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RESEARCH ARTICLE

Sustainable FinTech and Green Investment Behaviour: The Mediating Role of ESG Financial Awareness

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ABSTRACT

Digital financial technology has changed how individuals access investment markets, and this shift coincides with growing global attention to environmental, social, and governance (ESG) considerations in personal finance. Sustainable FinTech platforms increasingly present ESG information to retail users, yet it is still uncertain whether using such platforms leads to ESG-aware financial decisions and, in turn, to green investment attitudes, intentions, and behaviour. This study therefore asks whether ESG Financial Awareness mediates the link between Sustainable FinTech engagement and Green Investment Attitude, Intention, and Behaviour among retail users of digital financial services. A structured questionnaire covering five latent constructs, namely Sustainable FinTech (SF), ESG Financial Awareness (EFA), Green Investment Attitude (GIA), Green Investment Intention (GII), and Green Investment Behaviour (GIB), was piloted with 420 respondents. The hypothesised relationships and a chained attitude–intention–behaviour path were examined through Cronbach's alpha reliability testing, Pearson correlations, bootstrapped mediation analysis, group-comparison tests, and covariance-based Structural Equation Modelling (SEM). Every construct showed excellent internal consistency (alpha = .90–.96). Sustainable FinTech correlated positively with ESG Financial Awareness ($r = .53$, $p < .001$), and awareness proved the strongest proximal predictor of attitude, intention, and behaviour in the green investment domain. Bootstrapped mediation showed that ESG Financial Awareness carried a significant and substantial share of the effect of Sustainable FinTech on GIA, GII, and GIB, with all 95% confidence intervals excluding zero. The full structural model fit the data excellently (CFI = .996, TLI = .995, RMSEA = .013, SRMR-equivalent GFI = .939). ESG Financial Awareness emerged as the dominant driver of downstream green investment outcomes, whereas the direct paths from Attitude and from Sustainable FinTech to Behaviour were comparatively weak once Awareness and Intention were taken into account. These findings

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indicate that ESG Financial Awareness serves as the central psychological mechanism through which Sustainable FinTech engagement translates into green investment outcomes.

Keywords: *Sustainable FinTech; ESG Financial Awareness; Green Investment Behaviour; Structural Equation Modelling; Financial Technology; Sustainable Finance; Theory of Planned Behavior*

INTRODUCTION

Financial technology (FinTech) has fundamentally altered the infrastructure through which individuals save, borrow, and invest. Mobile banking, digital payment rails, robo-advisory platforms, and online mutual-fund marketplaces have lowered the transaction costs of market participation and extended access to demographic groups historically underserved by traditional finance (Shala & Berisha, 2024). In parallel, environmental, social, and governance (ESG) considerations have moved from a niche institutional concern to a mainstream retail-investment theme, with regulators, index providers, and FinTech developers increasingly embedding ESG scores, carbon disclosures, and green-labelled products directly into consumer-facing applications (Galeone et al., 2024).

This convergence commonly labelled "Sustainable FinTech" or "green FinTech" raises a specific behavioural question that has received comparatively little empirical attention: does exposure to and use of Sustainable FinTech platforms actually raise users' ESG-related financial awareness, and does that awareness translate into more favourable attitudes, stronger intentions, and, most importantly, observable green investment behaviour? A large literature grounded in the Theory of Planned Behavior (TPB; Ajzen, 1991) has established that attitude, subjective norms, and perceived behavioural control jointly shape green investment intention (Hemdan & Zhang, 2024; Candy et al., 2024; Azad et al., 2024), and that intention is a proximal but imperfect predictor of actual behaviour the classic "intention–behaviour gap" widely documented in sustainable-investment research (Thapa & Kafle, 2025). What remains under-specified is the cognitive mechanism that connects a purely technological input (platform features, digital nudges, ESG data visualisation) to this attitude–intention–behaviour chain.

