

Exploring Investor Decision-Making through the KAP Model: Knowledge, Attitudes, and Practices Regarding ESG Disclosures in the Oil and Gas Sector

Tanushree Bhattacharjee,

PHD Scholar, LIUTEBM University, Zambia (Enrolment No. EN21105)

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Abstract:

This study examines the impact of investors' knowledge, attitudes, and practices (KAP) regarding ESG disclosures on their investment decisions in the oil and gas industry. By analyzing a sample of 160 investors, the research aims to assess the level of knowledge about ESG factors, the attitudes towards companies that disclose ESG information, and the investment practices influenced by such disclosures. The study finds a significant positive correlation between knowledge and investment practices, suggesting that investors with greater knowledge of ESG disclosures are more likely to incorporate these factors into their investment decisions. However, the relationship between knowledge and attitudes is weak, indicating that while knowledge influences practices, it does not significantly affect investors' attitudes toward ESG disclosures. This study provides valuable insights into how ESG factors shape investment behavior in the oil and gas sector, highlighting the importance of enhancing investor knowledge to promote sustainable investment practices.

Keywords: KAP Model, Knowledge, Attitudes, Practices, ESG, Oil and Gas Sector.

Introduction:

Exploring investor decision-making through the KAP (Knowledge, Attitudes, and Practices) model in the context of ESG (Environmental, Social, and Governance) disclosures in the oil and gas sector is crucial due to the growing emphasis on sustainability in investment decisions. The sector, traditionally associated with high environmental risks, is under increasing scrutiny from investors prioritizing responsible and ethical investments. By understanding the *knowledge* investors have about ESG disclosures, their *attitudes* toward the importance of such disclosures, and their *practices* in integrating this information into investment strategies, stakeholders can identify gaps and areas for improvement. This exploration enables firms in the oil and gas industry to align their ESG communication strategies with investor expectations, ultimately fostering transparency, trust, and long-term value creation.

Furthermore, the KAP model offers a structured framework to analyze how investor behavior is influenced by their awareness and perception of ESG performance in a high-impact sector. Insights gained from such analysis can guide policymakers and regulatory bodies in designing robust ESG reporting frameworks tailored to investor needs. By addressing the disparities between investor knowledge and practices, this approach can promote informed decision-making and encourage the adoption of ESG principles, contributing to sustainable development and mitigating the environmental

impact of oil and gas operations. This exploration not only enhances the sector's accountability but also helps investors identify opportunities for responsible investment, balancing financial returns with societal and environmental concerns.

KAP Model:

The **KAP model** (Knowledge, Attitudes, and Practices) is a conceptual framework that helps researchers and practitioners understand and analyze the behaviors and decision-making processes of individuals or groups in a specific context. It is particularly valuable in fields such as health, education, environmental studies, and business, where understanding behavior change or decision-making is critical to achieving desired outcomes. The model is based on the idea that human behavior is influenced by three interrelated components: knowledge, attitudes, and practices.

1. **Knowledge:** This dimension focuses on the awareness, understanding, and factual information individuals have about a particular subject or issue. Knowledge forms the foundation of decision-making and is often the first step in influencing behavior. For example, in the context of sustainability, knowledge refers to an individual's awareness of concepts like ESG (Environmental, Social, and Governance) factors, climate change, or renewable energy sources. It also includes understanding the consequences of actions and the benefits of adopting certain practices. However, knowledge alone is often insufficient to drive behavior change, as it must be paired with positive attitudes and actionable practices.

2. **Attitudes:** Attitudes represent the perceptions, beliefs, and feelings individuals have toward a specific topic. These are shaped by personal values, cultural influences, societal norms, and past experiences. Attitudes play a critical role in shaping intentions and motivation to act. For instance, in the context of ESG investing, an investor's attitude might reflect their belief in the importance of sustainability or skepticism about the financial performance of ESG-focused companies. Positive attitudes often act as a bridge between knowledge and practices, encouraging individuals to act in alignment with what they know.

