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Chief Editor's Note

This is the second volume's first issue. In other words, this is the third issue of the journal. This journal is still in its infant stage, yet it creates opportunities for researchers and scholars to make their research visible, particularly for Maldivians researchers. This issue contains three (3) research papers. The research papers included in this issue are covering areas of transformational leadership and its effects on supportive supervisor behaviour as well as organisational commitment, sustainable practices and firm performance, and finally addressing Maqasid al-shariah and information transparency in Murabaha financing.

IJEMAT have a very committed and experience editors and reviewing team to ensure that the submitted papers are carefully evaluated for its relevance and quality as IJEMAT is seeking to index the journal in popular indexing databases. The team consists of experts from three relevant disciplines and field. Therefore, the Editorial Board would like to thank the authors and researchers who contributed to the first volume (Issue 1) of IJEMAT. Also, we express our sincere gratitude to the advisory board of the IJEMAT, peer reviewers, the Centre of Research and Publication and Kulliyyah of Economics and Management Studies and all other relevant department for all supporting hands for their valuable support in the process of publication. We anticipate critical feedback and constructive suggestions for improving the IJEMAT in the upcoming issues.

Thank you for considering IJEMAT- International Journal of Emerging Issues in Management, Accounting and Technology as a publication outlet. The Editorial Board welcomes original research-based articles and expects your contribution, suggestion, and support for the upcoming issue.

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Maqāṣid Al-Sharī‘ah And Information Transparency In Murabaha Financing: A Case Study Of An Islamic Rural Bank In Indonesia

ABSTRACT

This exploratory qualitative single-case study examines how five dimensions of Maqāṣid al-Sharī‘ah are reflected in murabaha financing at one Islamic Rural Bank in Indonesia, with particular attention to information transparency. Data were gathered through structured interviews with four purposively selected informants (one financing officer, two murabaha customers, and one Maqāṣid expert), observation, and documents. The evidence provides reported or partial support for protection of religion, life/self, wealth, and family welfare, while the most important qualification concerns protection of intellect (hifz al-‘aql). The financing officer reported detailed disclosure, but customer accounts showed uneven depth of understanding. One customer confirmed that margin and charges were known at the outset while also reporting limited explanation of the contract's meaning and legal basis. The case therefore indicates an information-depth and customer-understanding gap rather than deliberate concealment. Standardized disclosure and comprehension checks are recommended.

Keywords: Maqāṣid al-Sharī‘ah; murabaha financing; information transparency; customer understanding; Islamic Rural Bank

INTRODUCTION

Islamic banking is expected to satisfy formal Sharia requirements while also advancing the substantive purposes of Sharia. In Indonesia, Islamic financial institutions operate within regulatory and Sharia-governance arrangements that include the Sharia Supervisory Board (Dewan Pengawas Syariah/DPS). From a Maqāṣid al-Sharī'ah perspective, the assessment therefore concerns not only whether a financing product is formally Sharia-compliant, but also whether its implementation promotes welfare, avoids harm, protects wealth and family welfare, and enables customers to make informed decisions. Mukhlisin (2020) similarly shows that Maqāṣid-oriented assessment can extend evaluation beyond technical compliance and connect Islamic financial reporting with broader ethical accountability.

Murabaha is especially relevant because its structure requires clarity about the asset and price. Fatwa No. 04/DSN-MUI/IV/2000 defines murabaha as a sale in which the seller discloses the acquisition price and the buyer pays an agreed price that includes a profit margin (Dewan Syariah Nasional-Majelis Ulama Indonesia [DSN-MUI], 2000). The Indonesian Financial Services Authority has also issued a dedicated murabaha product guideline to strengthen implementation and public understanding (Otoritas Jasa Keuangan [OJK], 2023a). Customer-facing information about the price structure, margin, charges, payment obligations, tenor, and other material terms is therefore integral to meaningful understanding of the transaction.

Clear disclosure also has a customer-protection dimension. OJK Regulation No. 22 of 2023 governs financial-service conduct, including the provision and communication of product information and the preparation of agreements (OJK, 2023b). In Islamic finance, Laldin and Furqani (2013) identify fair and transparent financial practices among the specific ends of Maqāṣid-oriented finance. Transparency is therefore more than an administrative formality: it is a practical means by which customers can evaluate their obligations before giving consent and distinguish the economic substance of a murabaha sale from an interest-bearing loan.

The 2020–2021 literature shows growing efforts to operationalize Maqāṣid in Islamic banking through performance indexes, institutional measures, and comparative frameworks (Nugraha et al., 2020; Suhartanto et al., 2020; Tarique et al., 2020, 2021; Kristianingsih et al., 2021; Mursyid et al., 2021; Sa'diyah et al., 2021). Contemporary work also argues that Islamic bank performance should incorporate social and welfare objectives rather than financial outcomes alone (Prasetyo & Rofiah, 2021), while *maslahah*-oriented institutional practice is associated with customer satisfaction and loyalty (Edastama, 2021). These studies strengthen the case for examining substantive customer welfare, but they generally operate at institutional or aggregate levels rather than at the level of information actually communicated in a specific murabaha transaction.

Accordingly, this study examines the implementation of the five Maqāṣid al-Sharī'ah dimensions in murabaha financing practices at a selected Islamic Rural Bank in Indonesia, with particular attention to the depth and clarity of customer information. Two questions guide the analysis: (1) How are the five Maqāṣid dimensions reflected in the reported murabaha financing practices of the selected bank? (2) To what extent does the information provided to murabaha customers support informed understanding, particularly under *hifẓ al-'aql*? The study is deliberately framed as an exploratory single case. Its contribution is to show how differences between an institution's account of disclosure and customers' reported understanding can reveal a Maqāṣid-relevant implementation gap without implying deliberate concealment.

This article contributes to the Maqāṣid-oriented Islamic banking literature by shifting attention from institutional compliance indicators to the customer-level experience of a specific murabaha transaction. It shows that a bank may communicate core financial figures while customer accounts still indicate uneven understanding of the contract's meaning, legal basis, and practical implications. This distinction strengthens the article's central claim that substantive customer comprehension is a Maqāṣid-relevant issue under *hifẓ al-'aql*.

The next section develops the analytical relationship among Maqāṣid al-Sharī'ah, murabaha, and information transparency. The research method is then explained, followed by an integrated findings and discussion section organized around the five Maqāṣid dimensions. The paper closes with case-specific conclusions, practical recommendations, and limitations.

MAQĀṢID AL-SHARĪ'AH, MURABAHA, AND INFORMATION TRANSPARENCY

1. Maqāṣid al-Sharī'ah as the Analytical Framework

Maqāṣid al-Sharī'ah refers to the objectives and purposes underlying Sharia rules. The classical framework associated with al-Shāṭibī organizes essential human interests around protection of religion (*hifẓ al-dīn*), life/self (*hifẓ al-nafs*), intellect (*hifẓ al-'aql*), wealth (*hifẓ al-māl*), and descendants/family (*hifẓ al-nasl*), situated within the hierarchy of *ḍarūriyyāt*, *ḥājiyyāt*, and *taḥsīniyyāt* (Kurniawan & Hudafi, 2021). The original field study used these five necessities together with contextual indicators drawn from a contemporary Maqāṣid framing attributed in the thesis to Ibn 'Āshūr. This article therefore uses the five necessities as its primary categorical structure and treats Ibn 'Āshūr's contemporary orientation as a complementary basis for translating those objectives into banking-relevant domains. This integration resolves the apparent al-Shāṭibī/Ibn 'Āshūr inconsistency without presenting the two approaches as competing frameworks.

Operationalization requires caution because no single banking practice can fully represent a Maqāṣid dimension. The indicators used here are therefore contextual analytical domains rather than definitive measures of Maqāṣid attainment. This caution is consistent with recent measurement research showing that Maqāṣid-based banking assessment is multidimensional and should be validated across legal, social, governance, and welfare considerations rather than reduced to one observable practice (Tarique et al., 2020, 2021). Table 1 accordingly distinguishes the normative concern, the context-specific murabaha domain, and the evidence sought in this case.

The relationship between ends and means is particularly important in Islamic finance. Laldin and Furqani (2013) distinguish substantive objectives from the contracts and institutional mechanisms used to pursue them. Recent studies reinforce this point in several ways: Wan Ibrahim and Ismail (2020) link Islamic bank outcomes to regulatory and Maqāṣid parameters; Ishak and Asni (2020) show how Maqāṣid can mediate between fiqh rules and contemporary banking practice; and Baehaqi et al. (2020) apply Ibn ‘Āshūr's Maqāṣid reasoning to contested Islamic accounting practices. Together, these studies support a substantive reading of murabaha in which formal contract validity remains necessary but the quality of implementation, communication, and customer understanding also matters.

2. Murabaha and the Role of Information Disclosure

For this study, information transparency means understandable communication of the material terms and basic meaning of the murabaha contract. These terms include the acquisition price where applicable, margin, charges, total obligation, tenor or payment schedule, and any other conditions that affect the customer's decision. Transparency therefore concerns not only whether information appears in a document, but also whether the customer can understand the nature and cost of the transaction before giving consenting to it.

This definition clarifies the link to *hifẓ al-‘aql*. Protection of intellect is broader than financial literacy or disclosure, but in a financing decision it includes preserving the customer's capacity for sound and informed judgment. Transparency is therefore treated as a means to that end, not as equivalent to *hifẓ al-‘aql* itself. Adequate communication should reduce avoidable misunderstanding and allow the customer to evaluate the nature and cost of the transaction before agreeing to it. Importantly, a transparency concern may arise from insufficient depth, clarity, or comprehension even when a margin or listed charge has technically been disclosed.

The other dimensions are interpreted in the same contextual manner. Avoidance of *riba* and effective Sharia oversight are relevant to *hifẓ al-dīn*; dignified, non-harmful treatment and appropriate support are relevant to *hifẓ al-nafs*; affordability and protection against avoidable economic hardship are relevant to *hifẓ al-māl*; and financing practices that help

customers meet obligations without displacing essential household needs are relevant to *hifz al-nasl*. These are evidence domains for this case, not exhaustive definitions of the five *Maqāṣid*.

Table 1. Analytical Framework and Contextual Operational Domains

Maqāṣid dimension	Normative concern	Contextual operational domain in murabaha	Evidence sought in this case
Protection of religion (<i>hifz al-dīn</i>)	Sharia-conforming economic conduct	Avoidance of <i>riba</i> ; Sharia governance and DPS oversight	Officer/customer/expert accounts; financing documents and any available Sharia-supervision evidence
Protection of life/self (<i>hifz al-nafs</i>)	Dignity, non-harm, and humane treatment	Service ethics; respectful communication; supportive installment follow-up	Bank and customer accounts of service, complaints, communication, and follow-up
Protection of intellect (<i>hifz al-‘aql</i>)	Capacity for informed and sound judgment	Clear, complete, and understandable pre-contract explanation	Contract meaning; margin; charges; total obligation; tenor/ payment schedule; customer understanding
Protection of wealth (<i>hifz al-māl</i>)	Protection from unjust loss and economic hardship	Affordability; restructuring/ relaxation; margin or term adjustment where applicable	Reported relief mechanisms, customer experience, and effects on basic household expenditure
Protection of descendants/family (<i>hifz al-nasl</i>)	Protection of family welfare from unreasonable financial burden	Meeting financing obligations without displacing essential family needs	Customer-reported family impact; relief/flexibility relevant to household welfare

3. Research Gap and Analytical Proposition

The literature therefore reveals a gap between institution-level *Maqāṣid* assessment and the customer-level experience of a specific transaction. Recent *Maqāṣid* performance studies in Indonesia and other settings demonstrate the value of moving beyond narrow profitability measures, yet their indicators are generally derived from annual reports, aggregate ratios, or institutional governance (Nugraha et al., 2020; Kristianingsih et al., 2021; Mursyid et al., 2021; Sa'diyah et al., 2021). Murabaha process research, meanwhile, emphasizes Sharia-compatible transaction design (Tlemsani et al., 2020). Less attention is given to whether customers actually understand the information communicated during contracting. The analytical proposition of this study is therefore that a discrepancy between what the bank reports explaining and what customers report understanding is itself a meaningful *Maqāṣid* signal under *hifz al-‘aql*.