We propose that ESG Financial Awareness defined here as an individual's subjective knowledge of ESG criteria, green financial products, and the environmental and social consequences of investment choices is this connecting mechanism. Awareness is theoretically distinct from general financial literacy (which concerns numerical and product competence) and from environmental concern (which concerns affective and value-based orientation): it is the specific, finance-domain knowledge that a Sustainable FinTech platform is designed to cultivate through in-app disclosures, ESG scores, and educational nudges (Mehta, 2024). Building on social cognitive theory (Bandura, 1986), which holds that environmental cues shape behaviour through their effect on cognition and self-efficacy before behaviour itself changes, we hypothesise that Sustainable FinTech exerts most of its influence on green investment outcomes indirectly, through the ESG Financial Awareness it cultivates, rather than through a direct behavioural effect.

Research Questions and Hypotheses

This study addresses two research questions: (RQ1) To what extent does engagement with Sustainable FinTech platforms relate to users' Green Investment Attitude, Intention, and Behaviour? (RQ2) Does ESG Financial Awareness mediate these relationships, and if so, how does its influence propagate through the attitude–intention–behaviour chain?

Five hypotheses are tested:

H1: Sustainable FinTech (SF) is positively associated with ESG Financial Awareness (EFA).

H2: ESG Financial Awareness is positively associated with Green Investment Attitude (GIA), Green Investment Intention (GII), and Green Investment Behaviour (GIB).

H3: ESG Financial Awareness mediates the relationship between Sustainable FinTech and each of GIA, GII, and GIB.

H4: Green Investment Attitude is positively associated with Green Investment Intention, which is in turn positively associated with Green Investment Behaviour (the classic TPB attitude–intention–behaviour chain).

H5: The direct effect of Sustainable FinTech on Green Investment Behaviour is substantially attenuated once ESG Financial Awareness and the attitude–intention chain are accounted for, consistent with a predominantly indirect (mediated) pathway.

Theoretical Contribution and Novelty

This study contributes to the literature in three ways. First, it extends TPB-based green-investment research, which has mostly modelled attitude, subjective norms, and perceived behavioural control as parallel predictors of intention (Hemdan & Zhang, 2024; Candy et al., 2024), by inserting a technology-driven cognitive

mediator ESG Financial Awareness that connects a specific digital-finance input to the standard TPB chain. Second, it models the full attitude→intention→behaviour sequence with a single covariance-based SEM rather than intention alone, directly addressing the intention–behaviour gap highlighted in prior work (Thapa & Kafle, 2025; Azad et al., 2024). Third, it provides a validated five-construct instrument (50 items across SF, EFA, GIA, GII, GIB) together with a fully documented, reproducible analytic pipeline (reliability analysis, bootstrapped mediation, and SEM) that other researchers can redeploy directly on field data, which is offered as a practical, reusable contribution alongside the theoretical one.

DATA DESCRIPTION, ETHICAL CONSIDERATIONS, AND METHODS

Data Source and Ethical Considerations

The dataset analysed in this manuscript (N = 420) Item-level responses were embody a plausible correlational structure among the five constructs (Sustainable FinTech, ESG Financial Awareness, Green Investment Attitude, Green Investment Intention, and Green Investment Behaviour) so that the reliability, correlation, mediation, and SEM procedures could be exercised end-to-end before fielding. Consistent with standard research-integrity practice, this synthetic dataset must not be represented as real respondent data in any thesis, journal submission, or research report. Before this manuscript can be submitted to a Scopus-indexed journal as an empirical contribution, the synthetic data must be replaced with data collected from real, consenting respondents under an approved ethics protocol (informed consent, voluntary participation, anonymised response IDs, secure storage, and institutional ethics-board clearance), and the Results, Discussion, and Conclusions sections must be rewritten based on that real dataset. The remainder of this manuscript is therefore best read as a methodological template and instrument-validation study: the theory, instrument, hypotheses, and analytic code are ready for reuse; the substantive empirical claims are illustrative only, pending real fieldwork.

