

INVESTING IN SOCIALLY RESPONSIBLE INVESTMENT (SRI): THE ROLE OF RESPONSIBILITY, CONSCIOUSNESS AND LITERACY

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Abstract: Investment decisions on Socially Responsible Investment (SRI), an integrative investment tool that combines social and environmental effects with financial benefits may vary from conventional investment following the essentiality of pro-environmental factors. This study examined the role of Environmental Responsibility (ER), Environmental Consciousness (EC), and Financial Literacy (FL) on investment intention in SRI and extended the Theory of Planned Behaviour (TPB) model by integrating ER, EC, and FL. A total of 228 valid samples were gathered via convenience sampling and further analysed through Partial Least Squares-Structural Equation Modelling (PLS-SEM). Resultantly, the intention to invest in SRI was significantly affected by Attitude (ATT), Subjective Norms (SN), and Perceived Behavioural Control (PBC). Both ER and EC were substantially related to ATT while FL significantly impacted PBC. The mediating analysis implied the significant and direct impact of ER, EC, and SN on SRI investment intention through ATT. Meanwhile, FL indirectly affected the intention to invest in SRI through PBC. The practical implications of these outcomes potentially facilitate stakeholders to increase their investment intention in SRI.

Keywords: Socially responsible investment, environmental responsibility, environmental consciousness, financial literacy, theory of planned behaviour.

Introduction

The general public has gained much awareness of their duties and responsibilities in protecting society and the environment following the implications of unsustainable consumption patterns (Raut *et al.*, 2021). Such awareness led to the introduction of Socially Responsible Investment (SRI) to fulfil the demand resulting from investors' social responsiveness. Compared to traditional investment, SRI is a technique that considers social, ethical, and environmental issues in addition to financial gain (Simon *et al.*, 1972) for current investors to attain both financial and non-financial goals (Kumar, 2016). Such goals are catalysed by SRI, which establishes the investment portfolio by integrating both financial and social goals (Raut *et al.*, 2021). Notably, investments with adverse social and environmental effects are omitted from SRI (Mehta *et al.*, 2020). Contrary

to conventional investment decision-making, which may be inappropriate as financial benefits are not prioritised, the SRI proves ideal for investors who duly regard the benefits of social and environmental sustenance for future generations (Raut *et al.*, 2021).

Investment decision-making, which entails much rational thinking and in-depth analysis is complex. Given the novelty of SRI features, investors must also regard specific social and environmental aspects in their judgement. For example, Yue *et al.* (2019) highlighted the significance of consumers' Environmental Responsibility (ER) in stimulating pro-environmental behaviour. Likewise, Channa *et al.* (2022) indicated consumers who feel accountable for environmental issues tend to reflect higher pro-environmental behaviour intention. Awareness of environmental

intricacies also played a key role in cultivating eco-friendly behaviour (Arroyo & Carrete, 2019). Specifically, Duong *et al.* (2022) affirmed that individuals demonstrate more favourable Attitudes (ATT) toward pro-environment products with a higher consciousness of environmental issues. Both ER and EC could be key determinants of SRI investment decisions.

Investors who intend to make wise investment decisions must possess a certain level of financial knowledge, rational thinking, and informed judgement. Thus, FL significantly impacts investors' investment decision-making. Jain *et al.* (2022) underscored the essentiality of FL in enhancing individuals' investment intentions. Furthermore, FL and awareness prove necessary to make informed and rational investment decisions (Raut *et al.*, 2021). Raut's (2020) emphasis on the significance of FL in elevating investors' confidence and creating a mindset that supports rational and informed investment decision-making implies the likelihood of investors' ability and investment decisions being affected by FL. In line with Farani *et al.* (2017) argument that some variables under the Theory of Planned Behaviour (TPB) constructs may influence individuals' behavioural intention, this study proposed the indirect impact of ER, EC, and FL on the intention to invest in SRI through ATT and PBC.

Relevant research has examined the key factors influencing one's investment intention. Lai (2019) and Raut (2020) examined the key determinants of investment intention in the stock market while Khan *et al.* (2020) and Zhao and Zhang's (2021) works investigated investment intention in *Sukuk* and cryptocurrency, respectively. Nevertheless, literature on SRI intention remains relatively scarce. Adam and Shaiki (2014), who utilised the extended TPB model, discovered the substantial effect of ATT, SN, and moral norms on intention and behaviour towards SRI. Meanwhile, Raut *et al.* (2021) integration of the Theory of Reasoned Action (TRA) model with four additional variables

revealed the significant impact of moral norms, FL, financial performance, ATT, and SN on SRI intention. Mehta *et al.* (2020) conceptually proposed the positive association of ATT and SN with investment intention in SRI. Despite much acknowledgement of the substantial effect of ER, EC, and FL in pro-environmental behaviour, evidence on the role of ER, EC, and FL in SRI (either directly or indirectly with the TPB constructs) remains limited. This knowledge gap needs to be bridged with in-depth examination.