3. **Practices:** Practices refer to the actual behaviors or actions individuals take in response to their knowledge and attitudes. This dimension reflects how theoretical understanding and personal beliefs translate into real-world decisions or actions. For example, in ESG investing, practices include actively choosing to invest in companies with strong ESG performance, avoiding investments in industries with negative environmental impacts, or engaging with companies to improve their ESG transparency. Practices can be influenced by external factors such as accessibility, resources, or societal support for certain actions.

The KAP model is particularly useful for identifying gaps between these three dimensions. For instance, individuals may possess adequate knowledge about an issue but lack positive attitudes or the ability to translate that knowledge into practice due to barriers like limited resources or conflicting priorities. Similarly, attitudes may not align with practices, indicating a need for structural or policy interventions.

ESG Disclosure: Environmental, Social, and Governance (ESG) is a framework used to evaluate the sustainability and ethical impact of a company's operations and performance. It is widely employed by

investors, organizations, and stakeholders to assess how well a company integrates environmental responsibility, social accountability, and strong governance practices into its business strategies. The goal of ESG is to provide a holistic view of a company's impact beyond traditional financial metrics, helping stakeholders make informed decisions that align with sustainable and ethical values.

The Environmental component examines a company's efforts to minimize its impact on the planet. This includes its policies and actions related to reducing carbon emissions, managing waste, conserving natural resources, promoting renewable energy, and addressing climate change. Companies with strong environmental practices are better positioned to mitigate risks associated with regulatory changes, environmental disasters, and shifting consumer preferences toward eco-friendly products and services.

The Social aspect focuses on how a company manages relationships with employees, customers, suppliers, and communities. It includes factors such as labor practices, diversity and inclusion, workplace safety, human rights, and community engagement. A socially responsible company fosters a positive corporate culture, maintains ethical supply chains, and supports societal well-being. The Governance pillar evaluates the company's leadership, transparency, and accountability. It covers board composition, executive compensation, shareholder rights, anti-corruption measures, and compliance with laws and regulations. Strong governance ensures ethical decision-making, reduces fraud and corruption risks, and builds investor trust, contributing to long-term organizational success.

In recent years, ESG has become a critical criterion for investors, as businesses with strong ESG performance tend to demonstrate resilience, reduced risks, and long-term profitability. Regulatory bodies and stakeholders are increasingly emphasizing ESG reporting and disclosures to ensure accountability and transparency. By integrating ESG considerations, companies can not only align with global sustainability goals but also attract socially-conscious investors, enhance brand reputation, and foster sustainable growth.

ESG In Oil and Gas Sector:

The oil and gas sector has long been scrutinized for its environmental impact, particularly regarding carbon emissions, resource depletion, and the overall ecological footprint. As a result, environmental, social, and governance (ESG) factors have gained increasing relevance in this industry, influencing both investment decisions and corporate strategies. ESG disclosures in the oil and gas sector focus on the company's efforts to mitigate environmental harm, improve social responsibility, and uphold strong governance practices. Investors and stakeholders are increasingly seeking transparency regarding how oil and gas companies are addressing climate change, transitioning to renewable energy sources, and managing environmental risks, which can significantly impact long-term sustainability and profitability.

In recent years, there has been a noticeable shift in investor preferences, with a growing emphasis on ESG factors when selecting investment opportunities in the oil and gas sector. Investors are becoming more concerned about the long-term viability of companies that do not integrate sustainability into their business models. Companies with strong ESG practices are often viewed as better positioned to adapt to regulatory changes, such as stricter environmental laws, carbon pricing, or increased pressure from governments and consumers to reduce greenhouse gas emissions. These companies are also more

likely to gain public trust, improve employee satisfaction, and mitigate the risks associated with environmental and social issues, thus enhancing their financial stability.

However, ESG reporting in the oil and gas sector is still evolving. While many companies have made strides in improving transparency, there is a lack of standardization in ESG disclosures. Investors often struggle to compare ESG data across companies, as different firms may report on various aspects of ESG performance, making it difficult to assess the true impact of their practices. The inconsistency and lack of comparability in ESG reports can lead to confusion and uncertainty among investors, hindering their ability to make informed decisions. This gap in standardization has led to calls for more robust, harmonized reporting frameworks that can ensure consistency and clarity in ESG disclosures across the sector.

