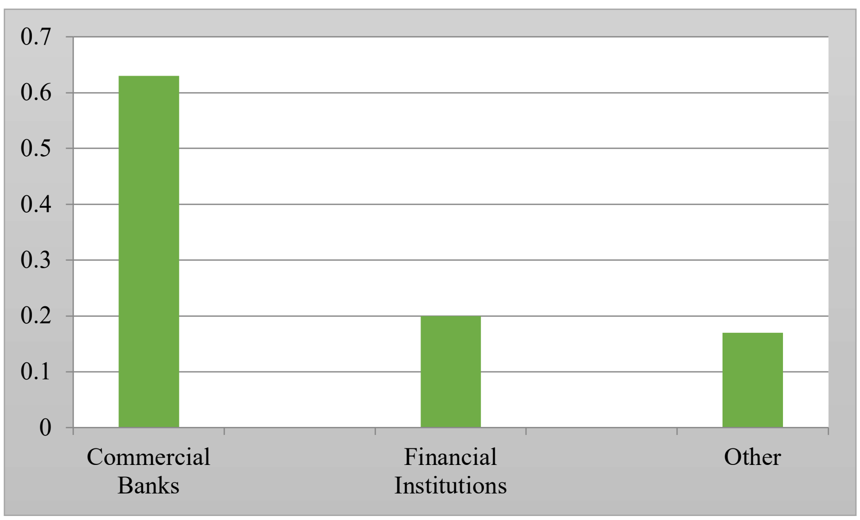

Figure 1. Financial Institution

Notably, middle-income individuals constituted the majority (56%) among those who preferred banks, while young people tended to favor mutual funds and investment companies. These findings align with previous research conducted by Stango and Zinman (2008) and highlight the influence of behavioral factors and savings habits on individuals' financial decisions.
The study found that 45% of the respondents demonstrated awareness of compound interest, while 55% had limited or unsatisfactory understanding of this concept. Interestingly, female respondents showed a higher level of awareness compared to male respondents, and younger participants exhibited a clearer understanding of compound interest. These findings align with previous research on financial numeracy, such as the study by Col, Sampson, & Zia (2009).

4.1.2 Knowledge of Stock Market

In terms of knowledge about the functioning of the stock market, only 21% of the respondents displayed an average level of understanding, while a majority of 72% had limited knowledge. Among those who exhibited knowledge about the stock market, there was a slightly higher percentage of females (45%) compared to males (55%). On the other hand, among respondents with limited knowledge, there were 49% females and 51% males. Notably, individuals in the age bracket of 31-35 demonstrated a better understanding of the stock market, while those over 40 years of age had less awareness.

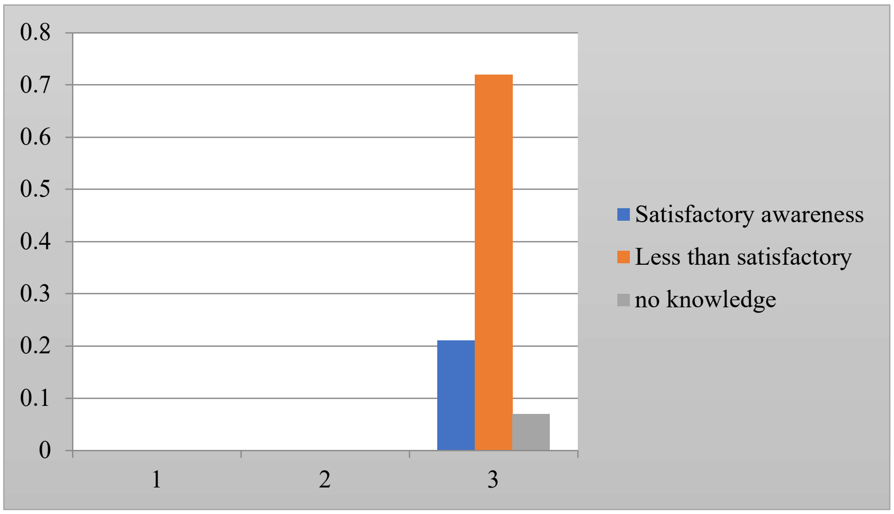

Figure 2. Awareness of Stock Market

These results differ from studies conducted in Western countries, where the awareness level of capital markets is generally higher, and young people are more eager to invest, as observed by Hogarth and Beverley (2003). The unique characteristics of the population under study may contribute to these differences in results, indicating caution among respondents when it comes to investing in riskier avenues like the stock market.

