

Ethical leadership on Employee Engagement in Construction Industry during Pandemic in Malaysia: Mediating Role of Organizational Culture (Market Culture)

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Abstract

The leadership quality of construction leaders is one of the most critical factors in assuring the success of a project. This study aimed to look into the construction sector's ethical issues and learn more about the situation of unethical behaviours in Malaysia. It emphasizes the complexities of ethical issues and the limitations to ethical activity in the construction business. Therefore, quantitative data was collected for this study by delivering an online questionnaire to respondents in Klang Valley to collect 400 sets of questionnaires. Following this, the researcher conducts data analysis involving factor analysis, reliability testing, descriptive analysis, and multiple linear regression to discover the relationship between the independent and dependent variables. Eight hypotheses were developed to test the relationship between ethical leadership and other constructs, including people orientation, fairness, integrity, ethical guidance, and market culture. Overall, 2 out of 8 research hypotheses are supported according to the research findings, and six research hypotheses are not supported. The result also indicates that people orientation significantly correlates with employee engagement mediated by market culture. Also, ethical guidance is significantly related to employee engagement mediated by market culture.

Keywords: Ethical Leadership, People Orientation, Fairness, Integrity, Ethical Guidance, Market Culture.

1.0 Introduction

Leadership is both a notion and a practice that is constantly changing. The leader's job concerning various conditions and attributes employs various leadership styles. The efficacy and productivity of a project are inextricably linked to the leadership behaviour of those in charge. Leaders assist the team in breaking down barriers to create relationships and support one another, as well as obtain the knowledge required to meet objectives and complete the task at hand (Wan Muda, Libunao, Isa and Yusoff, 2019). According to Wan Muda, Libunao, Mohd Salleh and Sulaiman (2016), leadership in the construction industry is the sum of an individual's ability to lead a group of people effectively. They went on to say that an individual's skill, education, and experience, as well as his or her personality and attitude, are all necessary qualities for being an effective leader. On the other hand, human resource managers and team leaders define leadership capability as a leader's ability to influence subordinates through knowledge and experience, a positive attitude, and desirable leadership skills. "There are no poor engineers or scientists, only poor.

The Malaysian government has proposed the Movement Control Order (MCO) as one of the lockdown options, which will take effect on March 18, 2020 (Esa, M., Ibrahim, F.S. and Mustafa Kamal. E., 2020). As a result, the MCO has significantly impacted Malaysia's sectors, particularly the construction industry. As a result, time and money become critical factors in delivering projects effectively, and in the current environment, most ongoing projects fail to meet their deadlines and budgets. As a result, this article aims to investigate the effects of the Movement Control Order (MCO) on project success (Esa et al., 2020). Engineering and construction (E&C) firms are accustomed to cyclical downturns, but COVID-19 has struck with unprecedented speed and strength. Projects are being postponed or terminated. Employee and subcontractor labour health is an issue, and social separation on construction sites poses practical challenges. Companies with furlough staff may be concerned about their future availability and expertise. Because many constructions and contracting firms lack significant capital reserves, the lockdowns may compel some to restructure debt, seek new sources of finance, or risk going bankrupt (Pwc, 2021). According to (Nasaruddin and Abdul Rahma, 2016), construction is a labour-intensive sector by nature, requiring skills, commitment, and excellent personnel management. It is regarded as one of the world's most important industries, accounting for 18 per cent of global GDP (Udhayakumar and Karthikeyan, 2014).

In the construction sector, the building profession has played a critical role in determining the industry's performance. Leadership is one of the most critical research areas in the construction business that receives relatively little attention. Leadership is frequently viewed as a social exchange process in the leader-follower relationship. The impact of social and cultural disparities in leadership on the performance of construction projects has been enormous and is the key to project success (Wan Muda et al., 2019). Malaysian construction enterprises must have a competitive advantage to thrive in global and domestic markets. The organizational ability is used to make the best decision possible about using these resources to achieve organizational goals, such as competitive advantage, which can be enhanced by a better understanding of the relationship between knowledge management and organizational culture. The importance of organizational culture in gaining a competitive advantage is well acknowledged (Virgiyanti, Tufail and Abu Bakar, 2019).

According to Nasaruddin and Abdul Rahma (2016), the leadership quality of construction leaders is one of the most critical factors in assuring the success of a project. A good leader could effectively manage the project and strategize construction operations using risk management. The construction process can be navigated sustainably with good leadership skills among the construction parties. It is time for Malaysia to have a strong leader among the construction parties to ensure that our building industry meets world standards by 2020 to achieve our goal of becoming a developed country.

If the organization's best administrations do not legitimately control the culture, the diversity of cultures in the organization impacts the company's overall development. Postponement and cost overwhelm the two most critical difficulties in the development sector, among many others. In development projects, the postponement has disastrous consequences for a significant share of the goals achieved (Maiti and Indhu, 2018). People spend a lot of their time working for companies. It makes no difference what type of organization you are. It must be understood that all organizations exist to achieve specific goals. The qualities and standards developed within the organization are vital to the company's organizational culture. Qualities and Standards created by a particular organization are highly significant since they are a unifying factor that binds the organization's individuals together (Maiti and Indhu, 2018). Building a workplace culture of integrity and ethics is one of the significant issues or concerns that must be addressed. The fourth task of Vision 2020 is to create a strong society with moral and ethical features and citizens with religious values and intact spirituality, which is in keeping with the culture of integrity. Integrity is the most appreciated attribute of leadership, and it is the most prevalent management talent that organizations must have, as previously said (Shafter, M. E., Ghnaem, S. S. & Abdelmotleb, F. A., 2016). According to Molina (2016), integrity is defined as an organization that operates following the goals and principles for which it was established. In this vein, an organization's goals and ideals must be clearly stated for individuals to internalize and incorporate them into their daily work. An organization's management and leadership must establish clear and robust integrity to execute organizational policies that institutionalize continual or ongoing moral progress within and outside the organization.

Since they are the ones who are educated in the industry, then, of course, the expectations are set for them to improve unethical practices and the actual performance of their duties. Misconduct among professionals has increased, and there is great confusion between their behaviour and the required ethics (Abdul Rashid, Abdul Hamid, Mohd Zainudin, and Mohammed, 2019). This study aimed to look into the construction sector's ethical issues and learn more about the situation of unethical behaviours in Malaysia. It emphasizes the complexities of ethical issues and the limitations to ethical activity in the construction business.

2.0 Literature Review

2.1 Underpinning Theory

Four hypotheses can help explain how ethical leaders influence their employees in greater depth. One is the social exchange hypothesis (Blau, 1964), which posits that feelings of personal obligation, gratitude, and trust emerge from social interactions. This concept, founded on the reciprocity norm (Gouldner, 1960), asserts that when good treatment is given in social relationships, reciprocation will occur, possibly in exchanging high-value commodities with the other party. Employees who believe their supervisors are ethical and have their best interests at heart (Kalshoven et al., 2011, 2013) are more likely to feel required to do something in return (Ng and Feldman, 2015). (Gouldner, 1960; Brown et al., 2005).

A second theory that describes how ethical leaders can get the most out of their staff is the social identity theory (Ashforth and Mael, 1989). According to this theory, employees' sense of belonging to the company increases if its leaders are trustworthy. Employees who believe they are well-liked build a sense of belonging to the company (Tyler, 1997). When ethical leaders are consistent in word and deed, trustworthy, and people-oriented, employees are more likely to give their all on behalf of their organizations (Kalshoven et al., 2011, 2013).

One technique of offering their best for the organization is to respond positively while going through a shift. When a company implements change to adapt to the marketplace, it produces internal procedures that deconstruct existing structures and build new ones (Chonko, 2004). It's no surprise, however, that successful change management relies on employees' acceptance and support of change (Abrell-Vogel and Rowold, 2014), which is a type of discretionary reaction (Herscovitch and Meyer, 2002) that is linked to change preparedness (Desplaces, 2005; Vakola, 2014). Vakola (2014) defines readiness to change as being proactive and having a positive attitude toward change, as well as being mentally or physically prepared to engage in any change (Desplaces, 2005) by performing actions that will improve, alter, vary, or modify something (Madsen et al., 2005). Such a favourable response is more likely to occur under ethical leadership settings that establish social exchange processes with employees and inspire social identity in them. The readiness to change of employees cannot be reached just through social contact and social identity processes. Changes shift from the known to the unknown, posing a challenge to "how things are done" (Vakola and Nikolaou, 2005), resulting in high levels of uncertainty (Nelson, Cooper and Jackson, 1995). Employees can feel a wide range of unpleasant emotions resulting from change (e.g., fury, worry, turbulence, despair, fear, and so on) (Vakola and Nikolaou, 2005), and ethical leadership can help minimize these negative emotions.

