



## Cognitive and Behavioral Responses to ESG Accounting Disclosures: A Gender-Based Study

Ms. Karimunnissa Begum Shaik<sup>\*1</sup>, Dr. Y. Srinivasa Rao<sup>2</sup>

<sup>\*1</sup>Research Scholar, Department of Management Studies, Vignan's Foundation for Science, Technology & Research, karimunnissabegumsk@gmail.com

<sup>2</sup>Assistant Professor, Department of Management Studies, Vignan's Foundation for Science, Technology & Research, yadavallisrinivasrao@gmail.com

### ABSTRACT

This study looks into investors' cognitive processing and behavioral appraisal of accounting disclosures by ESG and sustainability accounting, as well as gender differences in these assessments. Our study looks at ESG as non-financial accounting information from a decision usefulness, transparency, and disclosure credibility perspective. We analyses how investors assess the credibility of ESG information reported by companies, apart from the application of accounting judgement in valuing investment alternatives. The study uses data from 450 individual investors in Asia-Pacific. Within the framework of this study, a conceptual framework is tested using covariance based structural equation modelling (SEM). The cognitive factors being the financial literacy, risk perceive and objective ESG knowledge, while the behavioral factors include social norm, ethical judgement, and trustee signaling in ESG disclosures affect the usefulness of ESG accounting information and evaluative decision. The paper specifies attitude towards ESG information and perceived return as mediators. Besides, the researchers apply multi-group SEM to test measurement invariance. They further test accounting judgement differences across gender. The model's output evidence that it had good psychometric properties ( $\chi^2/df= 2.18$ , CFI= 0.95, RMSEA= 0.05, SRMR= 0.04), have good reliability and valid construct (CR > 0.80, AVE > 0.50), and have discriminant validity. The structural outcomes point out that both cognitive evaluations ( $\beta = 0.32$ ,  $p < 0.001$ ) and behavioral evaluations ( $\beta = 0.45$ ,  $p < 0.001$ ) are considered significant building blocks to develop ESG disclosure credibility and decision usefulness. Furthermore, attitude toward ESG information partially mediates the relationship between cognitive evaluations and behavioral evaluations and ESG disclosure credibility and decision usefulness. Perceived return plays the weakest mediation role. The analysis of multiple groups shows that behaviour is. This research contributes to sustainability accounting theory and shows how, by understanding ESG as not only an investment attribute but also as sustainability accounting disclosure, disclosure credibility, cognitive interpretation, and ethical judgement jointly determine the decision usefulness of ESG. Results obtained from this study have major implications for ESG reporting frameworks, standard setters and assurance providers requiring enhanced transparency, standardization and credibility in sustainability reporting for investor-oriented accounting outcomes.

**Keywords:** ESG investment; cognitive drivers; behavioral drivers; gender differences; structural equation modelling; attitude; perceived return

### 1. Introduction

The Sustainability accounting and ESG are gradually evolving from a philanthropic activity to a significant focus of financial disclosure and capital market pricing. Sustainable investors are mainly impacted by ESG factors regarding the selection of investments and portfolio risk. Nonetheless, non-investors increasingly apply the ESG criterion as non-financial accounting disclosure (including the validity of ESG accounting disclosure, without skepticism). According to Plumlee et al., (2015), ESG Accounting enhances transparency and minimizes information asymmetry. From the works of Cheng et al (2014), ESG accounting disclosure is part of the firm value and it helps in the enhancement of the valuation efficiency through Environmental, Social and

Governance activities. This firm value plays a key role in the enhancement of the valuation of investments. Numerous regulatory initiatives have come out recently. The report by Dhanda et al in 2019 highlights the increasing risk of climate-related exposure. This report has been published by Asia Investor Group on Climate Change. The ball underlines in 2019 the enhanced scrutiny regarding many stakeholders and their activities. Moreover, he emphasises on the speed of ESG reporting.

Recently, ESG research started evolving in the literature concerned with sustainable finance and investment and the analysis of checking policies (Friede, Busch, & Bassan, 2015). This literature has greatly enhanced economic value information for ESG and Institutional

investors accessibility. ESG disclosure has long been the subject of mild research as accounting information at the micro-level, in spite of this. Theories of Accountancy do not say much about how investors interpret CSR disclosures with respect to credibility, transparency and decision usefulness. Essentially, the cost will not transfer to the user after access to information based in decision-usefulness theory and recognised set of accounting guidelines. No matter the organization we will specifically look into cognitive and behavioral incorporation. Towards a Framework for ESG Reporting. The cognitive factors such as financial literacy, risk perception and knowledge of objective ESG are helping a user to process ESG accounting information through this window-view. Informed and literate individuals will review the validity of information as well as detect defects in the measures and assess their application.

Everything is happening within the space of relevant global financial information. Behavioural factors shaping the perceived credibility and integrity of sustainability reporting that relies on a patchy assurance system include ethical judgment, social norms and people's trust in ESG disclosures. A behavioural assessment may strengthen or weaken the effectiveness of ESG accounting information. Moreover, it may play a mediating role in the use and application of disclosures in making investment-related decisions. Managers utilize accounting and financial data to improve a structure or facility within an organization's overall performance. The financial and operational (non-financial) plus also the techniques data assist in developing processes or structures which result in sustainable value. In all its business activities and dealings, a business must comply with the law and be conscious of the law. One important reason for doing a corporate report is to make the right choice. Business firms are always finding new and innovative ways for creating the most value through sustainability. We can minimize the environmental risk most efficiently by implementing the right control systems to control them. Through these reports one can accurately and correctly detect and prevent this risk. When something is accounted for, it ensures that it won't go missing in the first instance. It also monitors harmful practices and implements measures so they do not continue and harm at a loss.

Reporting of social and environmental impacts is costly, risky, strategic, and important. One also needs to setup a system that is unconventional. We have to control to follow its social and environmental context. This study makes three interconnected contributions to the accounting literature. The study first contributes on a conceptual and empirical level by conceptualizing ESG as sustainability accounting disclosure and providing the first evidence of the impact cognitive and emotional factors have on the perceived decision-usefulness and perceived credibility of ESG information disclosure at the individual investor level. The concept of intermediaries refers to process intermediaries, which

Available online at: <https://jtar.org>

mediators and mediator processes could be thought of as the underlying processes that theoretically mediate the accounting information interpretation. It has been noted that mediator or intervening processes are primarily attitudinal and perceptual; they help explain: how accounting inputs are processed; evaluative judgement in decisions-usefulness theory. The study finally employs a multi-group structural equation modelling approach to offer compelling proof of gender differences in the interpretation of ESG disclosures. As a result, it enhances sustainability accounting theory by integrating heterogeneity in user judgment. A recent study presents useful ESG information at micro level from an accounting perspective unlike adoption.

The remaining paper is organized like the following. The paper's second section reviews the literature on sustainability accounting of ESG disclosures, gender-based differences affecting accounting judgement and then hypothesis development. According to chapter three, the study's design, data collection techniques, and also data analysis approaches are reviewed. Section 4 presents the empirical results consisting of the validation measurement and the multi-group structural results. The final Section discusses the results pertaining to sustainability accounting theorization, reporting standards and practical disclosure and assurance implications. This segment elaborates on the teachings of conclusions and limitations and future scope.