RESEARCH METHOD

This study adopts a descriptive qualitative single-case study design. The case is one Islamic Rural Bank (Bank Perekonomian Rakyat Syariah/BPRS) in Tangerang, Banten, Indonesia, and the unit of analysis is the implementation of Maqāṣid-related principles in its murabaha financing practice. The site was the empirical setting of the original study because it offered murabaha financing that could be examined within its institutional context. The study does not claim that the bank is statistically or theoretically representative of all BPRS. Fieldwork was conducted in 2021, and the article retains a case-specific interpretation.

Informants were selected purposively based on their direct relevance to the case. The source study identifies four informants in three categories: one Marketing/Financing officer responsible for the bank's financing activity, two customers with direct experience of murabaha financing, and one Maqāṣid al-Sharī'ah expert with an academic background in uṣūl al-fiqh and Islamic banking. Interviews followed prepared, role-specific structured guides organized around the five Maqāṣid domains. The study appendices contain interview transcripts, and the field protocol states that data were recorded and supported by photographs. Exact interview duration is not consistently documented and is therefore not reported here.

The study used three forms of evidence: interviews, direct observation, and documentary evidence. Observation focused on the formulation and implementation of murabaha financing and the way transactions were processed at the bank. Documentary sources identified in the study include murabaha product-financing documents, financing-limit determination documents, collectability recapitulation documents for murabaha facilities, and research photographs. The available records identify these document types but do not state a complete document count or a consistent document date range. Consequently, documentary and observational material is used as contextual evidence; where item-level corroboration is not reproduced, the findings below are explicitly described as interview-reported rather than fully triangulated.

Analysis followed the stages stated in the original methodology: data collection, data reduction, narrative data display, and conclusion/verification. The five Maqāṣid dimensions provided a priori analytical categories, while agreement and disagreement among the financing officer, two customers, and the expert were retained rather than averaged away. Credibility was addressed through cross-source comparison. The study protocol also specified triangulation, supporting recordings and photographs, negative-case consideration, and member checking. However, the available records do not document a formal second-coder procedure or a saturation assessment, so neither inter-coder reliability nor data saturation is claimed. The fieldwork was conducted under institutional research permission; no separate ethics-board approval is reported in the available records. Informant

identities are anonymized in this article as BO (bank officer), C1-C2 (customers), and ME (Maqāṣid expert). Given one bank and four informants, assessments are expressed as reported support, partial/mixed support, or partial/mixed support rather than as definitive institutional scores.

The analysis below therefore treats each Maqāṣid dimension as an interpretive category rather than as a scoring instrument. Findings are strongest where claims are supported by more than one source, and they are qualified where the available record relies mainly on interview testimony or does not reproduce supporting documents.

FINDINGS AND DISCUSSION

The findings are organized around the five Maqāṣid dimensions and triangulate the perspectives available in the interview record wherever possible. The thesis also reports observation and documentary collection, but it does not reproduce dimension-by-dimension documentary findings; accordingly, the analysis distinguishes interview convergence from documentary confirmation. The most analytically important finding concerns *hiḏ al-‘aql*, where the evidence does not substantiate concealed charges but does indicate uneven depth of customer understanding. Table 2 summarizes the evidence and the qualification attached to each assessment.

1. Protection of Religion (hiḏ al-dīn)

The bank officer reported that *murabaha* transactions were intended to follow Islamic principles and that the DPS monitored potential deviations. In translated form, BO stated that transactions were carried out according to the Qur'an and Hadith and that any *riba*-related element would be evaluated by the DPS. A customer account was consistent with part of this claim: C2 reported that there was no unilateral addition of charges and that the relevant costs had been communicated at the beginning of the agreement. The Maqāṣid expert likewise emphasized that an Islamic bank should avoid *riba* and that DPS oversight is central to that purpose.

These convergent accounts provide reported support for *hiḏ al-dīn* within the narrow operational domain used in this case. They do not, however, establish comprehensive Sharia compliance. The study identifies financing documents among its data sources, but the available manuscript record does not reproduce a DPS review record, product approval, or contract-level Sharia audit. The finding is therefore limited to interview-reported avoidance of *riba* and reported supervision, rather than an independently verified compliance judgment.

2. Protection of Life/Self (hiḏ al-nafs)

The service evidence is more mixed than the earlier manuscript suggested. BO described a financing process in which staff ask the purpose of the application, analyze

the customer's documents, and proceed to the contract after internal approval. C1 reported that the financing staff regularly followed up on payments and offered assistance when difficulties arose. At the same time, the same customer stated that service overall could still be improved, referring to instances of unfriendly service and insufficient guidance on where to seek assistance. This negative case is retained because it qualifies the bank-side account of uniformly good service.

Under the contextual framework, proactive support and respectful communication are compatible with *hifz al-nafs* because they can protect dignity and reduce avoidable hardship. Nevertheless, service ethics is only one narrow manifestation of a much broader *Maqāṣid* objective. The evidence is therefore characterized as partial/mixed support rather than full attainment: the financing relationship contains supportive practices, but the customer testimony also identifies service shortcomings and the study does not provide a broader welfare assessment.

3. Protection of Intellect (hifz al-‘aql) and Information Transparency

Information transparency is the central finding of the case. BO stated that the bank had explained *murabaha* in detail, including its margin and additional costs stated in the agreement. The customer accounts were more limited. C1 reported knowing mainly that the arrangement was a *murabaha* contract and said that the meaning of the contract, its legal basis, and related details had not been explained clearly enough. C2 described *murabaha* only in general terms, as a sale in which the bank earns a margin from the difference between purchase and selling prices. These accounts reveal a discrepancy between the depth of explanation reported by the bank and the depth of understanding reported by customers.

The fuller transcript materially refines the earlier interpretation of this discrepancy. C1 also confirmed that the margin was known from the beginning and described the margin arrangement as transparent; the same customer further stated that there had been no unilateral additional charge and that the costs in the *murabaha* arrangement had been communicated at the start. The empirical problem is therefore not well described as non-disclosure of costs. Rather, it is an uneven information-depth and comprehension problem: material financial figures may have been communicated while the conceptual structure, legal basis, and fuller implications of the contract were not equally well understood.

This distinction is important for *hifz al-‘aql*. The *Maqāṣid* expert stated that transparent information should explain the elements of the contract, including margin, tenor, installments, and other relevant terms, and that Islamic banks should communicate them clearly. In a *murabaha* decision, informed judgment depends not only on the presence of figures in a document but also on whether the customer can understand the nature and consequences of the transaction. The evidence thus supports a concern about substantive understanding without supporting an allegation of deliberate concealment or distortion.

Accordingly, *hifz al-‘aql* receives partial/mixed support. The bank-side account and customer confirmation of margin and charges indicate that some core financial information was disclosed, whereas the customers' limited understanding of the contract's fuller meaning indicates that disclosure did not consistently translate into substantive comprehension. The available study records do not reproduce a standardized disclosure form, item-by-item comprehension test, or observation record of the signing conversation, so the precise point at which the understanding gap arose cannot be established. This evidential boundary is central to the case interpretation.

4. Protection of Wealth (hifz al-māl)

The study provides more concrete evidence concerning payment relief. BO reported that customers facing payment difficulties could be advised to submit a request for installment relief or restructuring and described possible measures including relaxation, margin reduction, and extension of the repayment period. C1 independently confirmed the availability of relief, specifically mentioning relaxation and margin reduction as features that made the BPRS attractive. These accounts indicate that payment flexibility was not merely an abstract recommendation but was part of the reported financing relationship.

Within *hifz al-māl*, such flexibility can help protect customers from avoidable economic hardship when obligations become difficult to meet. The evidence supports a partial assessment because the source records do not reproduce a formal restructuring policy, complete eligibility criteria, or case-level calculations demonstrating how repayment capacity was assessed. The strongest defensible conclusion is therefore that relief mechanisms were reported and customer-confirmed, while their formal governance and frequency cannot be determined from the available material.

5. Protection of Descendants/Family (hifz al-nasl)

Evidence concerning family welfare is also available and resolves the inconsistency that previously appeared across the abstract, findings, and conclusion. C1 stated that *murabaha* financing had helped meet household needs, including a home renovation and a motorcycle purchase, and reported that the financing did not disrupt family finances. BO similarly connected customer relief and attention to customer needs with the benefit generated by *murabaha* financing. ME explained that installment flexibility and other relief could help protect a customer's family from financial difficulty.

These accounts provide partial reported support for *hifz al-nasl* through family-welfare effects. The conclusion does not rely on collateral or insurance automatically transferring debt obligations away from descendants, because the study records do not establish such a mechanism. Instead, the evidence is limited to the more defensible proposition that manageable financing and relief can help a customer meet household needs without unnecessarily displacing essential family expenditure. As this evidence is based mainly on

one customer's experience, it should not be generalized beyond the case.

Table 2. Evidence-Based Case Assessment

Maqāṣid dimension	Reported case evidence	Assessment	Key limitation/qualification
hiḥf al-dīn	BO and ME report riba avoidance and DPS oversight; C2 reports no unilateral added charges.	Reported support	No DPS review record or contract-level Sharia audit is reproduced in the available study record.
hiḥf al-naḥs	BO reports structured service and follow-up; C1 reports proactive help but also broader service shortcomings.	Partial/mixed support	Service ethics is a narrow indicator and customer experience is not uniformly positive.
hiḥf al-‘aql	BO reports detailed explanation. C1 confirms margin and charges were known, but C1-C2 report limited deeper explanation/ understanding of the contract.	Partial/mixed support	Indicates an information-depth/ comprehension gap, not proven concealment; no item-level disclosure/comprehension record is reproduced.
hiḥf al-māl	BO reports restructuring/ relaxation, margin reduction, and term extension; C1 confirms relief availability.	Partial support	Formal eligibility criteria, frequency, and case-level capacity assessment are not reproduced
hiḥf al-naṣl	C1 reports financing helped household needs without disrupting family finances; ME links relief to protection from family hardship.	Partial support	Evidence is mainly one customer's experience and does not support broad claims about intergenerational debt transfer.

Taken together, the evidence supports a graded rather than binary assessment. The interview accounts provide reported support for the narrow hiḥf al-dīn domain, partial/mixed support for hiḥf al-naḥs, partial/mixed support for hiḥf al-‘aql, and partial support for hiḥf al-māl and hiḥf al-naṣl. The central contribution is the refined transparency finding: the record does not substantiate hidden murabaha costs, but it does show that communicating margin and charges does not necessarily ensure deeper customer understanding of the contract. This distinction is consistent with the broader Maqāṣid proposition that Islamic finance should be assessed through substantive welfare and informed participation, not only through the formal presence of an Islamic contract.

CONCLUDING REMARKS

This exploratory case study examined how five dimensions of Maqāṣid al-Sharī‘ah are reflected in reported murabaha financing practices at one Islamic Rural Bank in Indonesia. Evidence from four purposively selected informants provides reported support for hiḥf al-dīn and partial, mixed, or contradictory support across hiḥf al-naḥs, hiḥf al-‘aql, hiḥf al-māl, and hiḥf al-naṣl. These findings should not be read as proof of complete Maqāṣid attainment. The most important result concerns hiḥf al-‘aql. The bank officer reported detailed explanation of murabaha terms, while customer accounts showed uneven depth

of understanding. Crucially, one customer confirmed that margin and charges were communicated at the outset while also reporting insufficient explanation of the contract's meaning and legal basis. The case therefore identifies an information-depth and customer-understanding gap rather than deliberate distortion or concealment.

The practical implication is that murabaha customer protection should address substantive comprehension as well as formal disclosure. The studied bank should use a standardized pre-contract disclosure that states the acquisition price where applicable, agreed margin, charges, total selling price/obligation, tenor, installment schedule, and consequences of restructuring; staff should also explain in plain language how the contract works and verify understanding before signature. A short disclosure checklist and customer acknowledgment can document this process. The DPS should periodically review both contract forms and communication practice, including sample customer-understanding checks. For payment difficulties, written criteria for restructuring, relaxation, margin adjustment, and term extension would also make relief practice more transparent and consistent.

The study remains limited by its single-bank design and four-informant sample, so the results cannot be generalized to Islamic Rural Banks in Indonesia as a whole. The available study records identify structured interview guides, observation, document types, transcripts, and credibility procedures, but they do not consistently report interview duration, a complete document count/date range, dimension-specific observational corroboration, a second-coder process, or data saturation. These omissions limit evidential depth. Future research should use multiple BPRS cases, more customers and financing officers, explicit comparison of pre-contract disclosure documents with interview evidence, observation of contract explanation where ethically permissible, and a clearly documented coding and triangulation protocol. Such work could test whether information-depth gaps are isolated to this case or represent a wider challenge in murabaha customer understanding.

