

Original Article

# Testing the Effectiveness of Educational Workshops on Financial Knowledge of High School Students Studying in Rural Chhattisgarh, India.

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**Abstract** - Financial literacy is crucial for financial control and opportunity navigation, yet often overlooked, particularly in South Asian countries where literacy levels lag behind developed nations. Enhancing financial literacy can significantly benefit individuals from lower socioeconomic backgrounds, improving income generation over time. This study examines the impact of financial literacy workshops on high school students in rural Chhattisgarh, India, focusing on improving financial knowledge. Using a quantitative approach, surveys were conducted with 286 students from three government schools, measuring financial knowledge before and after the workshops. The survey employed the financial knowledge scale developed in 2019 by NCFE. Results show a significant increase in knowledge, with mean scores rising from 5.08 to 8.71. Gender analysis reveals females initially had higher financial knowledge, but males surpassed them post-workshop. Age analysis indicates older students (above 15) had higher pre-test scores, yet younger students (15 and below) showed greater improvement. These findings demonstrate the effectiveness of interactive workshops in enhancing financial literacy and emphasise the need for targeted educational strategies. The study highlights workshops as valuable tools for financial education, fostering significant improvements across demographics. Insights from this research are crucial for educators, policymakers, and curriculum designers aiming to enhance financial literacy among rural youth. Future research should replicate these findings in other regions and explore various educational interventions to further boost financial literacy. This study contributes to understanding the role of financial education in equipping students with essential skills for personal and economic resilience.

**Keywords** - Education, Financial Knowledge, Financial Literacy, Workshop.

## 1. Introduction

The global economy's growing interconnectedness is influencing shifts in global economic patterns, encompassing financial dimensions, which could potentially impact personal financial stability. Financial literacy, on this account, plays a crucial role. It encompasses three key constructs: financial knowledge, financial behaviour, and financial attitude. While financial behaviour and attitude focus on the perception and treatment of money, financial knowledge focuses on the technical know-how in the field. The National Financial Educators Council (2018) defines financial literacy as having the expertise and understanding of financial topics to confidently make informed decisions that align with an individual's personal, family, and global community objectives. [1].

Globally, financial literacy rates demonstrate stark contrasts. While developed regions like Europe and Australia report higher rates of approximately 50%, respectively, South Asia stands with an average rate of below 30% [2]. This disparity underscores the influence of educational systems, cultural attitudes, and resource availability on financial education.

For instance, in India, only about 27% of the population is financially literate, with significant variations across states. Goa boasts the highest literacy rate at 56%, while Chhattisgarh lags at 9% [3]. Moreover, another survey revealed that 76.3% of urban respondents aged 16-50 admitted to never having learned financial management, highlighting a critical gap [4]. Additionally, 42.9% of the population borrows money from informal sources like commission agents and money lenders [5]. Augmenting financial literacy in India has the potential to boost economic growth, enhance citizens' financial well-being, and contribute to human capital formation, ultimately helping alleviate poverty.

Existing literature highlights the significant impact of workshops and online financial education courses on enhancing financial knowledge and improving financial behaviours such as savings and borrowing [6]. Workshops are particularly effective due to their interactive and participatory nature, engaging participants in a hands-on learning environment that can be especially impactful for certain demographics. For example, Johnson et al. (2021) conducted a study nationwide in the USA demonstrating



that digital platforms offering online financial education courses significantly contribute to increased financial knowledge among middle school students [7]. Moreover, a study by Agasisti, Barucci, Cannistrà, Marazzina, and Soncin (2019) shows that both online and on-campus modes of learning significantly improved financial education among students at a technical university in Italy [8].