4.1.3 Gender Differences

The question regarding choice of institution other than banks for earning profit was put to respondents. It was found that 62% respondents were not aware of any alternative for placement of funds. This is consistent with the study conducted by Zia (2010). Only 16% opted for mutual funds and investment companies while 19% opted for insurance schemes. It shows that very few people are aware of other alternatives for placement of funds. Among 62% people who were ignorant, 53% were females and 47% were male. Among the respondents who were aware of insurance schemes, 46% were males and 54% were females. Females were more aware of mutual funds than males. Middle age and high-income group people had more awareness on insurance schemes and mutual funds. These results are by and large reaffirming the studies conducted by Col, Sampson, & Zia (2009).

4.1.4 Tabulation

Results of financial awareness have been summarized in Table 4.1. Table shows the bifurcation of results with respect to male and females. In this Table, responses on household budget planning, choice of respondents on placement of funds, their knowledge of interest rate and stock market have been tabulated.

Table 1. Awareness with Financial Knowledge

Choices	Total	Male	Female
1. Financial numeracy	15%	47%	53%
2. Choice for funds placement			
a. Commercial Banks	63%	55%	45%
b. Financial Institutions	20%	54%	46%
c. Other	17%	55%	45%
3. Knowledge of compound interest			
a. Satisfactory	45%	51%	49%
b. Less than satisfactory	55%	43%	57%
4. Knowledge of stock market			
a. Satisfactory awareness	21%	62%	38%
b. Less than satisfactory	72%	52%	48%
c. No knowledge	7%	63%	37%

4.2 Media and Financial Literacy

The study examined the role of media in financial literacy using ten questions to assess people's interest, media preferences, persuasion, and trust. Results indicated that 47% of the respondents expressed a desire to be informed about personal finance through media, while 41% showed disinterest. Among the interested respondents, 51% were male and 49% were female, primarily falling in the age range of 31-40 years. These findings align with the research conducted by Zia (2010), which also emphasizes the importance of media in financial literacy. Regarding the preferred mode of financial education, 45% of the respondents indicated a preference for electronic media, particularly through expert advice. Approximately 38% suggested that finance-related channels on social media platforms could be helpful in disseminating financial education. Additionally, 17% of the respondents mentioned relying on news bulletins in newspapers for their financial awareness. These findings slightly deviate from the studies conducted by McKenzie & Weber (2009). Figure 4.3 provides a visual representation of respondents' media preferences for receiving financial education.

4.2.1 Choice of Media for Finance Related Education

As far as topic of interest is concerned, the respondents were asked to tell which topic they want to be informed on media. Results show that about 27% showed interest in share trading and 15% showed interest in investing in fixed income securities, i.e., bonds. Around 32% people showed interest in investment in immovable property while 27% showed interest in insurance policy. These results are unique to this study and do not affirm the study conducted by Bernheim (1995). One of the reasons may be the differences in level of financial information possessed by different populations.

