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"Financial Literacy and Sustainable Investment Among University Students: An Analytical Exploration"

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Abstract
This study investigates university students' interest in sustainable investment, focusing on various determinants such as financial knowledge, attitudes toward financial planning, awareness of sustainable investment, perceived importance of sustainability, social influence, perceived financial self-efficacy, financial risk tolerance, and financial social responsibility. Additionally, it examines the role of demographic factors, including gender, city of residence, and educational discipline, in shaping investment interests. Employing a descriptive research design, data was collected from 552 valid responses out of 759 distributed questionnaires, achieving a robust response rate of 72.7%. The study encompassed university students across five regions of Gujarat, using both online and offline methods for inclusivity. Reliability and validity tests revealed strong internal consistency across variables, though certain constructs exhibited minor issues with convergent validity. Structural Equation Modelling (SEM) highlighted significant predictors of sustainable investment interest, with social influence, financial risk tolerance, and financial knowledge playing pivotal roles, while attitudes toward financial planning negatively influenced perceptions. Notably, sustainable investment awareness and financial social responsibility emerged as critical drivers, underscoring the need for targeted educational interventions. The findings suggest gaps in financial literacy and awareness of sustainable investment, with practical implications for educational institutions, policymakers, and financial service providers. By addressing these gaps through tailored financial literacy programs, enhanced curriculum design, and leveraging social influence mechanisms, stakeholders can foster greater engagement with sustainable investments among university students. This research provides a foundation for future studies on sustainable financial behaviours and offers actionable insights for promoting sustainability in investment practices.

Keywords: sustainable investment, university students, financial knowledge, financial planning attitudes, sustainability awareness

1. Introduction

Financial literacy is an essential skill for navigating modern economic landscapes, particularly among university students, where it shapes financial behaviors, investment choices, and overall economic wellbeing. As sustainability becomes a global priority, integrating sustainable investment into financial decision-making is critical. This analysis explores university students' financial literacy, awareness of sustainable investment practices, and the role of education and accessibility in fostering sustainable financial habits (Aboagye&Lartey, 2021).

1.1 Significance of Financial Literacy in Higher Education

Financial literacy enables university students to manage finances effectively, budgeting for tuition, housing, and expenses while avoiding debt and achieving stability during and after their studies (Lusardi & Mitchell, 2014; Rojas, 2018). It also enhances their understanding of sustainable investments, aligning financial decisions with long-term goals and societal priorities (Gupta & Kumar, 2020; Singh & Agarwal, 2019). Beyond personal benefits, financial literacy supports societal wellbeing, driving sustainable economic growth through informed investments and responsible spending (OECD, 2016; O'Sullivan & Downey, 2021).

1.2 Role in Future Professional Success

Graduates with strong financial knowledge are better equipped to secure employment, negotiate salaries, and manage workplace benefits (Fernandes, Lynch, &Netemeyer, 2014; Verma& Choudhury, 2020). This knowledge enables them to understand markets and pursue entrepreneurship (Wright, 2018). Universities fostering financial literacy produce professionals who excel in careers and make responsible choices, including sustainable investments, promoting long-term economic and environmental responsibility (Hastings, Madrian, &Skimmyhorn, 2013).

1.3 Bridging the Financial Literacy Gap

Despite its importance, many university students lack basic financial knowledge, leading to poor financial decisions (Atkinson & Messy, 2012). Integrating financial literacy into academic programs, alongside community workshops and online tools, can bridge this gap. These efforts help students adopt habits that benefit them individually and align with sustainable investment goals (Lyons et al., 2006).

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2. Review of literature

The literature on financial literacy and sustainable investment highlights the growing importance of ESG integration, especially among younger investors. Studies show rising demand for sustainable products, with ESG criteria used to manage risks and identify opportunities (Amel-Zadeh&Serafeim, 2018). Financial literacy empowers informed decisions, but research on university students' preparedness for sustainable investing is limited (Atkinson & Messy, 2012; Lusardi & Mitchell, 2014). Reports like BlackRock (2020) and the Sustainable Investment Forum (2019) stress the need for ESG education in universities. However, gaps remain in integrating ESG into financial literacy programs and addressing barriers like knowledge gaps and complexity.