According to uncertainty reduction theory, individuals try to reduce uncertainty before acting (Berger and Calabrese, 1975; Berger, 1986). Employees reduce uncertainty by making sense of the surrounding environment and events (Neves et al., 2018). They seek clues that will allow them to lessen uncertainty and trust the circumstance (Berger, 1986). According to Demerouti, Bakker, Nachreiner, and Schaufeli's (2001) job demands and resources (JD-R) theory, watching ethical leadership in management can help attain this goal. Job resources (i.e., elements that help minimize job demands and their accompanying physiological or psychological costs) can become a technique to buffer the negative impacts of job demands or stressors on employees when faced with job demands (i.e., aspects that need physical and psychological efforts). As a result, in uncertain situations (or job demands), a connection with ethical leaders can be viewed as a job resource that can assist individuals in dealing with uncertainty and becoming more change-ready. In effect, ethical leaders, who are often viewed as representatives of the organization (Abrell-Vogel and Rowold, 2014), demonstrate integrity, address the needs of employees, instil trust, and serve as a reliable source of ethical guidance (Kalshoven et al., 2011, 2013). Employees will likely feel supported, fair, and compassionately treated continually and in the long run under ethical leaders (Ng and Feldman, 2015), which should boost their emotions of security. As a result, with ethical leaders, the uncertainty associated with any organizational change may be reduced, with employees receiving the security they require (Sharif and Scandura, 2014; Neves et al., 2018), and trust their leaders (Sharif and Scandura, 2014), mainly their long-term intentions and behaviour (Ng and Feldman, 2015), and the changes they initiate (Abrell-Vogel and Rowold, 2014). Employees are more likely to feel less fear, more security (Sharif and Scandura, 2014; Neves et al., 2018), more information about the situation, and a greater sense of control (Morgan and Zeffane, 2003) under ethical leadership conditions, which is critical for them to respond effectively to any change process (Vakola and Nikolaou, 2005).

Furthermore, ethical leaders empower people (Kalshoven et al., 2011, 2013), so they are more likely to promote employee participation in the change process (i.e., the voice in the change process; Sharif and Scandura, 2014) by reflecting confidence in employees' abilities, thereby increasing their self-efficacy perceptions (Abrell-Vogel and Rowold, 2014; Steinmann et al., 2016). Such improvements in self-efficacy views are essential for effectively comprehending and responding to the environment (Bandura, 2001) and being prepared for any change (Shah and Shah, 2010; Vakola, 2014).

2.2 Effect of Ethical Leadership on Employees' Performance

The Malaysian economy grew 5.9% in 2017 (2016: 4.2%), with moderate growth of 6.7 per cent (2016: 7.4%) in the construction industry. The construction industry provides 4.6 per cent of Malaysia's GDP, or around RM53.4 billion (2016: 4.5 per cent; RM50.1 billion). In 2017, 1.3 million construction workers made up around 8.7% of Malaysia's total workforce (14.6 billion) (DOS, 2021). This demonstrates that the construction industry offers Malaysians a diverse range of professional and business prospects. Infrastructure developments such as MRT, LRT, power plants with motorways, sewers, and diverse non-residential and residential projects are driving growth. Malaysia's Construction Industry Development Board (CIDB) registered 7,981 projects worth RM181.2 billion (USD43.8 billion) in new construction projects granted in 2017. (2016: 8,127 projects; RM255.9 billion, USD61.8 billion). The private sector has been the primary driver of construction growth (CIDB, Projection of Construction Resources: The Methodology, 2018).

According to Al Nasser, Osborne, and Steel (2013), leadership style must vary as the project and procedures progress. Democratic and participative leadership styles are ethical, but authoritarian leadership is frequently considered deficient in ethical behaviour. Employees need ethical leadership to function well, but with solid corporate principles, the impact of leadership on employee performance rises to a new level. Employee performance and ethical leadership can be directly or indirectly proportional, ensuring that moral values can be improved by implementing ethical leadership improvement initiatives (Malik et al., 2016). According to recent studies, investing in human resource development is helpful to institutes in terms of updating the potential and proficiency of workers to improve performance and competence. Workers' technical and non-technical education and exercise are critical to increasing their knowledge and potential in this environment. Leadership is widely accepted and shown through study as a critical component of an institute's success in today's world. Ethical leadership is being utilized to control and motivate employees to perform better.

Trevio et al. (2006) proposed that the aspects of culture and moral environment were inextricably linked and that this, in turn, influenced workers' institutional commitment. They did notice differences in terms of behaviour, in any case. For example, firms that imposed an ethical code on their employees negatively impacted unethical behaviour, i.e., the stronger the code of conduct, the less unethical activity was observed. An atmosphere centred on self-centeredness was most strongly linked to unethical behaviour in non-code contexts. Similarly, they maintained that treating workers fairly, upholding moral conduct, and keeping an eye on them are aspects of a culture that contribute to high moral behaviour and attitude. The altered reward system, which includes moral and immoral behaviour, is a critical component of an ethical culture (Brown et al., 2005). According to studies, an institute's punishment and incentive systems impact ethical behaviour.

2.3 Ethical Leadership in Construction Industry

Leadership is a constantly changing notion and practice (Wan Muda, Libunao, Khairunisa Isa, Ahmad and Md Yusoff, 2019). The leader's job concerning various conditions

and attributes employs various leadership styles. The efficacy and productivity of a project are inextricably linked to the leadership behaviour of those in charge. Leaders assist the team in breaking down barriers to create relationships and support one another, as well as obtain the knowledge required to meet objectives and execute the task at hand (Murphy and Ensher, 2008). According to Muda et al., leadership in the construction industry is the sum of an individual's abilities and capacity to effectively lead a group of people in an organization. They went on to say that an individual's skill, education, and experience, as well as his or her personality and attitude, are all necessary qualities for being an effective leader. On the other hand, human resource managers and team leaders define leadership capability as a leader's ability to influence subordinates through knowledge and experience, a positive attitude, and desirable leadership skills (Wan Muda et al., 2019).

The importance of leadership quality to construction project success is similar to the importance of other efforts: to ensure the smooth running of projects (Senam, Abdul Rashid, Sarkawi and Zaini, 2014), to satisfy conflicting requirements in support of organizational success, to increase the company's profitability, to create new opportunities for companies to apply their skills, and to develop leaders to professional ladders (Udhayakumar and Karthikeyan, 2014). A project will function more smoothly with fewer disturbances owing to project restrictions, such as tight schedules and budgets, limited resources, risky situations, and others (Nasaruddin and Abdul Rahman, 2016). In order to successfully execute a construction project, a good construction leader must be able to recognize project strengths, weaknesses, opportunities, and threats. Because there will be less or no repeat of work and a delay, the company's profits will increase. Furthermore, proactive executives prefer to create new chances rather than simply finishing tasks. Furthermore, sound executives who act ethically will improve their professional image (Nasaruddin et al., 2016).

Yukl (2002) in Majeed (2018) presented the criteria for judging ethical leadership at the workplace (see Table 1), which seems highly applicable to the school administration and management context. Being ethical entails objectively following the proper conduct and practising integrity, but it also entails making successful decisions, depicting people who promote morality in the workplace and establishing knowledge of the necessity of being ethical. The criteria outlined by Yukl (2002) represent a spectrum of perspectives on how ethical leadership could be integrated into educational leadership practice in a far broader context than is currently thought.

Table 1: *Criteria for judging ethical leadership*

Criteria	Ethical Leadership
Use of leader's influence and power	Helps institutions and followers
Vision development	Vision is developed based on followers' inputs, values, and ideas
Behavioural integrity	Value-based consistent actions
Risk-taking in decision-making	Takes personal risks
Communication of relevant information	Complete and timely disclosure of relevant information
Response to criticism and dissent	Encourages critical evaluation to find better solutions
Development of followers' skills	Trains, mentors, and coaches followers.
Handling diverse interests of stakeholders	Attempts to integrate and balance.