## 2. Literature Review

### 2.1 ESG and Sustainability Accounting Disclosure

The academic literature on ESG has followed much the same trajectory over the last two decades, while sustainability reporting as such has become increasingly institutionalised within the corporate disclosure system (CRD: 16). Initially, the matter of ESG was regarded as an "investor choice" with an ethical dimension. To put it another way, the ESG issue was contextualized as "doing good by doing well". Many studies also examine whether or not there is a trade-off between financial performance and sustainability investments (Renneboog, Ter Horst, and Zhang 2008). This means that making a profit is more important than benefitting the environment or the community. However, more recent analysis disputes the existence of any such trade-off. This was stated in a study by Friede, Busch, and Bassen, in 2015. For instance.

When ESG disclosures are sufficiently clear and informative, it can make investors more confident about the business operations. It sends a message to shareholders, creditors, and the broader capital market regarding the entity's risk management, organizational governance quality and stakeholder engagement practices (Flowers, 2022). While ESG disclosures will have certain aspects in common with financial information, they differ in many ways. One difference is in the type of disclosure information. For example, quantitative measures for ESG as a non-financial information have heterogeneous measurement practices

relative to financial information. In the same vein, comparability of ESG disclosures to financial reports information is weak. Assurance mechanisms for ESG disclosure vary greatly from the financial one. Although the ESG reports can be credible, what is unclear is the overall level of credibility. As a result, the information regarding ESG disclosure may not be useful for decision-making. The legitimacy theory and signaling theory propose other accounting theories. Due to, for example, the Global Reporting Initiative and emerging sustainability standards, regulators are increasingly emphasizing the standardization of ESG disclosures. In turn, sustainability accounting research has so far limited attention to the user-side processing. The decision-usefulness theory argues that accounting information must be actually processed and incorporated into judgement and decisions before it becomes useful. A significant gap in sustainability accounting literature is how a non-professional investor cognitively and behaviorally process and evaluate ESG disclosures as accounting information, with an absence of standardized measurement and assurance.

## **2.2 Cognitive Interpretation of ESG Accounting Information**

Cognitive components under the accounting-based framework can be defined as influencing the investor's ability to understand and interpret the environmental social and governance (ESG) disclosures. Various attributes of investors would plausibly enable such processing. Financial literacy equips investors with an essential knowledge of the reporting content. This knowledge allows investors to interpret complex risk narratives. They form a judgment on whether ESG ratchets up or down risk. They also benchmark ESG metrics against performance accounting.

Investors may interpret relevant accounting information differently. It largely depends on their risk perception. Those who see ESG disclosures as a possible signal of better risk management or long-run stability perceive the information as decision-relevant (Nguyen, Nguyen, and Nguyen 2019). In the same manner, it is the objective knowledge (that is, the knowledge of sustainability standards, the methodologies of rating providers, and the existence of ESG indices) and the subjective knowledge (i.e. whether investors think that they are well-informed about ESG reporting) which helps investors to separate useful from irrelevant information in non-financial disclosures and substantive from symbolic reporting (Amel-Zadeh and Serafeim 2018). Nevertheless, it is possible that cognitive processing is not entirely neutral. For instance, overconfidence bias or ambiguity aversion may impair accounting judgement. Due to their self-confidence, investors may be overly reliant to ESG disclosures. Alternatively, investors might ignore ESG disclosures because of ambiguity aversion, given the potential for uncertain effectiveness (Barber and Odean 2001). At the cognitive level, all these

processes take place. Importantly, this limits their impact on accounting information's interpretation.

## **2.3 Behavioral Evaluation and Accounting Judgement of ESG Disclosures**

The role of behaviour in ESG reporting further affects its credibility and integrity, in addition to cognitive interpretation. Social norms constitute informal standards that shape perceptions about which corporate actions are appropriate or desirable (Cialdini and Goldstein 2004). As a result, sustainability reporting that adheres to these behavioral norms will improve investor perception of disclosures as credible and useful for decision-making.

Ethical orientation impacts accountability judgement because it shapes investors' perceptions of the intent of an ESG disclosure. People with a strong ethical self-concept are more likely to challenge the authenticity of disclosures based on the morality of their language and actions relative to their professed values (Aquino and Reed 2002). Trust is an important behavioral mechanism in sustainability accounting where the assurance is not mandatory and so investors need to rely on the perception of credibility of the ESG label, rating, and third party assurance. For instance, research indicates that apprehension about greenwashing greatly enhances investor skepticism of disclosures pertaining to ESG, thereby diminishing their value as an information device (Dyck, Lins, Roth, and Wagner 2019).

Moreover, past sustainability reporting led to path-dependent learning. Investors who are especially focused on environmental, social, and governance issues already know that sustainability reporting means something. Path-dependence with heuristics which influence later interpretation (e.g., electronic card players Wason selection task). As such, the behaviour evaluations of past experience ("it either works or it does not work, do not bother me with the technical bits") may increase skepticism about.

## **2.4 Gender Differences in ESG Accounting Judgement**

Many studies have found that men are more likely to report higher levels of confidence in their financial knowledge than women. This may alter the way that they cognitively process and weight ESG information within their accounting judgements and can sometimes result in an overconfidence bias (Barber and Odean 2001). Whereas women, on average, display greater ethical sensitivity and greater risk awareness. This may increase the scrutiny over the credibility and transparency of ESG disclosures (Croson and Gneezy 2009). Gender may therefore be an important moderating lens with respect to the cognitive interpretation and assessment of the behavioural weight that is placed on ESG disclosures.

Research indicates that women tend to favor sustainability reporting that indicates societal and environmental liability more so than men, while men value risk-related performance-related signals embedded

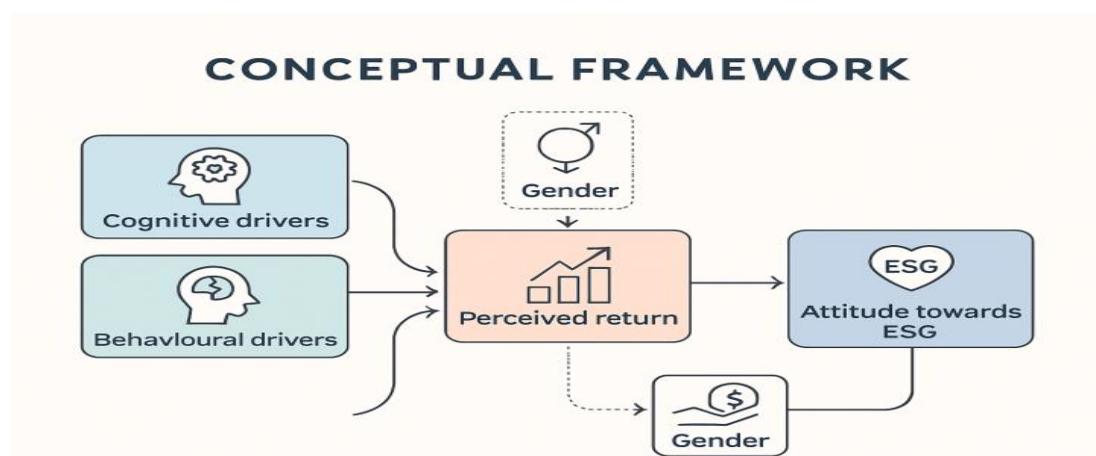
in ESG reporting more than women (Nofsinger, Sulaeman, and Varma 2019). Research findings reveal mixed results; that is, studies find no observable gender difference (Białkowski and Starks 2016) after controlling for structural factors, such as education and income. This maybe supported by a theory. Sustainability accounting literature theoretically lacks insight into how gender influences the interpretation, credibility and decision usefulness of ESG accounting information in a diversity of cultural and regulatory settings including the Asia-Pacific region.