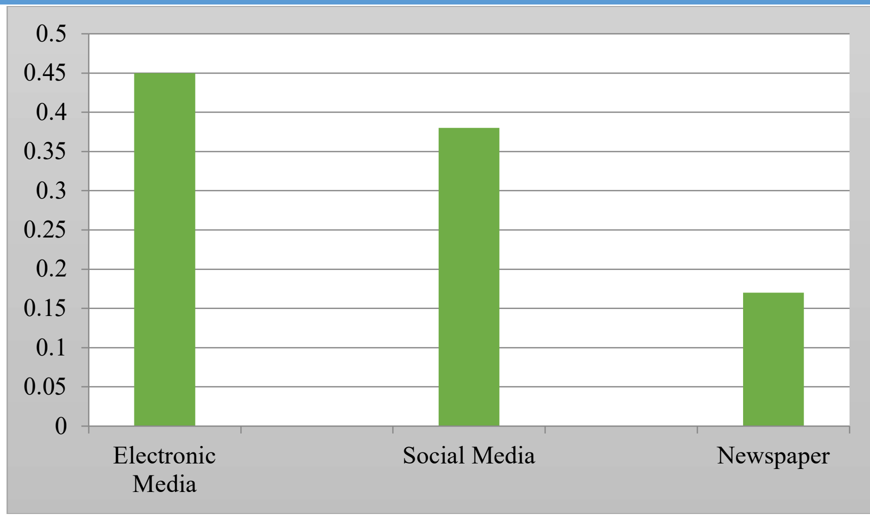

Figure 3. Choice of Media

4.2.2 First Source of Financial Information

People's choice and reliability of media was also assessed. Results show that Newspaper is the first source of financial information of 51% respondents. This is consistent with the findings of Zia (2010). Television is the first source of information for 21% respondents while internet is relied upon by 26% respondents. This result is different from earlier studies conducted by Stango & Zinman (2008).

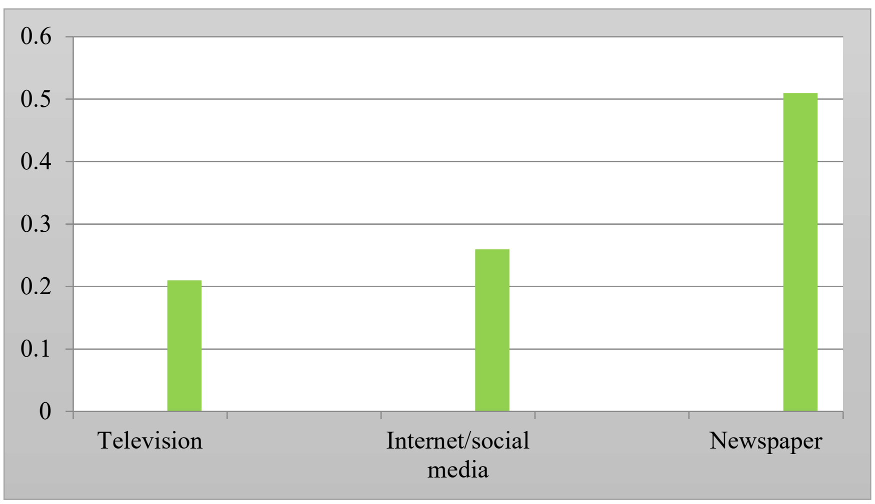

Figure 4. Sources of Financial Information

Respondents were asked to reply up to what extent they trust the authenticity of financial information disseminated on the media. Our results show that around 43% people believe that the information disseminated on media is reliable and authentic while 38% people believe that such information is not reliable. However around 19% people were unable to answer.

4.2.3 Reliability of Mass Media

Respondents were asked to state which media they spend most of their spare time on. Results show that around 37% replied in favor of television, 10% in favor of Radio, 15% in favor of Newspaper and 28% in favor of social media and Internet. These results are by and large consistent with Lusardi & Mitchell (2007).

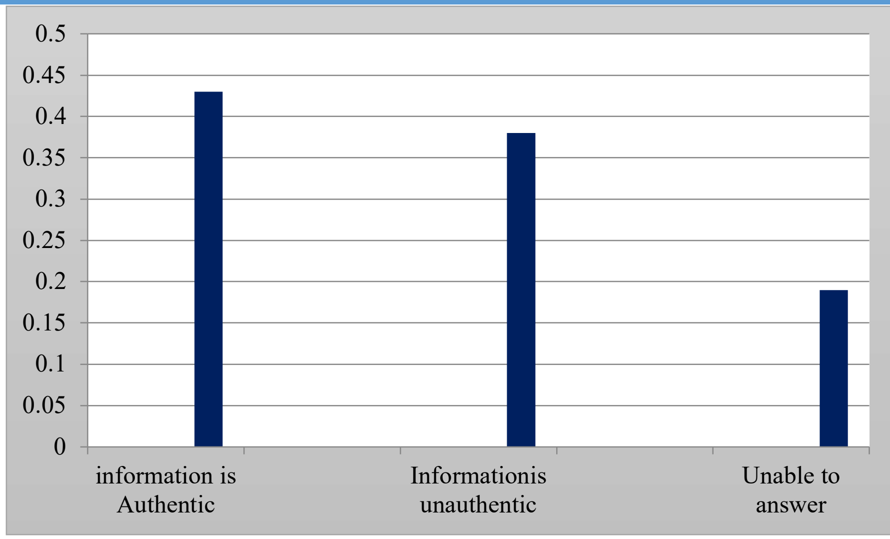

Figure 5. Reliability of Mass Media

4.2.4 Users time spent on Mass Media

Figure 6 show the time allocation of users/viewers for different type of media. This also reflects the respondents' preferences.