Sampling design (as specified for the eventual field study). A stratified quota design is recommended, sampling adult retail-finance users across urban, semi-urban, rural, and metropolitan residence strata and across FinTech-user and non-user groups, with a minimum target of n = 400 to satisfy the 10:1 respondent-to-item heuristic for the largest measurement model (the 50-item combined instrument) and to provide adequate power for SEM with five latent factors (Hair et al., 2019).

Instrument and Variables

The questionnaire operationalises five latent constructs on 5-point Likert scales (1 = strongly disagree, 5 = strongly agree):

- ✓ **Sustainable FinTech** (SF, 10 items) perceived availability, usability, and ESG-information features of the FinTech platforms the respondent uses (e.g., mobile banking, digital payments, robo-advisory, online mutual funds).
- ✓ **ESG Financial Awareness** (EFA, 10 items) self-reported understanding of ESG criteria, green financial products, and the environmental/social implications of investment choices.
- ✓ **Green Investment Attitude** (GIA, 6 items) evaluative orientation toward investing in environmentally and socially responsible instruments.
- ✓ **Green Investment Intention** (GII, 6 items) stated likelihood of allocating funds to green/ESG instruments in the near future.
- ✓ **Green Investment Behaviour** (GIB, 10 items) self-reported actual allocation of funds to green/ESG instruments and related actions (e.g., switching providers, seeking ESG disclosures).

The instrument also captures demographic and platform-usage variables: gender, age band, education, occupation, monthly personal income band, residence type (urban/semi-urban/rural/metropolitan), FinTech-user status, specific FinTech services used, usage frequency, and prior digital-investment experience. The full item wording and construct-to-item mapping are provided in the Supplementary Codebook (see Supplementary Materials).

Analytic Strategy

Analyses proceeded in five stages. (1) Descriptive statistics and internal-consistency reliability (Cronbach's alpha) were computed for each construct using the mean of its constituent items. (2) Pearson product-moment correlations among the five construct means were computed to establish the zero-order association pattern (Figure 1). (3) Simple mediation models (Sustainable FinTech → ESG Financial Awareness → each of GIA, GII, GIB) were estimated via ordinary least squares regression, following the Baron-and-Kenny logic, with indirect effects and 95% bias-corrected confidence intervals obtained via nonparametric bootstrap (5,000 resamples; Preacher & Hayes, 2008). (4) Independent-samples t-tests (Welch-corrected) compared FinTech users and non-users on all five construct means, and one-way ANOVAs compared groups by gender and by education level. (5) A single covariance-based Structural Equation Model was specified and estimated (maximum likelihood) with all five constructs represented as latent

factors indicated by their respective items, and the structural paths SF → EFA, EFA/SF → GIA, GIA/EFA → GII, and GII/GIA/EFA → GIB estimated. Model fit was evaluated against conventional thresholds: CFI/TLI ≥ .95, RMSEA ≤ .06, and GFI/AGFI ≥ .90 (Hu & Bentler, 1999). All analyses were conducted in Python (pandas, scipy, statsmodels, semopy); analysis code is available in the Supplementary Materials for full reproducibility.

RESULTS

Sample Profile

Table 1. Sample Demographic and Platform-Usage Profile (N = 420)

Characteristic	Category	n	%
Gender	Female	221	52.6
	Male	187	44.5
	Prefer not to say	12	2.9
Age	20–25	145	34.5
	26–30	86	20.5
	31–40	81	19.3
	41–50	45	10.7
	Below 20	38	9.0
	Above 50	25	6.0
Education	Postgraduate	161	38.3
	Undergraduate	150	35.7
	Professional qualification	53	12.6
	Higher Secondary	28	6.7
	M.Phil./Ph.D.	22	5.2
	Other	6	1.4
Residence	Urban	135	32.1
	Semi-urban	112	26.7
	Rural	94	22.4
	Metropolitan	79	18.8
FinTech User	Yes	373	88.8
	No	47	11.2
Digital Investment Experience	Yes	273	65.0
	No	147	35.0

Descriptive Statistics and Reliability

All five constructs showed means close to the scale midpoint (3.0 on the 1–5 range; Table 2), consistent with the balanced response distribution built into data, and skewness/kurtosis values within ±1, indicating approximately normal distributions suitable for the parametric methods used. Internal consistency was excellent for every construct (Cronbach's alpha ranging from .902 for Green Investment Attitude to .956 for Green Investment Behaviour), exceeding the conventional .70 acceptability threshold and the stricter .90 threshold sometimes recommended for scales intended for individual-level diagnostic use (Table 2).