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What kind of leadership behaviours impact the organisational commitment of employees in the resort sector of Maldives?

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ABSTRACT

While there is growing evidence in management that supervisors play a crucial role in enhancing the organisational commitment of employees, little is known about the indirect effect of leadership style on organisational commitment through family supportive supervisor behaviour. In addition, knowledge of how employees' perceptions of family supportive supervisor behaviour affect work outcomes is also limited. Drawing on Affective Events Theory and Social Exchange Theory, it is hypothesised that supervisors who adopt a transformational leadership style and family supportive supervisor behaviour are more likely to affect organisational commitment positively. This quantitative study was conducted for the resort employees of the Maldives with experience in the current resort for more than one year. Data were collected using an online form. The results of structural equation modelling using a bootstrapping technique show that transformational leadership style is positively related to organisational commitment and family supportive supervisor behaviour mediates the relationship between transformational leadership style and organisational commitment. This result indicates that employees with supervisors who use transformational leadership styles are more likely to perceive a higher level of family supportive supervisor behaviour, which positively affects job outcomes such as organisational commitment. Therefore, it is recommended that resort managers adopt a transformational leadership style and family supportive supervisor behaviour to increase employees' organisational commitment. This result can be further utilised to address the high turnover rate in the resort sector.

Keywords: transformational leadership style, family supportive supervisor behaviour, organisational commitment, resort islands, hospitality and tourism industry

INTRODUCTION

The rapid development of the hospitality industry has been evident over the past decade (Michel et al., 2020). This includes almost all types of tourist facilities including hotels, guesthouses, resorts, cruise lines and restaurants. Employees in the hospitality industry play a vital role in providing good quality service to customers (Radwan, 2020). The service experienced by customers is crucial in forming customers' perceptions towards the hotel (Yeh, 2019). Therefore, taking care of the employees by motivating, training and making them committed to the organisation is essential to enhance customer loyalty and satisfaction. This becomes a great challenge to a hotel manager due to the heavy workloads, irregular holidays, and inflexible working hours. Besides, due to these stressful factors, the employee turnover rate is high in the hospitality industry around the world (Guzeller & Celiker, 2020). According to Marinakou and Giousmpasoglou (2019), some of the reasons behind the high turnover rate include issues with management teams, organisational culture, fewer career opportunities, low wages, generation differences and seasonal working conditions.

The extant literature revealed that employee turnover can be reduced by increasing organisational commitment. Guzeller and Celiker (2020) found that employees who are unable to form a strong emotional bond with the organisation are more likely to leave the organisation in the hospitality and tourism industry. According to Firth et al. (2004), leadership style directly affects team members' organisational commitment and job satisfaction, which in turn affects and shapes employee turnover intention. Transformational leadership is one of the most effective leadership styles influencing organisational commitment (Radwan, 2020; Afshari, 2021). In addition, the turnover intention of employees can be minimised when leaders exhibit family supportive supervisor behaviour (Hammer et al., 2009; Alshutwi, 2016). Leadership behaviours that can be modified to address the needs of subordinates can increase organisational commitment (Mwesigwa et al., 2020). Thus, understanding leadership behaviours that can impact employees' organisational commitment is of utmost importance to address the high turnover rate in the hospitality and tourism industry.

Maldives is a small island nation located southwest of the Indian subcontinent and approximately 450 miles southeast of Sri Lanka across the equator. It comprises 26 major atolls and 1,190 small islands distributed across an area of around 90,000 square kilometres. Maldives may not be clearly visible on the map, but it is considered a luxury destination for tourists. The country's natural beauty, including the sea, sun, and sandy beaches, makes it attractive to tourists. The country's tourism model is unique: each resort occupies an island separated by sea from local communities and is considered a separate hotel. The population of this island consists of only workers and tourists and outsiders are not allowed to enter without permission.

Tourism is the engine that propels the economy of the country, with linkages to various related economic activities and is one of the leading sources of employment opportunities. The tourism industry is the main contributor to the country's GDP, contributing 26%. The lifeline of the country is tourism and several island communities depend on this industry for their livelihoods (Maldives Bureau of Statistics, 2020). According to the Ministry of Tourism (2022), there were 164 resorts/marinas operating at the end of the year 2022.

Despite the success of the tourism industry of the Maldives, a high turnover rate exists in the resort sector which increases the cost of hiring and training employees. To retain the success of the industry, it is important to retain talented employees. Some of the factors that affect employee retention include proximity to home island, social isolation and family issues (Netthasinghe, 2016).

Since the resort islands are separated by sea, employees tend to stay and live in the resorts, making them socially isolated from the local community. The statistics show that 89% of the workforce resides at the resorts (Maldives Bureau of Statistics, 2020). Employees are unable to visit their families frequently. Some employees visit their families once every three or six months or once a year. The geographical isolation of the island creates a barrier for employees to travel back to their residences and families frequently. Thus, while staying at the resorts employees need support and care from their supervisors and the leadership, especially in resolving work-family conflict and balancing work-family life. Leadership style and behaviours may lessen the impact of major issues associated with the hospitality sector, which includes employee turnover, commitment and managing the company in an uncertain environment (Elkhwesky et al., 2022). Employees who work with transformational leaders get psychological benefits that lead them to perceive their supervisor as having a higher level of family supportive supervision, which is a beneficial work resource that improve occupational health (Kossek, et al., 2018). Studies indicated that leadership perception and leaders' behaviour have a significant impact on work-family support, health, and productivity of employees (Hammer et al., 2011).

Past studies have revealed that, although research on leadership styles in the hospitality industry has advanced over the past 13 years, several leadership styles remain under-researched in the hospitality industry with their outcomes (Elkhwesky et al., 2022). Several antecedents of organisational commitment have been studied in the past including transformational leadership style. However, family supportive supervisor behaviour as an antecedent of organisational commitment and the mediating role of family supportive supervisor behaviour in transformational leadership style and organisational commitment has received insufficient attention in past studies. Only limited studies related to leadership and organisational commitment are available in the hospitality industry from Asian countries, especially developing countries. In addition, most leadership studies have been conducted

in hotels. Elkhwesky et al. (2022) call for future researchers to conduct leadership-style studies for other types of tourist facilities including resorts targeting employees, customers and managers.

Therefore, this research bridges the gap in the literature. In addition, this research would aid in managing human resources in the hospitality and tourism industry.

With this background, the aim of the study is to analyse the relationship between transformational leadership style and organisational commitment and to investigate the mediating role of family supportive supervisor behaviour in the relationship between transformational leadership style and organisational commitment.

THEORY AND HYPOTHESES

The conceptual framework of this study has been formulated based on two theories: Affective Events Theory (AET) and Social Exchange Theory.

Affective Events Theory

Studies conducted using AET in the leadership area have highlighted that leadership behaviour is a significant affective event in the workplace that can set off a range of affective reactions among subordinates and subsequently influence their behaviour and other kinds of outputs (Cropanzano et al., 2017). AET states that things that happen at work can cause people to have either positive or negative emotional reactions, which in turn prompt individuals to produce corresponding results (Feng et al., 2024). This theory also highlights that affective reactions are not caused directly by events, but rather that employees' affective events are preceded and determined by their cognitive interpretation of those events. The central idea of this theory states that affective reactions mediate the relationship between work events and outputs. Transformational leadership style and family supportive supervisor behaviour are regarded as an observable collection of behaviours that occur throughout interpersonal interactions among the leaders and subordinates. Leaders who have transformational characteristics and family supportive supervisor behaviour may stimulate employees' affective reactions, attitudes, and behaviours that can impact their emotional attachment to the organisation.

Social Exchange Theory

Social Exchange Theory explains how two or more people interact behaviourally and how that interaction reinforces the other person's behaviour with the hope that this exchange would benefit both parties (Blau, 1964). In accordance with this theory, transformational leadership style and family supportive supervisor behaviour can be an important driver of organisational commitment. Employees feel attached to the organisation and benefit from their supervisor's support in a working environment with a management-supportive atmosphere. The end result can be that employees stay in the organisation for a long time.

Organisational managers must adopt transformational leadership behaviours and family supportive supervisor behaviour as a strategy to reduce work-family conflict issues (Kailasapathy & Jayakody, 2019). Therefore, it is believed that transformational leadership style and family supportive supervisor behaviour can enhance organisational commitment.

Organisational Commitment

Organisational commitment is an important concept in the hospitality industry for individuals and organisations since successful hotel operations depend on pleasant relationships between employees and customers (Patlar & Wang, 2016). Organisations frequently work to encourage employee commitment to establish stability and reduce employee turnover (Meyer & Allen, 2004). Meyer and Allen (1991) considered organisational commitment as a multidimensional construct encompassing affective, normative and continuance commitment. Affective commitment reflects desire, and employees stay in the organisation because they want to. Employees with a high normative commitment remain because of their obligation towards the organisation. Continuance commitment is the cost of leaving the organisation and employees stay because they have to do so. Thus, organisational commitment is the employees' attachment to the organisation. Commitment entails an intention to stick with a plan of action and remain in the organisation. Therefore, organisational commitment is more than loyalty and implies a good relationship with the organisation where employees put forth extra effort in achieving organisational goals (Mowday et al., 1979). Studies have consistently indicated that a decrease in turnover can be attributed to commitment (Tett & Meyer, 1993; Meyer et al., 2002).

Transformational Leadership Style

Transformational leadership emphasises intangible attributes like common values, a shared vision, and ideas to foster connections, provide meaning for various actions, and motivate individuals to participate in the process of transformation (Daft, 2015). Hence, transformational leadership characteristics include their exceptionally charming charisma which makes them more inspiring, and they can develop themselves to create a high-performance team. According to Bass (1985), transformational leaders focus on increasing followers' participation in attaining organisational objectives. Transformational leaders motivate employees to see beyond their narrow self-interest in pursuit of a common objective. This is achieved through idealised influence, encouraging creative behaviour from employees, supporting and mentoring employees, and providing inspirational motivation. Transformational leadership was found to generate psychological resources for employees such as experiencing work-family supportive behaviours from their supervisors (Kossek, et al., 2018).

Family Supportive Supervisor Behaviour

Family supportive supervisor behaviour refers to behaviours of supervisors that are helpful and supportive in resolving work-family conflicts and balancing work and family responsibilities (Hammer et al., 2009). Family supportive supervisor behaviour was developed from the social support theory and is considered a type of informal support given to the subordinates by the supervisor. Hence, Family supportive supervisor behaviour is conceptualised from the perception of subordinates. As per Hammer et al. (2009), Family supportive supervisor behaviour is a multidimensional construct which includes four sub-dimensions: emotional support, role modelling, instrumental support, and creative work-family management. Emotional support can be showing empathy towards subordinates. An example of instrumental support includes facilitating when employees request to visit their families. Role modelling is when leaders show subordinates taking time to care for their families. Creative work-family management can be when leaders plan ways to support family needs. When supervisors provide assistance to subordinates regarding their family issues, positive effects have been observed on employees' attitudes and behaviours (Hammer et al., 2009; Kossek et al., 2018).

Transformational Leadership and Organisational Commitment

Yahaya and Ebrahim (2016) assert that employees' commitment is significantly affected by the leadership style of their supervisors. Hence, Mwesiwa et al. (2020) reaffirmed that employee commitment can be increased by adopting the right leadership style that matches the needs of subordinates. Radwan (2020) recommended adopting a transformational leadership style to impact the organisational commitment of employees in the hospitality industry. However, few studies examined how transformational leadership style affects organisational commitment in the hospitality and tourism industry (Yuan et al., 2021; Radwan, 2020; Dlamini et al., 2017) and results differ in different cultures and industries. Several leadership styles have not been thoroughly studied with their outcomes in the hospitality industry and studies lack sufficient empirical support (Elkhwesky et al., 2022). The behaviour of transformational leaders focuses on inspiring followers to go beyond expectations and engaging them in accomplishing organisational goals (Radwan, 2020). Using transformational leadership in the hotel sector will lead to motivated and satisfied employees (Dlamini et al., 2017). In the Maldives civil service sector, transformational leadership style and affective commitment were found to have a significant relationship (Sudha et al., 2023). This was the only study found related to this area and this relationship is not clear in the resort sector of the Maldives.