### 2.5 Research Gap and Theoretical Positioning

To sum up, previous studies are aware of the cognitive and behavioral factors affecting ESG-related decision making, but conceptualized them from a behavior finance perspective and not an accounting-based one. There are very few studies that have examined ESG as an accounting disclosure along with information asymmetry and legitimacy. No research has also looked into how individual users make sense and understand sustainability information once its disclosed (cognitive interpretation). Moreover, gender differentials in ESG-related outcome variables do not get enough theorization from an accounting judgement perspective. This study endeavors to fill these gaps by converging cognitive interpretation and behavioral evaluation under a sustainability accounting lens. The present study employs structural equation modeling techniques to analyze the series of cognitive interpretation, behavioral evaluation and consequent judgement and choice from accounting information based on ESG disclosures and also examines gender-based heterogeneity in this process.

## 3. Theoretical Framework and Hypotheses

### 3.1 Theoretical Foundations



### 3.2 Cognitive Interpretation of ESG Accounting Disclosures

EPS plays a vital role in the investment world. It measures the present development of any company, along with its potential for growth and extension. It also helps investors assess the potential and strength of the

Sustainability accounting is the main theoretical foundation of the present study which takes the cue from the related theoretical perspectives. A study by Sundgren and Holm (2015) was done to analyze how accounting can be a vital component of sustainability. On the other hand, Lamberton (2005) believes reporting performance on ESG is an advance that should further understanding accounting. By applying four theories, this study provides insights into how investors use ESG disclosures based on their assessments of legitimacy, signalling, and usefulness. From the perspective of accounting, ESG reports are seen as accounting information that aims to reduce information asymmetry, enhance transparency, and create reliable signals of an organization's commitment to continuous value creation in a sustainable manner.

According to Anthony (2011), theories of decision usefulness argue that accounting information can change decisions if users assess the information's relevance and credibility. In addition, signaling theory hold that ESG disclosures are essential signals of firm quality and effectively signal that such firms possess attributes and risks that are long term. Legitimacy theory indicates that ESG disclosures may be seen another complement.

Investors' responses to ESG disclosures require both a cognitive and behavioral evaluation of accounting information. The cognitive processes help how we interpret and evaluate the relevance of ESG accounting metrics and contextualize them. The judgement on behavioral practices may also result into an evaluation of the belief, ethics and trustworthiness of the disclosures. The difference in usefulness and decision reactions to ESG accounting information can thus be explained by these two mechanisms.

company financially. An issuing company will always use the help of EPS to come to a conclusion regarding its share market value. EPS is the net earnings of any company, and so, an investor will always look at the details of EPS to get an idea of what return he will get per share. Earnings Per Share refers to the amount

payable to each ordinary shareholder once all the earnings have been allocated by the company. A company can return cash to shareholders through dividend or share buyback. The earnings may be current or cumulative in the case of preferred stock. Thus, to calculate EPS, use

According to decision-usefulness theory, mental capacity enables investors to evaluate whether ESG disclosures can significantly reduce information asymmetry and help in accounting-based decision-making. Accordingly, the following hypothesis is proposed:

H1: Cognitive interpretation of ESG accounting disclosures positively influences accounting-based ESG decision outcomes.

### **3.3 Behavioural Evaluation and Ethical Judgement of ESG Reporting**

The behavioral drivers have to do with the evaluative dimension of judgement that captures the perceptions of trust, ethical integrity, and legitimacy. The legitimacy of sustainability disclosure according to investors is determined by social norms (Cialdini and Goldstein 2004). When sustainability disclosure positively matches social norms, it helps to increase legitimacy. Investors' ethical orientation influences the degree they seek evidence of moral candour and value congruence through the examination of ESG disclosures (Aquino and Reed 2002). As a result, the credibility of the information provided about sustainability performance is impacted. The extent to which investors accept or reject ESG disclosure as a credible signal versus greenwash is driven by their reliance on ESG reporting frameworks, labels and rating agencies, especially in an assurance environment dominated by limited assurance. Analysis of behavior's is used to determine whether ESG reporting is accepted as reliable accounting signals from a signaling and legitimacy theory perspective. Where trust and ethical judgement is high, that ESG reporting is more likely to be used in more accounting-based decisions. Therefore the following hypothesis is advised

H2: Behavioral evaluation of ESG reporting, reflected in trust and ethical judgement, positively influences accounting-based ESG decision outcomes.

### **3.4 Mediating Role of Attitude and Perceived Return**

The investor's attitude toward ESG accounting information reflects a assessment of the usefulness and relevance of sustainability disclosures on a holistic basis. The decision usefulness theory states, a positive attitude shows investors believe the ESG information is useful, trustworthy and relating to decision-making. Earlier research indicates that the interpretation of the information is the cognitive aspect of attitude, while the application of the information is the behavioral side of attitude.

When investors assess the extent to which ESG disclosures signal financial viability and potential for value creation over the long-run, especially when accountable to capital markets, it tends to be more

*Available online at: <https://jtar.org>*

outcome-focused than measures of what investors actually do. From a signaling viewpoint, ESG reporting could be seen as signaling likely performance outcomes, which in the presence of a credible expectation, leads to an increase in discount rates with. Accordingly, the following mediation hypotheses are proposed:

H3: Attitude towards ESG accounting information mediates the relationship between cognitive interpretation of ESG disclosures and accounting-based ESG decision outcomes.

H4: Attitude towards ESG accounting information mediates the relationship between behavioral evaluation of ESG reporting and accounting-based ESG decision outcomes.

H5: Perceived return mediates the relationship between cognitive interpretation of ESG disclosures and accounting-based ESG decision outcomes.

H6: Perceived return mediates the relationship between behavioral evaluation of ESG reporting and accounting-based ESG decision outcomes.

### **3.5 Moderating Role of Gender in Accounting Judgement**

Using a theoretical approach, gender either heightens or dampens accounting judgement and ethical evaluation as a systematic behavioral difference rather than simply influencing investment preference to not difference in judgement. Research indicates that women appear to show a greater ethical sensitivity and responsiveness towards social accountability, which may strengthen women's appraisal of the behavioral veracity and social legitimacy of ESG disclosures (Croson and Gneezy 2009). Conversely, men tend to exhibit greater confidence in financial analysis and risk assessment, which may enhance risk assessment and ESG evaluation. In fact, this confidence and thought process may be reflected in overconfidence in accounting judgement (Barber and Odean 2001).

