

Psychological Drivers of ESG Investment in the Polymer Sector

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Abstract

This research will delve into the mentalities of investors concerning investments in polymer-ESG projects. Sustainable investing has become very popular in recent times across the globe. At the same time, the polymer or plastic industry is encountering numerous environmental issues. Plastics make up some 3.3–4.5% of global emissions of greenhouse gases (≈ 1.8 billion tons per year, TPI), and only about 9% of the total production of 400 million tons is recycled. These obstacles make it very “feared” for investors to ESG-profile polymer firms. Using the theories of behavioral finance and the theory of planned behavior, the study comes up with the above-listed six constructs to describe investor psychology: environmental concern, social responsibility orientation, ethical beliefs, risk perception, trust in ESG information, and financial literacy. The influence of these variables on the construct of investment intention in ESG investments was examined by using survey-based SEM. The findings demonstrate that environmental concern, social responsibility, trust in ESG information, ethical beliefs, and financial literacy positively affected the ESG investment intention, and perceived risk has a negative impact on ESG investment intention. Practical implications involve tips for both investors and policymakers and polymer companies on how to take advantage of the psychological motivators for sustainable finance-profile.

Keywords: ESG investment, psychological drivers, polymer sector, structural equation modeling (SEM), investor behavior, sustainable finance

INTRODUCTION

But Environmental, Social, and Governance (ESG) has become a driver of investment decision-making around the world. ESG factors are now at the center of investment decision-making, as they convey the non-financial risks and value drivers of the long term, whereas these are not part of traditional financial decision-making [1]. Investors are starting to realize that improvements in ESG are not only good for risk control, regulation, corporate reputation, sustainability, and long-term stability and resilience, but they are all good [2]. Sustainable asset management has taken off quickly in this context [3]. The steep surge in sales volumes of ESG funds has been the result of the rule-making by the Securities and Exchange Board of India (SEBI) on ESG funds in 2021. As a result of the advancement of the world towards being more socially responsible, with social inequality and

global climate change gaining greater significance, positive social responsibility investing is rapidly increasing in importance [4]. Sophisticated investors are not only worried about the financial data provided; they are also worried about the sustainability of the companies, e.g., reduction of emissions, fair labor practices, etc., which are perceived as a lower risk to the companies for their long-term viability [5]. In this stakeholder lens, the investments the firms make in society, and the preferences investors have for society are on the same playing field [6].

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Plastics and polymers are imperative industrial manufacturing sectors and highlight some of the other sectors where much ESG research is taking place, but is not covered here [7]. The value of global polymer sales is more than \$1 trillion, supporting products from packaging to consumer goods applications. But the production and disposal of polymers are a huge sustainability challenge. Many polymer products are produced from non-renewable petroleum resources. This results in depletion of fossil fuels. Many pollutants and greenhouse gases are released in the production of polymers (plastics), which use lots of energy. The share of CO₂ emissions from plastics ranges from 3.3% to 4.5%, equaling 1.8 billion tons per year of CO₂, and may rise to 4.5 billion tons of CO₂ by 2050. Another major issue is associated with their resistance to natural degradation. Accumulated plastics are seen in landfills and ocean beds where they remain for hundreds of years, resulting in soil and water pollution. Only 9% of all waste plastic is recycled. All those environmental drawbacks (climate change, resource depletion, plastic waste) are cause of concerns for environmentalists.

Environmental regulations significantly impact the operations, costs and innovation strategies applied to the polymer companies. Governments across world are issuing stricter guidelines regarding plastic production, waste management, recycling, emissions, and use of hazardous chemicals. In response to that, some polymer producers seek to introduce environmentally friendly innovations such as bioplastics or effective recycling [8, 9]. Natural rubber composites are also made [10]. Other proximate options – like Areca catechu fibers – are also explored [11]. As a result, the cost of operations of many polymer companies are increasing. If they fail to comply with these regulations, they may face legal compliances and restrictions. By extension, green or ESG-incentivized financing is beginning to flourish in industrial sectors. But investors' understanding of ESG risks for polymers is not uniform. With the scale and size of the industry, investors have started to seek transparency about the environmental footprint of polymer companies [12].

The traditional finance context is assumed to be rational expected-utility maximizers, but increasing evidence shows that psychological factors critically influence sustainable investing [13]. Some ideas stick with you when behavioral finance enters the picture such as loss aversion, social preferences, and the introduction of bias [14]. From an ESG point of view, some researchers state that investing with ESG is just a psychological effect. Investors care not only about how returns are generated, but their judgments about returns and ESG impacts are also subject to cognitive biases. A pure financial approach to ESG investments can be trumped by psychological considerations such as moral values, social concerns, risk-taking, and trust in information.