The current study objectives are presented as follows: (1) To investigate whether pro-environment constructs (ER and EC) influence ATT and subsequently determine the intention to invest in SRI; (2) to investigate whether knowledge construct (FL) influence PBC and subsequently determine the intention to invest in SRI; (3) to examine the mediation role of ATT on the relationship between pro-environmental constructs (ER and EC) and intention to invest in SRI; (4) to examine the mediation role of PBC on the relationship between knowledge constructs (FL) and SRI intention; and (5) to study the influence of SN on ATT and investment intention in SRI. An extended TPB model was proposed to achieve these objectives. Specifically, the three aforementioned elements function as exogenous constructs that would significantly influence the two TPB constructs and, ultimately, impact the SRI investment intention. Several significant contributions were associated with the current work. First, this study holistically examined the role of the three additional constructs, specifically in SRI. Second, this study proposed a novel framework to evaluate the significant factors predicting the intention to invest in SRI by extending the TPB model with three additional constructs. Based on the study outcomes, these constructs directly impacted the TPB constructs and indirectly influenced the SRI investment intention using the aforementioned constructs. Summarily, this study identified ATT and PBC's significant mediation role.

Literature Review

Theory of Planned Behaviour

A well-established underpinning theory must complement a robust research framework. Ajzen's (1985) TPB, extensively utilised in multiple individual behaviours to predict one's behavioural intention was selected as the underlying theory in this study to explain consumers' intention to invest in SRI. Three constructs (ATT, SN, and PBC) were suggested in TPB to predict behavioural intention. ATT denotes consumers' positive or negative perception of a particular phenomenon (Ajzen, 1991). The SN implies the viewpoints of people (family members or friends) who are important to the consumers on committing to a specific phenomenon (Ajzen, 1991). Lastly, PBC indicates the level of ease in engaging with a certain behaviour (Ajzen, 1991). Overall, consumer behaviour could be predicted by the three constructs. Various studies involving green purchase behaviour (Vu *et al.*, 2022; Duong *et al.*, 2022; Ling *et al.*, 2023), entrepreneurial intention (Waris *et al.*, 2022), and investment intention (Raut, 2020; Kumari *et al.*, 2022) also adopted TPB as their underpinning theory. Additionally, this study incorporated ER, EC, and FL into the TPB model for a robust framework and a sound understanding of its role in determining consumers' investment intention within SRI.

Hypotheses Development

Effect of Attitude on SRI Intention

The ATT under TPB implies an individual's degree of favourable or unfavourable perceptions towards a specific behaviour (Ajzen, 1991). In other words, ATT characterises one's favourable or unfavourable feelings towards certain behaviours such as investment decisions. Investors with a good ATT towards SRI tend to invest based on social and environmental benefits. Following Mehta *et al.* (2020) conceptualisation, ATT positively affects investment intention in SRI. A good or positive ATT stimulates investment intention following past research such as Lai (2019). Furthermore,

Raut (2020) revealed the significant role of ATT in the intention to invest in the Indian stock market. Kumari *et al.* (2022) study also highlighted the significant influence of ATT on investment intention in the stock market during the COVID-19 pandemic. With regards to SRI, Adam and Shauki (2014) and Raut *et al.* (2021) asserted that favourable ATT significantly stimulates individuals' investment in SRI. The following hypothesis is proposed based on the aforementioned discussions:

H₁: The ATT has a positive significant relationship with the intention to invest in SRI.

Effect of Subjective Norms on Attitude and SRI Intention

Notably, SN denotes one's perceived pressure from their social context (friends, family, and colleagues) in engaging with a specific behaviour (Ajzen, 1991) and encouragement from significant others to behave in a certain behaviour (Vu *et al.*, 2022). Lai (2019) underscored investors' propensity to have a positive perception of stock investment if the people around them also invest in stock investment. For example, significant others with a positive opinion towards SRI cause investors to have a favourable ATT and investment intention. Past literature has extensively examined the significant influence of SN on the investors' ATT and investment intention. For example, Adam and Shauki (2014) revealed the essentiality of SN in affecting investors' ATT and intention to invest in SRI. Raut (2020) and Raut *et al.* (2021) further asserted the crucial impact of social influences from significant others on investment decision-making. As the perception of surrounding people could significantly impact the investors' ATT and intention to invest in SRI, the following hypotheses are proposed:

H₂: The SN has a positive significant relationship with ATT.