In addition to workshops and online courses, other educational interventions have also shown promising results. Another critical investigation by Cole, Sampson, and Zia (2011) compared different methods of delivering financial education to young adults in Indonesia [9]. They discovered that methods focusing on interactive, real-life applications were more effective than traditional classroom-based instruction, leading to a 12% improvement in financial literacy scores. Similarly, a meta-analysis by Fernandes, Lynch, and Netemeyer (2014) synthesised findings from 201 previous studies, emphasising the effectiveness of tailored interventions in influencing specific financial behaviours [10]. Their analysis highlighted an average effect size of 0.1 across various outcomes, underscoring the importance of customization in financial education programs to maximise their impact. The literature review above accentuates a scarcity of studies on financial literacy in Asian countries, particularly in Southeast Asia like India. There is a critical need for further research to understand and explore the factors influencing financial literacy among diverse demographics, which is essential for shaping efficacious educational policies and curricula aimed at youth. Existing data on financial literacy in rural India highlights the notably low rates in these areas, limiting both individual well-being and economic progress. Most financial literacy initiatives focus on urban populations, leaving rural high school students in government schools underserved. Moreover, gender disparities in financial literacy are stark, with only 27% of Indian men being financially literate and only 20% of women [11].

Furthermore, while education correlates positively with financial literacy, targeted studies on effective interventions for high school students in rural India are lacking. Existing research often generalises findings without addressing the unique challenges faced by rural pupils. Therefore, this study intends to fill these gaps by assessing the effectiveness of workshops as an intervention to enhance financial knowledge among high school students in rural Chhattisgarh, India. Using a quantitative approach with surveys as the main research tool, this study seeks to uncover practical strategies to improve financial literacy among this demographic. Addressing these gaps is crucial for developing tailored educational strategies that empower rural youth with essential financial skills for personal and economic resilience.

## 2. Methodology

### 2.1. Research Aim and Hypotheses

The primary aim of this study is to measure the efficacy of financial literacy workshops in improving financial

knowledge among high school students residing in rural Chhattisgarh. The paper also focuses on a few secondary objectives. These are listed below:

- Measuring the state of financial knowledge of high school students residing in rural Chhattisgarh.
- Understanding the impact of gender as a variable on the benefits derived from financial knowledge workshops.
- Understanding the impact of age as a variable on the benefits derived from financial knowledge workshops.

The following are the null hypotheses of the study:

H<sub>01</sub>: There is no significant difference in the pre-test and post-test scores for financial knowledge of high school students.

H<sub>02</sub>: There is no significant difference in the pre-test and post-test scores of all female students.

H<sub>03</sub>: There is no significant difference in the pre-test and post-test scores of all male students.

H<sub>04</sub>: There is no significant difference in the pre-test scores based on gender.

H<sub>05</sub>: There is no significant difference in the post-test scores based on gender.

H<sub>06</sub>: There is no significant difference in the pre-test and post-test scores for the age group 15 and below.

H<sub>07</sub>: There is no significant difference in the pre-test and post-test scores for the age group above 15.

H<sub>08</sub>: There is no significant difference in the pre-test scores based on age.

H<sub>09</sub>: There is no significant difference in the post-test scores based on age.

H<sub>010</sub>: There is no significant difference in the improvement of financial knowledge scores based on age.

### 2.2. Research Design

This study is an experimental study that uses a survey research design. Thus, to measure financial knowledge levels a survey was used. The survey was based on the financial knowledge scale developed by the National Centre for Financial Education (NCFE) (Financial Literacy and Inclusion in India) (2019) [3]. The knowledge required for engaging in activities like staying updated on economic and financial developments, evaluating financial products and services, and making sound, informed financial choices is known as financial knowledge. It includes components like understanding investment, inflation, interest rates and savings.

### 2.3. Scales and Tools Used

The survey included the 8-item standardised scale developed by NCFE to measure financial knowledge (savings, investment, inflation, interest rates and risk management) and incorporated 2 additional questions to test understanding of money management and government bonds. There were 8 Multiple Choice Questions and 2 Numerical Open-ended Response Questions. The marking of the survey forms entailed each wrong question being awarded a mark of 0 and the right answer being awarded a mark of 1.

The survey also included a section to collect demographic information, including Gender, Grade, School Name, Aadhaar Card Number, Address and whether they have attended similar workshops before.