2.4 Traits of an Ethical Leader

A good leader has a sense of right and wrong and is willing to stick to these ideas even when things get tough (Hossain, 2015). A good leader is honest, cares deeply about specific concepts that need serious consideration, and is prudent. In a study of executive ethical leadership (Trevino, Brown, and Hartman, 2003), ethical leaders were receptive and open and possessed standard leadership attributes like integrity, honesty, and trustworthiness. Transactional leader practices such as defining ethical standards and holding followers accountable for ethical behaviour are examples of ethical leadership. Character and integrity, ethical awareness, community/people-orientation, motivating, encouraging, empowering, and managing ethical accountability are six critical traits that Resick, Hanges, Dickson, and Mitchelson (2006) identified as defining ethical leadership.

Furthermore, according to Freeman and Stewart (2006) and Onyebuchi, Mohamed Saat and Abdullah (2018), the characteristics of ethical leadership include:

(1) the leader's articulation and embodiment of the organization's purpose and values,

(2) the leader's focus on organizational success rather than personal ego, (3) the leader's ability to find and develop the best people, (4) the leader's ability to create a living conversation about ethics, values, and the creation of value for stakeholders, and (5) the ability to take a charitable understanding of others. In a similar spirit, OConnell & Bligh (2009) used a synthesis study of previous research to identify the following nine traits of an ethical leader: (1) Consider the long-term implications of business decisions, (3) Consider the well-being of others when making decisions, (4) Treats others somewhat when making decisions, (5) Acts ethically or role models ethical behaviour, (6) Communicates the importance of ethics, (7) Understands themselves and those with whom they work, (8) Holds others accountable for acting ethically, and (9) Provides training and support for employees on how to act ethically. Nonetheless, ethical leaders are distinguished from other corporate leaders by these characteristics. Ethical leaders are those who are sensitive to all employees' interests (Onyebuchi et al., 2018).

2.5 Ethical Issues in Construction

End-oriented utilitarianism, mean-oriented deontological theories, virtue ethics, and other ethical theories should all be used to make ethical judgements (Fleddermann, 2008). This can lead to conflicts between law and ethics, especially when ethically ambiguous issues can be considered legal (Table 2). The majority of ethical difficulties occur in these domains. To avoid other disputes, ethical concerns should be handled with caution. Ethics and business ethics are defined in a variety of ways. Construction ethics is described in this paper as the study of moral standards in construction environments and among construction project stakeholders. Because construction is built on projects in which the stakeholders are intimately tied, the concept of stakeholder is as significant in construction as it is in business.

The ethical issues in construction have been identified through literature reviews (CIDB, 2000; Fan and Fox, 2009; Tow and Loosemore, 2009; Zarkada- Fraser and Skitmore, 2000; and Ray and Hornibrook, 1999), and these issues have been adopted to be used as the questions in the survey. These issues are comprehensive and detailed enough to represent the ethical issues in the construction industry (Table 2).

Table 2: Ethical issues in the construction industry

Issue No.	Description
	Lack of competence or misinterpretation of competence
1	(Examples: Operating outside one 's area of expertise, operating without a license, misleading information, etc.)
	Lack of quality or quality control of work
2	(Examples: Not satisfying specification, compromising standard, use of low quality material, lack of working manner while performing, etc.)
	Lack of protection to public's health, safety and welfare
3	(Examples: Poor risk management and assessment, neglect worker 's safety, hazardous material, etc.)
	Lack of protection to the environment
4	(Examples: Action contributing to water, air, sound, etc., pollution, natural resources depletion, etc.)
	Improper bidding practices
5	(Examples: Bid shopping- disclosing a contractor 's bid to another prospective contractor to secure lower bid, Under bid – To make an unnecessarily lower bid, etc.)
	Improper Bill of quantities practices (BoQ)
6	(Examples: Engineer inflates price in BoQ with intention to collude with successful contractor, etc.)
	Improper drawings practices
7	(Examples: Engineer includes unnecessary structure or material in drawing in sharing the excess cost with abettor, etc.)
	Improper political or society involvement, conflict of interest
8	(Examples: Involvement in politic for personal and company 's interest, fraud, performing construction services for others' financial, political and personal interest, etc.)
	Misrepresentation of financial status or records
9	(Examples: Misleading lending institution, bank, client, etc.)

Source: (CIDB, 2018; Fan and Fox, 2009; Tow and Loosemore, 2009; Zarkada- Fraser and Skitmore, 2000; and Ray and Hornibrook, 1999),

2.5.1 People orientation

Ethical leaders are trustworthy, fair, and people-oriented and provide ethical counsel (Kalshoven et al., 2011). They have several essential elements that might help employees cope with the stress and turbulence of working in unpredictable and changing times (Sharif and Scandura, 2014). Because stress causes employees to acquire unfavourable attitudes about change (Vakola, 2014), ethical leaders may positively impact employees' willingness to change. Their organizations' culture can also indirectly influence such an impact to encourage change readiness. Because ethical leaders determine which aspects of their organizations' cultures are most essential and which shape workplace behaviour (Schein, 1992), the idea that ethical leaders can foster readiness to change by shaping their organizations' cultures is underpinning and fills an essential gap in the literature. Ethical leaders are likely to be people-oriented and conscious of the consequences of their decisions (The workplace coach, 2013). As a result, they use their influence and authority to serve the greater good rather than self-serving goals, resulting in a "win/win" situation for both employees and the company. This role modelling guides and motivates others to prioritize the group's needs and interests over their own. Leaders and followers form an intellectual and emotional bond due to such involvement, making both sides equally responsible in pursuing mutual goals. Inspiring, motivating, and

other visionary actions that make up transformative leadership are traits of ethical leaders. Ethical leaders also coach cohorts in developing a sense of personal and professional competence, allowing them to excel while being more resilient, loyal, and lucrative (The workplace coach, 2013).

H1: People orientation has a positive impact on the employee engagement.

2.5.2 Fairness

One of the most potent characteristics of a productive workplace is fairness. It fosters cooperation, goodwill, and a sense of fairness among coworkers. A fair leader learns about the team member's strengths and talents and seeks to engage them. They want to learn as much as possible from as many people. Fairness does not imply that everyone will be recognized in the same way (job functions, promotions, salary raises, etc.), but it does imply that everyone will have an equal chance to be recognized (Legacybusinesscultures, 2016). When dealing with situations that affect many people, fair leaders hold themselves accountable for the remaining objective. A leader demonstrates fairness by adhering to established norms and responding reasonably. They seek alignment among individuals and teams to achieve the greatest mutually beneficial outcomes. They interact with others without bias or judgement. They put their words into action (Legacybusinesscultures, 2016). Leaders who score high on the fairness dimension might:

- Avoid the command and control ways of management that are ingrained in an organization
- Seek alignment among teams
- Be effective at treating others equitably
- Be unbiased
- Withhold judgment based on prejudices (Legacybusinesscultures, 2016).

H2: Fairness has a positive impact on employee engagement.

2.5.3 Integrity

Integrity is defined by Yukl (2013), and Engelbrecht (2017) as "honesty and consistency between a person's proclaimed ideals and behaviour." Trust in leaders is founded on ethical leaders' behaviours, such as integrity and reliability, which are likely to result in trust that subordinates will reciprocate based on social exchange. According to social learning theory, subordinates will be encouraged to trust ethical leaders due to their role-modelling behaviour displayed by their credibility and trustworthiness (Engelbrecht, 2017). Ethical leaders also have the bravery to turn their moral intentions into ethical actions, known as a high level of behavioural consistency (Zhu et al., 2004). Employees' faith in the leader will likely grow due to this consistency. According to Colquitt, Scott, and LePine (2007) and Engelbrecht (2017), integrity is a highly rational reason to trust someone. A sense of justice or moral character gives predictability, which can aid in coping with uncertainty. As a result, a leader with integrity will be viewed as trustworthy, resulting in trust in that leader.

The link between ethical leadership and leader integrity Leader characteristics such as honesty, integrity, and trustworthiness, according to Brown and Trevino (2005), contributed to the "moral person" aspect of ethical leadership. Mayer, Aquino, Greenbaum, and Kuenzi (2012) found that an ethical leader's personal beliefs (such as honesty and altruism) are essential to their social identity and aid in their moral behaviour. Although there is the considerable conceptual overlap between integrity and ethical leadership, integrity is merely one component of ethical behaviour (Palanski and Yammarino, 2007). Mayer et al. (2012)

found that a leader's ethical behaviour is influenced by his or her moral ideals. Integrity and honesty should be critical to a role model's validity and attractiveness (Bandura, 1986), and ethical leadership has frequently been linked with these (Brown and Trevino, 2005). Brown et al. (2005) claim that honesty and ethical leadership will be favourably connected yet empirically distinct from one another because ethical leadership covers more than truth-telling.

