

Determinants of Corporate Sustainability in the Malaysian Construction Industry

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Abstract

Corporate sustainability is a key concern for corporation. This research intends to evaluate: (1) the influences of training and development and the components of human governance (i.e., transformational leadership, integrity and collectivism) on the corporate sustainability; (2) the impact of the components of human governance on training and development; and (3) the role of training and development in mediating the relationship between the components of human governance and corporate sustainability. Through an online questionnaire survey, 283 responses were collected from the Malaysia construction industry by using non-probability sampling technique. Statistical inferential analyses were carried out by utilising both SPSS Version 25.0 and SmartPLS 3.0. The results represented a significant positive relationship between the components of human governance, training and development, and corporate sustainability. This research also found that only transformational leadership and integrity (but not collectivism) have positive relationship on training and development. The research findings likewise evinced that training and development partially mediates the relationship between the components of human governance (i.e., transformational leadership and integrity but not collectivism) and corporate sustainability. This research contributes an unabridged theoretical perspective on corporate sustainability by providing a deeper understanding of how training and development and the components of human governance determine corporate sustainability as well as the relationships between transformational leadership, integrity and collectivism with corporate sustainability through the mediating role of training and development. Lastly, this research also promotes a better system and policies for organisations to achieve their goals of corporate sustainability.

Keywords: collectivism, corporate sustainability, integrity, training and development, transformational leadership, human governance

1. Introduction

Sustainability was introduced by Elkington (1997) as a concept that includes triple bottom line (“TBL”) (i.e., environmental, economic and social aspects). Beyond the conventional business profit-orientation, there is no doubt that corporate sustainability is growing in popularity in the 21st century *Anno Domini* (Singh et al., 2019; Baumgartner & Ebner, 2010). Additionally, the Malaysia government has imposed a number of legislations and guidelines to promote corporate sustainability initiatives, including the Environmental Quality Act 1974, Malaysian Code on Corporate Governance and Bursa Malaysia’s Sustainability Reporting Guide. However, studies reveal that the corporate sustainable performance of companies in Malaysia still lag behind best practice (Radzi et al., 2018; Ismail et al., 2015). This is particularly true for the construction industry, which constitutes a huge source of inadequacy for sustainability. According to Mok (2019), the lack of sustainability risk management and worksite safety led to a recent landslide tragedy which happened in the Bukit Kukus road project that claimed 9 workers’ lives.

Rather than governing corporations through externally imposed rules and regulations, Kumar (2019) and Ahmad and Salleh (2008) assert that the transformation of corporate behaviour should begin by centering on the behaviour of the people within the company as human behaviour steers the corporate behaviour potently. In other words, an internal moral compass the people-centered paradigm or, more precisely, human governance should be inculcated to navigate the behaviour and essence of internal stakeholders of companies. Apart from that, human

resource (HR) strategies are found to be important in encouraging sustainable practices in the workplace (Chams & García-Blandón, 2019), especially training and development strategy that could bring about well-trained and highly developed employees, which in turns, drives the organisational sustainability (Silva et al., 2019; Ji et al., 2012). Hence, the current research has highlighted the impact of human governance on corporate sustainability through the mediating role of training and development; at the same time, to address the scant nexus between human governance, training and development and corporate sustainability.

The aims of this research involve: (1) the influences of training and development and the components of human governance (i.e., transformational leadership, integrity and collectivism) on the corporate sustainability; (2) the impact of the components of human governance on training and development; and (3) the role of training and development in mediating the relationship between the components of human governance and corporate sustainability.

2. Literature Review

2.1 Theoretical Underpinnings and Framework

2.1.1 Stewardship Theory

Stewardship theory has been pioneered by Donaldson and Davis (1991) as a way of determining facilitative organisational structure based upon behavioural premises so that leaders can employ an effective approach to achieve good corporate performance. It depicts leaders and employees work together as a pro-organisational team (Davis et al., 1997) to increase the corporate assets and achieve the organisational objectives (Mason et al., 2007). Additionally, this theory offers intrinsic motivation such as self-actualisation, growth and development, achievement, and affiliation, which can result in greater utility than those who are enticed by the extrinsic value (Lawal, 2012).