**2.4. Sample and Sampling Characteristics**

The survey was conducted in three government schools in the city of Durg in the Indian state of Chhattisgarh. The sampling technique used was a combination of convenience and purposive sampling. The survey was dispensed to 286 high school students in grades 9, 10, 11, and 12 across three schools. All three schools were co-educational, and so the sample consisted of 159 females and 127 males. 57.34% of the total students were above 15, and 42.66% of the total students were 15 and below. Out of 286 students only 3 students had attended similar workshops before.

**2.5. Data Collection Procedure**

The surveys were administered through physical survey printouts and were made available in both Hindi and English for the respondents' convenience. The survey form itself contained 3 sections:

- The personal information of the respondents
- The pre-workshop survey questions
- The post-workshop survey questions

The students received the surveys from their schoolteachers. For any questions that may arise, the researchers were available at the school to answer them. The teachers were asked not to help the children with answering the questions. The students were first asked to fill out the first two pages which contained the demographic background as well as the pre-workshop questions in whichever language they were comfortable with. Afterwards, the students were asked not to fill out the last part and set aside the survey forms. The questions entailed the concepts of savings, investment, inflation, interest rates and risk management. The workshop was 1hr and 30 minutes long. Following the workshop, the students completed the same set of questions again, this time part of the post-workshop section, and handed back the survey forms. The respondents were reassured of the anonymity and confidentiality of their personal data. Participation was voluntary.

**2.6. Statistical Techniques**

The statistical techniques employed for this research paper are independent and paired t-tests. These tests were done on Data Tab and Google Sheets was used to first catalogue the data in a more organised and tabular form.

**2.7. Ethical Considerations**

This study involved voluntary participation by the students, and there was informed consent from their side. The students were also promised anonymity and confidentiality being maintained throughout this research analysis.

**3. Results**

The results found using the statistical techniques are presented below in a tabular form. Under each table, the

results are statistically analysed, and proof of the hypothesis being accepted or rejected is provided. These tables showcase the results incurred through the investigation of the primary and secondary aims of this research.

**Table 1. Paired t-test analysis of Financial Knowledge Scores before and after the workshop (N=286)**

	N	M	SD	t	p
<b>Pre-Test Score</b>	286	5.08	0.91	-55.9	<0.001***
<b>Post-Test Score</b>	286	8.71	0.8		

Note: \*p<0.10, \*\*p<0.05, \*\*\*p<0.01

As can be seen in Table 1, there is a significant difference in the pre-test scores (M=5.08, SD=0.91) and post-test scores (M=8.71, SD=0.8) of students with regards to financial knowledge, as t(285)=-55.9 and p<0.001. Hence, by this effect, the workshop significantly is able to enhance the financial knowledge of the high school students included in the sample. Therefore, the null hypothesis H<sub>01</sub> has been rejected.

**Table 2. Paired t-test analysis of males and females based on the Testing Stage (N=286)**

	Age	N	M	SD	t	p
<b>Female</b>	Pre	159	5.18	0.97	-40.33	<.001***
	Post	159	8.6	0.82		
<b>Male</b>	Pre	127	4.96	0.81	-40.47	<.001***
	Post	127	8.84	0.76		

Note: \*p<0.10, \*\*p<0.05, \*\*\*p<0.01

As can be seen in Table 2, there is a significant difference in the pre-test scores (M=5.18, SD=0.97) and post-test scores (M=8.6, SD=0.82) of all the female students with regards to financial knowledge, as t(285)=-40.33 and p<0.01. Hence, by this effect, the workshop significantly can enhance the financial knowledge of the female high school students included in the sample. Therefore, the null hypothesis H<sub>02</sub> has been rejected. Likewise, the workshop has been able to significantly improve the financial knowledge of male students as well, as t(285)=-40.47 and p<0.01 (Pre: M=4.96, SD=0.81; Post: M=8.84, SD=0.76). Therefore, the null hypothesis H<sub>03</sub> has been rejected.