H₃: The SN has a positive significant relationship with the intention to invest in SRI.

Effect of Perceived Behavioural Control on SRI Intention

The PBC, which denotes the level of ease in behaving towards a particular behaviour (Ajzen, 1991), implies an individual's ability to perform a certain behaviour. People with the ability to perform a specific behaviour without additional effort and cost would be more inclined to perform it. The investors in this study were expected to invest in SRI, which requires minimal effort or cost. Likewise, relevant research indicated the significant influence of PBC on investment intention (Raut *et al.*, 2018; Lai, 2019). For example, Raut (2020) disclosed the significant association of PBC with investment intention in the stock market. Kumari *et al.* (2022) also revealed PBC's decisive role in investing in the stock market during COVID-19. As such, the following hypothesis is proposed:

H₄: The PBC control has a positive significant relationship with the intention to invest in SRI.

Effect of Environmental Responsibility on Attitude

The ER or people's perception of the level of behavioural responsibility for environmental welfare and well-being (Duong *et al.*, 2022) is related to individual responsibility toward environmental issues. One who feels such accountability is inclined to engage with environmentally friendly behaviour such as investing in SRI. This proposition is particularly supported by relevant literature on the significant effect of ER on behavioural intention (Yue *et al.*, 2020). Parallel to Channa *et al.* (2022), individuals who feel responsible and conscious of the vulnerability of the natural environment tend to engage in pro-environmental behaviour. In this study, ER proved positively significant to investors' ATT. Duong *et al.* (2022) affirmed that a higher perception of ER potentially improves individuals' favourable ATT. Investors who feel socially and environmentally responsible and possess pertinent knowledge of an environmental issue would reflect a favourable ATT toward SRI. As higher ER would enhance

investors' ATT toward the SRI, the following hypothesis is proposed:

H₅: The ER has a positive significant relationship with ATT.

Effect of Environmental Consciousness on Attitude

Kumar *et al.* (2021) defined EC as the magnitude of one's awareness regarding environmental complexities. People with a certain level of awareness could behave positively or negatively towards environmental issues (Dang *et al.*, 2022) and boycott socially and environmentally detrimental behaviour. Similarly, Arroyo and Carrete (2019) highlighted an individual's possibility of engaging in pro-environmental behaviour is affected by the level of concern for the ecological problem. The influence of EC in this study proved to positively affect ATT following investors' favourable ATT toward the SRI with a higher level of awareness and concern for social and environmental issues. Furthermore, Waris *et al.* (2022) summarised the significant effect of ATT on environmental concerns. Individuals with a favourable ATT towards eco-friendly products are more conscious of ecological issues (Duong *et al.*, 2022). Salam *et al.* (2022) also revealed the substantial impact of EC on ATT towards green brand purchase intention. Thus, the following hypothesis is proposed:

H₆: The EC has a positive significant relationship with ATT.

Effect of Financial Literacy on Perceived Behavioural Control

The FL refers to the necessary knowledge required to make key investment decisions. Noctor *et al.* (1992) defined FL as an individual's capacity to make an informed judgement and wise financial use and management decisions. Both FL and awareness play a pivotal role in informed and rational investment decision-making (Raut *et al.*, 2021). Following Raut *et al.* (2021), FL significantly influenced investors' decision-making in SRI. The investors must

possess a certain level of knowledge or FL to make such an investment decision. In this vein, FL implies investors' ability to make good and rational investment decisions. Such literacy enables them to establish a good mindset for investment decision-making and enhances their confidence in making a rational and sound judgement for their investment (Raut, 2020). Additionally, Raut (2020) identified the significant role of FL in PBC. As a higher level of FL could increase investors' PBC in making an investment decision, this study proposed that FL significantly influenced PBC.

H₇: The FL has a positive significant relationship with PBC.

Mediating Role of Attitude and Perceived Behavioural Control

The current work also proposed the mediating role of ATT and PBC in understanding the indirect influences of the three exogenous constructs to determine the investment intention in SRI. Following the literature on the mediating role of TPB constructs in different research contexts, this proposition was theoretically supported as other variables capturing the novel features of the research context may indirectly impact behavioural intention through the TPB constructs (Farani et al., 2017). Duong et al.