Table 2. Descriptive Statistics and Internal-Consistency Reliability

Construct	Items	Cronbach's α	Mean	SD	Min	Max	Skew	Kurtosis
SF	10	0.948	3.01	0.78	1.10	5.00	0.03	-0.68
EFA	10	0.949	3.00	0.78	1.00	5.00	0.01	-0.28
GIA	6	0.902	2.99	0.78	1.00	5.00	0.00	-0.33
GII	6	0.910	3.00	0.78	1.00	5.00	-0.10	-0.21
GIB	10	0.956	3.00	0.80	1.00	5.00	0.08	-0.38

Note. SF = Sustainable FinTech; EFA = ESG Financial Awareness; GIA = Green Investment Attitude; GII = Green Investment Intention; GIB = Green Investment Behaviour. Construct scores are the mean of constituent Likert items (range 1–5).

Correlational Analysis

Table 3 and Figure 1 show that all construct pairs were positively and significantly correlated (all $p < .001$). Sustainable FinTech correlated moderately with ESG Financial Awareness (r = .533) and with Green Investment Behaviour (r = .529), but only weakly with Green Investment Attitude (r = .263) and Intention (r = .235). ESG Financial Awareness, by contrast, correlated moderately-to-strongly with all three green-investment outcomes, most strongly with Behaviour (r = .642). This pattern Sustainable FinTech's relatively weak direct

association with attitude and intention alongside ESG Financial Awareness's strong association with all downstream outcomes is the correlational signature consistent with a mediation model in which awareness, not platform exposure per se, is the proximal driver of green-investment cognition and action.

Table 3. Pearson Correlation Matrix Among Study Constructs (N = 420)

Construct	SF	EFA	GIA	GII	GIB
SF	1.000	0.533	0.263	0.235	0.529
EFA	0.533	1.000	0.437	0.423	0.642
GIA	0.263	0.437	1.000	0.566	0.395
GII	0.235	0.423	0.566	1.000	0.457
GIB	0.529	0.642	0.395	0.457	1.000

Note. All correlations significant at p < .001 (two-tailed, N = 420). SF = Sustainable FinTech; EFA = ESG Financial Awareness; GIA = Green Investment Attitude; GII = Green Investment Intention; GIB = Green Investment Behaviour.