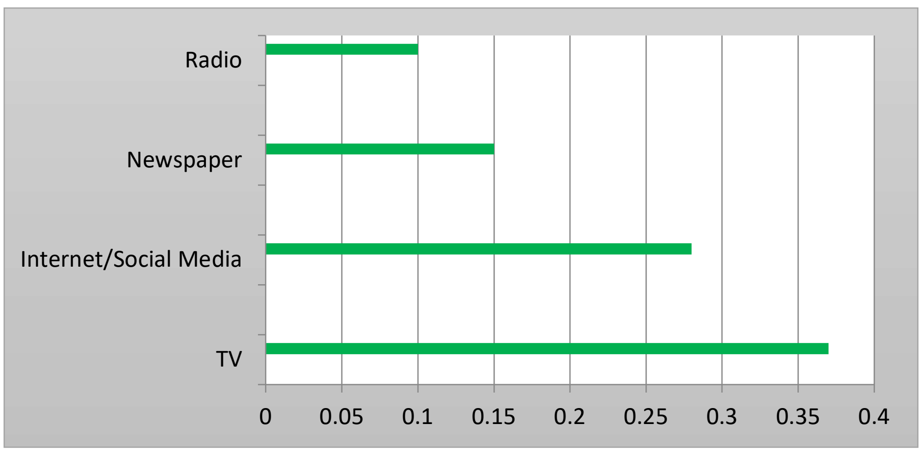

Figure 6. Time Spent on Mass Media

4.2.5 Effectiveness of Media

The study assessed the effectiveness of media in promoting financial literacy through four questions. Results revealed that 31% of the respondents believed that media provides ample coverage of financial literacy, while 47% disagreed with this statement. When asked about the need for a specialized channel dedicated to financial education, 48% of the respondents expressed support for such a channel, while 43% did not agree. Regarding media's influence on financial decision-making, only 11% of the respondents felt motivated by media in their financial decisions, while 74% did not perceive any persuasion from media. In terms of the attractiveness and informational value of financial newspaper editions, approximately 34% of the respondents found them to be attractive and informative, whereas 47% considered them to be neither informative nor attractive. These findings align with previous studies conducted in developing countries, as observed by Col, Sampson, and Zia (2009). However, it is important to note that broader generalizations from these results may not be appropriate due to the small sample size. Figure 7 provides a visual representation summarizing the outcomes related to media effectiveness.