(2022) disclosed the significant influence of SN, perceived ER, and environmental concern on green purchase intention through ATT. Meanwhile, SN and environmental concerns indirectly affected green purchase intention via PBC. Kumar (2021) also revealed the partial mediating effect of PBC on environmental knowledge, environmental concern, and environmental and health awareness with green buying behaviour. Moreover, Lau and Hashim (2020) discovered that PBC could significantly mediate the association between environmental concern and behavioural intention to adopt green concepts. The following hypotheses are proposed to test the indirect effect of the exogenous constructs on investment intention in SRI.

H₈: The ATT significantly mediates the relationship between ER and intention to invest in SRI.

H₉: The ATT significantly mediates the relationship between EC and intention to invest in SRI.

H₁₀: The ATT significantly mediates the relationship between SN and intention to invest in SRI.

H₁₁: The PBC significantly mediates the relationship between FL and intention to invest in SRI.

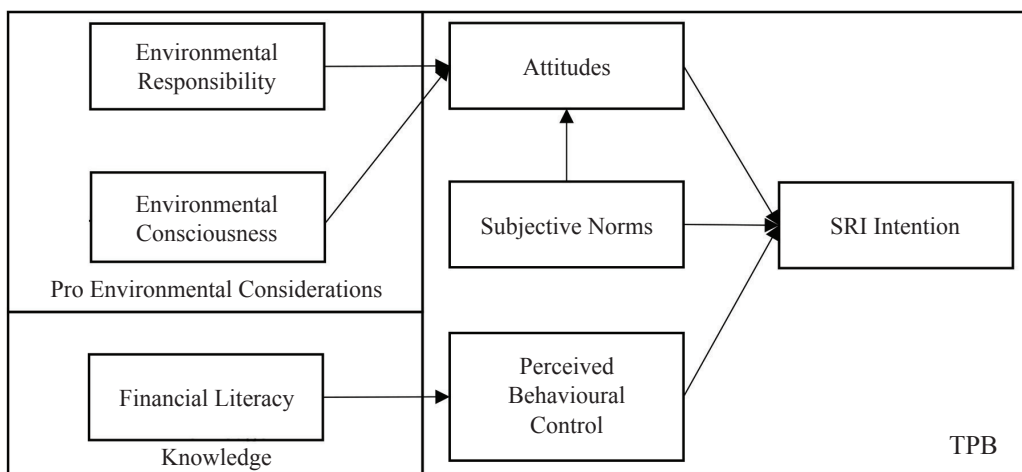


Figure 1: Research model

Based on the above discussion on literature review and hypotheses development, the research model in Figure 1 is formulated.

Methodology

Sample and Data Collection

The general public in Malaysia was the targeted research population. Quantitative data were gathered through convenience sampling. An online survey was designed to conveniently collect primary responses from the study respondents at no cost and ensure their literacy and technological knowledge. The invitation link to the online survey was shared digitally through WhatsApp, Facebook, emails, and other platforms. Despite some drawbacks associated with online surveys, this method is extensively used (specifically in the post-pandemic era) to reduce physical contact between respondents and researchers. Although 244 responses were collected from July to August 2022, only 228 counterparts proved valid. The final sample of 228 responses, which fulfilled the minimum sample size requirement (153) based on power analysis with an effect size of 0.15, a power level of 0.95, and seven predictors, proved satisfactory.

Research Instruments

The measurement items from past works were adapted to develop the current study questionnaire. 25 measurement items were adapted for seven constructs, with five demographic questions included to design the questionnaire. In measuring the three TPB constructs, three items for ATT and SN were adapted from Raut, Kumar, and Das (2021). Meanwhile, three items for PBC were derived from Raut (2020). The ER was assessed with four measurement items from Yue *et al.* (2020) while four items for EC were elicited from Kumar, Prakash, and Kumar (2021) and Dang *et al.* (2021). Four items for FL were adapted from Yang *et al.* (2021). Moreover, four items for investment intention adapted from Yang *et al.* (2021) measured the dependent variable.

The respondents were required to address these items with a seven-point Likert scale ranging between 1 (strongly disagree) and 7 (strongly agree) to measure their level of agreement on the items. Notably, the questionnaire was translated from the original English version into Bahasa Malaysia for respondents to internalise the meaning underlying these measurement items.