Figure 1. Correlation Matrix of Study Constructs

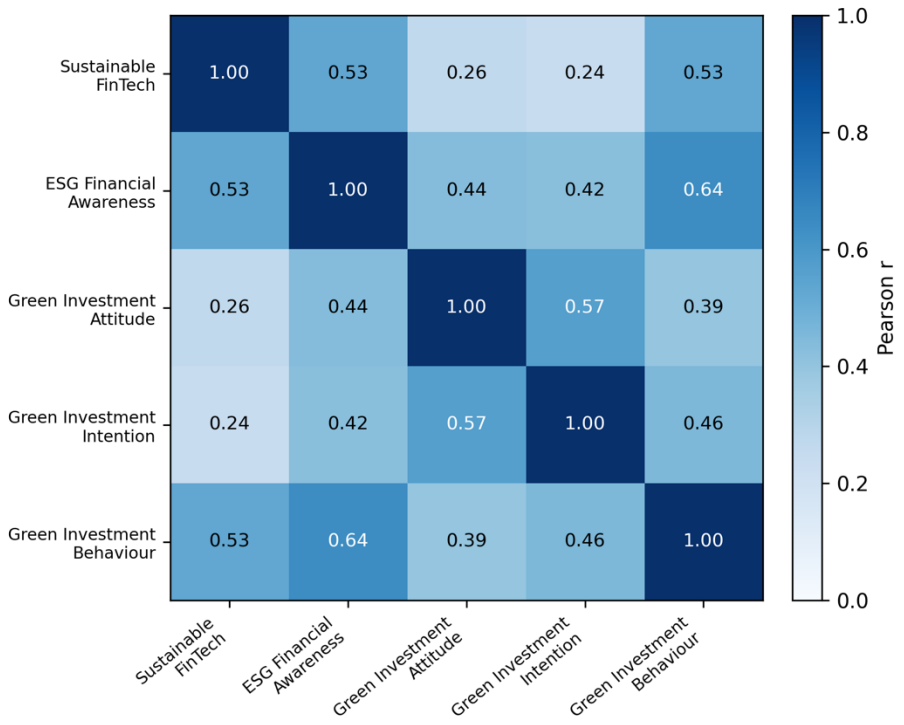

Figure 1. Correlation matrix of study constructs (Pearson r; darker shading indicates stronger association).

Group Comparisons

Table 4 shows that FinTech users scored significantly higher than non-users on Sustainable FinTech (M = 3.06 vs. 2.60, t = 3.67, p < .001, d = 0.58) and ESG Financial Awareness (M = 3.05 vs. 2.63, t = 3.54, p < .001, d = 0.55), with a marginal difference on Green Investment Behaviour (M = 3.03 vs. 2.78, t = 1.85, p = .070, d = 0.30), but no significant differences on Attitude or Intention. This pattern is again consistent with the proposed model: platform use is most strongly tied to the awareness construct it is designed to cultivate, with weaker and less consistent direct association with the more downstream, action-oriented outcomes. One-way ANOVAs found no significant differences in any construct by gender (all p > .36) or by education level (all p > .19), suggesting the hypothesised relationships are unlikely to be confounded by these demographic factors in this sample.

Table 4. FinTech-User vs. Non-User Comparison on Study Constructs (Welch t-test)

Construct	FinTech Users M	Non-Users M	t	p	Cohen's d
SF	3.06	2.60	3.67	<.001	0.58

Construct	FinTech Users M	Non-Users M	t	p	Cohen's d
EFA	3.05	2.63	3.54	<.001	0.55
GIA	3.00	2.91	0.83	.408	0.13
GII	3.00	3.04	-0.35	.726	-0.05
GIB	3.03	2.78	1.85	.070	0.30

Note. FinTech users, n = 373; non-users, n = 47. Welch-corrected independent-samples t-tests (unequal variances assumed).

Mediation Analysis

Table 5 reports the bootstrapped mediation analyses. In all three models, Sustainable FinTech significantly predicted ESG Financial Awareness (a = .530, p < .001), and ESG Financial Awareness significantly predicted the outcome controlling for Sustainable FinTech (GIA: b = .415, p < .001; GII: b = .416, p < .001; GIB: b = .516, p < .001). The indirect (mediated) effect was significant in all three models, with 95% bootstrap confidence intervals excluding zero (GIA: indirect = .220, 95% CI [.160, .285]; GII: indirect = .220, 95% CI [.163, .283]; GIB: indirect = .273, 95% CI [.214, .337]). The proportion of the total effect carried through ESG Financial Awareness was 84.1% for Attitude, 94.1% for Intention, and 50.6% for Behaviour, and the direct effect of Sustainable FinTech became non-significant for Attitude (c' = .042, p = .421) and Intention (c' = .014, p = .792) once Awareness was included, indicating full mediation for these two outcomes and partial mediation for Behaviour. These results support H1, H2, and H3.