There has been extensive research on the overall impact on the market after the ESG frenzy, but there is little literature on how individual investors react psychologically [15]. In particular, few studies have used a sector-specific analysis. The relationship between ESG and investor psychology is studied less in other sectors, such as heavy manufacturing, e.g., polymers. The constructs of environmental concern or trust are not largely merged into a unified behavioral model of behavior toward ESG intention in the existing literature [16]. Furthermore, the field of psychological aspects behind ESG investing is still largely under-researched in emerging markets, where the regulations, cultures, and conditions are significantly different from those in the West. Thus, it is important to know what the most relevant mindsets are that drive investors in the polymer industry to then consider ESG.

RESEARCH OBJECTIVES

To address these gaps, this study proposes and empirically tests a model that produces and tests a model of intention to invest in ESG that is grounded in a psychological framework. Specifically, this study focuses on:

- Find out the nature of significant psychological factors that can affect ESG investment motivations in the polymer industry.
- Explain psychological factors that influence investment decisions.

The nuances of the sector and the theories of behavioral finance are put to the test in relation to polymer-related investors in a practical context of ESG, focusing on the following:

The paper is organized as follows. The second part provides a literature map and theoretical background of the relevant concepts in behavioral finance and ESG investing, as well as formulates hypotheses for each of the psychological drivers. It then presents the conceptual framework (hypothesized relationships). The methodology of the survey, sample, and measures used in this research and the approach of SEM are detailed in Section 3. The findings obtained from the data analysis are presented in Section 4, which consists of the analysis of the measurement model and path estimates of the structural model. The results in relation to the previous studies are discussed in Section 5. Theoretical, practical, and managerial implications are presented in Section 6. This is followed by a summary, limitations, and suggestions for future research in Section 7.

LITERATURE REVIEW

Theoretical Foundations

- *Behavioral Finance Theory*: Behavioral Finance is the quest to integrate psychological aspects into financial decision-making. It describes abnormal behavior around rationality in the rational-investor model through cognitive oddities (overconfidence, loss aversion, herding, etc.). The basic idea of Kahneman and Tversky's prospect theory is presented; it teaches that people have an identifiable preference for dealing with gains and losses as a group across the board [17]. In ESG scenarios, prospect theory could indicate investors are likely to be overly sensitive to loss exposures stemming from climate hazards or, conversely, place an undervalued, high value on ethical benefits. ESG investing is a fusion of values and judgmental issues with respect to ESG information. Therefore, the research in this paper is based on the behavioral finance theory because it considers that the psychological causes will have noticeable impacts on the intention of investing in ESG.
- *TPB – Theory of Planned Behavior (Ajzen)*: Attitude towards the behavior, subjective norms, and perceived behavioral control, in turn, lead to intention to do the behavior. With ESG investing, attitude could be based on personal values, for example, environmental value or corporate social responsibility; subjective norms could be based on social values, for example, a society's expectations to invest ethically; and perceived control could be based on self-assurance in one's capacity to invest sustainably. Empirical studies found that attitudes and social influences are found to influence ethical investment intentions, and financial literacy increases perceived control and intention [18]. With this in mind, TPB offers an interesting lens to view the model as it incorporates attitudes/values and financial capability as predictors of ESG intentions.
- *Prospect Theory*: According to Prospect Theory, an individual gives an unduly high valuation to potential losses compared to potential gains [17]. Under an ESG investment scenario, when investors think that ESG stocks are riskier, maybe because they are volatile or they are concerned about their return, they are likely to avoid investing in such stocks. On the other hand, a sense of potential loss from failing to include ESG could drive and promote the inclusion of ESG. Risk perception is incorporated in many behavioral ESG models. Empirical research suggests that perceived risk plays an important role in making investment decisions and affects investment decisions with biases [19]. While it's difficult to find peer-reviewed norms, a survey of the industry confirms this prediction: too many investors think that the performance on these three ESG factors is a risk-mitigating asset class. In other words, the psychological concept of risk perception has been manifested exactly as it is in prospect theory, which strongly emphasizes loss aversion, which represents the effect on intention.

ESG Investment Behavior

ESG investment behavior is an analysis of Environmental, Social, and Governance (ESG) elements by investors while undertaking the investment decision process. ESG investors evaluate their environmental, social, and governance (ESG) criteria while making investment decisions, rather than risk-return criteria in traditional investment theory. There has been a profound impact on global financial markets by increased awareness regarding climate change, ethics, sustainable growth, and corporate social responsibility [20]. ESG indicators serve as a measure of the ability to adapt to change, transparency, and sustainable performance of businesses ahead of others in ESG criteria.