Analytic Approach

This study used Partial Least Squares-Structural Equation Modelling (PLS-SEM) to analyse the gathered data. Based on the multivariate normality test of Mardia's coefficient procedure, the collected responses were not normally distributed (skewness [$\beta = 7.928$] and kurtosis [$\beta = 81.688$]). PLS-SEM is the most appropriate method to estimate this non-normal data distribution (Hair *et al.*, 2019).

Results

The respondents' profile in Table 1 demonstrates a higher number of females (61%) compared to males (39%). In terms of age distribution, approximately half of the respondents were from 21 to 30 years old, followed by 31 to 40 years old (19%), and 20 years old and below (18%). Most of the respondents were comprised of employees (46%) and students (40%). Regarding income classification, approximately three-quarters of the individuals earned RM3,169.00 and below while only 2% earned over RM10,960.00 per month. With regards to educational qualification, most respondents had tertiary education backgrounds (70%).

Common Method Bias

This study conducted Harman's single factor test and full-collinearity test following the possibility of Common Method Bias (CMB), which could result from the responses collected with single-source data. Harman's single-factor test revealed that the dominant factor (48.34%) only explains under 50% of the total response variances. No CMB issues were identified in this study (Podsakoff *et al.*, 2003). In line with

Table 1: Respondent profile

Characteristics	Frequency	Percentage (%)
Gender		
Male	90	39.47
Female	138	60.53
Age		
20 years old and below	42	18.42
21 - 30 years old	122	53.51
31 - 40 years old	44	19.30
41 - 50 years old	15	6.58
51 years old and above	5	2.19
Occupation		
Employee	104	45.61
Student	91	39.91
Self-employed	14	6.14
Housewife	11	4.82
Others	8	3.51
Income Classification		
Lower B40 (RM3,169.00 and below)	169	74.12
Upper B40 (RM3,170.00 - RM4,849.00)	26	11.40
Lower M40 (RM4,850.00 - RM7,099.00)	19	8.33
Upper M40 (RM7,110.00 - RM10,959.00)	9	3.95
T20 (RM10,960.00 and above)	5	2.19
Highest Education		
Primary school and secondary school	52	22.81
Certificate, Diploma, and Bachelor's Degree	159	69.74
Master's Degree and PhD	17	7.46

Table 2, the Variance Inflation Factor (VIF) values derived from the full collinearity test for all constructs (under 3.3) verified that CMB was not an issue in this study (Kock, 2015).

Measurement Model Assessment

The collected response reliability and validity must be determined by pre-hypothesis testing. As such, the measurement model was assessed with the outcomes tabulated in Tables 2 and 3. Both the outer loading and Average Variance Extracted (AVE) functioned to evaluate convergent validity. Convergent validity was

achieved in both items and construct levels as the loading values for all items exceeded 0.7080 (Table 2) (Hair *et al.*, 2019), excluding ER1 and EC4, which were deleted. Meanwhile, the AVE values of all constructs exceeded 0.5000 (Bagozzi & Yi, 1988). Composite Reliability (CR) also assessed the responses' internal consistency. The outcomes presented in Table 2 proved the establishment of internal consistency as all CR values exceeded the threshold level of 0.7000 (Gefen, Straub & Boudreau, 2000). Concerning discriminant validity, the Heterotrait-Monotrait (HTMT) ratio of correlation outcomes in Table

3 revealed the establishment of discriminant validity. The HTMT values were lesser than the liberal level of 0.9000 (Gold, 2001). In this vein, the study measurement model was satisfactorily reliable and valid for hypothesis testing in the subsequent phase.

Table 2: Construct reliability and convergent validity

Construct	Items	Outer Loading	AVE	CR	VIF
Attitude (ATT)	ATT1	0.937	0.845	0.942	2.289
	ATT2	0.924			
	ATT3	0.896			
Subjective Norms (SN)	SN1	0.772	0.769	0.908	2.164
	SN2	0.927			
	SN3	0.923			
Perceived Behavioural Control (PBC)	PBC1	0.902	0.854	0.946	2.570
	PBC2	0.941			
	PBC3	0.929			
Environmental Responsibility (ER)	ER2	0.829	0.804	0.925	1.506
	ER3	0.938			
	ER4	0.920			
Environmental Consciousness (EC)	EC1	0.889	0.703	0.876	3.153
	EC2	0.762			
	EC3	0.860			
Financial Literacy (FL)	FL1	0.823	0.723	0.912	2.865
	FL2	0.889			
	FL3	0.849			
	FL4	0.838			
Intention (INT)	PI1	0.884	0.804	0.943	2.767
	PI2	0.911			
	PI3	0.904			
	PI4	0.888			