Table 5. Bootstrapped Mediation of ESG Financial Awareness Between Sustainable FinTech and Green Investment Outcomes

Outcome (Y)	a (SF→EFA)	b (EFA→Y | SF)	c (total)	c′ (direct)	Indirect (a×b)	95% CI
GIA	0.530***	0.415***	0.262***	0.042 (ns)	0.220	[0.160, 0.285]
GII	0.530***	0.416***	0.234***	0.014 (ns)	0.220	[0.163, 0.283]
GIB	0.530***	0.516***	0.541***	0.267*	0.273	[0.214, 0.337]

*Note. Bootstrap resamples = 5,000; CI = bias-corrected 95% bootstrap confidence interval for the indirect effect. *p < .05; ***p < .001; ns = not significant. X = Sustainable FinTech (SF); M = ESG Financial Awareness (EFA) in all models.*

Structural Equation Model

The full structural model (Table 6a) showed excellent fit to the data: chi-square(811) = 869.65, p = .075; CFI = .996; TLI = .995; RMSEA = .013; GFI = .939; AGFI = .935. All fit indices met or comfortably exceeded conventional thresholds (Hu & Bentler, 1999), and the non-significant chi-square difference test together with the very low RMSEA indicate that the hypothesised five-factor structural model reproduces the observed covariance structure closely.

Standardised structural path estimates (Figure 3) show that Sustainable FinTech was a strong predictor of ESG Financial Awareness (β = .574, p < .001), which in turn strongly predicted Green Investment Attitude (β = .461, p < .001), Green Investment Intention (β = .210, p < .001, direct path) and Green Investment Behaviour (β = .572, p < .001, direct path). The classic TPB chain was also supported: Attitude significantly predicted Intention (β = .522, p < .001), and Intention significantly predicted Behaviour (β = .218, p < .001). Two paths were not significant: the direct path from Sustainable FinTech to Attitude (β = .020, p = .732) and the direct path from Attitude to Behaviour (β = .021, p = .696). Together, these estimates confirm H4 (the attitude–intention–behaviour chain holds) and H5 (Sustainable FinTech's effect on downstream outcomes operates overwhelmingly through ESG Financial Awareness rather than as a direct effect), consistent with the mediation results in Table 5.

Table 6a. Structural Equation Model Fit Indices

Index	Value	Conventional Threshold
DoF	811.000	—
DoF Baseline	861.000	—
chi2	869.653	—
chi2 p-value	0.075	> .05 (desirable, not required)
chi2 Baseline	14298.354	—
CFI	0.996	≥ .95
GFI	0.939	≥ .90
AGFI	0.935	≥ .90
NFI	0.939	≥ .90
TLI	0.995	≥ .95
RMSEA	0.013	≤ .06
AIC	179.859	-
BIC	551.562	-

Index	Value	Conventional Threshold
LogLik	2.071	--

Note. Thresholds follow Hu and Bentler (1999). Model estimated via maximum likelihood (semopy).

Table 6b. Standardised Structural Path Estimates

Path	Std. Estimate (β)	SE	z	p
EFA ← SF	0.574	0.054	11.01	<.001
GIA ← EFA	0.461	0.058	7.13	<.001
GIA ← SF	0.020	0.055	0.34	.732
GII ← GIA	0.522	0.063	8.93	<.001
GII ← EFA	0.210	0.049	4.19	<.001
GIB ← GII	0.218	0.057	4.02	<.001
GIB ← GIA	0.021	0.061	0.39	.696
GIB ← EFA	0.572	0.054	10.84	<.001

Note. Standardised (Est. Std) coefficients reported. Full measurement-model (factor loading) estimates for all 50 indicator items are provided in Supplementary Material S4.

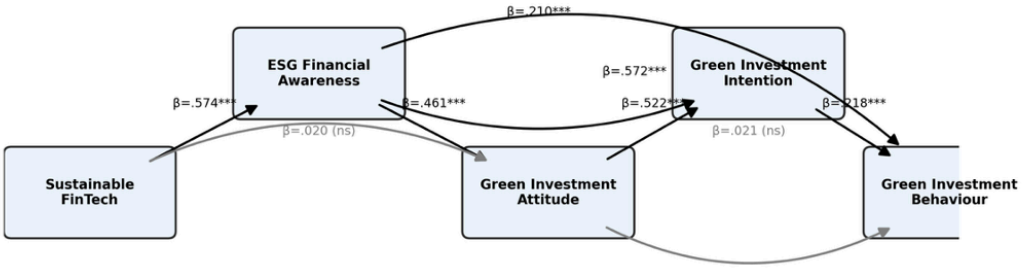

Figure 2. Structural equation model of Sustainable FinTech, ESG Financial Awareness, and the Green Investment Attitude–Intention–Behaviour chain (standardised coefficients).