In the hotel sector of China, Yuan et al. (2021) found a positive and significant relationship between transformational leadership and affective commitment and the study stressed that moral modelling, articulate vision, individualised consideration and leader charisma nurtured

the commitment of employees. Radwan (2020) studied the hotel sector of Egypt and found a significant relationship between transformational leadership style and organisational commitment and recommended that hotel managers must adopt transformational leadership style to sustain employees' commitment. Dlamini et al. (2017) also found a significant relationship between transformational leadership style and organisational commitment and suggested that leaders must have transformational behaviours such as igniting enthusiasm and promoting unity in achieving organisational vision to increase employees' emotional attachment to the organisation and to continue serving the organisation. In different sectors, several other studies found a significant and positive relationship between transformational leadership style and organisational commitment (Mwesigwa et al., 2020; Mayowa-Adebara & Opeke, 2019; Eliyana & Muzakki, 2019; Acquah, 2019). Hence, the following hypothesis has been proposed.

H1: There is a significant relationship between transformational leadership style and organisational commitment.

Transformational Leadership and Family Supportive Supervisor Behaviour

Transformational leadership style is likely to be associated with family supportive supervisor behaviour since when employees raise work-family issues, transformational leaders have the ability to step in and help resolve conflict, thereby providing family support. Transformational leaders exhibit good behavioural patterns such as inspiring staff members, fostering intellectual stimulation, and demonstrating concern for the needs of their followers (Bass & Avolio, 1994). Through this, transformational leaders improve employee well-being which leads to a decrease in work-family conflict (Arnold, 2017). Supervisors who use transformational leadership, exert effort to reduce work interference with family conflict by enhancing family supportive supervisor behaviour (Kailasapathy & Jayakody, 2019). This can be achieved by developing an informal work-family supportive culture and by making efficient use of formally available resources. Transformational leaders will have the necessary skills for family supportive supervisor behaviour (Straub, 2012). Transformational leadership style may be associated with family supportive supervisor behaviour because the traits of transformational leaders inspire behaviours congruent with family supportive supervision (Kossek, et al., 2018). It is possible that subordinates' perception of family supportive supervisor behaviour might be attributable to the general characteristics of the transformational leadership style. Kossek et al. (2018) found a positive and significant relationship between transformational leadership style and family supportive supervisor behaviour indicating that supervisors with a higher level of transformational leadership style were more likely to be considered by their subordinates as using a higher level of family supportive supervisor behaviour. Kailasapathy and Jayakody (2019) also revealed a significant positive relationship between transformational leadership

style and family supportive supervisor behaviour. Based on this empirical evidence, the hypothesis below is proposed.

H2: Transformational leadership is related to family-supportive supervisor behaviour.

Family Supportive Supervisor Behaviour and Organisational Commitment

In the extant literature on organisational commitment in the hospitality industry, several factors such as transformational leadership style, tourism involvement, employee creativity and trust in leadership were found to have a significant effect on organisational commitment (Dlamini, et al., 2017; Yeh, 2019, Radwan, 2020; Yuan et al., 2021). However, the relationship between family supportive supervisor behaviour and organisational commitment is lacking in past studies. Family supportive supervisor behaviour is derived from supervisor support. According to Yang et al. (2019), supervisor support has a greater impact on increasing organisational commitment. When managers provide support to their staff, it demonstrates that the organisation values and recognises the worker's abilities, which can strengthen workers' organisational commitment, loyalty to the organisation, and sense of belonging (Gorgulu & Akilli, 2017). Support from supervisors can increase employees' organisational commitment, which lowers turnover (Dewan & Myatt, 2008). Greenhaus and Powell (2006) discussed the idea of "work-family enrichment," which holds that supervisor support can reduce conflict and also improve workers' general well-being, fostering a stronger organisational commitment. (Greenhaus & Powell, 2006).

The emotional support component of family-supportive supervisor behaviour focuses on communicating with subordinates and getting to know their obligations in their personal and family lives. This may be connected to the affective component of organisational commitment, which is the connection that employees have with their employer (Mowday et al., 1979). Employees' affective commitment may rise when they feel comfortable speaking with their supervisor since their expectations are aligned with their self-fulfilment and accomplishments in the organisation. The creative work-family management component of family supportive supervisor behaviour can be related to the continuance and normative commitment of organisational commitment. Employees view it as a benefit when managers proactively rearrange work to promote a balance between work and non-work life, and this may boost normative and continuance commitment. Therefore, it is assumed that an employee's organisational commitment increases when their supervisor helps them strike a balance between work and family obligations. This leads to the development of the following hypothesis.

H3: Family supportive supervisor behaviour is related to organisational commitment.

The mediating effect of family supportive supervisor behaviour between transformational leadership style and organisational commitment.

According to Arthur and Hardy (2014), there are several benefits of transformational leadership style for both companies and workers, such as improved job performance, organisational commitment, and employee organisational citizenship behaviour. Afshari (2021) highlighted that little attention has been given to understanding the process through which transformational leadership generates these links and the effects that follow in various cultural contexts. Although the link between transformational leadership style, family supportive supervisor behaviour and organisational commitment is clear, the mediating role of family supportive supervisor behaviour in the association between transformational leadership style and organisational commitment is not evident in past studies. According to Elkhwesky et al. (2022), there are many flaws in the research of mediating and moderating factors in the leadership styles research in the hospitality sector.

Transformational leaders give their followers a positive purpose for their work and appeal to their followers' sense of purpose (Afshari, 2021). This sense of purpose to the followers is provided when they present a compelling vision for the organisation and motivate followers to work hard on achieving that mission (Bass, 1985). Transformational leaders can reduce the work-family conflict faced by employees through their family supportive supervisor behaviour that can increase organisational commitment. The characteristics of family supportive supervisor behaviour show concern for their employees' well-being by helping them reconcile their duties to their families and their jobs and resolving conflicts (Hammer et al., 2009). Employees will have less work-family conflict and more job satisfaction when they perceive their supervisor assists them in their family duties. This perceived assistance and support from supervisors fosters a greater sense of belonging and loyalty to the organisation, enhancing organisational commitment. Hence, transformational leadership can enrich organisational commitment by fostering a supportive environment where supervisors actively support their employees' family responsibilities. Therefore, it is hypothesised that family supportive supervisor behaviour can act as an intermediary mechanism through which transformational leadership influences organisational commitment. Based on this argument, the following hypothesis is developed.

H4: Family supportive supervisor behaviour mediates the relationship between transformational leadership style and organisational commitment.

RESEARCH METHODOLOGY

Sample

Using a simple random sampling method, the study sample consists of 250 randomly selected employees from the resorts of Maldives with a bed capacity of more than 450 beds. Considering the inclusion criteria, the study focused on a population of around 900 employees. The target sample size was set at 260, determined by considering the minimum sampling requirements by established sampling principles, the potential for missing data,

and the expected response rate. The study sample comprises full-time permanent staff members with work experience in the current resort for more than 1 year and employees who reside there. These employees work in a variety of disciplines such as administration, accommodation, transportation, food and beverage, recreation and other fields including marine work. Nevertheless, those workers in the outsourced area are excluded from this study. Since it is not feasible to visit these resort islands, data was gathered online using a Google Form with the assistance of the resort management. The resort management was contacted by phone, and they shared the link to the Google Form with the employees who were qualified and consented to participate in the study.

Research Method

Considering the difficulty of travelling to the resorts, a cross-sectional method and a quantitative approach were adopted for this study. The research strategy employed is a case study and a deductive approach was used.

Measures

TCM Employee Commitment Survey developed by Meyer et al. (1993) was used to measure organisational commitment. Among these items, four items were re-coded and are considered “reverse-keyed” items. Transformational leadership style was measured using the Multifactor Leadership Questionnaire (MLQ) by Bass and Avolio (2004). Items used to measure family supportive supervisor behaviour were adopted from the Family Supportive Supervisor Behaviour Short Form developed by Hammer et al. (2013). A five-point Likert scale, with anchors of 1 denoting “strongly disagree” and 5 denoting “strongly agree,” was used to rate each item. A sample item in organisational commitment includes “I would be very happy to spend the rest of my career with this organisation”. The statement “The person I am rating....talks optimistically about the future” is a sample item from MLQ. An example of a family supportive supervisor behaviour item is “My supervisor makes me feel comfortable talking to him/her about my conflicts between work and non-work” (Hammer et al., 2013).

Data Analysis

There were four sections in the questionnaire. The demographic questions were in Part A, transformational leadership questions were in Part B, the questions on family supportive supervisor behaviour were in Part C, and the questions about organisational commitment were in Part D. Due to the limitation of educational qualification of resort employees to comprehend English adequately, the questionnaire has been translated into Dhivehi and is bilingual in both Dhivehi and English. Most of the employees in the study are male (90%), married (66.4%), aged 31–40 (46.4%), basic education level (29.6%) and have 1–2 years of experience in the current resort (42.8%). For all the variables used in this study, the reliability test, normality test using P-P plots, Standardized Residual Histogram,

Skewness and Kurtosis, Tolerance and VIF, Mahalanobis Distance and Scatter Plot, factor analysis were conducted, and all values were within the acceptable threshold. The data was analysed using Statistical Package for the Social Sciences (SPSS) software and AMOS software (version 24). Exploratory Factor Analysis (EFA) was conducted for the variables to see the factor structure within the Maldivian context. Confirmatory factor analysis, or CFA, was used to examine the measurement model's validity as well as the distinctiveness and convergence of the variables under investigation. The model's reliability was assessed using Cronbach's alpha and composite reliability. Structural Equation Modelling (SEM) was conducted to check the association between transformational leadership style, family supportive supervisor behaviour and organisational commitment. A bootstrapping technique using AMOS was employed to check the mediation analysis of family supportive supervisor behaviour between transformational leadership style and organisational commitment.

Ethical Consideration

Before proceeding with the survey, a brief explanation of the purpose of the study was given to the participants and their consent was taken. In addition, they were informed about the voluntary participation and the option to discontinue at any given time. Personal information such as their name, email address and the name of the resort were not collected.

RESULTS

Validity and Reliability

The final structural model is provided in Figure 1 and it includes 18 items of transformational leadership style, 4 items of family supportive supervisor behaviour and 8 items of organisational commitment. The confirmatory factor analysis examination revealed a statistically good model fit ($\chi^2/df = 2.007$, CFI = .943, RMSEA = .064).

According to Table 1, all factor loadings are beyond the threshold of 0.5, AVE values are above 0.5 and composite reliability values are more than 0.7. These values indicate good convergent validity (Hair, Black, Babin, Anderson, & Tatham, 2006).

The Heterotrait-Monotrait Ratio (HTMT) is calculated and provided in Table 2 to check the discriminant validity. As per Table 2, all HTMT ratios are less than 0.9, establishing discriminant validity.