As can be seen in Table 3, there is a significant difference in the pre-test scores of males (M=5.08, SD=0.91) and female (M=8.71, SD=0.8) students with regards to financial knowledge, as t(285)=2.1 and p<0.05. Hence, by this respective result, it is found that female students had higher financial knowledge to begin with. Therefore, the null hypothesis H<sub>04</sub> has been rejected. Similarly, there is a significant difference in the post-test scores of male (M=8.84, SD=0.76) and female (M=8.6,

SD=0.82) students. As  $t(285)=-2.55$  and  $p<0.05$ , these results show males have significantly higher financial knowledge after the workshop, and thus, the null hypothesis  $H_{05}$  has been rejected.

**Table 3. Independent t-test analysis of Pre-Test and Post-Test Scores based on Gender (N=286)**

	Age	N	M	SD	t	p
Pre-Test Scores	Female	159	5.18	0.97	2.1	0.036**
	Male	127	4.96	0.81		
Post-Test Scores	Female	159	8.6	0.82	-2.55	0.011**
	Male	127	8.84	0.76		

Note: \* $p<0.10$ , \*\* $p<0.05$ , \*\*\* $p<0.01$

**Table 4. Paired t-test analysis of younger and older students based on the Testing Stage (N=286)**

		N	M	SD	t	p
15 and below	Pre	120	4.78	0.9	-38.82	<.001***
	Post	120	8.56	0.69		
Above 15 years	Pre	166	5.31	0.85	-40.84	<.001***
	Post	166	8.82	0.86		

Note: \* $p<0.10$ , \*\* $p<0.05$ , \*\*\* $p<0.01$

**Table 5. Independent t-test analysis of Pre-Test and Post-Test Scores based on Age (N=286)**

	Age	N	M	SD	t	p
Pre-Test Scores	15 & below	122	4.78	0.9	4.91	<.001***
	> 15 years	164	5.3	0.85		
Post-Test Scores	15 & below	122	8.57	0.69	2.58	0.01***
	> 15 years	164	8.81	0.86		
Differential Scores	15 & below	122	3.78	1.08	-2.16	0.032**
	> 15 years	166	3.51	1.1		

Note: \* $p<0.10$ , \*\* $p<0.05$ , \*\*\* $p<0.01$

As can be seen in Table 4, there is a substantial difference in the pre-test scores ( $M=4.78$ ,  $SD=0.9$ ) and post-test scores ( $M=8.56$ ,  $SD=0.69$ ) for all high school students

that are 15 and below in regards to financial knowledge, as  $t(285)=-38.82$  and  $p<0.001$ . Hence, by this effect, the workshop significantly is able to enhance the financial knowledge of the high school students that fall in the age category of 15 and below years included in the sample. Therefore, the null hypothesis  $H_{06}$  has been rejected. Likewise, the workshop has been able to significantly improve the financial knowledge of students that are above 15 years old as well, as  $t(285)=-40.84$  and  $p<0.001$  (Pre:  $M=5.31$ ,  $SD=0.85$ ; Post:  $M=8.82$ ,  $SD=0.86$ ). Therefore, the null hypothesis  $H_{07}$  has been rejected.

As can be seen in Table 5, there is a significant difference in the pre-test scores of younger students (15 and below) ( $M=4.78$ ,  $SD=0.9$ ) and older students (above 15) ( $M=5.31$ ,  $SD=0.85$ ) students with regard to financial knowledge, as  $t(285)=4.91$  and  $p<0.001$ . Hence, by this respective result, it is found that older students had higher financial knowledge to begin with. Therefore, the null hypothesis  $H_{08}$  has been rejected. Similarly, there is a significant difference in the post-test scores of younger students ( $M=8.56$ ,  $SD=0.69$ ) and older students ( $M=8.82$ ,  $SD=0.86$ ). As  $t(285)=-2.58$  and  $p=0.005$ , these results show older students have a significantly higher financial knowledge after the workshop and thus, the null hypothesis  $H_{09}$  has been rejected. However, the improvement in the scores due to the workshop (difference between post-test and pre-test scores) is higher for younger students ( $M=3.78$ ,  $SD=1.09$ ) than older students ( $M=3.51$ ,  $SD=1.09$ ). Meaning that the workshop proves to be more beneficial for younger students. The null hypothesis  $H_{010}$  is rejected as  $t(285)=-2.08$  and  $p=0.039$ .