Amel-Zadeh and Serafeim (2018) Investors use ESG metrics to manage risks, identify opportunities, and meet ethical finance demands, reflecting their growing importance in modern strategies. ESG factors are valued not just for profitability but also for ethical considerations, supporting their integration into mainstream investment education. **Research Gap:** While the role of ESG in investment strategies is evident, there is limited focus on how financial literacy among university students impacts their understanding and application of ESG factors. Further research is needed to explore educational approaches to enhance ESG awareness at the university level.

Atkinson and Messy (2012) Financial literacy, defined as a blend of awareness, knowledge, skills, attitudes, and behaviors, is essential for sound financial decision-making. Addressing knowledge gaps in financial literacy is critical to improving financial planning and reducing unsustainable debt among young adults. Targeted educational programs can equip university students with competencies, including integrating sustainable investment practices. **Research Gap:** While the importance of financial literacy is clear, its specific impact on the adoption of sustainable investment practices among university students remains underexplored. Further research could focus on tailoring financial literacy education to foster sustainable investment habits in young adults.

BlackRock (2020) Sustainable investing is transforming financial strategies as institutional investors increasingly adopt frameworks driven by technological advances and climate awareness. Tools like ESG scorecards enable young investors to align portfolios with sustainability goals, offering practical insights for educators and policymakers to enhance financial literacy curricula. **Research Gap:** While the role of sustainable investment tools is highlighted, little is known about how university students perceive and use these tools. Further research could explore the effectiveness of ESG tools in shaping investment decisions among students.

Friede, Busch, and Bassen (2015)A meta-analysis confirms ESG integration boosts financial outcomes, merging profitability with ethics. It highlights the need to teach university students ESG evaluation for impactful investing. **Research Gap:** The study lacks focus on how universities communicate ESG benefits. Research could explore improving financial literacy programs to convey sustainable investing's advantages.

Lusardi and Mitchell (2014) Financial literacy significantly impacts individual wellbeing and economic stability, shaping decisions on saving, borrowing, and investing. Higher financial literacy enables long-term planning and informed sustainable investment decisions, highlighting the importance of integrating financial education in university curricula. **Research Gap:** While the study highlights financial literacy's broad effects, it does not specifically address its influence on students' sustainable investment decisions. Further research could explore enhancing curricula to include sustainable investment knowledge.

The Sustainable Investment Forum (2019) Millennials and Gen Z demand ESG-aligned investments, emphasizing the need for universities to teach sustainable finance early. **Research Gap:** Barriers for students in applying ESG principles remain unexplored. Research could address how universities can equip them with practical skills.

The World Economic Forum (2019) Sustainable investment is vital for addressing global issues like climate change and inequality. Incorporating ESG principles into financial literacy programs equips students to make responsible financial choices. **Research Gap:** The report lacks analysis of how ESG principles in university curricula impact students' attitudes and decisions. Further research could assess the role of case studies in shaping ethical investment behaviors.

Studies link financial literacy with sustainable investment, emphasizing the need for education that combines technical skills with values-driven strategies. Interdisciplinary approaches are vital to preparing students as responsible investors aligned with societal goals. **Research Gap:** While the need for interdisciplinary education is clear, specific teaching methods for integrating ESG into university curricula remain underexplored. Research could focus on innovative ways to foster technical financial knowledge and sustainability awareness.

3.Research Methodology:

The research methodology for this study on financial literacy and sustainable investment among university students employs a mixed-methods approach, combining quantitative and qualitative techniques to ensure a comprehensive understanding of the subject. Primary data collection involves administering structured questionnaires to university students, focusing on their financial knowledge, attitudes toward sustainable investment, and awareness of environmental, social, and governance (ESG) principles. Secondary data is gathered from academic journals, industry reports, and case studies to provide a theoretical foundation and context for the analysis. Quantitative data is analysed using statistical software to identify patterns and correlations, while qualitative insights are derived from semi-structured interviews to capture students' perceptions and challenges regarding sustainable investing. The methodology aims to explore the

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intersection of financial literacy and ESG considerations, offering actionable recommendations for enhancing financial education to foster informed and ethical investment practices among university students.