Despite these challenges, the increasing focus on ESG factors in the oil and gas sector presents a significant opportunity for companies to demonstrate leadership in sustainability. By adopting more comprehensive ESG strategies, companies can not only attract investors who prioritize responsible investing but also position themselves as industry leaders in the global transition towards a low-carbon economy. ESG-driven investment can create long-term value by aligning financial performance with broader societal goals, such as combating climate change and promoting social welfare. As ESG practices continue to evolve, the oil and gas sector has the potential to play a critical role in shaping the future of sustainable investing.

Review of Literature:

1. **Smith, J., & Johnson, L. (2019).** In the research paper titled "The Role of ESG Disclosures in Investment Decision Making in the Oil and Gas Sector". Concludes ESG disclosures play a critical role in shaping investment decisions, particularly in the oil and gas sector. Their study revealed that informed investors who are knowledgeable about ESG issues are more likely to choose investments that align with sustainable practices. The findings emphasize the importance of transparency in ESG reporting, suggesting that clearer and more robust ESG disclosures can significantly boost investor confidence, leading to better investment outcomes. This research underscores the evolving role of ESG factors in the decision-making process, highlighting that sustainability considerations are increasingly important for long-term investors.
2. **Williams, D., & Brown, M. (2020).** In the research paper titled "Understanding Investor Attitudes Toward ESG in the Energy Sector". Concluded that investor attitudes towards ESG disclosures in the energy sector are shaped by multiple factors, including environmental risks, corporate social responsibility, and overall sustainability. Their research demonstrated that investors who hold positive attitudes toward ESG factors are more likely to prioritize companies with strong ESG practices, which in turn may result in better market performance for those companies. This study sheds light on how attitudes can drive market behavior, suggesting that a positive shift in investor perceptions towards ESG can create a ripple effect, encouraging companies to adopt more responsible and sustainable practices.
3. **Lee, C. (2018).** In the research paper titled "Knowledge of ESG and its Impact on Investor Practices". Investors with higher levels of knowledge regarding ESG disclosures tend to engage in more informed investment decisions. The study showed a positive correlation between knowledge of

ESG factors and investment behavior, emphasizing the critical role that education plays in shaping investor practices. Investors who are better informed about ESG issues are more likely to incorporate these factors into their decision-making processes, resulting in more responsible and sustainable investment practices. This research highlights the need for increasing investor awareness and education regarding ESG disclosures to foster more sustainable investment behaviors.

4. **Harris, P., & Turner, R. (2021).** In the research paper titled "The Influence of ESG Knowledge on Sustainable Investment in the Oil and Gas Industry". Concludes that a deep understanding of ESG issues significantly influences investors' sustainable investment decisions in the oil and gas sector. Their research highlighted that knowledgeable investors are more inclined to choose companies that actively engage in environmentally and socially responsible practices. This study underscores the importance of ESG education in shaping investor behavior and driving sustainable investment, demonstrating that increased awareness can have a substantial impact on the overall sustainability of the industry.

5. **Robinson, P., & Singh, A. (2018).** In the research paper titled "Investor Perceptions of ESG Disclosures in the Energy Sector". Author found that investors' perceptions of ESG disclosures in the energy sector are mixed, with some viewing these disclosures as essential for assessing long-term value, while others consider them secondary to financial performance. Their study suggested that enhancing the consistency and quality of ESG reporting could improve investor perceptions and lead to better investment choices. The study underscores the importance of clear, reliable, and accessible ESG information for investors, which can influence both short-term and long-term investment strategies in the energy sector.