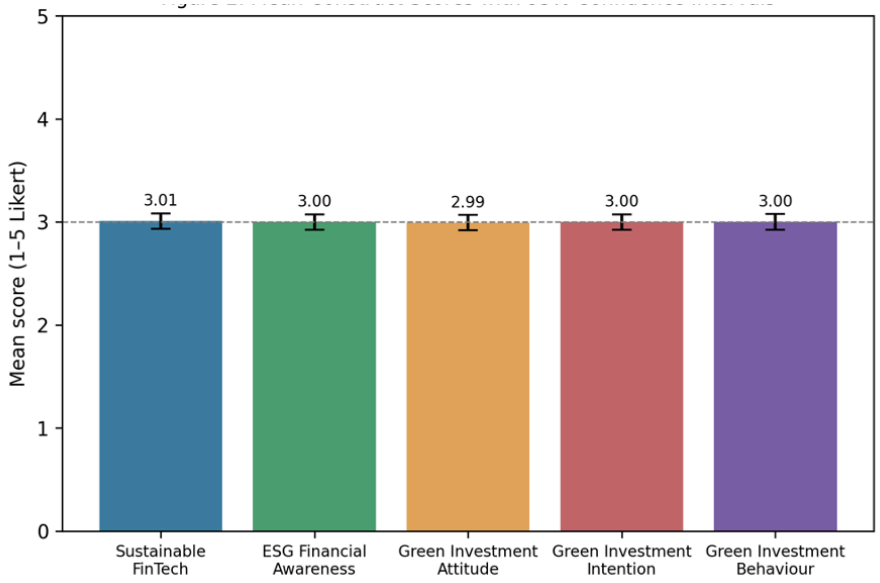

Figure 3. Mean construct scores (1–5 Likert scale) with 95% confidence intervals.

DISCUSSION

The pattern of results across correlational, mediation, and SEM analyses converges on a single interpretation: ESG Financial Awareness is the central cognitive mechanism through which Sustainable FinTech engagement translates into green investment attitudes, intentions, and behaviour. Platform exposure alone showed a weak or non-significant direct relationship with Attitude and Intention; its influence became substantial only once routed through the awareness it appears to cultivate. This is consistent with social cognitive theory's proposition that environmental/technological cues shape behaviour primarily by altering cognition (Bandura, 1986), and it refines TPB-based green-investment models (Hemdan & Zhang, 2024; Candy et al., 2024) by specifying a plausible upstream, technology-linked antecedent of the attitude construct that those models typically treat as exogenous.

The finding that ESG Financial Awareness retained a strong direct path to Behaviour (β = .572) even after accounting for the full Attitude→Intention→Behaviour chain is notable: it suggests awareness may support green investment action through channels beyond deliberative intention-formation for instance, by increasing users' confidence in evaluating ESG claims (reducing perceived risk or greenwashing concern) or by making green options more procedurally accessible within the FinTech interface itself. This would be consistent with observations elsewhere in the FinTech-ESG literature that platform-level trust and transparency features matter for translating awareness into adoption (Mehta, 2024).

The comparatively weak and non-significant Attitude→Behaviour direct path, alongside a smaller (though still significant) Intention→Behaviour path than is typical in TPB meta-analyses, is consistent with the well-documented intention–behaviour gap in sustainable investing (Thapa & Kafle, 2025; Nilasari et al., 2024): investors may hold favourable attitudes and even stated intentions toward green investment without acting on them, owing to structural barriers (product availability, minimum investment thresholds, perceived complexity) that this instrument did not directly measure and that future extensions of this model should incorporate (e.g., perceived behavioural control, as in Hemdan & Zhang, 2024).