Gender appears to influence the cognitive processing and behavioral evaluation of ESG disclosures, before these disclosures are integrated into accounting-based decisions. Accordingly, the following hypotheses are proposed:

H7: Gender moderates the relationship between cognitive interpretation of ESG accounting disclosures and accounting-based ESG decision outcomes, such that the relationship is stronger for male investors.

H8: Gender moderates the relationship between behavioral evaluation of ESG reporting and accounting-based ESG decision outcomes, such that the relationship is stronger for female investors.

## **4. Research Methodology**

This research uses a quantitative theory-testing design to study the the cognitive processing and behavioral evaluation that investors make of ESG accounting disclosures. The investment behaviour prediction isn't the CenterPoint of the research design, but the focus is on testing an accounting model with a theoretical

grounding that explains how investors might cognitively process & behaviorally assess ESG information's credibility. A survey that obtains cross-sectional evaluative responses, in particular, was administered to obtain the data on investors' processing and evaluation of ESG accounting disclosures issued in the Asia-Pacific context, which is yet relatively less developed in terms of sustainability reporting and assurance practices.

The primary analytical technique used is structural equation modelling (SEM). This technique has long been deemed suitable for the evaluation of theoretically specified relationships among latent accounting constructs, including information interpretation, disclosure credibility and decision usefulness (e.g. Hair, Hult, Ringle and Sarstedt 2022). SEM allows simultaneous evaluation of measurement properties of ESG-related constructs and structural relations specified by sustainability accounting theory, as well as relevant mediated and moderated mechanisms (Hair, Hult, Ringle and Sarstedt 2022). This study applies SEM as a theory-confirmatory method to confirm the empirical validity of the proposed accounting.

#### **4.1 Sampling and Data Collection**

The sample for the respondents comprised individual investors who must have directly experienced making investment decisions, including mutual fund, equity or any other capital market investment. Proper users of accounting disclosures relating to ESG are investors such due to their generally being accustomed to making judgements with Financial Reporting or Non-Financial Reporting or both. Besides, another selection of theory a concentration 567 words who is based particularly on the gender-based differences in accounting judgement has collected the sample in order to obtain almost equal number of male and female respondents (almost equal, as per the identified)

Using a structured questionnaire, data was collected from online investment forums and investor education programmes in premier Asia-Pacific financial centres namely Singapore, India and Hong Kong. These three locations provide an interesting set of heterogeneous contexts in terms of ESG reporting exposure and regulatory maturity. Due to the need for multi-group analysis and theory-testing through SEM, a sample size of at least 400 would be deemed sufficient. A consistent extrapolation from literature was 200 observations per group to guarantee stable estimation of a multi-group structural model (Kline 2016). In a survey that involved the use of questionnaires, one sample of  $n = 450$  was examined.

#### **4.2 Measurement of Constructs**

The constructs of the follow-up study were operationalized using multi-item measures adopted from past studies (after a few modifications). Also, the measures were validated. In addition, all of the items used a five-point Likert-scale ranging from 1 – strongly disagree to 5 – strongly agree. According to a recent

*Available online at: <https://jtar.org>*

literature review, four major theoretical drivers of ESG driven disclosure can be identified in the literature cognitive, behavioral, social and organizational.

Here is a breakdown of the important cognitive drivers of ESG disclosure. Cognitive drivers captured investors' ability to understand ESG disclosures. It included financial literacy (van Rooij et al. 2011), risk perception inferred from ESG reporting (Nguyen et al. 2020), and ESG knowledge reflecting familiarity with sustainability standards and reporting practices (Amel-Zadeh and Serafeim 2018).

The mechanisms of accounting judgement were represented by behavioral drivers. The ESG disclosures' social legitimacy were included (Cialdini and Goldstein 2004). The assessment of ESG accounting information was carried out to capture the overall evaluation by investors taking the view of the sustainability disclosure whether it is relevant and useful. The measure was adapted from Ajzen (1991) and reworded to suit the study context. An ESG disclosure signal associated with an outcome (perceived return) was used. These items were selected for this construct Friede, Busch and Bassen (2015). The dependent construct is an accounting-based ESG decision outcome. We based our dependent variable's measurement on the work of Nofsinger, Sulaeman, and Varma (2019). Indicators for this construct capture the probability that the investors will utilize the ESG disclosures in their future decisions in.

#### **4.3 Data Screening and Assumptions**

The data was screened for suitability for theory-testing through SEM before model estimation. Any case which had missing data (less than 5% of responses) on any of the variables was subjected to full information maximum likelihood (FIML) estimation responses. FIML estimation responses is the accepted method of dealing with missing data in accounting research. In addition, Mahalanobis distance was computed to identify multivariate outliers at  $p < 0.001$ . Cases that were classified as extreme were deleted since.

The skewness and kurtosis statistics were used to tests for normality of all observed indicators. For small deviations from normality, the robust maximum likelihood (MLR) estimator is used, which produces standard errors and a  $\chi^2$  test statistic that is accurate and not biased. As a result, the distributional characteristics of the estimation formulation were formed by utilizing business and economic information quite Subject.

#### **4.4 Analytical Strategy**

The study adhered to a theory-validation sequence outlining the pursuit of research. To demonstrate empirical justification of the constructs and check their psychometric properties the measurement model was first evaluated. The study captured an operationalization framework to assess ESG-related accounting constructs that is not only constructively-used but also strongly vetted by select sectors. Roslender and followed the

internal theory-validation step. The estimation of the structural model was next. The purpose of the study was to test the hypothesized relationships. Furthermore, it examined the mediation supposed by the attitude and perceived return in determining the accounting decision outcome through cognitive interpretation and behavioral evaluation. Further, model fit indices and explanatory power were explored.

After that, we performed a third, multi-group SEM on accounting judgment by gender. The study first tested for configural invariance before assessing metric invariance and finally tested scalar (aka strong) invariance, which is a strict test of invariance between two groups. A goodness-of-fit test is considered acceptable when  $\Delta CFI > -0.01$ . To increase strength of the overall model, an additional analysis using PLS was conducted to ensure the structural relationships' stability. Harman's single-factor test and the common

latent factor approach (Podsakoff et al. 2012) were employed to assess possible common method bias. When considered together, these strategies highlight a focus on conceptual model validation and theory detection, and not exploratory or predictive modelling.

## 5. Results

The results of this study emphasize the relevance of ESG accounting disclosure in decision usefulness and credibility than having predictive ability of investment behaviour. In line with the theoretical focus of this research, the results are interpreted in terms of cognitive interpretation and behavioral evaluation of ESG information by investors in an accounting-based judgement process. Now we look at the results. To begin with, we first establish the measurement model followed by the structural relations of constructs, mediation effects and gender effects in accounting judgement

Variable	Category	Frequency	Percentage (%)
Gender	Male	233	51.5
	Female	219	48.5
Age (Years)	21-30	142	31.4
	31-40	186	41.2
	41-50	93	20.6
	51 and above	31	6.8
Education	Undergraduate	173	38.3
	Postgraduate	192	42.5
	Professional/Doctorate	87	19.2
Investment Experience	< 5 years	137	30.3
	5-10 years	187	41.4
	> 10 years	128	28.3

Table 1: Demographic Profile of Respondents (n = 452)

### 5.1 Measurement Model Assessment

The measurement was validated by carrying out confirmatory factor analysis on latent constructs representing cognitive interpretation and behavioral evaluation of ESG accounting information. As indicated by the values of  $\chi^2/df$ , CFI, RMSEA and SRMR (2.18, 0.95, 0.05 and 0.04, respectively), the data fitted well the measurement model.