Objectives of the Study

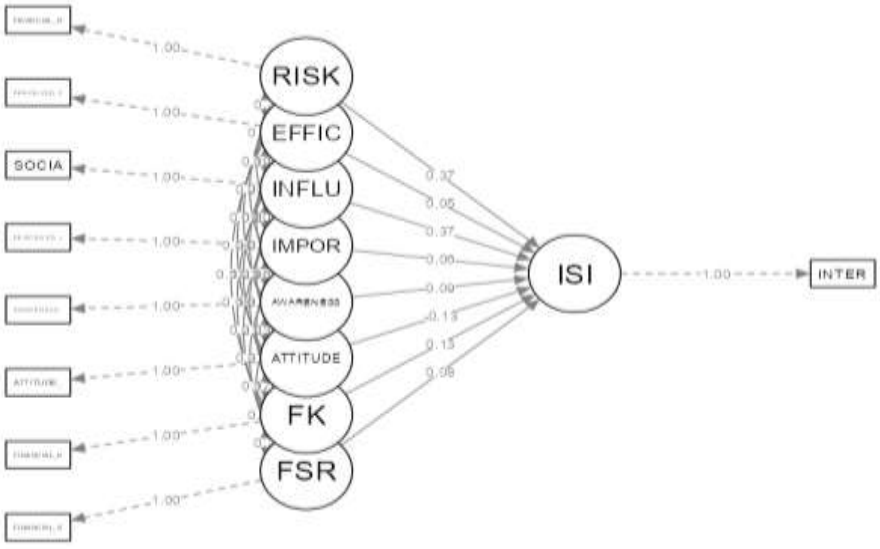
The study aimed to achieve the following objectives:

- To examine the relationship between financial knowledge, perceived financial self-efficacy, and university students' interest in sustainable investment.
- To investigate the impact of attitudes toward financial planning and financial risk tolerance on interest in sustainable investment among university students.
- To assess the level of awareness and perceived importance of sustainability and their influence on university students' sustainable investment interest.
- To evaluate the role of social influence and financial social responsibility on university students' interest in sustainable investment.
- To analyse the effect of demographic factors (gender, city of residence, and discipline of education) on university students' sustainable investment interest.

This study examined university students' interest in sustainable investment, focusing on factors like financial knowledge, attitudes, sustainability awareness, social influence, and demographics. Using a descriptive research design, data were collected via structured questionnaires from 552 valid responses across five regions of Gujarat, achieving a 72.7% response rate. Despite initial challenges, follow-ups ensured a diverse sample. The findings highlight financial behaviors and attitudes, offering insights into sustainable investment interest among students and a basis for future research.

Results and Discussions:

STRUCTURAL EQUATION MODELLING



Reliability & Validity:

Reliability indices				
Variable	**α**	**ω₁**	**ω₂**	**ω₃**	**AVE**
FSR	0.820	0.822	0.822	0.822	0.436
FK	0.801	0.806	0.806	0.809	0.457
ATTITUDE	0.822	0.826	0.826	0.832	0.488
AWARENESS	0.746	0.747	0.747	0.746	0.426
IMPORTANCE	0.801	0.804	0.804	0.807	0.509
INFLUENCE	0.816	0.818	0.818	0.820	0.476

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EFFICACY		0.790		0.793		0.793		0.790		0.439	
RISK		0.801		0.806		0.806		0.809		0.457	
ISI		0.887		0.885		0.885		0.880		0.607	

The study's variables show strong reliability, with Cronbach's alpha values exceeding 0.74, including Financial Social Responsibility (0.820) and Financial Knowledge (0.801). Composite reliability indices confirm consistency, but Average Variance Extracted (AVE) for some variables, such as FSR (0.436) and FK (0.457), falls slightly below the 0.50 threshold, indicating minor validity concerns. Importance of Sustainability ($\alpha = 0.887$, AVE = 0.607) stands out as the most robust construct. Overall, reliability is strong, with areas for validity improvement.

STRUCTURAL EQUATION MODELLING:

Model tests

Label	**X^2**	**Df**	**P**
User Model	5566	1049	< .001
Baseline Model	30231	1128	< .001

Fit indices

		95% Confidence Intervals		
SRMR	**RMSEA**	**Lower**	**Upper**	**RMSEA p**
0.065	0.055	0.053	0.056	< .001

User model versus baseline model

	Model
Comparative Fit Index (CFI)	0.845
Tucker-Lewis Index (TLI)	0.833
Bentler-Bonett Non-normed Fit Index (NNFI)	0.833
Relative Noncentrality Index (RNI)	0.845
Bentler-Bonett Normed Fit Index (NFI)	0.816
Bollen's Relative Fit Index (RFI)	0.802
Bollen's Incremental Fit Index (IFI)	0.845
Parsimony Normed Fit Index (PNFI)	0.759