H3: Integrity has a positive impact on the employee's engagement

2.5.4 Ethical Guidance

The actual performance of required skill and the personal traits underpinning such performance make up professional construction competency. (Mohamad, Abdul Rahman, Usman and Tawil, 2015). Working in the construction business requires a high level of technical expertise in the relevant areas. However, Mohamad et al. (2015) and Turner and Crawford (1992) claimed that personal characteristics such as values and attitudes matter more than actual performance in determining job success. They went on to say that the importance of these personal factors in increasing performance demonstrates a growing awareness of personal characteristics. Individual values, particularly ethical behaviour, are critical in building a more substantial construction industry practice culture. Fox and Skitmore, 2003, and Mohamad et al., 2015). According to Chan, Chan, Scott, and Chan (2002), the inclusion of ethics recognizes that values and morals are part of expertise, which promotes professional credibility. However, for construction professionals, learning is on technical and performance knowledge, which is considered a must, with less attention paid to techniques to internalize and build ethical ideals and behaviour in the workforce (Mohamad et al., 2015).

H4: Ethical guidance has a positive impact on employee engagement.

2.5.5 Market Culture

The management and maintenance of the internal environment in the organization's performance is in the interest of market culture. Contrarily, construction risk management shares the same goal of concentrating on an organization's internal and external environment. As a result, the culture can control how management and employees act and decide to achieve the goal, which also helps the firm manage risk. Additionally, market culture can lower market-related risk in the construction sector (Malik and Adeleke, 2018; Cameron and Quinn, 2006). The management and maintenance of the internal environment in the organization's performance is in the interest of market culture. Contrarily, construction risk management shares the same goal of concentrating on an organization's internal and external environment.

Additionally, risk management in construction project management is a thorough and methodical method of discovering, evaluating, and dealing with risks to meet the project's objectives (Adeleke et al., 2018; Taroun, 2014). Similarly, market culture can drive how management and people act and decide to achieve the goal, aiding the firm in risk management. The employee's expertise, experience, and judgement are taken into account while implementing risk management to identify the risk (Dikmen et al., 2004). The construction industry's market-related risk can also be decreased by market culture. Additionally, it has the power to support the organization's efforts to create risk management plans and to establish the organization's image.

H5: Market culture mediates between people-orientation and employee engagement.

H6: Market culture mediates between fairness and employee engagement.

H7: Market culture mediates between integrity and employee engagement.

H8: Market culture mediates between ethical guidance and employee engagement.

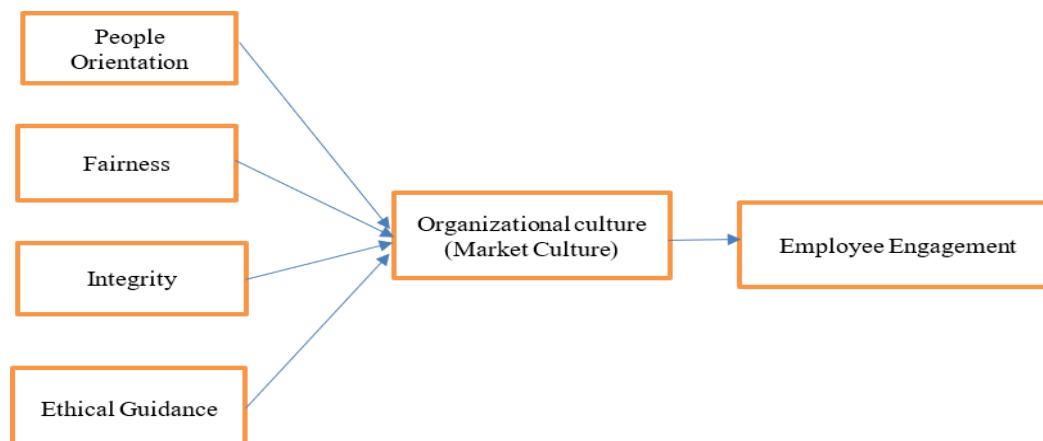


Figure 1: *Theoretical framework*

3.0 Methods

Non-probability sampling was employed in this study due to time constraints, the need to save money, and the limited interaction between people during the Covid-19 epidemic season. This method allows the author to contact nearby respondents to gather adequate data in a short amount of time while avoiding unpleasant contact with the respondent. The Klang Valley was chosen as the study's geographical area because it has had consistent growth in recent years and has been declared by the government to have the potential to become a developed state (MIDA, 2020). The questionnaires and data collection were based on the population distribution within the nine Klang Valley, and Selangor municipalities. Table 1 shows the current number of Selangor and Kuala Lumpur contractors based on their registration grades. For their day-to-day operations, contractor businesses, like any other organization, from G1 to G7, have management and operational teams (Ismail, Mohd Danur, Mohamed, Abdul-Karim and Mohd Nawi, 2017).

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Table 3: *The population of the registered contractors by grade in Selangor and Kuala Lumpur*

	Registration Grade	Population	Total
Lower grades	G1	5,667	15,606
	G2	3,503	
	G3	4,731	
	G4	1705	
Higher grades	G5	2822	7,244
	G6	772	
	G7	3650	

The sampling size of this research is based on the sample size determinant table suggested by Krejcie & Morgan (1970). Based on statistical data provided by CIDB (2017), the current population of contractors in Klang Valley is 22,850 (CIDB, 2017). Therefore, the minimum sampling size required is 379, as suggested by Krejcie and Morgan (1970). In this

study, members of the top management team are the subjects of the questionnaire. The top management team members determine the company's strategic direction and growth strategy. Five hundred questionnaires will be delivered. Based on the ratio between the population and sample size, equidistant sampling was performed at intervals of 5 in this study. An online questionnaire was chosen as the data collecting strategy for this study since it is both time and cost-effective and gives standardized replies (Queiros et al., 2017). This study uses descriptive analysis to process data from demographic profiles acquired from respondents, such as gender, age, race, employment, and other factors. The data for this study was gathered through a questionnaire, and the results were evaluated using the PLS-SEM statistical software tools.

4.0 Results

Descriptive for demographic data

The findings indicated that about 71.9% of the respondents were male. It was observed that most respondents were 25 years old and below, followed by those aged 31-40. Regarding education, it was found that the majority of the respondents hold a degree, around 42.9%. Moreover, most respondents hold working experience between 1 to 5 years, about 1-5 years.

Table 4: *Descriptive for demographic data*

	N	Code	Frequency	Percentage (%)
Gender	203	Male	146	71.9
		Female	57	28.1
Age	203	25 and below yrs old	131	64.5
		31 to 40 yrs old	48	23.6
		41 to 60 yrs old	17	8.4
		> 60 yrs old	7	3.4
Employment	203	Full-time	125	61.6
		Part-time	43	21.2
		Contract Basis	35	17.2
		SPM/STPM/Certificate	30	14.8
Qualification	203	Diploma	48	23.6
		Degree	87	42.9
		Mastet/PhD	32	15.8
		Certified Professional	6	3.0
Company Grade	203	G1	104	51.2
		G2	41	20.2
		G3	25	12.3
		G4	15	7.4
		G5	7	3.4
		G6	1	.5
		G7	10	4.9
Experience	203	> One year	43	21.2
		1 to 5 yrs	105	51.7
		5 to 10 yrs	36	17.7
		10 to 15 yrs	3	1.5
		>15 years	16	7.9

The study assessed the reflective measurement model using internal consistency reliability. Reliability analysis measures the internal consistency of the construct corresponding to the variables.