The proposed construct structure is an adequate fit to the data and can represent other constructs. The factor loadings of the items were above the acceptable fixed value of 0.60 and therefore confirm the reliability of items. The reliability of all constructs was above 0.80 which was further illustrated by this evidence. The average variance extracted for the constructs further revealed value that were more than levels recommended

of 0.50 for all the constructs thereby confirming reliability and validity. Analysis of the standardized factor loadings confirms that the four measurement items used in present study, which the different scholars developed to measure the accounting constructs, which present study embedded in two of its hypotheses.

We used the Fornell-Larcker criterion and HTMT ratios to test discriminant validity. In all instances, the square of the root of the AVE was greater than the correlations between inter-constructs and HTMT result was below the robust .85. The surveyed person differentiates between types of processing accounting information on environmental, social and governance (ESG). For instance, it distinguishes processing the information of a disclosure from processing the truth of the disclose.

Construct	Mean	SD	Skewness	Kurtosis
Financial Literacy	3.67	0.74	-0.32	-0.41
Risk Perception	3.21	0.83	-0.14	-0.38
ESG Knowledge	3.92	0.71	-0.27	-0.36
Social Norms	3.74	0.77	-0.35	-0.44
Ethical Orientation	4.08	0.65	-0.42	-0.39

Trust in ESG Labels	3.69	0.72	-0.29	-0.40
Prior Investment Behaviour	3.55	0.81	-0.21	-0.31
Attitude towards ESG	3.87	0.70	-0.33	-0.29
Perceived Return	3.49	0.75	-0.25	-0.35
ESG Investment Intention	3.95	0.73	-0.38	-0.28

Table 2:Descriptive Statistics of Constructs

### 5.2 Structural Model Results: ESG Accounting Information Processing

Paper boxes are made of high-quality paper which makes these boxes very versatile. The boxes can be printed in a multi-colour to make the packed material striking enough to grab the attention of the customers. These designs do not contain toxic chemicals and have rounded edges to ensure safety. The die-cut handles provided make the box quite convenient to carry. The possibilities to customize the paper boxes are almost limitless. There could be a printed marking indicating shelf life at its bottom.

#### 5.2.1. Examining ESG Disclosures Through the Mind.

According to the study, investors with more financial expertise, improved risk understanding, and a heightened consciousness of these standards see ESG

disclosures, which they associate with accounting, as decision-useful. The impact of ESG performance on cost of debt is positive and significant. From the perspective of decision usefulness, the findings highlight the role of investor information processing capacity in transforming ESG disclosures into accounting judgments.

Risk perception is largely cognitive in nature. Accounting information that effectively shows risk management is more credible than other accounting information. In short ESG reporting was akin to a risk disclosure. Sustainability information helps in mitigating uncertainty and information asymmetry. Additionally, a sound understanding of ESG

metrics goes hand in hand with financial proficiency. Consequently, this renders the disclosure increasingly relevant

Construct	CR	AVE	Cronbach's $\alpha$	Factor Loading Range
Financial Literacy	0.86	0.61	0.83	0.68 - 0.82
Risk Perception	0.84	0.58	0.81	0.64 - 0.80
ESG Knowledge	0.88	0.65	0.85	0.71 - 0.84
Social Norms	0.87	0.62	0.84	0.69 - 0.83
Ethical Orientation	0.90	0.68	0.87	0.73 - 0.86
Trust in ESG Labels	0.85	0.59	0.82	0.66 - 0.81
Prior Investment Behaviour	0.86	0.61	0.83	0.68 - 0.82
Attitude towards ESG	0.89	0.67	0.86	0.72 - 0.85
Perceived Return	0.87	0.63	0.84	0.70 - 0.83
ESG Investment Intention	0.91	0.69	0.88	0.74 - 0.87

Table 3:Reliability and Convergent Validity

**5.2.2. Behavioral Evaluation of ESG Reporting:** The behavioral evaluation construct is significantly affected by the Accounting-based ESG decision as shown by  $\beta$  coefficient value of 0.25 and p-level of less than 0.001. Moreover, it proved more impactful than cognitive interpretation. Consequently, a trustworthy account and moral decision is playing crucial role in accounting for sustainability. This is especially the case where the sustainability choice supported by the accountant requires ESG information that is believed to be provided ethically rather than cognitively interpreted. The usefulness of either ESG disclosures or private ratings is determined by a behavioral signal. Users feel ESG information is more useful in their decision-making when users consider it to be made in good faith and trustworthy, and not “green” washed. The strong

influence of ethical judgement behavioral signal means investors checks if the organizations ESG disclosures came from organizational accountability in the first place, or otherwise require mere symbolic compliances. The disclosure must be perceived as genuine and trustworthy for it to be accepted as a valid signal according to legitimacy and signaling theories which have a provision related to it in accounting.

Ethical judgement and trust, important accounting evaluative processes, interestingly go beyond behavioral explanations, highlighting what these findings highlight. Whether ESG disclosures are dependable components in assessment relies on these behaviours. In terms of usefulness of sustainability reporting, magnitude or compliance are not the only drivers. We need to note the user side too.

Construct	FL	RP	ESGK	SN	EO	TIL	PIB	ATT	PR	EII
Financial Literacy (FL)	0.78									

Risk Perception (RP)	0.34	0.76						
ESG Knowledge (ESGK)	0.42	0.28	0.81					
Social Norms (SN)	0.39	0.30	0.36	0.79				
Ethical Orientation (EO)	0.41	0.27	0.38	0.33	0.82			
Trust in ESG Labels (TIL)	0.36	0.25	0.35	0.40	0.37	0.77		
Prior Investment Behaviour (PIB)	0.38	0.32	0.29	0.34	0.30	0.33	0.78	
Attitude towards ESG (ATT)	0.43	0.29	0.41	0.37	0.42	0.39	0.36	0.82
Perceived Return (PR)	0.35	0.31	0.33	0.28	0.29	0.34	0.32	0.37
ESG Investment Intention (EII)	0.47	0.30	0.44	0.39	0.46	0.42	0.38	0.49
							0.41	0.83

Table 4: Discriminant Validity (Fornell-Larcker Criterion)

### 5.3 Mediating Effects: Attitude and Perceived Return

This test evaluated the mediation effect of attitude towards ESG accounting information and perceived return in the process of cognitive interpretation and behavioral evaluation to the outcome of accounting-based decision. The dependent construct was partially mediated by attitude towards ESG disclosures in the link between cognitive interpretation and behavioral evaluation. Investors' overall appraisal on the usefulness and relevance of ESG disclosure serves as an instrumental device through which disclosure interpretation impacts whose accounting judgements. The indirect effect of the perceived return was statistically significant but weaker. The enhanced

perception that ESG disclosure indicated that a developable or competitive financial performance would increase the likelihood that participants capitalized on the signal in their choice of accounting figures. In the long term, different aspects of stabilization are observed. The smaller effect size indicates that while performance signaling remains relevant, it is not as important as credibility and usefulness of disclosure for the impact that ESG information has on accounting judgements. This research proposes that an analysis of ESG study reporting on the basis of promise only will miss out on transparent, credible, useful disclosures, while overvaluing promise that is not transparent, credible and/or useful in decision-making.