Behavioral factors – such as environmental concerns, ethical considerations, social responsibility orientation, and credibility of ESG reporting – also play a crucial role in determining ESG investment intention; although green washing risks remain high in the system, they can be mitigated [21]. Finally, there is a slow evolution of ESG investment behavior in emerging economies, such as India, where regulators are starting to show increasing concern regarding sustainable investment, sustainable environmental awareness, and social investing.

There are specific ESG challenges in the polymer industry. Polymer industries have environmental consequences at the upstream (emissions during the production phase) and the downstream (residual waste and pollution) levels, unlike some consumer industries. However, due to high stringency towards pollution and consumer sentiment changes, investors might view polymer companies as high risk. Polymers are so ubiquitous; they also have a “hidden footprint” like plastics in packaging [22]. This indicates that currently, there are not enough factors in play to fully represent ESG risks in investments for the polymer sector. Other regulations, such as plastic bans and carbon taxes, also introduce a potential material aspect for polymer companies’ valuation related to their ESG performance.

Psychological Drivers of ESG Investment

There have been many previous studies that have shown several psychological and socio-cognitive factors associated with sustainable investing. We center on 6 key drivers:

- *Environmental Concern:* This is a measure of how salient participants’ awareness of ecological concerns (such as climate change and pollution) has been, how disturbing it was, and how interested they were in protecting the environment. People will prefer to invest in accordance with an environmentally friendly purpose. As one of the most important factors, environmental concern is a key motivator for positive attitudes and intentions to invest in ESG stocks. Concerns for the environment (WUE) are sometimes more significant than just promoting economic concerns. Similarly, this study aims to examine the linkage between environmental concern and intention to invest in ESG investments [23]. Then one can develop the following hypothesis:
✓ *H₁: Environmental concern impacts ESG investment intention.*
- *Social Responsibility Orientation:* It’s indicative of a general disposition of/about being oriented to the altruistic and/or social-minded attitude or a perception that everyone has some responsibility towards society. Some investors prefer to invest in socially responsible companies that have excellent labor management, social responsibility, etc. According to the stakeholder theory (1984) of Freeman, companies deal with stakeholders like employees, communities, and society. Specific ESG metrics of social concern are seldom identified, but it is assumed that an ESG philosophy with a pro-social view will positively impact ESG investment intention (H₂). That is, more people who believe it is their responsibility to invest in their country are more apt to invest in businesses that they believe are responsible. In addition to environmental practices, investors also look at the social practices of companies [24]. On this premise, the second hypothesis was put forward as follows:
✓ *H₂: Social responsibility orientation impacts ESG investment intention.*
- *Ethical Beliefs:* Ethical beliefs represent moral principles or values that inform perceptions and judgments about what is “right” and what is “wrong.” Many environmental/social motives are equated with ethical motives. Here, green investments are investments in terms of conscience (moral investing). We consider ethical belief as a separate motivator. If the return is similar, then an investor with the desire to invest socially and ethically but with certain ethical considerations (e.g., fairness and justice) may invest in ESG investing as well. Hence, it is hypothesized that there will be a positive correlation between stronger ethical beliefs and increased intention of investing in ESG [25]. The development of Hypothesis 3 was made based on this as mentioned below:
✓ *H₃: Ethical beliefs impact ESG investment intention.*
- *Risk Perception:* Risk perception here is defined as investors’ perception of risks in investing in ESG. The perceived risk of shareholder funds is a possibility, as well as the risk of damage to

reputation or the risk of corporate misgovernance. One of the key ESG rationales is for reducing portfolio risk. Many investors tend to see positive ESG as a way to decrease fluctuation. The key reasons for investors to invest in a stock are its performance or returns and their risk-return relationships. However, one of the key factors mentioned was the lack of trust. In models in the academic setting, risk perception is frequently incorporated in expanded TPB [19]. Based on the theory, it is believed that: (a): a higher perceived risk of investing in an environmentally responsible company will result in lower intention to invest; (b): A higher perceived risk of not investing in an environmentally responsible company will lead to a higher intention to invest. Following this, the 4th Hypothesis has been opted out:

✓ *H₄: Perceived risk impacts ESG investment intention.*

- *Trust in ESG Information and Investment Behavior:* This is belief in the reliability of information or systems. Perceived trust of investors positively impacts the investment decision [26]. A significant part of the implication of ESG investing is to trust in ESG ratings, sustainability reporting, and corporate disclosures. Investors tend to react negatively to ESG data, as they often struggle to assess consistency, standardization, and greenwashing. Trustworthiness and transparency of the ESG information can play a key role in attracting or deterring investors toward ESG investments [27]. Investors rely largely on the credibility and transparency of information related to the company and its ESG performance when making their investment decisions [28]. If investors find a company more trustworthy regarding its ethical standards, sustainability reporting, and ESG metrics, they will feel that they are working with a company that they can depend on and feel good about investing in. A sense of security and lower investment risks, as mediated by management trust, builds confidence that will encourage investors to invest in the ESG-focused firms. The current study hypothesizes that trust in ESG information will lead to greater intentions to invest in ESG as mentioned in the 5th hypothesis below:

✓ *H₅: Trust in ESG information impacts ESG investment intention.*

- *Financial Literacy:* Investor financial literacy may be referred to as the financial literacy of the investor or the ability to make sense of and fund the investment options available. More knowledgeable investors can understand and appreciate the benefits associated with ESGs as well as their own financial abilities. Financial literacy is used as an independent variable in previous research studies. ESG is a financial tool, and financial literacy is one of the tools that may improve investors' understanding of ESG and corporate governance information [29]. On the other hand, if individuals and families have inadequate financial literacy, they might be making poor investment decisions, being vulnerable to misinformation, and not having a good financial plan. Therefore, the financial literacy factor is added to the analysis, while it is hypothesized (the 6th as mentioned below) that the more an investor knows, the more likely they are to invest in ESG; and thus, feel capable of evaluating the costs and benefits of the ESG [18]:

✓ *H₆: Financial literacy impacts ESG investment intention.*

Figure 1 shows the key factors of intentions for investors in ESG-involving polymer companies based on psychological aspects. It identifies six key drivers, including environmental concern, social responsibility orientation, ethical beliefs, risk perception, trust in ESG information, and financial literacy. These factors all contribute to investor orientation and choices in sustainable investments. The visual model offers a compact insight into the role that different psychological factors play in the ESG intent to invest in polymers.

Conceptual Framework

The proposed model is presented in Figure 2 (on the next page). The dependent variable, environmental social responsibility investment intention (ESR), is related to six independent variables, which include environmental concern, social responsibility orientation, ethical belief, risk perception, trust in ESG information, and financial literacy.

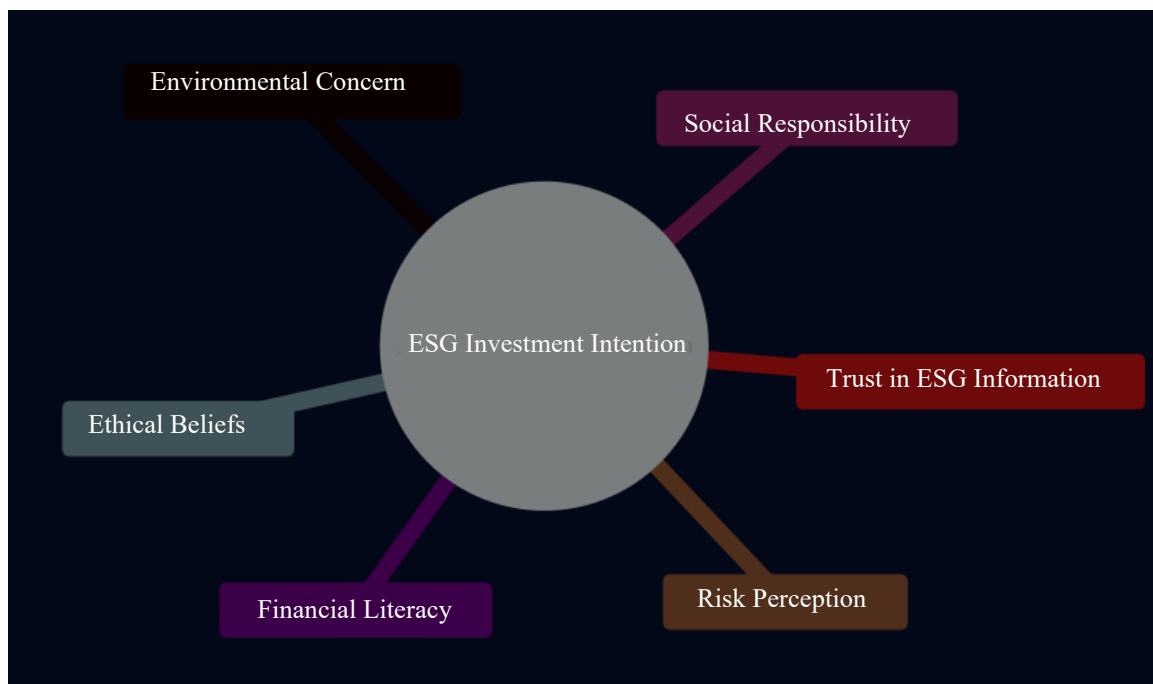


Figure 1. Psychological drivers influencing ESG investment intention in the polymer sector.