The Structural Equation Modelling (SEM) analysis shows a significant user model fit, with $X2(1049)=5566, p<.001 X^2(1049) = 5566$, $p < .001 X2(1049)=5566, p<.001$, typical for large samples. Fit indices indicate mixed results: SRMR (0.065) and RMSEA (0.055) suggest reasonable fit, but CFI (0.845), TLI (0.833), and NNFI (0.833) fall below the ideal 0.90 benchmark, showing scope for improvement. Parsimonious indices like PNFI (0.759) highlight simplicity but suggest the need for refinement.

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Parameters estimates

				95% Confidence Intervals		β	95% Confidence Intervals			
Dep	Pred	Estimate	SE	Lower	Upper		Lower	Upper	z	P
ISI	FSR	0.0786	0.0278	0.02408	0.1331	0.0750	0.02299	0.1270	2.83	0.005
ISI	FK	0.1347	0.0317	0.07249	0.1969	0.1277	0.06884	0.1866	4.24	< .001
ISI	ATTITUDE	-0.1262	0.0292	-0.18346	-0.0689	-0.1094	-0.15910	-0.0597	-4.32	< .001
ISI	AWARENESS	0.0939	0.0378	0.01984	0.1680	0.0748	0.01582	0.1338	2.48	0.013
ISI	IMPORTANCE	0.0564	0.0343	-0.01087	0.1236	0.0475	-0.00916	0.1042	1.64	0.100
ISI	INFLUENCE	0.3676	0.0340	0.30102	0.4343	0.3377	0.27770	0.3978	10.81	< .001
ISI	EFFICACY	0.0508	0.0277	-0.00349	0.1052	0.0491	-0.00337	0.1016	1.83	0.067
ISI	RISK	0.3704	0.0362	0.29937	0.4414	0.2925	0.23725	0.3477	10.22	< .001

Key predictors of the Importance of Sustainable Investment (ISI) include Financial Social Responsibility (β = 0.0750), Financial Knowledge (β = 0.1277), Awareness (β = 0.0748), Social Influence (β = 0.3377), and Financial Risk Tolerance (β = 0.2925), all positively influencing ISI, with Social Influence having the strongest effect. Attitude Toward Financial Planning negatively predicts ISI (β = -0.1094), while Perceived Financial Self-Efficacy and Importance of Sustainability show weak, non-significant effects. These findings highlight the critical roles of Financial Knowledge, Social Influence, and Risk Tolerance.

Findings, Discussion and Managerial Implications:
The study revealed key insights into university students' financial literacy and interest in sustainable investments. Most students (59.2%) demonstrated good financial literacy, especially in basic concepts, though gaps remain (24.7% uncertainty). Proficiency in financial calculations (64%) and budgeting (77.3%) was notable, but practical education is needed for those facing difficulties. Awareness of investment options (59.4%) and sustainable investments (74.2%) is growing, with 68% recognizing ESG importance. However, 29.5% are neutral or unaware of sustainability's environmental impact, highlighting the need for targeted education.
Family influence (55.5%), peer discussions (64.5%), and social media (67.5%) significantly shape views on sustainable investing, though neutrality persists among some. University education impacts 60.6% but could benefit from enhanced practical sustainability-focused initiatives.

Managerial Implications:
The findings highlight the need to enhance financial literacy and sustainable investment engagement among university students. Financial education programs should focus on basic concepts, practical skills, and sustainable investment benefits (Knoll &Houts, 2012; Lusardi, 2019; Sinha & Bansal, 2021). Social networks can play a significant role in promoting sustainable behaviors (Sadeghi&Khosravi, 2019).Integrating sustainable finance into curricula and offering certifications can prepare students for informed decisions aligned with global goals. Financial institutions should expand educational efforts, advisory services, and marketing campaigns to emphasize the universal value of sustainable investments, engaging a wider audience.