Indirect path	Indirect effect ( $\beta$ )	SE	95% CI	p
Cognitive → Attitude → ESG intention (H3)	0.118	0.023	0.075 to 0.164	0.000
Behavioural → Attitude → ESG intention (H4)	0.137	0.025	0.088 to 0.190	0.000
Cognitive → Perceived return → ESG intention (H5)	0.043	0.014	0.020 to 0.072	0.001
Behavioural → Perceived return → ESG intention (H6)	0.035	0.012	0.014 to 0.062	0.002

Table 5: Mediation results (indirect effects, bootstrap 5,000)

### 5.4 Gender-Based Differences in Accounting Judgement

We carry out a multi-group SEM to determine if ESG accounting information processing and evaluation differs by gender. After testing for configurational, metric and scalar invariance, we find that the constructs have the same meaning for male and female respondents. Structural paths can be meaningfully compared.

Our results indicate that gender differences in the assessment of ESG disclosures are experienced: the behavioral assessment pathway (particularly trust and ethical judgement) had a stronger effect for female respondents on the accounting-based ESG decision outcome of the setting. Consequently, when assessing ESG reporting, females may tend to be more critical of the credibility, morality, and authenticity of the disclosure. This means more attention to ethical accountability and transparency behind climate and sustainability reporting from an accounting perspective. For male respondents, the pathway of cognitive interpretation appears to be stronger than that of analysis of risk perception signal. Male investors tended to use ESG disclosures in accounting judgements when such information reflected risk reduction, governance quality, and long-term financial success. The differences in accounting judgement

emphasis rather than differences in sustainability preferences is reflected in these patterns which demonstrate the necessity to recognize differences among users of ESG information.

### 5.5 Summary of Key Accounting-Oriented Findings

In general, the results provide substantial empirical support for the proposed framework. The processing of ESG disclosures does not occur in a consistent and uniform manner. According to me, more and more serious negotiators have slogged away every detail of each conceivable moratorium issue and various aspects of the overall deal. With respect to accounting-related signals, the most important determinants of usefulness of disclosure are trustworthiness and ethical legitimacy of ESG reporting along with risk-related information contained in the ESG metrics.

As forecasted by Deegan (2014) and as argued in this paper, one would expect the forward-looking information score level to be stronger than the backward-looking information score level. However, the outcomes show something else. The backward-looking information level score has been seen higher than that of forward-looking information level score.

Path	Standardised $\beta$	SE	z	p	95% CI (bootstrap)
Cognitive drivers → ESG intention (H1)	0.312	0.047	6.638	0.000	0.221 to 0.403
Behavioural drivers → ESG intention (H2)	0.452	0.039	11.590	0.000	0.376 to 0.528
Cognitive drivers → Attitude	0.428	0.043	9.953	0.000	0.344 to 0.512
Behavioural drivers → Attitude	0.497	0.036	13.806	0.000	0.427 to 0.567
Cognitive drivers → Perceived return	0.289	0.045	6.422	0.000	0.201 to 0.377
Behavioural drivers → Perceived return	0.235	0.042	5.595	0.000	0.153 to 0.317
Attitude → ESG intention	0.276	0.046	6.000	0.000	0.186 to 0.366
Perceived return → ESG intention	0.148	0.039	3.795	0.000	0.071 to 0.225

Table 6: Structural path estimates (direct effects)

## 6. Discussion

Our research adds to essays on sustainability accounting by focusing on cognitive interpretation and behavioral evaluation of ESG disclosures as accounting information by investors and the gender-based accounting judgement heterogeneity in a behavioral context. Our findings show that ESG disclosures are decision useful accounting signals. Users are able to integrate useful ESG disclosures into their decision-making processes. However, the efficacy of these decision-useful signals depends on users interpreting disclosure content, disclosure credibility, and ethical integrity. Rather than conceptualizing ESG outcomes as a non-cognitive investment preference or behavioral propensity. The next discussion will focus the contribution of the study to accounting theory, sustainability reporting practices and standards. We will view gender disparities as discrepancies in accounting judgment.

The behavioral evaluation is the most important contributor towards perceived usefulness of ESG disclosures. The trust and ethical judgement of ESG reporting is measured through the behavioral evaluation. The frequency or reference to a reporting framework of sustainability information does not make it decision relevant from an accounting perspective. Incorporated in accounting-based judgement only when trustworthy, transparent and ethically authentic are ESG disclosures rather than legal documents. So, the usefulness of information for decision-making theory is extended. Thus, it has been shown that usefulness under non-financial reporting does not depend on technical disclosure alone. Moreover, the importance of trust and ethical judgement is compatible with legitimacy and signaling theories. This is because ESG disclosures need to emit convincing signals in terms of real organizational commitment towards sustainability, to be considered reliable accounting information

Model	$\chi^2$ (df)	$\chi^2/df$	CFI	TLI	RMSEA (90% CI)	SRMR
Measurement (CFA)	842.6 (386)	2.18	0.943	0.936	0.051 (0.046–0.056)	0.046
Structural model	921.3 (394)	2.34	0.937	0.930	0.055 (0.050–0.060)	0.049

Table 7: Model fit comparison

Psychology is used in the sales and marketing of a company that analyzes human behaviour. It is the best means to predict human behaviour based on human behaviour. Being a consumer is a thing that happens naturally but being a clever consumer is what we should always be looking at trying to be. These days marketing logic is not sufficient to sell a product. The phrase 'the why of people' indicates that marketing must continuously target getting better insight and knowledge in the 'why' of person. Let's take a look at how this works.

People feel an attachment to something and thus it is a natural behaviour of mankind. So if the consumers start to become the same way towards a company, then you are targeting the right career auditor. It is easier to pick a preferred brand than to pick a preferred product from each company as there would hardly be any difference in the ratings among all the companies. As a result, all companies will always try to impose the trademark or special identity of their goods to make it popular among

the consumers. You can notice how humans are motivated to remain loyal and express their choices. Marketers often create products these days from a consumer angle and not the other way round. In fact, even Steve Jobs had the same effect on consumers they trusted his taste more than their own. In such relationships, perceived return also plays the role of a mediator, but less. This suggests that performance signaling still matters, but more 'narrow' readings, which see ESG disclosures as 'mere' performance signals, are not sustained. Instead, the outcome supports older accounting arguments that sustainability disclosures should emphasize faithful representation and relevance, rather than 'overly optimistic' signaling.