Figure 1. Structural model

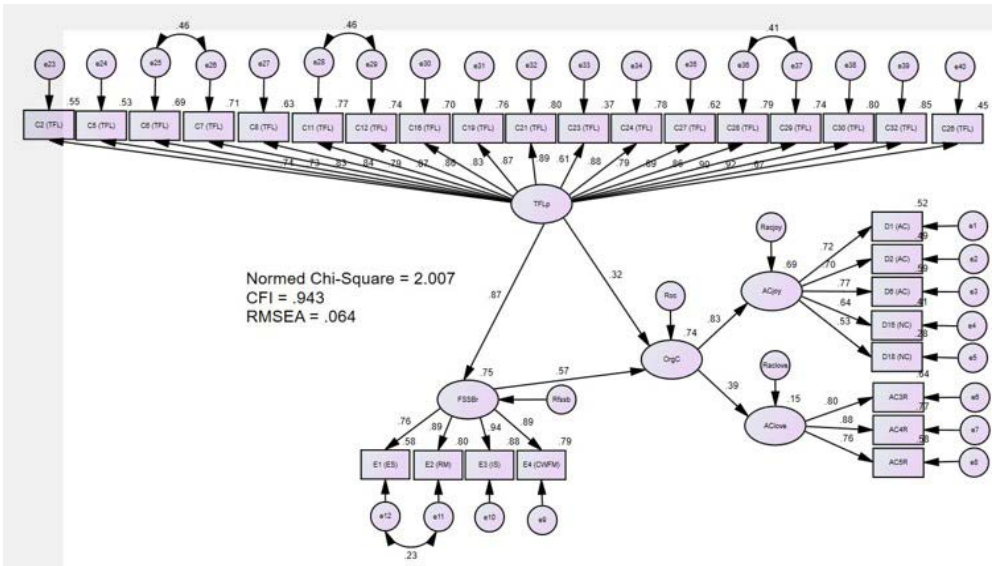


Table 1. Standardised factor loadings, average variance extracted (AVE), and composite reliability (CR)

Construct and Item	Standardised Loading	AVE	Composite Reliability
Transformational leadership style		.68	.95
TFL1	.745		
TFL2	.728		
TFL3	.828		
TFL4	.844		
TFL5	.795		
TFL6	.875		
TFL7	.860		
TFL9	.835		
TFL11	.874		
TFL12	.894		
TFL13	.608		
TFL14	.884		
TFL15	.668		
TFL16	.786		
TFL17	.886		
TFL18	.863		
TFL19	.892		
TFL20	.922		

Family-supportive supervisor behaviour		.76	.92
ES	.761		
RMB	.892		
IS	.937		
CWFM	.888		
Organisational commitment		.54	.90
AC1	.719		
AC2	.699		
AC3R	.799		
AC4R	.877		
AC5R	.761		
AC6	.770		
NC4	.642		
NC6	.529		

Table 2. Discriminant validity—HTMT ratio

	TFL	FSSB	OC
TFL			
FSSB	0.85		
OC	0.66	0.68	

Results of hypothesis testing

Table 3 provides the results of the hypothesis testing based on the path analysis of Structural Equation Modelling.

Table 3. Hypothesis testing (maximum likelihood estimates)

		Standardized Estimate	t-value	p-value	Results
FSSB	← TFL	.865	16.227	***	Significant
OC	← TFL	.318	2.060	.039	Significant
OC	← FSSB	.572	3.160	.002	Significant

*** p < .001; * p < .05

Hypothesis 1: There is a significant relationship between transformational leadership style and organisational commitment.

Table 3 shows a positive and significant relationship between transformational leadership style and organisational commitment (b = .318, t = 2.060, p < .05). Therefore, Hypothesis 1 was supported.

H2: Transformational leadership is related to family-supportive supervisor behaviour.

The statistical values in Table 3 demonstrated a positive and significant relationship between transformational leadership and family-supportive supervisor behaviour ($b = .865$, $t = 16.227$, $p < .001$). Hence, Hypothesis 2 was supported.

H3: Family supportive supervisor behaviour is related to organisational commitment.

It is evident from Table 3 that the relationship between family supportive supervisor behaviour and organisational commitment is positive and significant ($b = .572$, $t = 3.160$, $p < .05$). Thus, Hypothesis 3 was also supported.

Results of mediation analysis

H4: Family supportive supervisor behaviour mediates the relationship between transformational leadership style and organisational commitment.

Table 4 depicts the results of the mediation analysis using the bootstrapping technique. As seen in Table 4, the mediating role of family supportive supervisor behaviour is present between transformational leadership style and organisational commitment. The results revealed a significant and positive indirect effect of transformational leadership style on organisational commitment through family supportive supervisor behaviour ($b = .495$, $p < .05$). Since the confidence interval between the lower and upper bounds did not cross zero, this indirect effect is significant. Therefore, Hypothesis 4 was supported. As the direct effect of transformational leadership style on organisational commitment in the presence of a mediator was also significant ($b = .318$, $t = 2.060$, $p < .05$), there is a partial mediation of family supportive supervisor behaviour in the relationship between transformational leadership style and organisational commitment.

Table 4. Mediation analysis

Relationship	Direct Effect	Indirect Effect	Confidence Interval		P value	Conclusion
			Lower Bound	Upper Bound		
TFL → FSSB → OC	.318 ($p < .05$)	.495	.194	.873	.002	Partial Mediation

Source: Author's calculation.

DISCUSSION

This research examined the relationship between transformational leadership style and organisational commitment and the mediating role of family supportive supervisor behaviour in the relationship between transformational leadership style and organisational commitment. From the above analysis, it can be demonstrated that there is a positive and significant relationship between transformational leadership style and organisational commitment. This indicates that when leaders adopt a transformational leadership style, employees' organisational commitment can be enhanced. This research finding is supported by previous research conducted in different industries (Acquah, 2019; Eliyana & Muzakki, 2019; Mayowa-Adebara & Opeke, 2019; Mwesigwa et al., 2020; Afshari, 2021). In the context of the Maldives, Sudha et al. (2023) also found a positive relationship between transformational leadership style and affective commitment in the Civil Service Commission. In the hospitality and tourism industry, several studies found similar results, but the studies were limited to hotels, not resort islands (Dlamini et al., 2017; Radwan, 2020; Yuan et al., 2021). Contrariwise, these research findings contradict previous research in different industries (Gardner, 2018; Nanjundeswaraswamy, 2021; Oyewobi, 2022). The positive relationship between transformational leadership style and organisational commitment implies that the leaders in the resorts of Maldives are more compassionate and adaptable, assist workers in reaching their objectives, pay attention to their needs, and foster trust. The charismatic style and the way leaders motivate their followers to go beyond what is expected are being considered by the employees as good characteristics of a leader. As a result, workers respect, trust, and appreciate their leaders, and they also feel valued and that they are a part of the organisation, which increases employee commitment. This in turn affects employees psychologically and makes them more attached to the organisation. Thus, these employees work hard to achieve organisational objectives. Transformational leaders appeal to their followers' sense of purpose and give them a positive purpose for their work (Afshari, 2021). In the hospitality and tourism industry, transformational leadership can result in motivated and satisfied employees (Dlamini et al., 2017). Hence, it is concluded that a transformational leadership style is essential in enhancing employees' organisational commitment in the resorts of Maldives.

The next important finding of this study is that family supportive supervisor behaviour mediates the relationship between transformational leadership style and organisational commitment. While analysing this mediation relationship, it was revealed from this study that there is a positive and significant relationship between transformational leadership style and family supportive supervisor behaviour and family supportive supervisor behaviour and organisational commitment. The positive relationship between transformational leadership style and family supportive supervisor behaviour suggests that employees of Maldivian resorts believe that leaders who use transformational leadership style also use family

supportive supervisor behaviour extensively. This could also indicate that staff members are comfortable addressing work-family issues with leaders because of their transformational qualities. Furthermore, because followers live together on an island, leaders get to know them well, develop a strong bond with them, and offer assistance in resolving work-family conflicts. This finding is supported by Kossek et al. (2018) and Kailasapathy and Jayakody (2019). Transformational leaders can foster an informal supportive organisational culture and they can reduce work interference with family conflict by enhancing family supportive supervisor behaviour (Kailasapathy & Jayakody, 2019). The positive relationship between family supportive supervisor behaviour and organisational commitment signifies that when supervisors assist employees in managing work-family conflicts, a sense of belonging towards the resort can be developed which leads to an increase in organisational commitment. The literature lacks studies conducted on this relationship. However, from the literature, it is evident that supervisor support which is the main umbrella of family supportive supervisor behaviour is essential in increasing employees' organisational commitment (Yang et al., 2019; Greenhaus & Powell, 2006). The partial mediation effect of family supportive supervisor behaviour on the relationship between transformational leadership style and organisational commitment implies that there is an indirect effect of transformational leadership style on organisational commitment and this effect goes through family supportive supervisor behaviour. This means that because of the characteristics of charisma, idealised influence, individualised consideration, intellectual stimulation, and inspirational motivation, transformational leaders support their employees with work-family issues which make employees emotionally attached to the organisation. Therefore, these employees stay in the organisation and are more loyal which decreases turnover intention. This finding indicates that having supervisors with transformational leadership styles and family supportive supervisor behaviour can enhance employees' organisational commitment in the resorts of the Maldives. According to Straub (2012), managers have the power to serve as gatekeepers in facilitating the availability and successful execution of work-family initiatives, as well as initiators of positive change in informal supportive organisational cultures. Thus, the transformational leadership style affects organisational commitment directly and indirectly through family-supportive supervisory behaviour. Previous research has not clearly shown how family supportive supervisor behaviour mediates the relationship between transformational leadership style and organisational commitment. Therefore, this finding is new to the literature.

THEORETICAL AND PRACTICAL IMPLICATIONS

This study adds to the research exploring the outcomes of leadership behaviours and antecedents of organisational commitment and the mediating role of family supportive supervisor behaviour on the relationship between transformational leadership style and

organisational commitment in the hospitality and tourism industry, specifically in isolated resort island settings. Despite the analysis of antecedents of organisational commitment in the hospitality industry (Yeh, 2019; Luo et al., 2017; Adanse et al., 2017; Yao et al., 2019), none of the studies analysed family supportive supervisor behaviour as an antecedent and the mediating role it plays in the relationship between transformational leadership style and organisational commitment.

This study integrated the leadership and the leader's family support research, which advances the field of human resources management. According to Kossek et al. (2018), leaders are regarded as the gatekeepers to official and informal access to work-family support. Yet, few studies have examined how leadership style relates to the gatekeeping role. This study's findings demonstrated that a transformational leadership style can facilitate work-family support, which in turn has a beneficial lasting impact that increases employees' commitment to the organisation. This research provides additional information to the body of knowledge and validates the concept put forth by Hammer et al. (2009) that the psychological and instrumental assistance of workers is essential to worker outcomes like job satisfaction and retention. Furthermore, the results corroborate the research conducted by Kossek et al. (2018), which indicates that managers who use a transformational leadership approach are more likely to offer resources that facilitate work-family balance, which enhances employee outcomes.

The results of this study add to theory and have practical implications for island resorts due to the significant positive influence of transformational leadership style and family-supportive supervisor behaviour on organisational commitment and the mediating role of family-supportive supervisor behaviour on the relationship between transformational leadership style and organisational commitment. The results of this study support Affective Events Theory, which proposes that events that occur at work can elicit either good or negative emotional reactions, leading individuals to take appropriate actions. In addition, the findings support the Social Exchange Theory which postulates a mutually beneficial interaction between two parties. This study discovered that the transformational leaders' charismatic style and the assistance provided to balance and resolve work-family conflicts make workers feel appreciated and develop an affection and attachment to the organisation, which increases their organisational commitment. The conceptualised model of this research highlights the "dual agenda" of enhancing productivity and well-being by creating healthy work environments, rather than sacrificing either one.

From a managerial perspective, since transformational leadership was found to have a direct and indirect effect on organisational commitment through family supportive supervisor behaviour, the management of the resorts can check for transformational leadership and family supportive supervisor behaviour characteristics when hiring managers. Furthermore,

training related to transformational leadership and family supportive supervisor behaviour can be provided to the supervisory-level staff to enhance employee organisational commitment. Since the Maldives' fifth tourism master plan (2023–2027) focuses on creating a policy that would train locals for management roles and developing a training programme that will educate human resource managers (Ministry of Tourism, 2023), the findings of this research can be useful. The research findings can be utilised by managers and entrepreneurs in the hospitality and tourism sector to develop strategies that decrease employee turnover. Moreover, managers can use the results to develop human resource plans to improve employee performance and attitudes like organisational commitment. This is essential for the hospitality and tourism sector to be sustainable in the long run.

LIMITATIONS AND FUTURE RESEARCH

Every research has its limitations. This research is limited to only permanent employees with work experience of more than one year in the current resort and residing in the resort accommodation at resorts with a capacity of more than 450 beds. Hence, future research can be replicated in other types of resorts and tourist facilities such as hotels, guest houses and safaris/yachts. Data for this study was collected after the reopening of the resorts after the COVID-19 pandemic. Consequently, few employees met the inclusion criteria of work experience of more than one year. Due to the geographical dispersion of the island resorts, it was also difficult to get in touch with the management and staff; as a result, online communication was the most practical method of communication. In addition, the unavailability of past research and reference material was another limitation. The education level of some of the resort employees is also a limitation. Thus, the questionnaire has been translated into Dhivehi and is bilingual in both English and Dhivehi. The quantitative research adopted in this study disregarded the investigation of underlying causes, perceptions and experiences that can be discovered through qualitative research that impact leadership behaviours and organisational commitment. The cross-sectional data employed in this study prevents drawing inferences about causality. However, the hypotheses were formulated using a theoretical approach. The measurement of leadership style and family supportive supervisor behaviour was from the subordinates and therefore reflects only their perspective. Further studies can be focused on the supervisor's perspective. Moreover, other factors that affect organisational commitment in the resorts of Maldives can be investigated since social isolation could be an affecting factor. Alternatively, researchers can analyse whether managers have the power to adopt family-supportive supervisor behaviour or if managers can modify their behaviour to appease workers' needs. It is also possible to research the factors that affect supervisors' ability to adjust to family-supportive supervisor behaviour.