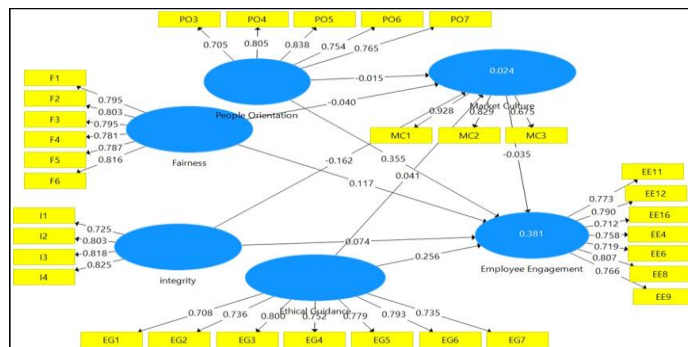


Figure 2: Outer loadings of factors (Measurement Model)

Measurement model

Researchers often use indicators' reliability to evaluate how a variable or a set of variables is consistent (Urbach and Ahlemann 2010). The indicator reliability of the measurement model is usually measured using indicator loadings (Gefen et al., 2000). Chin (1998b) stated that if a measurement model has a more significant loading than 0.7 for each item and loading is significant at least at 0.05; the measurement model has satisfactory indicator reliability. As shown in Table 5, all items of Cronbach's Alpha exceeded 0.7 (between 0.773 and 0.887). The composite reliability for all items was between 0.856 and 0.912. The average variance extracted for all the items exceeded 0.5. Based on the results, the reliability test achieved the threshold level of the measurement model, and all constructs achieved satisfactory indicator reliability in this study.

Table 5: Results summary for reflective measurement models

Constructs	Items	Loadings	CB Alpha	CR	AVE
People Orientation	PO3	0.705	0.833	0.882	0.602
	PO4	0.805			
	PO5	0.838			
	PO6	0.754			
	PO7	0.765			
Fairness	F1	0.795	0.887	0.912	0.634
	F2	0.803			
	F3	0.795			
	F4	0.781			
	F5	0.787			
	F6	0.816			
Integrity	I1	0.725	0.806	0.872	0.630
	I2	0.803			
	I3	0.818			
	I4	0.825			
Ethical Guidance	EG1	0.773	0.877	0.904	0.575
	EG2	0.790			
	EG3	0.712			
	EG4	0.758			
	EG5	0.719			
	EG6	0.807			
	EG7	0.766			
Market Culture	MC1	0.928	0.773	0.856	0.668
	MC2	0.829			
	MC3	0.675			

Discriminant Validity

The results of the Fornell-Larcker criterion for discriminant validity assessment are shown in Table 4.7. Table 6 indicated that the diagonal elements were more significant than the off-diagonal elements when the square root of each AVE in the diagonal was compared to the correlation coefficients (off-diagonal) for each construct. This indicates that the data had good discriminant validity.

Table 7: *Discriminant validity using the Fornell-Larcker criterion*

	Employee Engagement	Ethical Guidance	Fairness	Market Culture	People Orientation	integrity
Employee Engagement	0.762					
Ethical Guidance	0.497	0.758				
Fairness	0.237	0.171	0.796			
Market Culture	-0.095	-0.063	-0.036	0.817		
People Orientation	0.546	0.500	0.210	-0.081	0.775	
integrity	0.391	0.551	-0.001	-0.147	0.481	0.794

Table 8, HTMT was also utilized to test discriminant validity. Because all values are less than 0.9, the variables were found to have discriminant validity.

Table 8: *Heterotrait-Monotrait ratio of correlations (HTMT)*

	Employee Engagement	Ethical Guidance	Fairness	Market Culture	People Orientation	Integrity
Employee Engagement						
Ethical Guidance	0.560					
Fairness	0.255	0.175				
Market Culture	0.107	0.143	0.055			
People Orientation	0.628	0.583	0.238	0.139		
integrity	0.455	0.659	0.118	0.171	0.585	

Structural model

The study assessed the model using R2 and path coefficients for the relationship study. SmartPLS3.0 software was used for model building and parameter estimation.

Path Coefficients for Each Hypotheses Testing

Table 9 reports the path coefficients in the structural model among several constructs. It shows that the construct EG significantly influences the constructs EE and the p-value is smaller than 0.005. Besides, PO also significantly influenced the constructs EE, and the p-value is 0.000. However, the effects of EG on MC, F on EE, F on MC, MC on EE, PO o MC, I on

EE and I on MC are not significant as the t value is lower than the threshold t-value of 1.96 (significance level of 5%) (See Table 9 below).

Mediation Analysis

Table 10 reported the mediation effect of MC in the relationship between PO, F, I, EG and EE. This study found that the total effect of PO, F, I, EG on EE was 0.023 with a p-value > 0.05 and the confidence interval of ([0.023, 0.018, 0.033, 0.016]) which did not meet the mediating role of MC and no indirect effect. It was concluded that MC mediating does not mediate between PO, F, I, EG, and EE (see Tables 10 and 11).

Table 9: *The path coefficients*

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
EG -> EE	0.256	0.262	0.091	2.826	0.005
EG -> MC	0.041	0.050	0.153	0.270	0.787
F -> EE	0.117	0.120	0.067	1.740	0.082
F -> MC	-0.040	-0.051	0.095	0.425	0.671
MC -> EE	-0.035	-0.039	0.061	0.564	0.573
PO -> EE	0.355	0.354	0.084	4.242	0.000
PO -> MC	-0.015	-0.018	0.094	0.163	0.870
I -> EE	0.074	0.079	0.094	0.784	0.433
I -> MC	-0.162	-0.162	0.113	1.441	0.150

*EG-Ethical Guidance, EE-Employee Engagement, MC-Market Culture, F-Fairness, PO- People Orientation, I-Integrity

Table 10: *Specific indirect effects*

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Fairness -> Market Culture -> Employee Engagement	0.001	0.003	0.008	0.180	0.857
People Orientation -> Market Culture -> Employee Engagement	0.001	0.001	0.007	0.077	0.939
integrity -> Market Culture -> Employee Engagement	0.006	0.006	0.012	0.472	0.637
Ethical guidance -> Market Culture -> Employee Engagement	-0.001	-0.003	0.011	0.133	0.894

Table 11: Confidence intervals

Original Sample (O)		Sample Mean (M)	2.5%	97.5%
Fairness -> Market Culture -> Employee Engagement	0.001	0.003	-0.011	0.023
People Orientation -> Market Culture -> Employee Engagement	0.001	0.001	-0.014	0.018
integrity -> Market Culture -> Employee Engagement	0.006	0.006	-0.017	0.033
Ethical Guidance -> Market Culture -> EmployeeEngagement	-0.001	-0.003	-0.031	0.016

5. Discussion

The outcomes of the hypothesis testing showed that only two hypotheses were supported except for H2. H3.H5. H6. H7 and H8. The various research objectives are discussed in the sub-sections below.

H1: People orientation has a positive impact on the employees' engagement.

People orientation of ethical leadership positively influence employee engagement ($t=4.242$, $p=0.000$) (see table 9). This indicates that ethical leadership encourages employees to encourage healthy relationships and better actions among employees (Brown et al., 2005; Den Hartog and Belschak, 2012; and Brown et al., 2005). The positive relationship backs up the findings of Den Hartog and Belschak (2012), who found that when employees believe their leaders are acting ethically, they are more engaged at work. Employees are empowered by leaders who promote ethical behaviour by giving them the opportunities they need to become competent in their work. Ethical leaders serve their staff fairly and make decisions based on principles. They are transparent with their followers about their objectives and expectations (Brown and Trevino, 2006). Employees are inspired to take the initiative in the workplace by ethical leaders who equip them with the freedom to do so. An ethical leader's actions create an environment and opportunities for people to completely engage in their work.

H2: Fairness has a positive impact on employee engagement.

Fairness of ethical leadership did not influence ethical leadership ($t = 1.74$, $p 0.082$) (see Table 9). According to a study conducted by edge markets (Murugiah, 2021), the majority of staff report work environment lacks fairness. Technology research and consultancy firm Gartner Inc said in its 2021 ReimagineHR Employee Survey of 3,500 respondents released on Monday (November 8) that human resource (HR) leaders felt essentially the same - only 22% would describe their work as having a high degree of fairness. According to Gartner, employees who worked in a high fairness workplace performed 26 per cent better than those who did not and were

27 per cent less likely to resign, according to a poll done in the third quarter of 2021 (3Q21). According to Brian Kropp, Gartner HR practice chief of research, building a more equitable employee experience will be the essential priority for HR professionals in 2022. According to Kropp, employers should establish tactics around four areas to boost employee

views of fairness at work: being educated, feeling supported, feeling regarded, and receiving appreciation. "Organizations that use tactics to address these four variables can see a considerable increase in the number of employees who believe they have a fair work experience - from fewer than one in five to more than four in five," Kropp said (Murugiah, 2021).