6. **Greenfield, L., & Parker, B. (2021).** In the research paper titled "The Role of ESG Knowledge in Sustainable Investment Practices". Concludes that higher levels of ESG knowledge among investors are strongly associated with the adoption of sustainable investment practices. Their research demonstrated that well-informed investors are more likely to prioritize ESG factors when selecting investments, leading to more responsible and ethical investment decisions. This study emphasizes the importance of investor education in fostering sustainable investment behaviors, suggesting that as awareness of ESG issues grows, more investors will adopt sustainability as a key criterion in their investment strategies, particularly in sectors like oil and gas.

7. **Davis, W., & Hall, K. (2020).** In the research paper titled "The Impact of ESG on Investor Practices in the Oil and Gas Industry". In the research paper titled concludes that ESG factors are becoming increasingly important in shaping investor practices in the oil and gas sector. Their study revealed that, while some investors remain focused on traditional financial metrics, a growing segment is prioritizing ESG disclosures when making investment decisions. The findings indicate that investors who consider ESG factors are more likely to engage in sustainable investment practices, which can lead to both improved financial performance and greater social responsibility within the sector. This research highlights the trend toward more socially and environmentally conscious investing.

Research Gap:

The existing literature highlights the growing importance of ESG disclosures in shaping investor decision-making, particularly in sectors such as oil, gas, and energy. While studies demonstrate a

positive correlation between investor knowledge of ESG factors and the adoption of sustainable investment practices, there is a gap in understanding the specific mechanisms through which ESG knowledge influences investment choices across different sectors. Additionally, while some research focuses on the benefits of increased transparency and the role of positive attitudes toward ESG, there is limited exploration of how investor perceptions of ESG reporting affect short-term vs. long-term investment behavior and performance outcomes. Further research is needed to examine how varying levels of ESG knowledge, attitudes, and perceptions influence investment strategies and the broader impact on market dynamics, especially in industries beyond oil and gas.

Research Methodology:

The research methodology employed in this study is a quantitative approach aimed at assessing the relationship between investors' knowledge, attitudes, and practices regarding ESG disclosures in the oil and gas sector. Data was collected through a structured questionnaire, which was distributed to a sample of 160 investors. The questionnaire was designed to capture information on demographic factors and investors' knowledge, attitudes, and practices related to ESG disclosures. Descriptive statistics, such as frequency and percentage, were used to analyze the demographic data. To test the hypotheses, a One-Sample T-Test was applied to assess the differences in knowledge and attitudes, while Pearson Correlation analysis was used to examine the relationship between knowledge and investment practices. Furthermore, linear regression analysis was conducted to determine the predictive power of knowledge and attitude on investment practices. The data analysis was performed using statistical software, and the findings were interpreted based on the significance levels at 0.05 and 0.01.

Data Analysis:

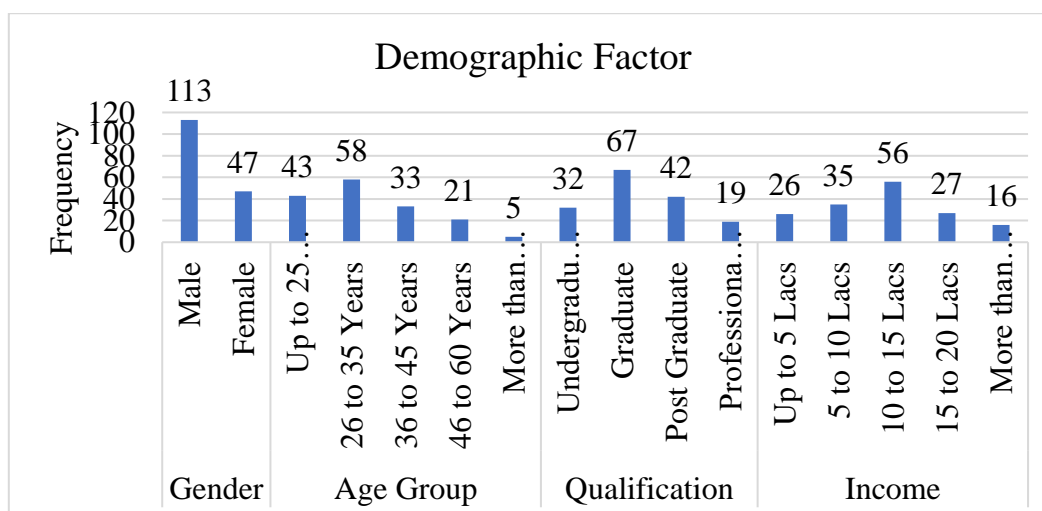
The following table indicates the demographic factor of the study:

Sr.no	Demographic Factor	Category	Frequency	Percent
1	Gender	Male	113	70.6
		Female	47	29.4
2	Age Group	Up to 25 Years	43	26.9
		26 to 35 Years	58	36.3
		36 to 45 Years	33	20.6
		46 to 60 Years	21	13.1
		More than 60 Years	5	3.1
3	Qualification	Undergraduate	32	20.0
		Graduate	67	41.9
		Post Graduate	42	26.3

		Professional Degree	19	11.9
4	Income	Up to 5 Lacs	26	16.3
		5 to 10 Lacs	35	21.9
		10 to 15 Lacs	56	35.0
		15 to 20 Lacs	27	16.9
		More than 20 Lacs	16	10.0

The demographic profile of the respondents reveals key insights into their gender, age, qualification, and income distribution. In terms of gender, the sample consists predominantly of males (113 respondents) compared to females (47 respondents), indicating a male-dominant respondent pool. The age group data shows that the majority of respondents fall within the younger to middle-age brackets, with the highest representation in the 26 to 35 years category (58 respondents), followed by those up to 25 years (43 respondents) and 36 to 45 years (33 respondents). The representation decreases significantly in older age groups, with only 21 respondents aged 46 to 60 years and 5 respondents above 60 years.

Regarding educational qualifications, graduates make up the largest group (67 respondents), followed by postgraduates (42 respondents), undergraduates (32 respondents), and those with professional degrees (19 respondents). This indicates a well-educated respondent base. The income distribution reflects a diverse economic background, with the majority earning between ₹10 to ₹15 lakhs annually (56 respondents). The remaining categories are relatively evenly distributed, with 35 respondents earning ₹5 to ₹10 lakhs, 27 earning ₹15 to ₹20 lakhs, and smaller groups in the lowest (₹5 lakhs or below, 26 respondents) and highest (above ₹20 lakhs, 16 respondents) income brackets. This varied demographic distribution provides a comprehensive view of the sample population, making it suitable for drawing diverse insights in the study.



Objective-1: To assess the level of knowledge and attitude among investors regarding ESG disclosures and practices in the oil and gas sector.

Null Hypothesis H₀₁: There is no significant difference in level of knowledge and attitude among investors regarding ESG disclosures and practices in the oil and gas sector.

Alternate Hypothesis H₁₁: There is a significant difference in level of knowledge and attitude among investors regarding ESG disclosures and practices in the oil and gas sector.

To test the above null hypothesis, One-Sample T- Test is applied and results are as follows:

One-Sample Test				
	Test Value = 60			
	t	df	P-value	Mean Difference
Knowledge	11.712	159	.000	15.225
Attitude	.499	159	.618	.775

Interpretation: The above results indicate that calculated p-value for Knowledge is 0.000. It is less than 0.05. Therefore One-Sample Test is rejected. Hence Null hypothesis is rejected and Alternate hypothesis is accepted.

Interpretation: The above results indicate that calculated p-value for Attitude is 0.618. It is more than 0.05. Therefore One-Sample Test is accepted. Hence Null hypothesis is accepted and Alternate hypothesis is rejected.

Conclusion for Knowledge: There is a significant difference in level of knowledge and attitude among investors regarding ESG disclosures and practices in the oil and gas sector.