CONCLUSION

This study addressed a gap in the literature on the mediating role of family supportive supervisor behaviour on the relationship between transformational leadership style and organisational commitment. This study discovered a positive and significant direct relationship between transformational leadership style and organisational commitment and an indirect effect of transformational leadership style on organisational commitment through family supportive supervisor behaviour. Therefore, leadership behaviours that impact the organisational commitment of employees in the resorts of Maldives are transformational leadership style and family supportive supervisor behaviour. The study findings are supported by Affective Events Theory and Social Exchange Theory. The results can be useful for the Maldivian resort management to increase the organisational commitment of employees and address the high turnover in the industry.

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Influence of sustainable practices on firm performance: Evidence from the FTSE Russell ESG Index adopted by Bursa Malaysia

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ABSTRACT

This study examined the relationships between workplace health and safety, corporate governance, environmental management, and firm performance from a financial-outcome perspective. The exogenous construct was overall sustainable practice, which was used to predict firm performance. A total of 151 corporate executives participated in the study, and a systematic sampling method was used. Data were collected through a self-administered questionnaire and analysed using Pearson correlation and multiple linear regression for hypothesis testing. The overall regression model significantly predicted firm performance. All three sustainable-practice dimensions were positively correlated with firm performance; however, only environmental management was a statistically significant predictor in the multiple regression model. Sustainable practices may improve a company's ability to generate revenue, build brand recognition, increase operational effectiveness, and attract investors, employees, and clients. Although implementing these policies may involve initial costs, sustainability has become a strategic requirement for modern enterprises, and the long-term benefits may exceed the expenditures.

Keywords: corporate governance, environmental management, firm performance, sustainable practices, workplace health and safety

INTRODUCTION

Sustainable development is no longer a trend; it is a necessity. Many countries have adopted more aggressive sustainability policies. France, for example, banned single-use plastics beginning in 2020, while Iceland is widely recognised for its low air emissions, extensive green landscapes, high water quality, and strong environmental policies.

Melinda and Wardhani (2020), in a recent Asian-context study of the relationship between the Thomson Reuters ESG Index and firm value across 22 Asian countries, found that ESG index scores had a statistically significant effect on firm value as measured by Tobin's Q. Their study demonstrates that ESG disclosure is important not only for increasing corporate value but also for signalling organisational resilience and sustainability. Similarly, Laskar and Gopal Maji (2018), using secondary data from Japan, South Korea, Indonesia, and India, found a positive and significant relationship between corporate sustainability performance and firm performance in all four countries.

The petrochemical industry manufactures chemical products derived from crude oil, and the same chemical compounds can also be obtained from other fossil fuels such as natural gas and coal, or renewable sources, and it can be conveniently divided into two groups: primary petrochemicals and intermediates and derivatives (Speight, 2020). Malaysia's petrochemical sector has expanded significantly in recent decades. Petronas contributed 62 per cent of total investment in this sector in 2008, and the largest foreign contributors to the industry were the United States, Germany, and Japan, accounting for 40 per cent, 22.8 per cent, and 14 per cent of total foreign investments, respectively (MGCC, 2008).

A firm's financial performance is an indicator of its ability to generate revenue using its core resources and business model. The concept is commonly used to assess a company's overall financial stability over time. Investors and analysts use financial reports to compare related firms in the same industry or to evaluate potential mergers. These reports provide information about a company's overall health, while financial indices offer quantifiable indicators of organisational efficiency. However, no single statistic can fully measure a company's financial performance (Kumar, 2017).

Trading creditors, securities sellers, clients, employees, and managers are among the actors with an interest in a corporation's financial performance. Financial results show how effectively a company raises money and manages its assets, liabilities, and owners' financial needs. Financial performance can be calculated in several ways, but each measure should be considered in its full context. Analysts and investors may examine line items such as acquisitions, corporate profits, cash balances, and total unit sales. They may also assess incremental growth or debt-reduction rates. Other suitable indicators of firm performance include improved market positioning, increased sales volume, and enhanced reputation (Lin et al., 2013).

LITERATURE REVIEW

Sustainability, according to Kocmanova et al. (2011), is a corporate strategy that incorporates economic, environmental, and social performance into corporate management to monitor long-term corporate growth, efficiency, performance, and competitiveness. This is one of the most apt descriptions for delivering clarity to corporate entities since it exactly echoes the attitude of John Elkington's Triple Bottom Line (TBL) concept (Amacha & Dastane, 2017). In this triple bottom line theory, business organisations are expected to be accountable for their economic, social, and environmental bottom lines by giving equal weight to each of these aspects of their operations, which serves as a guide for policy formulation and performance measurement (Sridhar & Jones, 2013).

According to Norman and MacDonald (2003), the TBL theory places equal importance on the linkage between the planet, people, and profit, stating that the majority of the material inputs for businesses come from the planet, people are the key enablers in the process of converting these inputs to outputs, and profits reaped by businesses come from these activities.

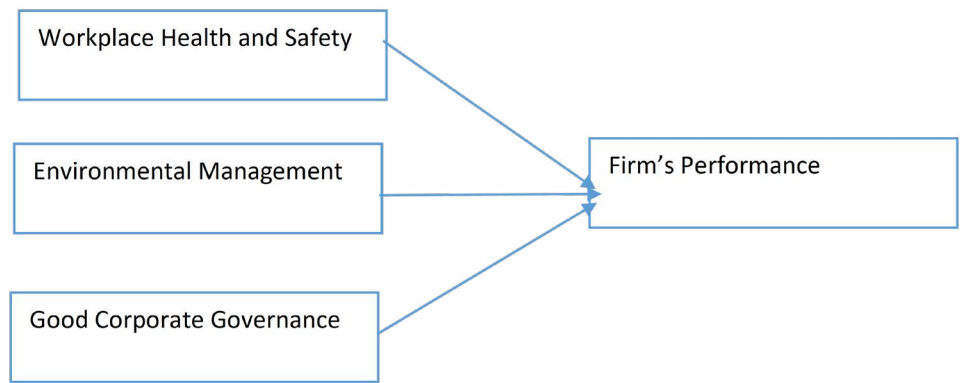
Companies always attempt to ensure that society perceives them as working within society's expectations, and they eventually want society's support that they are operating legitimately, according to the legitimacy theory. Noting the importance of 'legitimacy' it is considered as essential 'resource' and they may do whatever it takes to sustain such as targeted disclosures or reporting (Chiong, 2010).

Another important theory relevant to this study is stakeholder theory. It shares many similarities with legitimacy theory, but the two differ in how they conceptualise society's expectations. Legitimacy theory views those expectations as a single social contract between the firm and society, whereas stakeholder theory views them as a collection of social contracts between the company and various stakeholder groups, each with different expectations. This results in the company having multiple negotiated social contracts with different stakeholders in society (Chiong, 2010). Legitimacy theory therefore examines society at the macro level, while stakeholder theory examines it at the micro level.

Corporate sustainability means shifting a company's financial bottom line into a triple bottom line that includes environmental and social concerns, and businesses have realised that relying solely on their businesses' economics is no longer enough to stay relevant in a changing market (Chiong, 2010). A corporation's capacity to build a sound business plan is becoming increasingly reliant on how well it positions itself in terms of long-term development that balances financial, human, and environmental goals. This study will focus in-depth on how sustainable practices impact the firm performance in petrochemical industries by focusing on the aspects of workplace health and safety, environmental management, and good corporate governance (Figure 2.1). This is also a model adapted

from the ACSI framework (ACSI 2011).

Figure 2.1 Conceptual Framework on Impact of Sustainable Practices towards Firm Performance in the Malaysian Petrochemical Industry, as adapted from ACSI framework (ACSI 2011).



2.6 Hypothesis Development

2.6.1 Hypothesis 1 – Workplace health and safety practices have a positive relationship with firm performance among Malaysian petrochemical-related companies

The Institution of Chemical Engineers (ICChemE) developed a framework called Sustainability Metrics for the petrochemical industries to record and measure their progress toward sustainability, which is quite similar to the triple bottom line concept. Job conditions, societal effects, and health and safety at work are among the social indicators being measured (Vijayalakshmi, 2016). According to Al Sharrah et al. (2010), safety and health are embedded in all three key components of sustainability, including environmental concerns when considering human toxicity, economics when considering health and safety spending, and social indicators when aligning to work satisfaction. According to Vijayalakshmi (2016), the types of indicators tracked on occupational, health, and safety through research on Malaysia's petrochemical sectors include employee engagement in safety committees, injury rates and associated parameters, and training. The petrochemical industry gives prominent employee-related indicators akin to the oil & gas industry as they are closely related (Wolf, 2005).

On the positive side, through the research done by Amacha & Dastane (2017), analysis of Malaysian oil and gas companies demonstrated good safety and health practices across the industry, and this in turn also relates to good financial performance by the companies.

2.6.2 Hypothesis 2 - Environmental management practices have a positive relation on firm performance amongst Malaysian petrochemical-related companies

Following the GRI 3.1 Category on environmental indicators monitored by the petrochemical industries in Malaysia, Vijayalakshmi (2016) concluded that the 30 participating companies monitored 90 per cent of the total indicators, which included aspects such as materials, water, waste, effluent, biodiversity, and environmental accounting. Unlike the Malaysian study, a similar study of the same environmental indicator for 41 petrochemical manufacturing facilities in Thailand found that only half of the indicators are monitored, with the study citing a general lack of awareness and experience in GRI 3.1 reporting among those facilities as reasons (Chindavijak et al., 2015).

Multiple elements, including an organisation's field of operations, governance processes, performance level, and regulatory framework, may influence its willingness to disclose information about climate performance. However, a company's decision to disclose its climate-management performance does not necessarily reflect a genuine commitment to sustainable development; according to legitimacy theory, such disclosure may also be a response to external pressure (Talbot & Boiral, 2015). According to Amacha and Dastane (2017), most of the Malaysian oil and gas companies in their sample were lacking in climate-change management and environmental efficiency. Climate-related information appears to be increasingly material to stakeholders, including investors, as reflected in the attention paid to climate strategy reporting by major investors such as the Norwegian sovereign wealth fund and BlackRock (Dahl & Flottum, 2019). In the past, environmental regulations were often viewed as forcing businesses to deploy resources such as labour and capital to reduce pollution, which was considered inefficient from a business standpoint despite producing environmental benefits for society (Cucchiella et al., 2017). However, contemporary thinking has shifted this paradigm. An empirical study of 98 companies in the Chinese manufacturing sector using an integrated structural equation model found that green technology adoption had positive effects on economic performance and improved social reputation by meeting stakeholders' expectations (Xia et al., 2015).

The Resource-Based View (RBV) theory states that a company's competitive strategy and performance are strongly influenced by its valuable, rare, and inimitable organisational resources (Barney, 1991). According to the RBV, environmental management can help organisations develop competences such as cost reduction, improved corporate image, and increased employee morale, which can contribute to competitive advantage (Lannelongue et al., 2017). Compared with a single or limited set of environmental management practices, diverse environmental management techniques are more likely to support the development of distinct organisational capabilities and thereby improve company performance (Schaltegger and Synnestvedt, 2002).

2.6.3 Hypothesis 3 - Good corporate governance practices have a positive relation on firm performance amongst Malaysian petrochemical-related companies

The majority of Malaysian oil and gas companies had excellent levels of involvement in sustainability issues such as corporate governance, whistleblowing policy, code of conduct and ethics, and other aspects of economic and social sustainability were also found to be relatively good, according to an analysis done among Malaysian oil and gas companies on sustainability involvement and disclosure (Amacha & Dastane, 2017). In a study, Janggu et al. (2014) concluded that when determining the composition of the board, some key board characteristics, particularly board size, board professionalism, and board designation, should be taken into account to improve sustainability performance and, ultimately, the social role of organisations. Through his research, Vijayalakshmi (2016) identified that the three core indicators listed under Corruption and one aspect under Compliance are monitored fully indicating the emphasis the petrochemical industry accords to these matters on governance.