Source: Author's work.

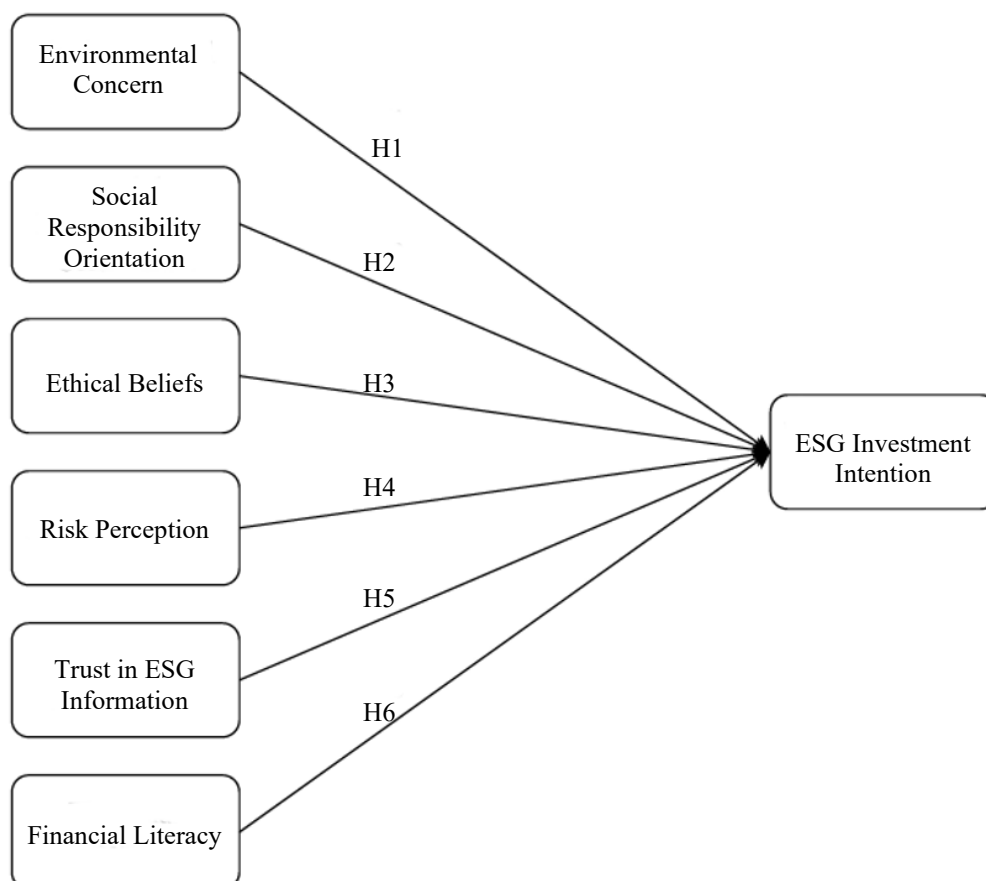


Figure 2. Conceptual framework.

Source: Author's work.

RESEARCH METHODOLOGY

Research Design

In this study, the quantitative, cross-sectional survey design is adopted, and the relationships between psychological constructs and the intention to invest in ESG are modeled. A survey was administered to investors and analyzed by analyzing the data obtained with the structural equation modeling (SEM) method. The method is situated in common usage in behavioral finance studies. The specific associations in a cross-sectional study can be tested at one time.

Sampling Technique

Investors were approached via the snowballing technique using investor communities, investment forums, and investment professional groups on LinkedIn. The sample size targeted was approximately 350 people, which is more than the 300 commonly recommended in the field of SEM studies. SmartPLS guidelines suggest that larger data samples ($N > 200$) are appropriate for credible results from PLS–SEM. Larger sample sizes yield more statistical power and applicability or external validity of the results.

Data Collection

An online survey was used to collect data using Google Forms, involving investors related to polymer companies. A total of 168 individual investors who had invested in or were interested in investing in polymer-related companies through equity funds/mutual funds were interviewed. The questionnaire contained elements of screening questions to make sure that the respondents had an investment background and a basic understanding of the ESG concepts.