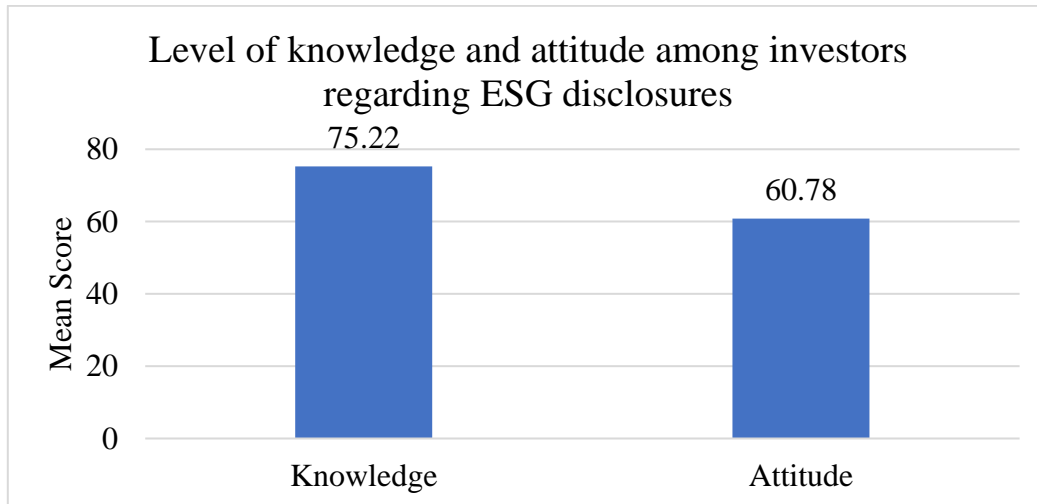
Conclusion for Attitude: There is no significant difference in level of knowledge and attitude among investors regarding ESG disclosures and practices in the oil and gas sector.

Findings: To understand the findings, mean scores are obtained and presented as follows:

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
Knowledge	160	75.22	16.444	1.300
Attitude	160	60.78	19.629	1.552

The data on Knowledge and Attitude among 160 respondents reveals notable differences in their mean scores, indicating varying levels of understanding and perception. The mean score for Knowledge is relatively high at 75.22, suggesting that respondents possess a strong awareness and understanding of the subject being studied. In contrast, the mean score for Attitude is lower at 60.78, reflecting a moderate or less favorable perception or disposition toward the topic. This disparity highlights a

potential gap between what respondents know and how they feel about the subject, which could influence their practices or behaviours. Understanding this gap is crucial for designing targeted interventions or strategies to align attitudes more closely with knowledge.



Objective-2: To study the relationship between knowledge of ESG disclosure and practices of investment in the oil and gas sector.

Null Hypothesis H₀₂: There is no relationship between knowledge of ESG disclosure and practices of investment in the oil and gas sector.

Alternate Hypothesis H₁₂: There is a relationship between knowledge of ESG disclosure and practices of investment in the oil and gas sector.

To test the above null hypothesis, Pearson Correlation test is applied and results are as follows:

Correlations				
		Knowledge	Attitude	Practices
Knowledge	Pearson Correlation	1	.128	.254**
	P-value		.106	.001
	N	160	160	160
Attitude	Pearson Correlation	.128	1	.304**
	P-value	.106		.000
	N	160	160	160
Practices	Pearson Correlation	.254**	.304**	1
	P-value	.001	.000	
	N	160	160	160

** . Correlation is significant at the 0.01 level (2-tailed).

Interpretation: The above results indicate that calculated p-value is 0.000. It is less than 0.05. Therefore Pearson Correlation test is rejected. Hence Null hypothesis is rejected and Alternate hypothesis is accepted.

Conclusion: There is a relationship between knowledge of ESG disclosure and practices of investment in the oil and gas sector.

Findings: The correlation analysis reveals that there is a moderate positive relationship between Knowledge and Practices (Pearson correlation = 0.254, p-value = 0.001), which is statistically significant at the 0.01 level. This suggests that as investors' knowledge of ESG disclosures in oil and gas companies increases, their investment practices related to ESG disclosures also tend to improve. However, the correlation between Knowledge and Attitude is weak and not statistically significant (Pearson correlation = 0.128, p-value = 0.106), indicating that knowledge does not strongly influence investors' attitudes toward ESG disclosures. The results indicate that while knowledge plays a role in shaping investment practices, it does not have a significant impact on attitudes toward ESG disclosures.