H3: Integrity has a positive impact on employee engagement.

Integrity of the ethical leadership did not influence ethical leadership ($t = 0.784$, $p = 0.433$) (see Table 9). H3 did not support this study. However, H3 was supported positively in various other studies. According to Nasaruddin and Abdul Rahma (2016), the leadership quality of construction leaders is one of the most important factors in assuring the success of a project. A good leader could effectively manage the project and strategize construction operations using risk management. The construction process can be navigated sustainably with good leadership skills among the construction parties. It is time for Malaysia to have a strong leader in the construction business to ensure that our construction industry meets world standards by 2020 as we strive to become a developed country. The following characteristics of leadership quality were derived from research publications that looked into the leadership quality of construction parties. However, many other studies have confirmed the positive relationship between these two constructs in various studies (Engelbrecht, 2017; Kalshoven et al., 2011; Kannan-Narasimhan and Lawrence, 2012; Mayer and Gavin, 2005; Palanski and Yammarino, 2011). Fairness, consistency, compassion, and integrity are all moral qualities frequently associated with trust (Colquitt et al., 2007). As previously said, integrity is defined as morally consistent and predictable behaviour. As a result, a leader with integrity is regarded as trustworthy, resulting in increased trust in that leader. A leader's behavioural integrity impacts their followers' faith in them. The connection between the leader and the subordinate will be successful if the leader actively demonstrates integrity via honesty, consistency, and moral behaviour

H4: Ethical guidance has a positive impact on employee engagement.

Ethical guidance of ethical leadership positively influences employee engagement ($t = 2.826$, $p = 0.005$) (see table 9). When working in the construction sector, technical expertise in the relevant trade areas is unquestionably essential. However, Turner and Crawford (1992) claimed that human characteristics such as values and attitudes matter more than actual performance in determining job success in the business. They went on to say that the importance of these personal characteristics in increasing performance shows that people are becoming more conscious of them. Individual values and ethical behaviour are critical components in building a more substantial construction industry practice culture (Fox and Skitmore, 2003). According to Chan, Chan, Scott and Chan (2002), including ethics recognizes that values and morals are part of expertise, promoting professional credibility. However, professional construction learning focuses on technical and performance knowledge, which is considered a must, with less attention paid to techniques to internalize and build ethical ideals and conduct in the professionals.

Engineers, architects, project managers, and contractors (including quantity surveyors in Malaysia) have a fundamental right to professional conscience as construction and engineering professionals (Martin and Schinzingler, 1996). Although the public increasingly demands ethical behaviour from all businesspeople, the public's standards for professional behaviour are higher than those for businesspeople (Jamal and Bowie, 1995). Professional conduct must include an ethical component, and the requirement for professionals to be aware of ethical issues in how they conduct themselves is a vital part of their recognition (Grimshaw,

2001). Ethics need a framework, such as a policy, a code of conduct, or a shared cultural understanding of the norms (Orme and Ashton, 2003). However, they require persons who can distinguish between good and wrong, make ethical decisions, and are self-assured enough to stand by their decisions. As a result, ethics education and training, particularly for professionals, cannot be overstated.

H5: Market culture mediates between people-orientation and employee engagement, **H6:** Market culture mediates between fairness and employee engagement, **H7:** Market culture mediates between integrity and employee engagement, and **H8:** Market culture mediates between ethical guidance and employee engagement.

Market culture of the organizational culture did not mediate between ethical leadership and employee engagement, H5 ($t= 0.163$, $p=0.870$), H6 ($t= 0.425$, $p=0.671$), H7 ($t= 1.441$, $p=0.150$), H8 ($t= 0.270$, $p=0.787$) (see table 9). Market culture can be seen in organizations focused on the outside world and the drive to succeed. Cullen, Parboteeah, and Hoegl (2004) discovered that a leader's lack of moral standards is a factor that weakens cultural values at work in a study of anomic managers, implying that leaders who are more willing to justify ethically dubious behaviours may culturally leave followers with no moral guidance. This article argues that unethical leadership is negatively associated to Cameron and Quinn's (1999) market and hierarchical cultures based on their characteristics. Individual ambition to achieve goals is encouraged by the market culture (Cullen et al., 2004), and achievement ideals are "conducive to the mentality that 'it's not how you play the game: it is whether you win or lose,'" according to Messner and Rosenfeld (2001). These ideals are outside ethical leadership, which would likely deter followers from having an excessive personal ambition to attain goals and avoid creating the market culture in their minds (Cullen et al., 2004).

6. Implication, Limitations, future research of the study and Conclusion

According to this study, people-orientation and employee engagement will improve when ethical guidance and leadership are present in the workplace. According to Brown et al. (2005), being a moral manager, not merely a moral person, is still vital since it entails implementing moral ideals and an ethical vision and making it apparent by living it out in the organization. As a result, practical guidelines suggest leading by ethical role modelling, developing performance criteria that reward ethical behaviour, facilitating fair and ethical solutions to problems and conflict, monitoring fraud and corruption through internal and external audit systems, and promoting an ethical code of conduct (Yukl, 2013). Training programmes aiming to raise ethical awareness and develop managers' capacity to find morally justifiable answers through interactive learning should be designed to educate management leaders to cope with common moral issues and dilemmas.

Regarding the study's limitations, the author acknowledges that it has flaws. First, the study could be skewed by one source or approach, necessitating caution in interpreting the findings. Furthermore, as Zheng and Pavlou (2014) point out, SEM models can only infer "near" rather than "absolute" causality. Therefore, they cannot infer causality. In addition, SEM exclusively records linear correlations between components, neglecting the potential of nonlinear relationships. Second, the author has concentrated solely on construction workers, who are subjected to various working conditions that are typically unique to their industry. Third, it is probable that the study overemphasizes working relationships in which employees

interact more, such as the construction areas mentioned in the survey. Finally, the data came from a small sample size, raising concerns about the findings' generalizability.

Some questions remain unsolved, and future studies could be based on them. Future studies should, for example, triangulate our data gathering technique, as noted in the constraints about the generalizability of the findings. Triangulating the research data with one or more studies can yield significant qualitative insights. Future research could also examine the impact of cultural perceptions and ethical leadership on other aspects and behaviours, such as workplace deviance among employees and against the firm, people orientation, fairness, honesty, and ethical advice. Further research could include ethical leadership, company culture, and national culture in the field of feasible models. Finally, the possible implications of perceptions of the culture types analyzed about the various regions or services where employees work in the construction business must be investigated. This could lead to significant disparities in the various construction businesses' behaviour. As a result, it is proposed that future studies avoid using a convenient sample and instead employ a quota sampling technique. In the future, investigations should use a larger sample size based on increased probability and unpredictability. As a result, the sample will represent the general business community more.

Organizations should take full responsibility for ensuring that ethical leaders drive management practices and that the presence of ethically based business processes and operations builds trust in the leaders. Employee engagement is increased among employees due to their faith in their leaders to consider their interests and behave fairly and ethically when making decisions in a changing work environment when these characteristics are strengthened.

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References

- Abdul Rashid, I., Abdul Hamid, A. R., Mohd Zainudin, A. and Mohammed Hatem, Z. (2019). Unethical Behaviour Among Professional in the Malaysian Construction Industry. *ResearchGate*, 1-8.
- Abrell-Vogel, C. and Rowold, J. (2014). Leaders' commitment to change and their effectiveness in change – a multilevel investigation. *Journal of Organizational Change Management*.
- Adeleke, A. Q., Windapo, A. O., Khan, M. W. A., Bamgbade, J. A., Salimon, M. G. and Nawanir, G. (2018). Validating the Influence of Effective Communication, Team Competency and Skills, Active Leadership on Construction Risk Management Practices of Nigerian Construction Companies. *The Journal of Social Sciences Research*, 460-465.
- Ashforth, B. E., and Mael, F. (1989). Social identity theory and the organization. *Academic of Management*, 20–39.
- Bandura, A. (. (1986). *Social Foundations of Thought and Action*. NJ: Prentice-Hall, Englewood Cliffs.
- Berger, C. R. (1986). Uncertain outcome values in predicted relationships: uncertainty reduction theory then and now. *Human Communication Research*, 34–38.