#### 4. Discussion

This study contributes to understanding the efficacy of workshops as an intervention to increase financial knowledge for high school students in rural India. When financial knowledge was measured before the workshop, everyone started at a moderate level (Mean = 5.08). The results accentuate that workshops help significantly improve financial knowledge as the scores after the workshop were astoundingly higher ( $M=8.71$ ) [12][13]. Workshops have been seen to ignite a keenness for new knowledge due to their engaging nature. Studies have found that interventions that utilise a participative and interactive pedagogy tend to be more effective in enhancing knowledge among the attendees [14]. Workshops are interactive and have been able to foster more participation and engagement. Interactive learning is known to be found in existing literature [15].

The gender disparities in financial knowledge levels before the workshop, with the girls scoring more than boys, was a staggering revelation. This finding contrasts with the literature showing that females have lesser financial literacy levels [16][17][18]. One conceivable explanation for females surpassing boys in this research is that in Indian culture, due to the heavy involvement of young women when running the family makes them aware about the family financials, making them more financially savvy. This level

of hands-on experience also means that females are more equipped with general financial knowledge [19]. The survey had about four questions related to general knowledge, such as saving and budgeting, allowing the females to score higher for that portion of the survey. One conceivable explanation for females surpassing boys in this research is that in Indian culture, young women are heavily involved in the everyday running of the family and are aware of family money, making them more financially savvy. This sort of hands-on experience also means that females are more equipped with the general knowledge related to finance. However, in this study, males outperformed females after the workshop, and a reason for this is that even though females have higher general knowledge, males could grasp concepts around investment and investment more strongly than females could [19]. They possess better financial knowledge than females [20]. Another probable cause could be due to the stereotype threat: females performed in the way they thought they should (which is poorer than what they knew) [20][21]. Conversely, there have been studies that showcase that females have better financial literacy than males [22]. Although, there have also been studies regarding the fact that gender does not impact financial literacy levels [23].

Results also indicate that the older students (above 15) outperform the younger students (15 and below). Older students usually have prior knowledge regarding finance, which could be due to their involvement in the familial handling of money. However, a more major factor would be due to their educational levels [24]. Nevertheless, the results above also show that the 'improvement' due to the workshop (difference between pre-test and post-test scores) is higher for younger students. A plausible explanation could be that since the younger started out with a lower score and, thus, lower knowledge, they had a higher scope in assimilating more information. It could also be due to their willingness to learn new and pragmatic concepts [25]. This also demonstrates that financial knowledge can be dispersed to students from as early as their first year in high school. However, there have been studies to support the notion of how age is not a factor that affects financial literacy among students [26].

## 5. Conclusion

This examination aimed to analyse constructive workshops as a way of dispersing financial knowledge among high school students studying in government schools in rural Chhattisgarh, India. The results showcase that workshops have significantly impacted the financial knowledge of high school students. Results also demonstrate the disparity between genders in fiscal knowledge.

The study's findings inform educators, policymakers, curriculum designers, and finance professionals about how

workshops as an intervention can be an exemplary tool to impart financial knowledge among high school students. This information will be crucial as they collaborate to establish strategies and implement successful policies to enhance financial knowledge among youth. These results also showcase how starting early with such programs can lay a solid foundation for students. Additional studies are required to duplicate our results in other areas of India and other developing countries. Further exploration is needed to determine successful methods of imparting financial education. Studies in the literature prove the efficacy of 1-hour long workshops and how long their impacts last [27]. With this study, it can be hypothesised that financial knowledge can be integrated into the curriculum by holding such workshops monthly for students.

By promoting financial literacy, India can experience a surge in its economic potential, enhance the financial well-being of its citizens, and contribute to human capital formation. Moreover, it can help boost living standards and sustain overall growth, potentially eradicating poverty to some extent. The link between financial literacy and poverty reduction is evident.