Conclusion:
The findings highlight growing interest in sustainable investing, driven by factors such as family, social networks, education, and media. While many respondents recognize the positive societal and environmental impacts of sustainable investments, uncertainty persists regarding accepting lower returns for ethical reasons. Social media emerges as a key tool for promoting sustainable practices, while family influence and discussions play a supportive role (GFLEC, 2020).
To bridge the gap between awareness and action, collaboration between financial institutions, educators, and policymakers is essential. Programs should offer comprehensive education on sustainable investing, leveraging social media campaigns, family-oriented initiatives, and university partnerships to engage a broader audience. Addressing return concerns through flexible products or case studies can make sustainable investing more accessible (Bowers, 2017).

Limitations & Future Scope:
While this research provides valuable insights into the factors influencing sustainable investment decisions, it is limited by its reliance on self-reported data, which may be subject to bias. Additionally, the study's focus on a specific demographic may not fully represent the broader population. Future research could explore a more diverse sample and

longitudinal studies to assess changes in attitudes toward sustainable investing over time and the impact of evolving market trends and educational interventions.

References:

1. Amel-Zadeh, A., &Serafeim, G. (2018). Why and how investors use ESG information: Evidence from a global survey. *Financial Analysts Journal*, *74*(3), 87–103. https://doi.org/10.2469/faj.v74.n3.2
2. Atkinson, A., & Messy, F.-A. (2012). Measuring financial literacy: Results of the OECD/INFE pilot study. *OECD Working Papers on Finance, Insurance and Private Pensions, 15*. https://doi.org/10.1787/5k9csfs90fr4-en
3. BlackRock. (2020). *Sustainability: The tectonic shift transforming investing*. BlackRock Sustainable Investing Report. Retrieved from https://www.blackrock.com
4. Friede, G., Busch, T., &Bassen, A. (2015). ESG and financial performance: Aggregated evidence from more than 2000 empirical studies. *Journal of Sustainable Finance & Investment*, *5*(4), 210–233. https://doi.org/10.1080/20430795.2015.1118917
5. Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, *52*(1), 5–44. https://doi.org/10.1257/jel.52.1.5
6. Sustainable Investment Forum. (2019). *Sustainable investment: Engaging the next generation of investors*. Retrieved from https://www.sustainableinvestmentforum.com
7. World Economic Forum. (2019). *Sustainable investing: Shaping the future of responsible investment*. World Economic Forum Report. Retrieved from https://www.weforum.org
8. Aboagye, A. Q., &Lartey, E. (2021). Enhancing Financial Literacy for Sustainable Investment Decisions. Journal of Finance and Accounting, 9(2), 85-100.
9. Rojas, M. (2018). The Intersection of Financial Literacy and Sustainable Investing: Perspectives from University Students. Journal of Economic Perspectives, 32(3), 183-199.
10. O'Sullivan, A., & Downey, M. (2021). Understanding Financial Literacy and Sustainable Investment Trends among Young Adults. International Journal of Business and Finance Research, 15(2), 67-82.
11. Gupta, R., & Kumar, P. (2020). Financial Literacy and Sustainable Investment: Insights from University Students. Journal of Business Ethics, 162(2), 303-316.
12. Singh, A., & Agarwal, S. (2019). Assessing Financial Literacy and Its Impact on Sustainable Investment Decisions among Youth. Journal of Youth Studies, 22(4), 457-472.
13. Verma, S., & Choudhury, M. (2020). Financial Literacy and Sustainable Investment: An Empirical Study of University Students. Journal of Sustainable Investment, 5(3), 115-128.
14. Wright, K. (2018). Financial Literacy and Sustainable Investment Choices among University Students. Journal of Economic Education, 49(2), 123-135.
15. Knoll, M. A., &Houts, R. M. (2012). Financial Literacy of College Students: A Study of the Impact of Educational Interventions. Journal of Consumer Affairs, 46(3), 334-354.
16. Sadeghi, A., &Khosravi, M. (2019). Financial Literacy and Investment Behavior: Evidence from University Students. International Journal of Educational Management, 33(2), 298-314.
17. Lusardi, A. (2019). Financial Literacy: An Essential Tool for Economic Participation. Harvard Business Review.
18. Sinha, R., & Bansal, S. (2021). The Impact of Financial Literacy on Sustainable Investment Decisions among Young Adults. Journal of Business Ethics, 170(3), 495-508.
19. Global Financial Literacy Excellence Center (GFLEC). (2020). The State of Financial Literacy in the United States: A Study of Financial Literacy Education Programs.
20. 14. Bowers, M. A. (2017). The Impact of Financial Literacy on the Investment Decisions of University Students. Master's thesis, University of Florida.