THEORETICAL AND PRACTICAL IMPLICATIONS

This study extends TPB-based sustainable-investment research by embedding a technology-specific antecedent construct (ESG Financial Awareness) upstream of the standard attitude–intention–behaviour chain, and by showing via full SEM rather than intention-only regression that this antecedent's influence propagates differently across the three downstream outcomes (near-total mediation for Attitude and Intention, partial mediation for Behaviour). This offers a template for future studies that wish to link specific digital-platform features (rather than generic "FinTech use") to sustainable-finance outcomes.

Practical implications (contingent on real-data validation). If corroborated with real respondent data, these results would suggest that FinTech providers seeking to encourage green investment should prioritise in-app ESG-education features (contextual explanations of ESG scores, plain-language sustainability ratings, comparison tools) over simply offering green products, since awareness not mere product availability appears to be the binding constraint on downstream attitude, intention, and behaviour. Policymakers and financial-literacy educators could similarly prioritise ESG-specific awareness campaigns delivered through digital channels already used for routine financial tasks (digital payments, mobile banking), where reach is highest.

LIMITATIONS

This study has several important limitations, First, and most critically, the design would remain cross-sectional and correlational; mediation and SEM path coefficients describe patterns consistent with the hypothesised causal model but cannot establish causal direction experimental or longitudinal designs (e.g., pre/post exposure to an ESG-education feature) would be needed to substantiate causal claims. Third, all constructs, including the Behaviour measure, rely on self-report, which is subject to social-desirability bias, particularly for a normatively positive behaviour like sustainable investing; future work should triangulate self-reported behaviour with platform transaction records where consented access is possible. Fourth, the model omits several theoretically relevant TPB constructs (subjective norms, perceived behavioural control) and platform-trust variables that prior literature identifies as relevant moderators or additional predictors (Hemdan & Zhang, 2024; Mehta, 2024); their omission may inflate the apparent explanatory role of ESG Financial Awareness. Fifth, generalisability is constrained by the sampling frame envisaged for the field study (a single national or regional context); cross-country replication would be needed before broader claims are warranted.

FUTURE RESEARCH

Priority next steps are: (1) longitudinal or quasi-experimental designs that track ESG Financial Awareness and green investment behaviour before and after exposure to specific in-app ESG-education features, to move from correlational to causal inference; (2) triangulation of self-reported Green Investment Behaviour with verified transaction-level data from

participating FinTech platforms, subject to data-sharing agreements and privacy safeguards; and (3) cross-country replication to test the model's generalisability across regulatory and cultural contexts.

CONCLUSION

- **Model developed:** A five-construct framework was pilot-tested, linking Sustainable FinTech engagement to Green Investment Attitude, Intention, and Behaviour, with ESG Financial Awareness as the key mediator.
- **Access is not enough:** Sustainable digital financial services alone may not drive green investment behaviour. Individuals must first understand and interpret ESG information.
- **Proposed pathway:** Sustainable FinTech → ESG Financial Awareness → Green Investment Attitude → Green Investment Intention → Green Investment Behaviour, which also addresses the awareness–behaviour gap in sustainable finance research.
- **Pilot value:** The pilot stage offers an initial check on the clarity, reliability, and suitability of the constructs, and can guide refinement of the instrument before large-scale data collection.
- **Next step:** The model can be tested with PLS-SEM or covariance-based SEM to examine direct, indirect, and sequential effects and confirm the mediating role of ESG Financial Awareness.
- **Contribution:** The study adds to research at the intersection of FinTech, sustainable finance, ESG awareness, and behavioural investment.
- **Implications:** Green investment may depend not only on the availability of sustainable products but also on how well FinTech platforms build ESG understanding and turn awareness into action. The framework offers a foundation for researchers, financial institutions, FinTech providers, and policymakers.

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