Table 3: Discriminant validity using HTMT

	ATT	SN	PBC	ER	EC	FL	INT
ATT	█						
SN	0.530	█					
PBC	0.517	0.760	█				
ER	0.574	0.362	0.226	█			
EC	0.784	0.740	0.726	0.561	█		
FL	0.560	0.751	0.803	0.289	0.787	█	
INT	0.718	0.598	0.589	0.403	0.864	0.731	█

Structural Model Assessment

The PLS-SEM was employed via SmartPLS for hypothesis testing. Based on the outcomes derived from all the proposed relationships presented in Table 4 and Figure 2, all the hypotheses, excluding H₂ were supported. All three TPB constructs significantly influenced SRI intention and supported H₁, H₃, and H₄. Regardless, only ER (H₅, β = 0.240) and EC (H₆, β = 0.495) denoted significant associations with ATT, whereas SN insignificantly influenced ATT (β = 0.107). Lastly, FL significantly impacted PBC (β = 0.727), supporting H₇. The effect size of f² also proved the medium effect of ATT on SRI intention while both SN and PBC reflected a small effect (Cohen, 1988). Although SN did

not affect ATT, ER demonstrated a small effect. The EC demonstrated a medium effect on ATT. Lastly, FL highlighted a large effect on PBC with an f² exceeding 0.35 (Cohen, 1988).

The proposed indirect relationships of the framework were also assessed, as presented in Table 5. The indirect relationship analysis shows that ATT and PBC could be significant mediators in this proposed framework. The ER (β = 0.115), EC (β = 0.238), and SN (β = 0.051) indirectly influenced SRI intention through ATT and supported H₈, H₉, and H₁₀. A similar finding was also disclosed for PBC while FL (β = 0.149) significantly influenced SRI intention via PBC and supported H₁₁. Furthermore, the effect size

Table 4: Path coefficients and hypotheses testing

Hypotheses	Relationship	Beta	t-value	P-value	BCI-LL	BCI-UL	f ²	Decision
H ₁	ATT -> INT	0.481	7.831	0.000	0.374	0.576	0.348	Support
H ₂	SN -> ATT	0.107	1.614	0.053	-0.004	0.212	0.015	Not support
H ₃	SN -> INT	0.166	2.065	0.019	0.032	0.297	0.030	Support
H ₄	PBC -> INT	0.206	2.963	0.002	0.091	0.319	0.046	Support
H ₅	ER -> ATT	0.240	4.133	0.000	0.143	0.333	0.089	Support
H ₆	EC -> ATT	0.495	7.568	0.000	0.388	0.602	0.275	Support
H ₇	FL -> PBC	0.727	21.396	0.000	0.664	0.777	1.121	Support

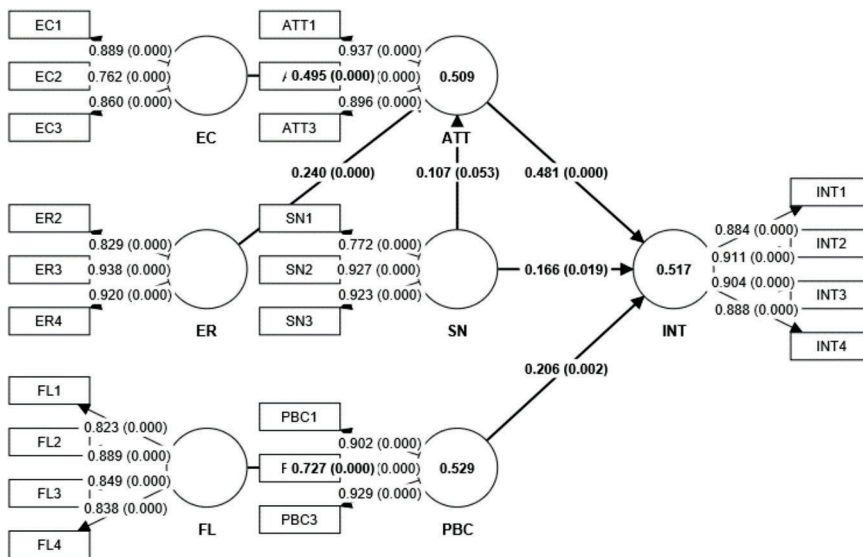


Figure 2: Research model with path coefficient and P-values

of f^2 indicated the small indirect effect of ER and EC on SRI intention, whereas SN revealed no indirect effect. The FL also denoted a small indirect effect on the intention to invest in SRI.