- Berger, C. R., and Calabrese, R. J. . (1975). Some explorations in initial interaction and beyond: toward a developmental theory of interpersonal communication. *Human Communication Research*, 99-112.
- Blau, P. M. (1964). *Exchange and Power in Social Life*. . New York, NY: Wiley.
- Brown, M.E., Treviño, L.K. and Harrison, D.A. (2005). Ethical leadership: A social perspective for construct development and testing. *Organizational Behavior and Human Decision Processes*,
- Cameron, K. S., and Quinn, R. E. (2006). *Diagnosing and Changing Organizational Culture*. The Jossey-Bass Business & Management Series. https://doi.org/10.1111/j.1744-6570.2006.00052_5.x
- Cameron, K. S., & Quinn, R. E. (1999). *Diagnosing and changing organizational culture*. New York, NY: Addison-Wesley.
- Chan, E. H. W., Chan, M. W., Scott, D., and Chan, A. T. S. (2002). Educating the 21st century construction professionals. *Journal of Professional issues in Engineering Education and Practice*, 44-51.117-134.
- Chonko, L. B. (2004). Organizational readiness for change, individual fear of change, and sales managers' performance: an empirical investigation. *Journal of Personal Selling and Sales Management*, 7-17.
- Chin, W. W. (1998b). The partial least squares approach to structural equation modelling. *Modern methods for business research*, 295(2):295– 336.
- CIDB. (2017). *Malaysia Country Report*. 22nd AsiaConstruct Conference (pp. 1-15). CIDB.
- CIDB. (2018). *Projection of Construction Resources: The Methodology*. 23rd Asia Construct Conference (pp. 1-21). Kuching: CIDB.
- Colquitt, J.A., Scott, B.A. and LePine, J.A. . (2007). "Trust, trustworthiness, and trust propensity: a meta-analytic test of their unique relationships with risk taking and job performance". *Journal of Applied Psychology*, 909-927.
- Cullen, J. B., Parboteeah, K. P., and Hoegl, M. (2004). Crossnational differences in managers' willingness to justify ethically suspect behaviors: A test of institutional anomie theory. *Academy of Management Journal*, 411-421.
- De Hoogh, A. H. B., and Den Hartog, D. N. (2008). Ethical and despotic leadership, relationships with leader's social responsibility, top management team effectiveness and subordinates' optimism: a multi-method study. *Leadersh Quarterly*, 297–311.
- Demerouti, E., Bakker, A. B., Nachreiner, F. and Schaufeli, W. . (2001). The job demands-resources model of burnout. *Juornal Applied sychology*, 499–512.
- Desplaces, D. (2005). A multilevel approach to individual readiness to change. *Journal of Behavioral and Applied Management*, 25-39.
- Dikmen, I., Birgonul, M. T., and Arikan, A. E. (2004). A critical review of risk management support tools. In Khosrowshahi, F (Ed.), 20th Annual ARCOM Conference.
- DOS.(11 November,2021).dosm.gov.Retrievedfromwww.dosm.gov.my:
https://www.dosm.gov.my/v1/index.php?r=column/cthemByCat&cat=77&bul_id=U0Fqc2FEOctBVmlRa3NSNIBVSzMyQT09&menu_id=OEY5SWtF SVVFVUpmUXEyaHppMVhEdz09
- Engelbrecht, A. (2017). Integrity, ethical leadership, trust and work engagement. *Leadership & Organization Development Journal*, 368-379.
- Esa, M., Ibrahim, F.S. and Mustafa Kamal. E. (2020). Covid-19 Pandemic Lockdown: The Consequences Towards Project Success in Malaysian Construction. *Advances in Science, Technology and Engineering Systems Journal*, 973-983.
- Fan, L. C. N. and Fox P. W. . (2009). Exploring Factors for Ethical Decision Making: Views from Construction Professional. *Professional Issues in Engineering education and practice*, 60-69.

- Fleddermann, C. B. (2008). *Engineering Ethics*. 3rd ed. Pearson Prentice Hall.
- Fox, P. W., and Skitmore, R. M. (2003). Developing the Hong Kong construction industry, Knowledge Construction. Proceedings of Joint International Symposium of CIB Working Commissions, W55, W65 and W107, October 22- 24, (pp. 711-722). Singapore: Department of Building, National University of Singapore.
- Freeman, R.E. and Stewart, L. (2006). corporate-ethics.org. Retrieved from www.corporate-ethics.org: <http://www.corporate-ethics.org/>
- Gefen, D., Straub, D., and Boudreau, M.-C. (2000). Structural equation modelling and regression: Guidelines for research practice. *Communications of the association for information systems*, 4(1):7.
- Gouldner, A. W. (1960). The norm of reciprocity: a preliminary statement. *American Sociological Review*, 161-178.
- Grimshaw, B. (2001). Ethical issues and agendas. *Facilities*, 43-51.
- Herscovitch, L., and Meyer, J. P. . (2002). Commitment to organizational change: extension of a three-component mode. *Journal of Applied Psychology*, 474– 487.
- Hossain, M. (2015). Ethical Leadership: Its Issues and Impacts in Organization. *International Journal of Ethics in Social Sciences*, 1-14.
- Ismail, F., Mohd Danur, M. S., Mohamed, O., Abdul-Karim, S. B. and Mohd Nawi, M.N. (2017). Ethics-Related Issues in the Tender Evaluation of Malaysia Public Projects. *Journal of Design and Built Environment*, 1-17.
- Jamal, K., and Bowie, N. E. . (1995). Theoretical considerations for a meaningful code of professional ethics. *Journal of Business Ethics*, 702-714.
- Kalshoven, K., Den Hartog, D. N. and De Hoogh, A. H. B. (2011). Ethical leadership at work questionnaire (ELW): development and validation of a multidimensional measure. *The Leadership Quarterly*, 51-69.
- Kannan-Narasimhan, R. and Lawrence, B.S. (2012). "Behavioural integrity: how leader referents and trust matter to workplace outcomes". *Journal of Business Ethics*, 165-178.
- Krejcie, R. V., and Morgan, D. W. (2016). Determining Sample Size for Research Activities. *Educational and Psychological Measurement* <https://doi.org/10.1177/001316447003000308>
- Legacybusinesscultures. (February 9 2016). legacycultures.com. Retrieved from <https://legacycultures.com/dimensions-of-leadership-fairness/>
- Madsen, S. R., Miller, D. and John, C. R. (2005). Readiness for organizational change: do organizational commitment and social relationships in the workplace make a difference? *Human Resource Development Quarterly*, 213–233.
- Majeed, N. (. (2018). Mastering theories. In D. A. (Ed.), *Ethical leadership: The heart of leadership* (pp. 203–211). Kuala Lumpur: University of Malaya.
- Maiti, A. and Indhu, B. (2018). Organizational Culture and Its Impact in Indian Construction Industry-A Case Study. *International Journal of Civil Engineering and Technology*, 110–125.
- Malik, N. S. A., and Adeleke, A. Q. (2018). The Effect of Organizational Culture on Material Risk among Malaysian Construction Industries. *Journal of Advanced Research in Applied Sciences and Engineering Technology*, 10 (1), 34-40.
- Turner, D., and Crawford, M. . (1992). Managing current and future competitive performance: The role of competence. Australian Graduate School of Management, Centre for Corporate Change, 1-26., 1-26.
- Mayer, D.M., Aquino, K., Greenbaum, R.L. and Kuenzi, M. (2012). Who displays ethical leadership, and why does it matter? An examination of antecedents and consequences of ethical leadership. *Academy of Management Journal*, 151- 171.