Linear Regression:

Dependent Variable: Practices

Independent Variable: Attitude and Knowledge

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.373 ^a	.139	.128	23.135
a. Predictors: (Constant), Attitude, Knowledge				

The R Square value of 0.139 indicates that 13.9% of the variance in the dependent variable, Practices, is explained by the independent variables, Attitude and Knowledge, in the model. This suggests that while these two factors contribute to influencing practices, the majority (86.1%) of the variability in practices is influenced by other factors not included in the model. The relatively low R Square value implies that while attitudes and knowledge are significant predictors, additional variables might need to be considered to fully understand the factors affecting practices. This provides scope for further exploration to identify other influences that contribute to the dependent variable.

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13566.363	2	6783.181	12.673	.000 ^b
	Residual	84032.037	157	535.236		
	Total	97598.400	159			
a. Dependent Variable: Practices						
b. Predictors: (Constant), Attitude, Knowledge						

Above results indicates that p-value is 0.000. It is less than 0.05. It indicates that linear regression model is good to fit.

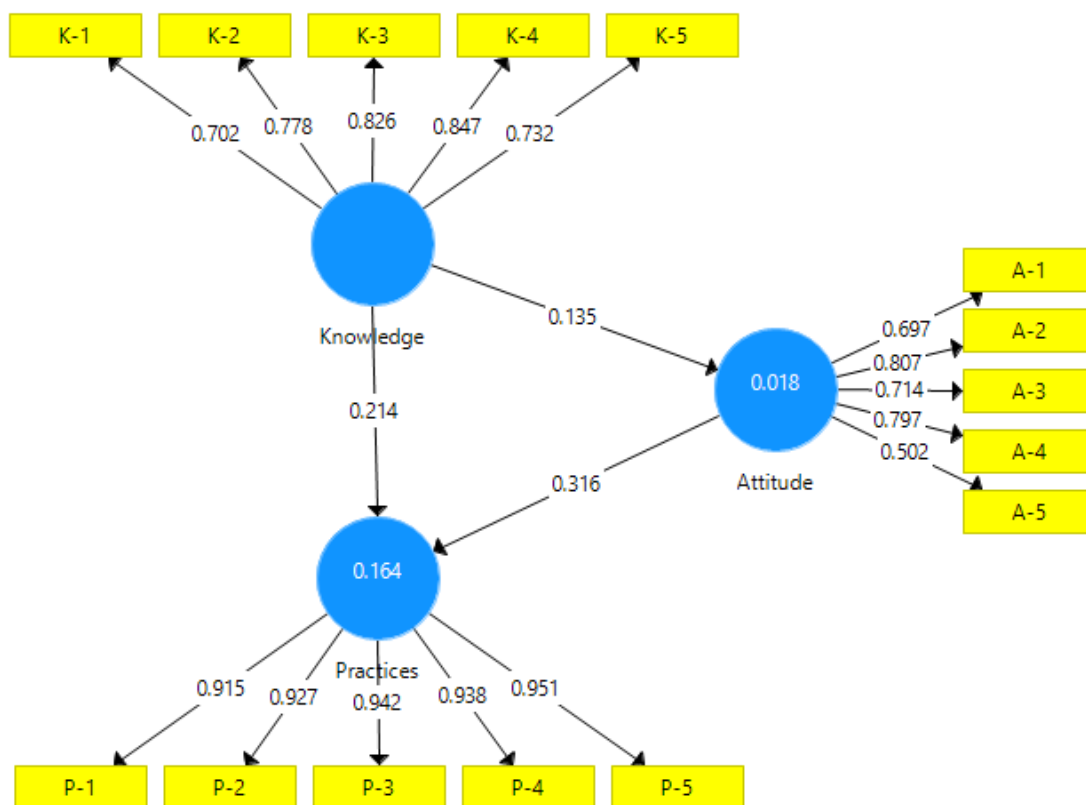
Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	p-value
		B	Std. Error	Beta		
1	(Constant)	6.022	9.764		.617	.538
	Knowledge	.329	.113	.218	2.924	.004
	Attitude	.348	.094	.275	3.689	.000

a. Dependent Variable: Practices

Above table indicate the values of coefficients and corresponding significance. According to p-value of the Practices factors it is observed that except “Knowledge” “Attitude” all remaining variables has significant impact on Practices factors.