A major contribution of this study is the view of gender differences as differing accounting judgment not differing behaviour choice or preference. The multi-groups analysis suggests that women tend to derive more use from trust and ethical judgement than men in the evaluation of ESG disclosures. This means that female

investors are more likely to have a critical view of the disclosure's validity and the company's ethical or moral/signaling legitimacy. On the other hand, male investors are more likely to invoke cognitive inference and interpretation as we observe them relying on ESG reporting for risk signals. The differences do not imply that either sex makes better or worse judgements. On the contrary, they provide support for the existence of various differences and heterogeneity in their uses as well as the processing of accounting information. User bias affects investor judgment on non-financial disclosures, according to new research on illustrative corporate disclosures conducted in Canada.

The results are also important for sustainability reporting, assurance and standard setting. For example, the overall weight of credibility and ethical judgement signals suggests that current ESG reporting regimes may be unfit, at least if they privilege volume over value. Standard setters and regulators must take steps forward on clearer measurement choices, greater comparability and enhanced assurance protocols to reduce skepticism and information asymmetry. It is important for a credibility of sustainability reporting, proper ESG disclosures, and information with the help of third-party assurance. Also, to make them more useful for investors (including a wide range of institutional investors), reporting general frameworks should tackle the relationship between the ESG metrics, risks, governance and long-value.

The current study makes a contribution to the sustainability accounting literature at a general theoretical level through an empirical validation of a micro-level accounting information-processing framework (Otley 2016). In particular, the interpretation of cognitive, the evaluation of behaviour, the conjectural judgement mechanism, and heterogeneity (gender) offer a more nuanced explanation for sustainability accounting than 'adoption'. This meets repeated requests for sustainability accounting research with micro-foundations and augments existing descriptive and predictive work through the validation of data and theory.

Our findings suggest that there are additional elements of ESG reporting which high quality firms and their auditors opt to communicate that may be key to informing the debate around ESG reporting and how high quality ESG reporting should be defined. It is not only the impact of the information but also how that information is perceived, trusted and ethically judged those matters, not only for ESG but with all information and how it is communicated. Moreover, we provide evidence that supports the idea that there are gender-related differences in accounting judgement. Hence fully assured sustainability reporting that has credibility needs to happen. Formulating ESG as being decision-useful.

## **7. Implications**

The results of this study have important ramifications for accounting theory, ESG accounting standard and

*Available online at: <https://jtar.org>*

disclosure design, accounting education and ethical practice. Viewing ESG through the lens of decision-useful accounting information which can impact investment decisions rather than an investment preference is directly relevant to the development of sustainability accounting research and practice.

### **7.1 Implications for Accounting Theory**

The research develops decision usefulness theory as applied to ESG disclosures to advance sustainability accounting literature will make an important contribution. Traditionally, accounting theory is concerned with usefulness of financial information to decision-makers. The research findings suggest that information users are putting the same, if not more, challenge on non-financial ESG disclosures. Above all, with respect to ESG, usefulness is not merely a result of existence or (technical) compliance but results from the complex interpretation, trust and ethical assessment by users of the disclosures.

The signaling and legitimacy components of the study complete higher levels. ESG disclosure basically an accounting signal, though not always perceived and used in a credible and sincerely moral way. Information asymmetry is only reduced by signals in ESG reports, mainly on risk appetite, quality of governance and long-term sustainability. In order to avoid tokenism, the signals must be credible, authentic and verifiable. By focusing my analysis not on the producers of disclosures, but on the users thereof, this theoretical insight shifts attention to the micro-foundations of sustainability accounting.

Obviously, that opens new avenues of accounting research on a certain heterogeneity on the user side. As such, if information has its own monetary value, its treatment is not independent of demographic characteristics. As mentioned in previous studies, hypothesis tests are performed based on heteroscedasticity-consistent standard errors. Furthermore, the measurement's precision underwent equalizing correction according to the size of the firms.

### **7.2 Implications for ESG Accounting Standards and Disclosure Design**

The results are significant for ESG accounting standards, reporting frameworks and the design of disclosures. Trust and ethical judgment exerts a significant effect hence it is argued that current practices may not be effective if they stress more on quantity of disclosures than quality, comparability and assurance. The decision usefulness of ESG information would improve if the standard setters focus on strengthening the qualitative characteristics of the information - especially faithful representation, verifiability, and consistency.

According to researchers, ESG disclosures are more potent when signals related to risk and governance are explicit. This confirms that sustainability reporting as it stands now is a risk disclosure form of financial

reporting. There are researches which also suggest that standards characterising ESG must ensure the tighter integration of sustainability with the accounting narrative rather than viewing ESG as a festival or add-on report.

Assurance looks to be an important implication. Trust is fundamental in assessing ESG disclosures, and hence, assurance of sustainability reporting by a third party can be significant.

in validating ESG information as reliable accounting data. Regulators and standard setting bodies should encourage or require independent assurance mechanism to lessen the greenwashing and information asymmetry problem. In addition, disclosure rules must clarify materiality, measurement and narrative explanation to allow consistent judgement by diverse users.

Disclosure design should also align with differences among users. They range from those who trust ESG ratings to those who discard them. As such reporting formats need to strike technical accuracy, intelligibility, as well as transparency. To enhance accessibility, but without sacrificing accounting quality, layered disclosure, additional explanatory notes and clearer links between ESG metrics and financial accounting results might help.

### **7.3 Implications for Accounting Education and Ethical Accounting Practice**

The findings of this research are useful for accountancy education and profession. As ESG reporting embeds itself in the accounting profession, accountants must build on their measurement skills. They should be able to make judgments and maintain an open mind regarding sustainability reporting.

Accounting programs should focus more on sustainability accounting, problems relating to ESG measurement, assurance, and evaluating ethics of non-financial disclosures. The users of ESG reports evaluate their moral intention and believability critically; accordingly, future accountants will need training to understand how the choice of reporting affects trust and legitimacy. Learning on greenwashing, assurance failure, and ethical choices in ESG reporting through case studies can help build desired competencies.

When viewed from a professional practice lens, the results are reflective of the accountability of accountants as a guardian of credibility. The conceptualization of ethical accounting practice entails resisting symbolic disclosure and ensuring that environmental, social and governance-aided (ESG) reports are a veritable reflection of the firm's performance and impact (Abubakar et al., 2022). Accountancy bodies should update the scope of the code of ethics on sustainable reporting and encourage continuous professional development on sustainability assurance and ethical accountability.

To sum up, the disparity of accounting judgement across sexes reflect the promise of diversity and inclusivity. The diverse perspectives within the accounting profession can improve the quality of disclosures, ethical sensitivity

and credibility of sustainability reporting. Consequently, they can enhance the decision usefulness of the ESG accounting information for a broader range of users.

What most people think of as sustainability communication is actually an accounting information system, and ESG reporting does, not end there. All function in usefulness, credibility, assurance and ethical judgement. The study thereby seeks to further sustainability accounting theorization and that does so in a way which can improve ESG reporting methodology development and ethical accounting practice improvement in an age of sustainability reporting.