Discussions

This study examined the role of ER, EC, and FL in influencing investment intention within SRI. Resultantly, investment intention in SRI was significantly influenced by ATT, SN, and PBC. Both ER and EC significantly impacted ATT, whereas FL was positively significant with PBC. Following the mediation analysis, ER, EC, and SN indirectly influenced SRI intention through ATT. The FL also indirectly affected the intention to invest in SRI via PBC.

The ATT significantly influenced investment intention in SRI, parallel to Raut (2020) and Raut *et al.* (2021). Following Raut *et al.* (2021), the positive ATT towards the SRI could be established by its features, which only consider environmentally-friendly investments. Thus, a favourable and positive ATT potentially increases the investment intention in SRI. The SN was also significantly associated with investing in SRI, following Lai (2019) and Raut (2020). Intriguingly, SN did not significantly influence ATT. This finding contradicted that of Adam and Shauki (2014), who revealed a significant SN-ATT association. The significant effect of SN implied the pivotal role of social pressure mounted by significant others in one’s investment decision. Investors encouraged by significant others tend to engage in a specific behaviour (Lai, 2019). Nonetheless, such social influences do not impact investors’ ATT following an insignificant relationship. The significant effect of PBC on investment intention in SRI, which was proven in this study validates

the findings of Adam and Shauki (2014) and Raut *et al.* (2018). As such, people with the capacity to do so would invest in SRI if it does not require additional effort or cost. Simplifying the procedures and providing accurate financial information for investment decision-making can potentially increase one’s investment intention (Lai, 2019).

Both ER and EC significantly affected ATT. The substantial impact of ER corresponded to Duong *et al.* (2022). It is deemed crucial to enhance investors’ sense of social and environmental accountability to improve their positive ATT towards SRI. In alignment with Duong *et al.* (2022), Salam *et al.* (2022), and Waris *et al.* (2022), a higher level of awareness and consciousness of social and environmental issues would develop a favourable ATT towards SRI. Empirically, both ER and EC played a crucial role in determining people’s investment in SRI. The outcome also proved the significant influence of FL on PBC following Raut (2020), who affirmed that FL could enhance investors’ ability to make wise investment decisions. This finding further contributes new evidence to literacy-related constructs to improve the investors’ ability to invest in SRI.

Based on the study outcomes, both ATT and PBC reflected a significant mediating effect on the relationship between ER, EC, SN, and FL with investment intention in SRI. These findings paralleled those of Lau and Hashim (2020), Kumar (2021), and Duong *et al.* (2022), which highlighted the significant mediating effect of ATT or PBC in different contexts. In this vein, the TPB model constructs demonstrated a direct effect on SRI intention. They functioned as effective mediators for some exogenous variables, indirectly influencing behavioural

Table 5: Hypotheses testing for indirect relationship

Hypotheses	Relationship	Beta	t-value	P-value	BCI-LL	BCI-UL	f^2	Decision
H ₈	ER ->ATT -> INT	0.115	3.773	0.000	0.068	0.170	Small	Support
H ₉	EC -> ATT -> INT	0.238	4.553	0.000	0.160	0.331	Small	Support
H ₁₀	SN -> ATT -> INT	0.051	1.676	0.047	0.000	0.100	None	Support
H ₁₁	FL -> PBC -> INT	0.149	2.798	0.003	0.063	0.238	Small	Support

intention through the TPB constructs (Farani *et al.*, 2017). In line with this indirect finding, the three additional constructs (ER, EC, and FL) directly affected the three TPB constructs but indirectly impacted the intention to invest in SRI through the three TPB constructs. Hence, social and environmental considerations (ER and EC) are key determinants of SRI intention beyond pro-environmental behaviour. This study offers new evidence on the direct or indirect effect of ER, EC, and FL in determining the investment intention in SRI within an extended TPB model.

Implications

The current study outcomes could offer significant implications. This work theoretically expands the present body of knowledge involving SRI. Based on the proposed study framework, this extending model of TPB fits well in examining the SRI intention. Three additional constructs, namely ER, EC, and FL, and three TPB constructs collectively explain the orientation of consumers' decision-making based on the decision to invest in SRI. Specifically, ER, EC, and FL significantly determined consumers' investment in SRI. Both ATT and PBC also acted as mediators between these exogenous constructs and SRI intention. ATT functioned as a mediator that could significantly mediate the relationship between ER, EC, and SN to invest in SRI, whereas FL could significantly influence SRI intention through PBC.