- Mayer, R.C. and Gavin, M.B. (2006). "Trust in management and performance: who minds the shop while the employees watch the boss?". *Academy of Management Journal*, 874-888.
- MIDA. (2020). MIDA. Retrieved from www.mida.gov.mt: <https://www.mida.gov.mt/report/>
- Mohamad, N., Abdul Rahman, I., Usman, M. and Tawil, N. M. (2015). Ethics Education and Training for Construction Professionals in. *Canadian Center of Science and Education*, 55.
- Molina, A. D. (2016). IBM Center for The Business of Government. Retrieved from www.businessofgovernment.org:<https://www.businessofgovernment.org/sites/default/files/Ten%20Recommendations%20for%20Managing%20Organizational%20Integrity%20Risks.pdf>
- Morgan, D. E. and Zeffane, R. (2003). Employee involvement, organizational change and trust in management. *International Journal of Human Resource Management*, <https://www.frontiersin.org/articles/10.3389/fpsyg.2019.02493/full#:~:text=R.esour.%20Manag.%2014%2C-,55%E2%80%9375,-.%20doi%3A%2010.1080/09585190210158510>.
- Murugiah, S. (Thursday November 2021). TheEdgeMarkets. Retrieved from www.theedgemarkets.com: <https://www.theedgemarkets.com/article/majority-staff-report-work-environment-lacks-fairness-%E2%80%9494-poll>
- Murphy, S. E. and Ensher, E. A. (2008). A qualitative analysis of charismatic leadership in creative teams: The case of television directors. *The Leadership Quarterly*, 19(3):335–352.
- Nasaruddin, N. A. N. and Abdul Rahman, I. (2016). Leadership Quality for Malaysia Construction Leader to Steer a Success Construction Project. *MATEC Web of Conferences* 47 (pp. 1-6). EDP Sciences.
- Nelson, A., Cooper, C. L., and Jackson, P. R. (1995). Uncertainty amidst change: the impact of privatization on employee job satisfaction and well-being. *Journal of Occupational and Organizational Psychology*, 57-71.
- Neves, P., Almeida, P. and Velez, M. J. (2018). Reducing intentions to resist future change: combined effects of commitment-based HR practices and ethical leadership. *Human Resource Management*, 249–261.
- Ng, T. W. H., and Feldman, D. C. (2015). Ethical leadership: meta-analytic evidence of criterion-related and incremental validity. *Journal of Applied Psychology*, 948–965.
- OConnell, W. and Bligh, M. (2009). merging from Ethical Scandal: Can Corruption Really Have a Happy Ending? *Leadership*, 213-235.
- Onyebuchi, O. S., Mohamed Saat, M. and Abduallah, D. F. (2018). The Effects of Ethical Leadership on Corporate Sustainability. *International Journal of Management and Applied Science*, 1-4.
- Orme, G., and Ashton, C. (2003). Ethics-a foundation competency. *Industrial and Commercial Training*, 184-190.
- Palanski, M.E. and Yammarino, F.J. (2011). "Impact of behavioural integrity on follower ob performance: a three-study examination". *The Leadership Quarterly*, 765-786.
- Pwc. (2021). www.pwc.com. Retrieved from pwc: <https://www.pwc.com/gx/en/issues/crisis-solutions/covid-19/engineering-construction-post-covid-world.html>
- Queirós, A., Faria, D., and Almeida, F. (2017). Strengths and Limitations of Qualitative and Quantitative Research Methods. *European Journal of Education Studies*, 3, 369-387.
- Ray, R. S. and Hornibrook, J. (1999). Ethics in tendering: A survey of Australian opinion and practice. *Construction Management and Economics*, 139-153.

- Resick, C. J., Hanges, P. J., Dickson, M.W. and Mitchelson, J. K. (2011). "A Cross- Cultural Examination of the Endorsement of Ethical Leadership", *Journal of Business Ethics*, 345–359.
- chein, E. H. (1992). *Organizational Culture and Leadership*, 2nd Ed. San Francisco, CA: Jossey- Bass.
- Senam, M. R., Abdul Rashid, K., Sarkawi, A. A. and Zaini, R. M. (2014). Construction project leadership from the perspective of Islam. *International Journal of Islamic Thought*, 1-6.
- Shafter, M. E., Ghnaem, S. S. & Abdelmotleb, F. A. (2016). The Roles of Management to Increase Efficiency for Employees and Interconnected with Good Leadership. *Journal of Business and Management*, 1-6.
- Shah, N. and Shah, S. (2010). Relationships between employees' readiness for organizational change, supervisor and peer relations and demography. *Journal of Enterprise Information Management*, 640-652.
- Sharif, M. M. and Scandura, T. A. (2014). Do perceptions of ethical conduct matter during organizational change? Ethical leadership and employee involvement. *Journal of Business Ethics*, 185–196.
- Steinmann, B., Nubbold, A. and Maier, G. W. . (2016). Validation of a German version of the ethical leadership at work questionnaire (ELW) by Kalshoven et al. (2011). *Front Psychology*.
- Taroun, A. (2014). Towards better modeling and assessment of construction risk: Insights from a literature review. *International Journal of Project Management*, 32(1), 101–115. <https://doi.org/10.1016/j.ijproman.2013.03.004>
- Theworkplacecoach. (March 6 2013). [theworkplacecoach.com](https://www.theworkplacecoach.com). Retrieved from [www.theworkplacecoach.com: https://www.theworkplacecoach.com/the-importance-of-ethical-leadership/](https://www.theworkplacecoach.com/the-importance-of-ethical-leadership/)
- Tow, D. and Loosemore, M. . (2009). Corporate Ethics in the Construction and Engineering Industry. *Legal Affairs and Dispute Resolution in Engineering and Construction*, 122-129.
- Treviño, L. K., Brown, M. E. and Hartman, L. P. (2003). A Qualitative Investigation of Perceived Executive Ethical Leadership: Perceptions from Inside and Outside the Executive Suite. *Human Relations*, 5-37.
- Trevino, L.K. and Brown, M.E. (2006). Ethical Leadership: A review and future directions. *The Leadership Quarterly (Science Direct)*, 595-616.
- Turner, D. and Crawford, M. (1992). Managing current and future competitive performance: The role of competence. *Australian Graduate School of Management, Centre for Corporate Change*, 1-26.
- Tyler, T. R. (1997). The psychology of legitimacy: a relational perspective on voluntary deference to authorities. *Personality and social psychology review*, 323–345.
- Udhayakumar, R. and Karthikeyan, P. (2014). Expected leadership qualities for a project manager to manage construction projects, *International Journal of Innovative Research and Development*, 57-61.
- Urbach, N. and Ahlemann, F. (2010). Structural equation modelling in information systems research using partial least squares. *Journal of Information technology theory and application*, 11(2):5–40.
- Vakola, M. (2013). Multilevel readiness to organizational change: a conceptual approach. *Journal of Change Management*.
- Vakola, M. (2014). What's in there for me? Individual readiness to change and the perceived impact of organizational change. *Leadership Organizational Development Journal*.

- Vakola, M., & Nikolaou, I. (2005). Attitudes towards organizational change: What is the role of employees' stress and commitment? *Employee Relations*, 27(2), 160–174.
- Virgiyanti, W., Tufail, M. A. and Abu Bakar, A. H. (2019). Intervention of Organizational Culture in Achieving Competitive Advantage through Knowledge Management in Malaysian Construction Companies. *International Journal of Innovative Technology and Exploring Engineering*, 1-11.
- Wan Muda, W. H. N., Libunao, W. H., Khairunesa Isa, Ahmad, A. R. and Md Yusoff, R. (2019). Leadership Capability Framework for the Construction Industry Leaders in Malaysia. *International Journal of Recent Technology and Engineering*, 1-7.
- Wan Muda, W. H. N., Libunao, W. H., Mohd Salleh, K., & Sulaiman, & N. (2016). Developing a Leadership Capability for Team Leaders in the Construction Industry: A Concept for Organizational Success. *Journal of Technical Education and Training*, 8(2). Retrieved from <https://publisher.uthm.edu.my/ojs/index.php/JTET/article/view/1372>
- Walumbwa, F. O., Mayer, D. M., Wang, P., Wang, H., Workman, K., & Christensen, A. L. (2011). Linking ethical leadership to employee performance: The roles of leader–member exchange, self-efficacy, and organizational identification. *Organizational Behavior and Human Decision Processes*, 204-213.
- Yulk, G. A. (2002). *Leadership in organizations* (5th ed.). Upper Saddle River, NJ: Prentice-Hall.
- Yukl, G. (2013). *Leadership in Organizations*, . NJ: Pearson, Upper Saddle River. Yukl.
- Zarkada-Fraser A. and Skitmore, M. (2000). Decision with moral content: Collusion", *Construction. Management and Economics*, 101-111.
- Zheng, Z. (Eric), Pavlou, P. A., and Gu, B. (2014). Latent Growth Modeling for Information Systems: Theoretical Extensions and Practical Applications. *Information Systems Research*, 25(3), 547–568. <http://www.jstor.org/stable/24700310>
- Zhu, W., May, D. R. and Avolio, B. J. (2004). The impact of ethical leadership behavior on employee outcomes: The roles of psychological empowerment and authenticity. *Journal of Leadership & Organizational Studies*, 16-26.