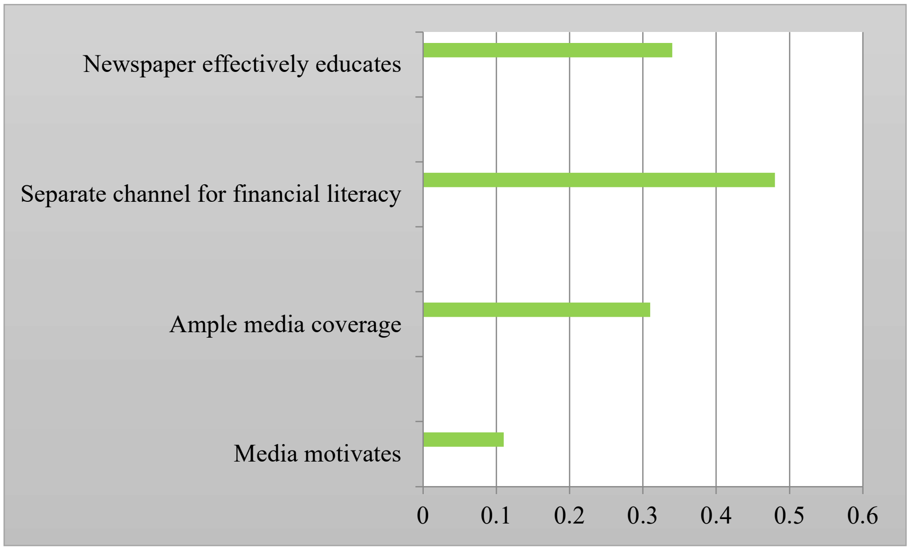

Figure 7. Media Effectiveness

5. Conclusion

Current Study aimed to investigate financial literacy and the role of media in promoting financial education among a sample of respondents in Rawalpindi and Islamabad. The findings provide valuable insights into the levels of financial awareness, the effectiveness of media in disseminating financial education, and the implications for financial behavior. The study revealed that respondents had low levels of financial awareness and understanding (Lusardi & Mitchel, 2007). Budgeting skills were lacking, as only a small percentage of participants engaged in household budget planning (Lusardi & Mitchel, 2007). Furthermore, there was limited knowledge of key financial concepts such as compound interest and the stock market (Col, Sampson, & Zia, 2009). These findings highlight the need for improved financial education initiatives that target budgeting skills and enhance financial numeracy. The survey results have highlighted the significant role of education in financial literacy and consumer awareness. The data suggests that individuals with higher education levels demonstrate higher levels of financial awareness and consumer knowledge. Moreover, financial behaviors, such as financial planning and familiarity with financial institutions, are positively correlated with the level of education. Based on these findings, it can be inferred that disseminating financial literacy and consumer awareness through media channels can greatly enhance overall financial literacy levels. Since a substantial portion of the population in Pakistan comprises young individuals who may have limited access to higher education institutions, it is recommended to introduce a comprehensive financial literacy and consumer awareness program into the education system, coupled with media initiatives.

5.1 Theoretical & Practical Implication

This initiative should primarily target Pakistani youth, aiming to transform their attitudes towards financial planning and encourage them to make informed decisions about their future by effectively utilizing the available resources, including reliable and accessible financial services providers. A national financial education program customized to regional needs could be developed, drawing inspiration from successful programs implemented in other countries

such as the financial literacy programs in New Zealand and Canada, such as those by the Canadian Foundation for Economic Education (CFEE). By leveraging the experiences and best practices of these programs, a mass media-based financial literacy program can be tailored to the needs of the Pakistani population.
Regarding the role of media in promoting financial literacy, the results showed mixed perceptions and preferences. While some respondents expressed interest in receiving personal finance information through media channels (Zia, 2010), a considerable portion showed disinterest. This suggests the importance of tailored and engaging financial content delivery via media platforms. Expert advice on electronic media and finance-related channels on social media were identified as potential effective strategies (McKenzie & Weber, 2009). The study also emphasized the significance of media effectiveness in promoting financial literacy. Respondents had divided opinions on the coverage of financial literacy in media, indicating the need for comprehensive strategies (Col, Sampson, & Zia, 2009). To address this, specialized financial education channels could be explored to cater to the preferences of individuals seeking financial knowledge.
Based on these findings, it is recommended to integrate financial literacy programs into the formal education system (Hogarth & Beverley, 2003). Education was identified as a key determinant of financial literacy and consumer awareness, and incorporating financial education into the curriculum can enhance financial knowledge and skills. Furthermore, leveraging media as a tool for disseminating financial education is crucial. A regionally customized financial education program targeting Pakistani youth could be developed, drawing inspiration from successful models in countries like New Zealand and Canada (Canadian Foundation for Economic Education, State of New Zealand). This program should utilize mass media platforms to effectively reach and engage the target audience, ensuring that financial education is accessible and relevant to their needs.

5.2 Future Directions

The study highlights the need to address gaps in financial literacy and utilize media for promoting financial education. Enhancing financial awareness, improving budgeting skills, and increasing knowledge of key financial concepts are essential. Integrating financial education into the formal education system and utilizing media platforms for targeted dissemination can empower individuals to make informed financial decisions and navigate the complexities of the financial landscape effectively. By implementing these recommendations, Pakistan can foster a financially literate population capable of making sound financial choices.

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