This study also provides several practical implications for stakeholders involving government agencies, fund management companies, and investment consultants, who could increase consumers' intention to invest in SRI. First, the three constructs in TPB (ATT, SN, and PBC) are the key determinants of consumers' investment in SRI. As such, fund management companies and investment consultants must emphasise the constructs to stimulate consumers' interest in investing in SRI. The benefits of investing in SRI must be publicised to enhance their perception towards the SRI and propensity to invest in SRI with

favourable ATT towards SRI. Promotion strategies or other SRI-related information have prioritised consumers rather than their significant others (family members and friends) who are important to them. The social pressure mounted on these consumers significantly affects their SRI intention. Individuals tend to invest in SRI with the encouragement of their significant others or if the people they value also invest in SRI. As the study revealed the essentiality of PBC in impacting consumers' intention to invest in SRI, fund management companies and investment consultants must reduce the level of difficulty and complexities underpinning investment applications. Consumers who could invest in SRI with minimal effort and cost through online platforms or mobile applications could enhance their investment intention.

Stakeholders should also focus on the three additional constructs to increase consumers' investment intention in SRI. Both ER and EC played an important role in increasing consumers' ATT towards SRI. As such, stakeholders (fund management companies and investment consultants) who intend to increase consumers' favourable and positive ATT towards SRI must increase consumers' sense of responsibility for and consciousness of social and environmental issues. Such consumers would reflect a better ATT toward SRI, ultimately affecting their intention to invest in SRI. The FL, a key determinant of consumers' PBC, suggests the need to enhance consumers' knowledge and literacy level for improved control behaviour such as the ease of investing in SRI and gradually increasing their investment intention. Thus, educational programmes on financial knowledge and the social and environmental issues that could increase consumers' FL and responsibilities and consciousness towards the society and environment must be organised to increase consumers' ease in deciding their investment decisions and establishing a good ATT towards SRI.

Policymakers should be well-equipped to inculcate consumers' sense of accountability in protecting society and the environment to

promote their investment intention in SRI. For example, consumers investing in SRI and fund management companies that manage these SRIs without adverse social and environmental effects could be offered fiscal and monetary incentives for a more sustainable investment environment.

Conclusion

This study investigated the role of ER, EC, and FL towards SRI intention. Introducing the TPB model to study general consumer behaviour enabled the integration of the additional variables capturing the novel features of the research context with the model for a holistic and empirically validated framework. Hence, this model was extended by including ER, EC, and FL as additional constructs that may significantly influence the three TPB model constructs: ATT, SN, and PBC. The ER, EC, and FL, which substantially determined consumers' pro-environmental behaviour should possess the same influence in investment decision-making. Moreover, the three TPB model constructs also served as mediators for the three exogenous constructs in influencing the investment intention in SRI. Essentially, the TPB constructs could mediate the relationship between the three additional constructs and investment intention in SRI. The study outcomes derived from the responses gathered from the general public in Malaysia revealed the essentiality of all three additional constructs in the three TPB constructs. The three TPB constructs also significantly impacted the intention to invest in SRI. Based on the mediating analysis, ER, EC, SN, and FL could indirectly affect SRI intention through ATT and PBC. This finding implies the significance of all three additional constructs to indirectly determine consumers' investment in SRI, which would significantly impact the three TPB constructs and only influence their investment intention in SRI.

The current work encountered specific limitations despite providing significant contributions and implications. First, this study investigated the intention to invest in SRI with

TPB as the underlying model, which may limit the study's comprehensiveness. Perceivably, the TPB model was introduced several decades ago for general behaviour. Future works could utilise other theories or models that could holistically determine the novel SRI features to optimise the research framework. Moreover, this study only included three additional to extend the TPB model. Potential scholars could consider other investment-related variables in their framework for a sound comprehension of consumers' investment intentions in SRI. This empirical work did not consider the respondents' heterogeneity, as they were assumed to be homogeneous in providing their opinions. However, the composition may affect outcome generalisability following most females, young generations, and married and lower-income consumers. Further research may examine the variances between the respondents' sub-groups by comparing men and women, higher and lower income, and younger and elder generations. Such comparative studies, which remain underexplored, could provide intriguing results. The relatively small sample size in this study compared to past works implies another limitation despite meeting the minimum requirement of the power analysis. Potential researchers could increase the sample size for reliable and robust findings on the subject matter to improve outcome accuracy.

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Conflict of Interest Statement

The authors declared that they have no conflict of interest.

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