Measurement Instruments and Scales

The research tool was adapted and modified to the aims of the present study from existing literature. All constructs were included with suitable scales previously developed on a 5-point Likert system from “strongly disagree” to “strongly agree.” This questionnaire consisted of four parts: informed consent, screening questions, core construct items, and demographic questions. Demographic variables included the proportion of current investment in ESG-related portfolios, educational qualification, age, gender, and investment experience.

Data Analysis Tools

The data were analyzed by applying the SmartPLS software. As the study is exploratory in nature, PLS–SEM analysis has been used. Assessment of the measurement model was the initial step in testing the research tools to ensure the reliability and validity of the measurements. Cronbach’s alpha (α) and composite reliability (CR) were used to assess internal consistency reliability. Acceptable indicators of reliability were considered to be values above 0.7.

Convergent validity and discriminant validity were used to determine the validity. Convergent validity refers to the correlation between items measuring the same construct; discriminant validity refers to the extent of correlation of constructs. Average Variance Extracted (AVE) was used for convergent validity, as mean scores above 0.5 were regarded as acceptable. To test for discriminant validity, the Fornell–Larcker criterion was adopted, which is defined as inter-construct correlations being less than or equal to the within constellations. Once the measurement model was validated, the structural model was analyzed to uncover the relationship between the variables.

DATA ANALYSIS AND RESULTS

Descriptive Statistics

A total of 278 respondents were questioned, and 261 responses were identified and analyzed. Table 1 shows a summary of the demographic characteristics of the respondents.

Table 1. Demographic details.

Particulars	Categories	Count	Percentage
Age	18–25 Years	41	15.71%
	25–34 Years	78	29.89%
	35–44 Years	83	31.80%
	45–54 Years	44	16.86%
	More than 55 Years	15	5.75%
Gender	Male	147	56.32%
	Female	114	43.68%
Education Level	Below Graduation	25	9.58%
	Graduate	127	48.66%
	Postgraduate	93	35.63%
	Above Postgraduate	16	6.13%
Investment Experience	Less than a year	28	10.73%
	2–5 Years	73	27.97%
	5–10 Years	102	39.08%
	10–15 Years	46	17.62%
	More than 15 Years	12	4.60%
% of Funds Allocated in the ESG Sector	0–10%	117	44.83%
	10–25%	79	30.27%
	25–50%	45	17.24%
	More than 50%	20	7.66%

Source: Author's work.

Measurement Model Assessment

Combined with the empirical tests of measurement models in financial studies and computer science, the use of SEM suggests that it is a useful tool for assessing the reliability and validity of the constructs studied. The models are crucial for the comprehension of decision-making behavior constraints and sustainability-related initiatives. The complete data for the construct behavioral dimensions and investment decisions are shown in Table 2, namely factor loading, AVE, CA, and CR.

Table 2. Measurement model assessment.

Variables	Items	FL	AVE	CA	CR
Environmental Concern (EC)	EC1	0.811	0.576	0.809	0.837
	EC2	0.785			
	EC3	0.796			
	EC4	0.781			
Social Responsibility Orientation (SRO)	SRO1	0.752	0.609	0.836	0.825
	SRO2	0.811			
	SRO3	0.859			
	SRO4	0.732			
Ethical Beliefs (EB)	EB1	0.741	0.694	0.812	0.869
	EB2	0.786			
	EB3	0.755			
	EB4	0.885			
Risk Perceptions (RP)	RP1	0.83	0.642	0.835	0.832
	RP2	0.792			
	RP3	0.829			
	RP4	0.819			
Trust in ESG Information (TR)	TR1	0.741	0.706	0.819	0.831
	TR2	0.792			

	TR3	0.804			
	TR4	0.876			
Financial Literacy (FL)	FL1	0.823	0.683	0.837	0.866
	FL2	0.769			
	FL3	0.871			
	FL4	0.794			
ESG Investment Intentions (II)	II1	0.822	0.724	0.853	0.845
	II2	0.853			
	II3	0.862			
	II4	0.857			

Note(s): FL = Factor Loading, AVE = Average Variance Extracted, CA = Cronbach's Alpha, CR = Composite Reliability.
Source: Author's work.

The results of the measurement model show that all constructs in this study have good reliability and validity values. The item reliability for all items falls above the suggested FL of 0.70, reflecting good item reliability. CA and CR < 0.80 indicate that high reliability for internal consistency of constructs was obtained. Furthermore, the value for the AVE scores is correlated with the value that is acceptable, and ranges from 0.576 to 0.724, indicating that there is appropriate convergent validity.