### **8. Conclusion**

The study disconnects the assumptions that ESG are merely discretionary investment preferences. In particular, it recognizes ESG as forbearers of contemporary accounting and reporting system. The present research uniquely demonstrates how individual investors cognitively process and behaviorally respond to ESG disclosure. When you show consideration for people and planet, you succeed. When you demonstrate genuine concern for others, it shows in your organization. Equally important are metalinguistic knowledge followed by the metacognitive regulation. Conversely, this leads to the development of intricate metacognitive knowledge and subsequent intricate metacognitive regulation. Turning this over and combining with existing knowledge and the like. Research shows ESG disclosures, a decision-relevant accounting signals, offer varying degrees of usefulness based on users' abilities to appraise disclosure content, and how users judge disclosure credibility and ethicality. This research enhances the conceptual scope of sustainability reporting from the decision usefulness paradigm. The usefulness of ESG disclosure does not reside within the accounting information but derives from accounting judgement at the user side. This study makes a contribution to signaling theory and legitimacy theory by showing empirically that ESG reporting reduces information asymmetry only where disclosures are viewed as authentic, transparent and credible. As a result, credibility and ethical judgement are at the core of 'allowing' or 'denying' in principle ESG information. The theoretical contribution that the study makes is the way it treats gender as a source of heterogeneity in accounting judgement. According to the study, gender differences should not be interpreted as differences in sustainability preferences or behavioral affinity. It further claims that there are systematic differences in the weighting and evaluation of ESG disclosures in accounting judgment. Divides users of accounting information into two groups: those with conflict and those without. Besides, it accentuates the need for reporting and communications practices, which involve accounting judgement schemas that are diverse and unique to improve inclusivity and transparency. By empirically validating a micro-level framework for the processing of accounting information, the study

provides three important theoretical contributions to sustainability accounting. The use of ESG disclosures begins with the understanding that a variety of investors' decisions do not respond similarly. Consequently, it demonstrates that trust, ethical judgement and assurance are as much the drivers of effective ESG reporting as technically correct disclosures. Ultimately, it defines ESG reporting as a functional extension of the accounting system that enables long term value communicating, risk mitigation, and accountability to wider stakeholders. All in all, our analysis supports the comprehension of ESG as an accounting construct and not as an investment story. Our intention primarily is to make a theoretical contribution to sustainability accounting and reporting literature focused on its decision usefulness, credibility of disclosure and ethical accountability. Due to the enhancement of sustainability disclosure with an accounting lens, accounting rules and financial reporting frameworks worldwide are demanding more detailed scrutinization of ESG reporting. Hence, future research could extend our work to further probe how different users comprehend, trust and rely upon these disclosures to render greater theoretical and practical relevancy in accounting to aid in the solution of complex sustainability problems.

#### References

1. Ajzen, I. (1991). The theory of planned behaviour. *Organizational Behaviour and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
2. Amel-Zadeh, A., & Serafeim, G. (2018). Why and how investors use ESG information: Evidence from a global survey. *Financial Analysts Journal*, 74(3), 87–103. <https://doi.org/10.2469/faj.v74.n3.2>
3. Assaf, C., Monne, J., & Harriet, L. (2025). Gender and ESG investing: Same behaviour but different motivations. *International Review of Financial Analysis*, 104, 104327. <https://doi.org/10.1016/j.irfa.2025.104327>
4. Baker, H. K., & Nofsinger, J. R. (2012). Socially responsible funds and investor preferences. *Journal of Investing*, 21(3), 111–122. <https://doi.org/10.3905/joi.2012.21.3.111>
5. Barber, B. M., & Odean, T. (2001). Boys will be boys: Gender, overconfidence, and common stock investment. *Quarterly Journal of Economics*, 116(1), 261–292. <https://doi.org/10.1162/003355301556400>
6. Cialdini, R. B., & Goldstein, N. J. (2004). Social influence: Compliance and conformity. *Annual Review of Psychology*, 55, 591–621. <https://doi.org/10.1146/annurev.psych.55.090902.142015>
7. Croson, R., & Gneezy, U. (2009). Gender differences in preferences. *Journal of Economic Literature*, 47(2), 448–474. <https://doi.org/10.1257/jel.47.2.448>
8. Dinh, T. H. (2025). Factors associated with ESG investment attitude. *Journal of Corporate Finance*, 35, 101–118. <https://doi.org/10.1002/cfp.2.1201>
9. Dyck, A., Lins, K. V., Roth, L., & Wagner, H. F. (2019). Do institutional investors drive corporate social responsibility? International evidence. *Journal of Financial Economics*, 131(3), 693–714. <https://doi.org/10.1016/j.jfineco.2018.11.003>
10. East, R. (1993). Investment decisions and the theory of planned behaviour. *Journal of Economic Psychology*, 14(2), 337–375. [https://doi.org/10.1016/0167-4870\(93\)90007-4](https://doi.org/10.1016/0167-4870(93)90007-4)
11. Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50. <https://doi.org/10.1177/002224378101800104>
12. Friede, G., Busch, T., & Bassen, A. (2015). ESG and financial performance: Aggregated evidence from more than 2000 empirical studies. *Journal of Sustainable Finance & Investment*, 5(4), 210–233. <https://doi.org/10.1080/20430795.2015.1118917>
13. Gopi, M., & Ramayah, T. (2007). Applicability of theory of planned behaviour in predicting intention to trade online. *International Journal of Emerging Markets*, 2(4), 348–360. <https://doi.org/10.1108/17468800710828653>
14. Harman, H. H. (1976). Modern factor analysis (3rd ed.). University of Chicago Press.
15. Hirschel, J.-F., & Kramer, M. (2021). Responsible Investment Brand Index (RIBI) Fourth Edition. Bloomberg. <https://ri-brandindex.org>
16. Kuo, Y.-F., & Young, S.-H. (2008). The intention-action gap in knowledge sharing practices. *Journal of Knowledge Management*, 12(1), 86–100. <https://doi.org/10.1108/13673270810852473>
17. Lane, B., & Potter, R. (2007). The adoption of cleaner vehicles: Exploring the role of attitudes and perceptions. *Transportation Research Part D: Transport and Environment*, 12(6), 429–439. <https://doi.org/10.1016/j.trd.2007.08.003>
18. Montaño, D. E., Kasprzyk, D., & Taplin, S. (2002). The Theory of Planned Behaviour and HIV preventive behaviour. In K. Glanz, B. K. Rimer, & F. M. Lewis (Eds.), *Health behaviour and health education: Theory, research, and practice* (3rd ed., pp. 259–311). Jossey-Bass.
19. Nofsinger, J. R., Sulaeman, J., & Varma, A. (2019). Do women invest differently than men? *International Review of Finance*, 19(3), 399–409. <https://doi.org/10.1111/irfi.12185>
20. Schulte, E., Scheller, F., Sloot, D., & Bruckner, T. (2021). A meta-analysis of residential PV adoption: The important role of perceived benefits, intentions and antecedents in solar energy acceptance. *Renewable and Sustainable Energy Reviews*, 135, 110185. <https://doi.org/10.1016/j.rser.2020.110185>

21. van Rooij, M., Lusardi, A., & Alessie, R. (2011). Financial literacy and stock market participation. *Journal of Financial Economics*, 101(2), 449–472. <https://doi.org/10.1016/j.jfineco.2011.03.006>