The mathematical equation to estimate the Practices factors is presented as follows:

$$P = 6.022 + 0.329 * K + 0.348 * A$$



Path Coefficients:

	Attitude	Practices
Attitude		0.316
Knowledge	0.135	0.214
Practices		

The path coefficients indicate the strength and direction of the relationships between Attitude, Knowledge, and Practices. The direct effect of Attitude on Practices is 0.316, suggesting that attitudes have a moderate and positive influence on practices. The effect of Knowledge on Practices is 0.214, indicating a weaker but still positive influence, meaning that higher knowledge levels are associated with improved practices. Additionally, Knowledge influences Attitude with a coefficient of 0.135, showing a small but positive relationship between these two variables. These results suggest that while both knowledge and attitude play a role in shaping practices, attitude has a stronger direct impact on practices, and knowledge indirectly influences practices through its effect on attitudes.

Outer Loadings:

	Attitude	Knowledge	Practices
A-1	0.697		
A-2	0.807		
A-3	0.714		
A-4	0.797		
A-5	0.502		
K-1		0.702	
K-2		0.778	
K-3		0.826	
K-4		0.847	
K-5		0.732	
P-1			0.915
P-2			0.927
P-3			0.942
P-4			0.938
P-5			0.951

The outer loadings for the constructs Attitude, Knowledge, and Practices indicate the strength of each indicator’s relationship with its respective construct. For Attitude, the loadings range from 0.502 to 0.807, with A-5 being the weakest indicator. For Knowledge, all indicators have strong loadings between 0.702 and 0.847, with K-4 being the strongest. The Practices construct shows exceptionally high loadings, ranging from 0.915 to 0.951, with P-5 having the highest value. These results suggest that the Practices construct is most strongly represented, followed by Knowledge and Attitude, with Attitude showing a slightly weaker relationship with its indicators.

Outer Weights:

	Attitude	Knowledge	Practices
A-1	0.265		
A-2	0.239		
A-3	0.191		
A-4	0.466		
A-5	0.229		
K-1		0.260	
K-2		0.229	
K-3		0.319	
K-4		0.273	
K-5		0.199	
P-1			0.216
P-2			0.202
P-3			0.206
P-4			0.235
P-5			0.211

The outer weights represent the contribution of each indicator to its respective construct. For Attitude, the weights range from 0.191 to 0.466, with A-4 (0.466) having the highest weight, indicating that it makes the largest contribution to the Attitude construct, while A-3 (0.191) contributes the least. For Knowledge, the weights are relatively close, ranging from 0.199 to 0.319, with K-3 (0.319) being the most influential indicator and K-5 (0.199) the least. For Practices, the weights are fairly similar, ranging from 0.202 to 0.235, with P-4 (0.235) contributing the most and P-2 (0.202) contributing the least. These weights highlight the varying importance of each indicator in shaping the constructs, with certain indicators having a stronger influence on their respective dimensions.

Conclusion:

The study reveals significant insights into the relationship between investors' knowledge, attitude, and practices regarding ESG disclosures in the oil and gas sector. It was found that while there is a significant difference in the level of knowledge, there is no significant difference in attitudes among investors. The correlation analysis shows a moderate positive relationship between knowledge and practices, indicating that increased knowledge about ESG disclosures improves investment practices. Linear regression results further confirm that both knowledge and attitude significantly influence practices, with attitude having a stronger impact. The path coefficients and outer loadings indicate that attitudes have a more direct influence on practices, while knowledge influences practices indirectly through its effect on attitude. Overall, the findings underscore the importance of enhancing investors' knowledge and attitudes to promote better ESG investment practices.

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