In conclusion, the Fornell–Larcker discriminant validity test was employed to verify the discriminant validity of all constructs used in this research. For all constructs, the square root of the AVE value is higher than its correlation with any other construct as shown in Table 3. The overall results indicated that the measurement part is reliable and appropriate for further investigation of the structural model.

Table 3. Discriminant validity test (Fornell–Larcker criterion).

Variables	EC	SRO	EB	RP	TR	FL	II
EC	0.972						
SRO	0.276	0.885					
EB	0.498	0.641	0.863				
RP	0.543	0.474	0.564	0.833			
TR	0.382	0.655	0.475	0.457	0.828		
FL	0.640	0.439	0.438	0.643	0.411	0.831	
II	0.544	0.372	0.602	0.573	0.358	0.556	0.879

Source: Author's work.

Structural Model Assessment

Having validated the measurement model, the paths of the structural model are subsequently evaluated. Path significance was determined by bootstrapping t-statistics. The path coefficients (beta), t values, and p values of H1–H6 and the R² values for ESG intention are shown in Table 4.

Table 4. Structural model assessment.

Hypothesis	Link	Coefficient	t-value	p-value	Decision
H ₁	EC → II	0.279	11.478	0.001	Accepted.
H ₂	SRO → II	0.327	9.568	0.000	Accepted.
H ₃	EB → II	0.402	21.479	0.002	Accepted.
H ₄	RP → II	−0.276	13.453	0.000	Accepted.
H ₅	TR → II	0.311	37.659	0.000	Accepted.
H ₆	FL → II	0.348	23.228	0.003	Accepted.

Source: Author's work.

Significant and supported, with pictures. However, there are slightly different findings regarding potential ESG investment intention: environmental and social concern, orientation towards social

responsibility, ethical beliefs, trust in ESG information, and financial literacy have positive and significant effects on intention to invest in ESG. Ethical beliefs are the most positive influence on the investment intention among these factors. Moreover, risk perception is significantly negative for ESG investment intention, indicating that the lower the investor's perceived risk, the more likely he or she is to be willing to invest in ESG portfolio opportunities. The results point to the significance of psychological factors in explaining ESG investor behavior overall.

The model accounts for a substantial amount of the variance in the intention: $R^2 = 0.462$ (refer Table 5), which means that the psychological variables explain about 46.2% of the variance in the intention.

Table 5. Variance explained.

Variable	R ²	R ² adjusted
ESG Investment Intentions (II)	0.462	0.459

Source: Author's work.

DISCUSSION

The results give insights into the factors that most influence ESG investment intention with respect to the polymer industry. Both environmental concern and social responsibility had positive effects that were significantly high (H_1 and H_2 supported) [30]. This is consistent with those who reported the overall strength of environmental values as the main driver of ESG attitudes and intentions. Investors with pro-environment ideologies make their opinions no secret and put them on notice when it comes to investing in products, as evidenced in high-weight industries such as polymers. Another key positive driver was trust in the information about environmental, social, and governance (ESG) (H_5 supported). If investors can trust ESG evidence and ratings, they will be quite open to investing. This sends a strong message about the need for a robust ESG reporting and certification process for polymer-investing companies.

In contrast, perceived risk did have a significant negative effect (H_4 supported) [31]. Investors with a negative bias on "ESG", therefore, tend to steer clear of them because of either the uncertainty of return or the issue of greenwashing. This is consistent with prospect theory [32]. Potential losses (or volatility) are one factor that has an impact on the reluctance to adopt ESG. This might lead to higher investment intention if an investor becomes less risk-averse or more convinced of ESG performance after being educated or having encountered evidence of performance. Interestingly, financial literacy (H_6) is also found to have a strong direct effect [31]. These findings correspond with those who showed that an increase in investment literacy resulted in improvement of perceived performance, and that increased perceived performance significantly affected intention. Ethical beliefs demonstrated a positive and strong relationship (H_3 supported). This may be because, when dealing with the intention to invest in a product for ethical purposes, to an extent, it turns into a moral compass.

The present findings indicate that for the polymer industry, concern for the environment is the number one priority. With the sector's significant emission and waste concerns, it could be expected that "green" investors will focus on polluting industries. In addition, the industry is likely to face distrust owing to greenwashing problems. Therefore, companies dealing in polymers may attract additional scrutiny [33]. The appearance of just one bad ESG report may have a huge influence on the confidence of investors. However, the experience with green bonds in other industries indicates that introducing ESG activities that are aligned with the company's business and third-party verified can prove especially beneficial.