A good corporate governance structure allows for proper management oversight, accountability, and review of sustainability practices (Thomas et.al, 2020). Disclosure of governance body information such as board responsibilities, board composition, remuneration, audit committee, internal controls, risk management, general meetings, and communication with stakeholders is considered essential in managing opportunities and risks related to the environment, economy, and society. According to Fama and Jensen (1983), boards with a larger number of independent directors can exert greater influence over managerial decisions. Hence they hold a higher influence over the quality of sustainability reporting. Brown and Caylor (2004) discovered that companies with better management are more profitable, and valuable, and pay out more cash dividends to shareholders.

Though more than 2,000 studies have examined ESG (Environmental, Social, and Governance) and financial performance (Friede et al., 2015), there are still significant doubts about the role of ESG in shaping both profitability and firm value, while also taking Malaysia's perspective into account, as the indicator's introduction in Bursa Malaysia is still novel (Azhar, 2020). There were numerous studies in the past to prove that sustainability reporting does improve financial performance but lacking in theories to support the relationship (Johari & Komathy, 2019). Thomas et al. (2020) analysed the correlation between ESG performance against a couple of financial metrics, and observed a few financial variables showing lower performance to ESG score which was contrary to expectations but acknowledged this could be since sustainable reporting practices are still in the infancy stage in Malaysia. Despite this, when Malaysian oil and gas companies' financial performance is measured over time, it can be stated that Malaysian oil and gas companies that reported their sustainability involvement and practices performed significantly better than those that did not (Amacha & Dastane, 2017).

METHODOLOGY

Data Collection Method

A questionnaire survey was used to collect primary data for this study. The survey was based on the FTSE Russell ESG Index adopted by Bursa Malaysia, which comprises the three pillars of environment, social, and governance (FTSE Russell, 2021). Selected relevant questions were included in the survey to link the instrument to the chosen independent variables, and the instrument was validated by specialists during the pilot test. A five-point Likert scale was used, with 1 representing strongly disagree and 5 representing strongly agree.

Data Instruments

An electronic questionnaire administered through Google Forms was used in this study. A self-administered format was selected because respondents could understand and answer the questions without a trained interviewer (Hair et al., 2007). The questionnaire took approximately 15 to 20 minutes to complete.

The questionnaire was designed to collect data aligned with the research objectives, hypotheses, literature, and study constructs (Churchill & Iacobucci, 2006). Its design therefore focused on ensuring that each item contributed directly to answering the research questions. The suitability and reliability of the instrument were subsequently assessed during the pilot test and reliability analysis.

Sample Size and Sampling Method

The survey was confined to Malaysian practitioners in the petrochemical and allied industries. Senior executives in charge of the company's operations, technical services, sustainability, or health, safety, and environment (HSE) departments were formally contacted via text message, email and, where necessary, a telephone call or message to solicit their participation.

After agreeing to participate, respondents were provided with the relevant online survey link through Google Forms, where the questionnaire was administered. Some participating facilities were owned by the same parent company and included both Malaysian corporations and multinational corporations (MNCs).

In this study, a systematic sampling approach was deployed. Forty petrochemical-related organisations were assessed, with a minimum of three respondents from each organisation drawn from the targeted functional areas. The sample included Bursa Malaysia-listed corporations and organisations registered with the Malaysian Petrochemical Association (MPA) or its associates. The Small Sample Technique proposed by Krejcie and Morgan (1970) was used to identify an effective sample size for representing the population. The survey ultimately generated 151 responses, providing a larger sample and strengthening the study.

DATA ANALYSIS

Demographics Profile

Table 4.2 presents the profile of respondents which comprise gender, age, race, educational level, occupation, department, organizational tenure, workplace location, number of employees in the organization, and organizational ownership type. Data were collected from respondents who are employees in petrochemical-based companies in Malaysia. The unit of analysis is organization. Respondents represent their organization in performing the data administration.

Table 4.2 Demographic profiles (n=151)

Demographics	Frequencies	Percentage (%)
<i>Gender</i>		
Male	122	80.8
Female	29	19.2
<i>Age</i>		
30 and below	22	14.6
31- 40	60	39.7
41 -50	47	31.1
51-60	18	11.9
61 and above	4	2.6
<i>Race</i>		
Malay	91	60.3
Chinese	22	14.6
Indian	24	15.9
Others	14	9.3
<i>Education Level</i>		
PhD	2	1.3
Master Degree	45	29.8
Bachelor Degree	65	43.0
Diploma	27	17.9
Secondary	12	7.9
<i>Occupation</i>		
CEO/Managing Director	4	2.6
General Manager/ HOD	10	6.6
Senior Manager	13	8.6
Manager	50	33.1
Executive/ Engineer	58	38.4
Others	16	10.6
<i>Department</i>		
Health Safety & Environment	60	39.7
Operations	53	35.1
Technical Services	38	25.2

<i>Tenure in the organization</i>		
Less than 5 years	6	4.0
5-10 years	12	7.9
11-15 years	9	6.0
16-20 years	13	8.6
More than 20 years	111	73.5
<i>Working Experience</i>		
Less than 5 years	54	35.8
5-10 years	42	27.8
11-15 years	26	17.2
16-20 years	14	9.3
More than 20 years	15	9.9
<i>Location of Company</i>		
Selangor	28	18.5
Terengganu	4	2.6
Kuala Lumpur	37	24.5
Kedah	1	0.7
Johor	8	5.3
Sarawak	16	10.6
Negeri Sembilan	42	27.8
Pahang	5	3.3
Sabah	5	3.3
Perak	1	0.7
Others	4	2.6
<i>Employees (Size of Firm)</i>		
5-99	27	17.9
100-199	12	7.9
200 – 499	46	30.5
More than 500	66	43.7
<i>Ownership Type of Petro-chemical firm</i>		
Public listed company	55	36.4
Government link company	17	11.3
Private Foreign company	36	23.8
Private local company	32	21.2
Joint venture company	11	7.3

According to the table, more than 80% of respondents were male, while approximately 20% were female. Respondents were drawn from the Operations, Technical Services, and Health, Safety and Environment departments of the participating enterprises. Most respondents were between 31 and 50 years old. Malays accounted for 60% of respondents, while Chinese and Indian respondents represented broadly similar proportions, and other ethnic groups accounted for 14%. In terms of highest education level, 43% held a bachelor's degree and 29% held a master's degree.

According to the position level of respondents, 33% are managers and 38% are executives. The scope of this study was covered by data obtained especially from respondents

in the Health, Safety & Environment (39.7%), Operations (35.9%), and Technical Services departments. Remarkably, the majority of responders (73.5%) have been with their current employer for more than 20 years. This has the effect of giving a solid and well-defined respond to the data collected. Except for Perlis, Kelantan, and Melaka, data was obtained from practically every state in Malaysia. 43.7 per cent of petrochemical-based organisations have more than 500 employees, putting them in the medium company category, while 56.3 per cent of respondents work for smaller businesses. As a result, the data collection includes multiple-sized organisations related to the petrochemical sector.

Descriptive Analysis

Table 4.3 Descriptive Analysis (n=151)

Variable	Mean	Standard Deviation
Firm Performance	4.63	4.51
Work Health & Safety	3.22	3.60
Environmental Management	4.14	4.30
Good Corporate Governance	3.40	3.45

Table 4.3 presents the reported mean and standard deviation for each variable derived from the descriptive analysis. Firm performance recorded M = 4.63 and SD = 4.51. Among the independent variables, workplace health and safety recorded M = 3.22 and SD = 3.60; environmental management recorded M = 4.14 and SD = 4.30; and corporate governance recorded M = 3.40 and SD = 3.45. Environmental management had the highest reported mean among the independent variables. Because the questionnaire used a five-point Likert scale, the standard-deviation values should be verified against the statistical output before the results are interpreted.

Reliability Test

The internal consistency of the four main variables and their 35 sub-items was examined using a reliability test. Cronbach’s alpha reliability coefficient ranges from 0 to 1. According to Gliem and Gliem (2003), the closer the Cronbach’s alpha coefficient is to 1.0, the stronger the internal consistency of the scale items. Mallery and George (2000) provide the following rule of thumb: $\alpha > .9$ = excellent, $\alpha > .8$ = good, $\alpha > .7$ = acceptable, $\alpha > .6$ = questionable, $\alpha > .5$ = poor, and $\alpha < .5$ = unacceptable. The reliability coefficients for the items used in the study are shown in Table 4.4. As shown, all constructs recorded Cronbach’s alpha values above the recommended threshold of 0.60 (Hair et al., 2010).

Table 4.4 Reliability Coefficient for items in the study (n=151)

Variable	Number of items	Cronbach's Alpha (n=151)
Workplace Health & Safety	9	0.745
Environment Management	11	0.952
Good Corporate Governance	10	0.918
Firm Performance	5	0.914
Total	35	

4.6.1 Correlation Analysis

Pearson correlation analysis was used to measure the strength and direction of the linear relationship among the variables. Table 4.5 illustrates the correlation coefficients for the variables used in the study. The results show significant relationships between workplace health and safety, environmental management, good corporate governance, and firm performance. Workplace health and safety was positively correlated with firm performance ($r = .331$), environmental management was positively correlated with firm performance ($r = .491$), and good corporate governance was positively correlated with firm performance ($r = .406$).

Table 4.5 Correlation among Variables

	Workplace Health & Safety	Environment	Corporate Governance	Firm Performance
Workplace Health & Safety	1.000			
Environment	.589**	1.000		
Management Corporate Governance	.618**	.789**	1.000	
Firm Performance	.331**	.491**	.406**	1.000

Environmental management and firm performance were moderately correlated, $r(147) = .491$, $p < .001$. Workplace health and safety and firm performance were also positively correlated, $r(147) = .331$, $p < .001$, while corporate governance and firm performance were moderately correlated, $r(147) = .406$, $p < .001$. These effect sizes were interpreted using Cohen's (1988) conventions (Sullivan & Feinn, 2012). The p-values indicate that the observed associations would be unlikely under the null hypothesis; they do not represent the probability that the correlations are true.

There is sufficient evidence to conclude that there is a significant relationship between environment management and firm performance because the correlation coefficient is significantly different from zero. Also, sufficient evidence is present to conclude that there is a significant relationship between corporate governance and firm performance because the correlation coefficient is significantly different from zero. And consistently, there is sufficient evidence to conclude that there is a significant relationship between workplace health and safety, and firm performance because the correlation coefficient is significantly different from zero.

Regression Analysis

To test hypotheses, predictive analysis was conducted using multiple linear regression. This is to describe the data and explain the relationship among the variables.

Table 4.6 Model Summary, ANOVA and Coefficient

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.494a	.244	.229	3.95992	1.944

a. Predictors: (Constant), SPGCG, SPWHS, SPENV

b. Dependent Variable: FP

Regression analysis is commonly used in research to analyze relationships between independent variables and dependent variables. In this study, R2 value is 0.244 which comprises 24.4 % of the variances of firm performance that can be predicted from the independent variables. This indicates the strength of the relationship by indicating the goodness of fit. Based on the F-test the model indicates it is statistically significant.

ANOVA^a

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	743.867	3	247.956	15.813	.000b
1. Residual	2305.100	147	15.681		
Total	3048.967	150			

a. Dependent Variable: FP

b. Predictors: (Constant), SPGCG, SPWHS, SPENV

The regression equation has predictive power if the f-ratio is significant, indicating that there is at least one statistically significant variable in the model.

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	7.312	2.470	2.961	.004
	SPWHS	.056	.091	.618	.538
	SPENV	.212	.058	3.660	.000*
	SPGCG	.016	.074	.213	.832

a. Dependent Variable: FP (firm performance)

b. Independent Variable: Sustainable Environment (SPWHS), corporate governance (SPGCG), workplace safety and health (SPWHS)

In this study, the firm performance was regressed with sustainable practices of workplace health and safety, environmental management and good corporate governance. The result of the regression analysis is shown in Table 4.6 of the Coefficient Table.

Firm performance = 7.312 + 0.056(workplace health and safety) + 0.212(environmental management) + 0.016(corporate governance).