The study cautions that the results are not generalizable to the larger population. Diverse profiles should be investigated using a larger sample to extend these results to a sizable population. These results only extend to the specific demographic of rural Chhattisgarh, India. Secondly, a point to be conscious of is that the duration of the workshop is heavily reliant on the topics being covered in that period, as financial knowledge is more vast than basic subjects. Since this workshop covered the most basic concepts that are part of financial knowledge, it took less time than if the content covered was more complex. The situational variables (duration, content of the workshops, demographics) of this workshop had been particular but this paves the way for future experimental studies by tweaking the variables according to the location and population. Full disclosure was not practised as it could have hindered the findings of the study/survey.

India can experience a surge in its economic potential, enhance the financial well-being of its citizens, and contribute to human capital formation by facilitating financial literacy. Moreover, it can help boost living standards and sustain overall growth, potentially eradicating poverty to some extent. The link between financial literacy and poverty reduction is evident. Augmented financial literacy correlates with a significant decline in poverty, as demonstrated by a study across Kenya, Tanzania, and Uganda, where a unit increase in financial literacy is positively associated with a decrease in poverty probability by 3.5% to 6.7% points [28].

## References

- [1] J.D. Jayaraman, and Saigeetha Jambunathan, "Financial Literacy Among High School Students: Evidence from India," *Citizenship, Social and Economics Education*, vol. 17, no. 3, pp. 168-187, 2018. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]