The model depicts the importance of investor psychology when it comes to ESG decisions. Investor psychology takes a positive approach to ESG decisions instead of a purely financial one. Intentions are related to values and social norms. This suggests that it is indeed a behavioral phenomenon. There's nuance as well because there is a focus on the polymer industry. Although the same drivers and hesitations exist in general terms in relation to ESG attitudes, the polymer context tends to

strengthen some of these drivers (such as concern for the environment) and, to some extent, the perceived risk [34].

IMPLICATIONS

This study makes a small but consistent contribution to the fields of behavioral finance and ESG. Based on these theories, it extends and combines these various psychological models in one SEM to create a model of intention toward ESG. As a theory, it extends multiple psychological constructs into one SEM for ESG intention. Establish values and beliefs as an important antecedent of sustainable investment, thereby fostering a values perspective on investors. Trust is also taken as an additional factor expanding the TPB. The emphasis is on the polymer industry, providing sector specificity.

It is significant for sustainable retail investors to be aware of this psychological motivation to invest and consider the biases. However, if there is a high priority for the environment, they may go out of their way and make “progressive” decisions even if the benefits are not guaranteed. They are skeptical of ESG data and will look at solid ESG data (e.g., those that are third-party audited) as their level of trust varies significantly in determining whether they invest in ESG funds. Investors who are conscious of such key psychological factors may strive to make well-informed decisions that are more balanced. It is important for the regulators and exchanges to recognize that transparency and trust are essential in reporting ESGs. ESG disclosure policies will build trust in investors. Greater data transparency is part of the increased allocation to ESGs. Increased data transparency is part of the increased allocation of ESGs. Investors with a strong interest in the environment could also be drawn to government incentives in support of the trustworthiness of ESG programs. In addition to communicating how their ESG strategies can provide long-term benefits, polymer companies need to communicate how their ESG strategies contain long-term risks and will mitigate them. To sum up, the industry needs to emphasize proven ESG gains and rely upon trusted third parties to attest to the gains achieved, thus tapping into the psyche to attract capital.

Embedding ESG in polymer companies’ strategy should not just be a moral thing to do; it is also a psychological must-do to attract and retain investors. Marketing ESG efforts leverage environmental concern. The risks associated with climate change should be communicated in relation to how sustainable strategies pose risks to appeal to investors’ risk perceptions. To create a level of trust regarding sustainability issues, companies can conduct tours for visitors within their green infrastructure or produce reports showing the investor impacts of sustainability audits conducted by independent auditors based on the findings of the study.

CONCLUSION

This study aimed to identify the effect of different psychological motivators on the intentions of investors to invest in the polymer industry’s ESG initiatives. Grounded in behavioral finance and TPB theory, investors using a model with six predictors: environmental concern, social responsibility orientation, ethical beliefs, perceived risk, trust in ESG information, and financial literacy were surveyed. Study results from SEM analysis show that altruistic values in the form of environmental concern and social responsibility were strong positive predictors of ESG investing intentions, verifying that the intention to invest sustainably is motivated by altruistic values. Intention also rose because of a greater level of trust in ESG disclosures, and trust was derailed by increased perceived risk. There was a limited direct impact on financial literacy and a modest impact on ethical beliefs. These revelations highlight that value-based and cognitive trust are what are driving ESG investing more than knowledge or logic about the market.

The results highlight the relevance of the psychological price drivers for (green) financing decisions. The need to address environmental considerations is a major issue for the polymer industry, due to its significant environmental impact. ESG skepticism requires credible ESG practices to be overcome. The findings of this research emphasize that human factors should be taken into

consideration in sustainable investment. Improving ESG capital flows, both by increasing the credibility of ESG and tapping investor trust, and by reducing irrational fears to sell off, will benefit the industry.

Limitations and Future Research Directions

The paper sheds light on the psychological effect that impacts behavioral finance, which in turn affects investor decisions, but there are some limitations in this paper that should be addressed. First, the results of convenience sampling do not necessarily generalize to the broader target population because the people who made up the sample may not be representative. Furthermore, social desirability bias could occur in self-reporting. Lastly, the model only included psychographic factors in its investigation of investment decisions, without incorporating any economic factors like previous performance and portfolio composition.

Future research could include the adoption of longitudinal research to better understand the relationship between intention and ESG investing; further participants, perhaps with randomization, to strengthen results; and experiments about how different psychographic factors impact behavior or are related to a demographic like income and age, as well as cross-national or cross-industry studies to see if there are any differences in ESG investor psychology across countries or industries.

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