The regression results indicate that environmental management significantly predicted firm performance, $t = 3.660$, $p < .001$. The model explained 24.4% of the variance in firm performance, $R^2 = .244$, adjusted $R^2 = .229$, $F(3, 147) = 15.813$, $p < .001$.

The F ratio indicates that the regression equation has predictive power and that at least one variable in the model is statistically significant. The ANOVA table shows that environmental management significantly predicts firm performance. The positive coefficient indicates that, for every one-unit increase in environmental management, firm performance increases by 0.212 units. The analysis therefore suggests that environmental management has a positive impact on firm performance. In contrast, workplace health and safety is not statistically significant because its p-value (.538) is greater than the 0.05 significance level. Corporate governance is also not statistically significant because its p-value (.832) is greater than 0.05.

Table 4.7 Hypothesis Result

Hypothesis	Analysis	Result
H1: Workplace Health and Safety practices have a positive relation on firm performance amongst Malaysian petrochemical-related companies	Pearson Correlation	Supported

Hypothesis	Analysis	Result
H2: Environmental Management practices have a positive relation on firm performance amongst Malaysian petrochemical-related companies	Pearson Correlation	Supported
H3: Corporate Governance practices have a positive relation on firm performance amongst Malaysian petrochemical-related companies	Pearson Correlation	Supported

The hypothesis results depend on the inferential test used. Pearson correlation analysis supported positive bivariate relationships between workplace health and safety, environmental management, corporate governance, and firm performance. In the multiple regression model, however, only environmental management significantly predicted firm performance; workplace health and safety and corporate governance were not statistically significant predictors. The next section discusses these findings and their implications.

DISCUSSION

Workplace Health and Safety practices and firm performance in the context of Malaysian Petrochemical-related companies.

One objective of this study was to examine the relationship between workplace health and safety practices and firm performance. Findings from the Pearson correlation analysis support the first hypothesis, which states that workplace health and safety practices have a positive relationship with firm performance among Malaysian petrochemical-related companies. According to Agboola et al. (2020), there is growing evidence that creating a healthy and safe work environment can raise labour productivity by improving worker satisfaction, reducing labour turnover, encouraging employees to take responsibility for their own safety and that of others, and increasing business profits. A study in Turkey, supported by the European Agency for Safety and Health at Work, also found a positive relationship between safety-prevention costs and employee satisfaction (Bayram et al., 2016). Both studies support the argument that investment in occupational health and safety generates positive returns. Malaysia has made considerable progress in this area since the launch of the Occupational Safety and Health Act 1994, although its practices may still lag behind those of the United States, Europe, and some Asian countries such as Japan and Singapore. Nonetheless, safety practices have become widespread across Malaysian industries and are no longer limited to high-risk sectors. This is evident in companies' increased participation across industries in voluntary annual safety awards such as those organised by the Malaysian Society for Occupational Safety and Health (MSOSH) and the National Council for Occupational Safety and Health (NCOSH), where firms are recognised for good practices beyond legal compliance.

On a different note, negative workplace safety events or accidents can deeply impact an organisation's financial performance and the magnitude of this impact is significantly greater today compared to before, indicating the challenging reality of today's workplace environment (Kabir et al., 2018). Major hazard incidents such as the explosion in the southern region, Pengerang Integrated Complex jointly owned by Petronas and Saudi Aramco which killed five people have since delayed the start-up of the refinery, and these are causing a lot of financial losses on top of the reputational impact not just to local communities but also to the global community noting these are big major oil and gas players known worldwide (Aziz, 2020). In 2021 alone, there were three separate explosions which happened at biodiesel plants, two of them in Malaysia and one in Sumatra, Indonesia all resulting in a fatality. These incidents happened during welding hot work activity and the main suspect was the presence of highly flammable methanol in the atmosphere when the work was carried out (Qua, 2021). Tragedies as such strengthen the need for good safety controls, practices and culture within an organisation, and the expectation deepens especially for high-risk industries such as petrochemicals where lapses in workplace safety can be catastrophic.

Environmental management practices and firm performance amongst Malaysian petrochemical companies

Another objective of this research was to examine the relationship between environmental management practices and firm performance in the Malaysian petrochemical-related industry. The findings show a strong and significant relationship between environmental management and firm performance among the sampled companies, and this is a key outcome of the study. Both inferential analyses, Pearson correlation and multiple regression, support Hypothesis 2, which states that environmental management practices have a positive relationship with firm performance among Malaysian petrochemical-related companies.

The findings here are consistent with another study done by Hirunyawipada and Xiong (2018), thru a study analysing 376 organisations which supported the significance of environmental commitment in improving firms' financial performance, measured by Return on Assets (ROA) and long-run financial performance measured using Tobin's Q. Supporting that, Tang et al. (2018) looked into the effects of green innovation on firm performance. The results of the study, which used a sample of 188 Chinese manufacturing enterprises, revealed that green innovation, in the form of product and process innovation, has a considerable positive impact on a firm's performance.

Another significant study done previously was to assess the linkage between environmental accounting, the environment, management, and firm performance. Environmental accounting plays a critical role in assessing a company's impact on the environment through a variety of channels. It aids the organisation in calculating environmental costs

and enhances the environmental disclosure procedure. Running the PLS-SEM, it was evident through the results gathered, that green innovation and environmental commitment are key contributors to enhancing firm performance amongst Indonesian multinational firms. Recommendations from that study suggest that policymakers use a green approach to boost their innovation processes, such as introducing green purchasing and green payment principles. In addition, management must inspire and motivate employees to work in a sustainable and environmentally friendly manner, as well as strengthen their environmental commitment (Somjai et al., 2020).

One key factor driving environmental commitments in Malaysia was also the development of a legal framework, following suit from legislative changes in more developed countries. Amendments to the Environmental Quality (Clean Air) Regulations 2014 and the introduction of the Environmental Professional Certification Program in 2016, are some of those requirements put in place which has elevated the expectations of industries on environmental management and compliance. Some required significant investments amounting to multi-millions of capital investments such as the installation of Continuous Emission Monitoring Systems (CEMS), and fixing of scrubber systems for pollution control and some, especially for petrochemical refineries may also include the installation of new processing units such as the Hydrogen Desulphurisation and Hydrogen Generation Units, as per the case with Hengyuan Refining Company (New Straits Times, 2019). Such legal measures are considered bold moves for governments especially in developing countries, as it may seem unfavourable for investors noting the high cost of compliance. On the other hand, for employees and the community at large, it signifies that the company is serious about managing the environment and operating as a responsible corporate citizen. There is also increased environmental awareness in today's community as compared to before. The public is acknowledging the impacts of climate change especially global warming, based on real impacts they're seeing nowadays such as prone flooding and prolonged drought seasons. This has put pressure on governments and major polluters such as oil & gas and petrochemical sectors, to take on more affirmative actions, beyond just the traditional corporate social responsibility (CSR) activities where some are seen to just project a good image for the company.

Previous studies support this study's findings on the relationship between the three selected sustainable practices, which represent the broader environmental, social, and governance (ESG) spectrum. However, environmental management practices stood out as the variable with the most significant impact on firm performance when compared with workplace health and safety and good corporate governance. This suggests that organisations seeking incremental improvements in firm performance should give particular priority to environmental management practices.

Good corporate governance practices and firm performance in the context of Malaysian petrochemical-related companies.

The last objective of this study was to examine the relationship between good corporate governance practices and firm performance in the context of Malaysian petrochemical-related companies. According to the results of the Pearson analysis, there is a moderately significant relationship between good corporate governance procedures and business performance among these companies.

There were mixed outcomes on previous studies done, assessing this relationship between corporate governance and firm performance. In a study, Ciftci et al. (2019) discovered that enterprises perform better when ownership is concentrated, which is often held by a few significant families. A high concentration of ownership encourages families to work together to improve firm performance. The same study amongst Turkish firms established that larger boards also performed better as they provided professional managers more latitude in exercising their judgement, allowing for more room for new ideas. They would also mean that there is more room inside the dominant family to accommodate diverse interest groups, bring in extended kin, and provide access to a larger reservoir of knowledge and, possibly, a wider range of personal and familial networks. According to Naimah and Hamidah (2017), the number of audit committee sessions and the quality of audits conducted, have a considerable positive impact on profitability. Analysis of sample listed companies (as listed in the Indonesia Stock Exchange) participating in the Corporate Governance Perception Index (CGPI) also showed that corporate governance principles have a strong positive impact on profitability. However, board independence and involvement of outside directors do not significantly affect firm performance, which is consistent with the earlier study's discovery.

Closer to Malaysia, Abdulsamad et.al., (2018) investigated the influence of board characteristics such as CEO duality, independent directors, board size and board meetings, on firm performance. Using purposive sampling, data were collected from 341 Malaysian public-listed companies, and the results were mixed. Board meetings, for example, had weak and negative effects on company performance, but independent directors only had weak and positive effects on ROA. The data collected representing the period from 2003 to 2013 could be seen as outdated if compared to the development of corporate governance practices advocated through the Securities Commission and Bursa Malaysia actively over recent years. However, another study done by Jakpar et.al, (2019) was also consistent where it concluded that components of corporate governance such as board size, and proportion of independent and non-executive directors (NEDs) have a negative relationship with firm performance.

On a more positive note, a study done recently investigating the impact of corporate governance on firm performance during the COVID-19 pandemic churned better results. The size of the board of directors is the only governance tool that has a significant positive impact on business success, based on a regression analysis conducted (Khatib & Nour, 2021). Another interesting outcome, during the Covid-19 pandemic, board gender diversity appeared to improve business performance, measured through financial metrics Return on Assets (ROA) and ROE). A useful explanation offered, that the benefits of diverse insight, expectation, knowledge, and background are more helpful to corporations as they navigated through uncharted waters for survival during the pandemic.

Malaysia has made substantial progress since the global 1MDB scandal, with governance standards tightened across multiple regulatory sectors. The National Centre for Governance, Integrity and Anti-Corruption (GIACC), under the Prime Minister's Department, launched the National Anti-Corruption Plan 2019–2023. The Malaysian Anti-Corruption Commission subsequently introduced a corporate liability law prohibiting corruption and dishonest commercial misconduct. These milestones demonstrate the government's commitment to strengthening integrity culture. The most recent revision of the Malaysian Code on Corporate Governance (MCCG) has also advanced key requirements, including advocacy for 30% women directors, discouragement of politicians holding board seats, prohibition of the chairman's involvement in board committees, and clearer expectations for board oversight of sustainability (Securities Commission, 2021). More companies are also taking proactive steps, such as setting up independent whistleblowing channels and adopting ISO 37001:2016 Anti-Bribery Management Systems, as they continue to strengthen governance practices.

The findings show a positive correlation between good corporate governance and firm performance, $r = .406$. This coefficient indicates the strength and direction of the bivariate association; it does not mean that a 1% increase in governance practices produces a 40.6% increase in firm performance. In the multiple regression model, corporate governance was not a statistically significant predictor when the three sustainable-practice dimensions were considered together.

CONCLUSION

This study addressed its objectives and research questions by examining the impact of sustainable practices on firm performance among Malaysian petrochemical-related companies. Pearson correlation analysis showed positive relationships between workplace health and safety, environmental management, corporate governance, and firm performance. The multiple regression results were more selective: environmental management was the only statistically significant predictor, while workplace health and safety and corporate governance were not significant when the three dimensions were considered together.

Environmental management therefore stood out as the most influential component in the model, suggesting that organisations may benefit from placing greater emphasis on this area to improve firm performance. Further research could strengthen and extend these insights.

RECOMMENDATION FOR FUTURE RESEARCH

This study was conducted with a special focus on sustainable practices amongst Malaysian petrochemical-related companies, covering various kinds of organisations such as private and government-linked. It aimed to go beyond the norm of typical oil and gas industry focus, or a much broader, general public-listed companies. Various other industries can be of research interest such as plantation, manufacturing, tourism and financial-related businesses which are also key industries in Malaysia. The study can also be expanded perhaps to the larger ASEAN and Asian region context, to assess any correlation and consistency.

As a method of data collection deployed in this study, the researcher only used an online survey questionnaire as the chosen method. Other methods such as secondary data analysis through annual and sustainability reports can be explored as more organisations are demonstrating reporting transparency now as compared to before. Other means may include observations and interviews. Lastly, the researcher also recommends a larger sample size involving more companies in future studies to obtain better results.

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