- [2] Global Financial Literacy Excellence Center (GFLEC), S&P Global Finlit Survey. [Online]. Available: <https://gflec.org/initiatives/sp-global-finlit-survey/>
- [3] National Centre for Financial Education, Financial Literacy and Inclusion Survey. [Online]. Available: <https://ncfe.org.in/nflis/>
- [4] Siddharth Mohan Roy, The Importance of Financial Literacy in India, 2020. [Online]. Available: <https://streetfins.com/the-importance-of-financial-literacy-in-india/#:~:text=Metropolitan%20areas%20like%20Maharashtra%2C%20Delhi%2C%20and%20West%20Bengal%20have%20financial%20literacy%20rates%20of%2017%25%2C%2032%25%2C%20and%2021%25%2C%20respectively>
- [5] Reserve Bank of India, Press Releases. [Online]. Available: [https://rbi.org.in/SCRIPTS/BS\\_PressReleaseDisplay.aspx?prid=28641](https://rbi.org.in/SCRIPTS/BS_PressReleaseDisplay.aspx?prid=28641)
- [6] Artur Pokrikyan, "The Impact of Financial Literacy Workshops in Rural Areas of Armenia," *Journal of Business*, vol. 5, no. 1, pp. 35-38, 2016. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [7] Jeremiah Johnson et al., "Impact of the FutureSmart Online Financial Education Course on Financial Knowledge of Middle School Students," *Journal of Financial Counseling and Planning*, 2021. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [8] Tommaso Agasisti et al., "Online or On-campus? Analysing the Effects of Financial Education on Student Knowledge Gain," *Evaluation and Program Planning*, vol. 98, pp. 1-11, 2023. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [9] Shawn Cole, Thomas Sampson, and Bilal Zia, "Prices or Knowledge? What Drives Demand for Financial Services in Emerging Markets?," *The Journal of the American Finance Association*, vol. 66, no. 6, pp. 1933-1967, 2011. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [10] Daniel Fernandes, John G. Lynch, and Richard G. Netemeyer, "Financial Literacy, Financial Education, and Downstream Financial Behaviors," *Management Science*, vol. 60, no. 8, pp. 1861-1883, 2014. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [11] Amita Chaudhury, and Venky Iyer, Don't Leave Women Behind: Accelerating progress in financial literacy, 2023. [Online]. Available: <https://bsfi.economicstimes.indiatimes.com/blog/dont-leave-women-behind-accelerating-progress-in-financial-literacy/102838632#:~:text=The%20financial%20literacy%20gender%20gap,only%2020%25%20of%20women%20are.>
- [12] Mike Szekeres, and Joy C. MacDermid, "Online Learning Versus Workshops: A Rank Minimized Trial Comparing the Effect of Two Knowledge Translation Strategies Designed to Alter Knowledge, Readiness to Change, and Self-efficacy with Respect to Rehabilitation Outcome Measures," *Disability and Rehabilitation*, vol. 44, no. 21, pp. 6531-6538, 2021. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [13] Sahar Salahi et al., "The Effect of Educational Workshop on Emergency Department Nurses' Self-efficacy in Patient Training," *Journal of Education and Health Promotion*, vol. 8, no. 1, 2019. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [14] Jafar Adib, Batool Nehrir, and Zohreh Vafadar, "Effect of Educational Workshops on Improving Critical Thinking Skills in Nursing Students," *Journal of Nursing Education (JNE)*, vol. 6, no. 1, 2017. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [15] Guiyun Zhang et al., "Medical School Anatomy and Pathology Workshops for High School Students Enhance Learning and Provide Inspiration for Careers in Medicine," *Academic Pathology*, vol. 3, 2016. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [16] Shohei Okamoto, and Kohei Komamura, "Age, Gender, and Financial Literacy in Japan," *PloS One*, vol. 16, no. 11, pp. 1-20, 2021. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [17] Emmanuel Sarpong-Kumankoma, Sayeed Ab-Bakar, and Felix Nartey Akplehey, "Gender and Financial Literacy in Ghana," *African Journal of Economic and Management Studies*, vol. 14, no. 4, pp. 569-582, 2023. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [18] Shosh Shahrabani, "Financial Literacy Among Israeli College Students," *Journal of College Student Development*, vol. 54, no. 4, pp. 439-446, 2013. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [19] Leila Falahati, and Laily Hj. Paim, "Gender Differences in Financial Literacy among College Students," *Journal of American Science*, vol. 7, no. 6, pp. 1180-1183, 2011. [[Google Scholar](#)] [[Publisher Link](#)]
- [20] Justus Blaschke, "Gender Differences in Financial Literacy Among Teenagers - Can Confidence Bridge the Gap?," *Cogent Economics & Finance*, vol. 10, no. 1, 2022. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [21] Gustav Tinghög et al., "Gender Differences in Financial Literacy: The Role of Stereotype Threat," *Journal of Economic Behavior & Organization*, vol. 192, pp. 405-416, 2021. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [22] Aygun Akgül, and Ali Gurel Göksel, "Financial Literacy: Examination of Financial Behavior and Attitudes of Sports Management Department Students," *Mediterranean Journal of Sport Science*, vol. 5, no. 3, pp. 733-751, 2022. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [23] Hery Syaerul Homan, "Comparative Study of Students Financial Literacy and Its Demographic Factors," *Advances in Economics, Business and Management Research*, 2015. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [24] John H. Young, "Financial Literacy: Age and Experience as Determinants," *Washington Business Research Journal*, vol. 3, no. 1, pp. 35-45, 2013. [[Google Scholar](#)]
- [25] Alison Gopnik, Thomas L. Griffiths, and Christopher G. Lucas, "When Younger Learners can be Better (or at Least more Open-Minded) than Older Ones," *Current Directions in Psychological Science*, vol. 24, no. 2, pp. 87-92, 2015. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [26] Gumani Ramavheha, Jaco Fouché, and Freda Van der Walt, "Financial Literacy of Undergraduate Students - A Case Study of a Public University in South Africa," *International Journal of Economics and Financial Studies*, vol. 9, no. 2, pp. 48-65, 2017. [[Google Scholar](#)]

- [27] Sally Ke et al., "Healthy Young Minds: The Effects of a 1-hour Classroom Workshop on Mental Illness Stigma in High School Students," *Community Mental Health Journal*, vol. 51, pp. 329-337, 2015. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [28] Isaac Koomson et al., "Effect of Financial Literacy on Poverty Reduction Across Kenya, Tanzania, and Uganda," *Global Social Welfare*, vol. 10, pp. 93-103, 2022. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]