Stewardship theory defines integrity and ethical organisational process throughout the human behaviours within the company (Segal, 2012), and is aligned with the goals of social enterprise as well as sustainability (Mason et al., 2007). It sees individuals' behaviour as collectivistic because they strive to attain organisational objectives instead of one's own (Ng, 2018). The assumption of this theory is that leaders' and organisational behaviours are established based on trust, collectivistic values, cooperation, reputation and involvement where these ethical behaviours are aligned with the interest of the stakeholders (Ng, 2018; Van Slyke, 2007; Davis et al., 1997). In line with Ng (2018), stewardship theory suggests that leaders are motivated by non-economic factors such as trust and respect gained from their followers. Indirectly, this viewpoint has an implicit linkage to transformational leadership theory, details of which are further discussed in the following sub-section.

2.1.2 Transformational Leadership Theory

The idea of transformational leadership was coined by Burns (1978) and was later developed by Bass (1985). According to this group of scholars, a transformational leader attempts to care and develop his or her followers by coping with their self-actualisation needs. Transformational leadership is a process that leans on inspirational motivation (i.e., motivates followers to embrace ethics, moral and shared values) and therefore inspire followers to act for the interest of the organisation (Bass & Avolio, 1989). As acknowledged by Bass and Riggio (2006), transformational leaders serve as an idealised influence on followers and therefore, advance these followers to their fullest potential (intellectual stimulation). Moreover, transformational leaders who exhibit individualised consideration behaviour seek to concern and transform followers toward better productivity and sustainability achievement (Tabassi et al., 2016; Tollin et al., 2015). The essential assumption underlying the prescriptions of transformational leadership theory is that the vision and passion of the leader could change and inspire his followers to accomplish excellent works (Mohiuddin, 2017). Accordingly, this type of leadership is mostly based on the personal integrity, values, faiths and qualities of the leader (Tabassi & Abu Bakar, 2010); all the while, the followers feel trust, respect and admiration for the leader (Bromley & Kirschner-Bromley, 2007).

In the case of corporate sustainability achievement, both stewardship and transformational leadership theories are the appropriate paradigm because sustainability by organisational ethics, collective goals and employees' growth, motivation and involvement could well contribute to their being in close alignment with the company's sustainable developments. Without doubt, the strategic integration of corporate sustainability into company's core operations requires the assistance of HRM and governance that is targeted at the humans within the corporation (Kurz et al., 2019; Hanapiyah et al., 2016). Through the lenses of both these theories, HRM and governance could assist to advocate corporate sustainability in the workplace. Altogether, such sustainability strategy could deem to be an essential weapon for outmanoeuvring company's rivals and earning a competitive advantage (Lambrechts et al., 2019).

2.1.3 Stimulus-Organism-Response (SOR) Model

Stimulus-Organism-Response (S-O-R) model has been applied as key theoretical framework to how the components of human governance (i.e., transformational leadership, integrity and collectivism) and training and development are related to corporate sustainability.

Originally, the S-O-R model was introduced by Mehrabian and Russell (1974) to depict store atmospheric attributes. It was later extended by Belk (1975) to describe situational variables and consumers' behavioural responses. Today, this model has been verified and broadly adopted in psychology, marketing and organisational behaviour studies (Tang et al., 2019; Cho et al., 2019; Chang & Jai, 2015); reason being, it offers a parsimonious yet effective structured theoretical lens that helps to identify the key success factors for business achievement (Kim & Lennon, 2013).

In Mehrabian and Russell's S-O-R model, the factor that affects the inner nature and behaviour of people is known as "stimulus". It is conceptualised as an element that stimulates the individuals (Chang & Jai, 2015), and at the same time, it is able to shape their internal and organismic experiences (Cho et al., 2019). In this research, based on both the theories of stewardship and transformational leadership, it is seen that the constructs of transformational leadership, integrity and collectivism are underpinned to the components of human governance. As such, the stimuli are the three components of human governance because they mould internal stakeholders' behaviours and values.

According to Bagozzi (1986) and Mehrabian and Russell (1974), "organism" in the S-O-R model indicates the cognitive or affective feelings and thinking activities, which intervene the relationship between the stimulus and human behavioural actions. Also, it is a structure or process that is held internally by an entity to mediate between those two sides, i.e., stimuli and individuals' final responses (Chang & Jai, 2015). In this research, training and development programme is investigated as an internal organism.

As stated by Bagozzi (1986), "response" represents the final action or output that is led by organism from individuals or entities. It involves psychological and/or behavioural reactions such as buying decisions, attitudinal intentions and commitments (Tang et al., 2019; Chang & Jai, 2015). Therefore, this research investigates a company's sustainability incorporation as a response.

2.2 Corporate Sustainability (CS)

Henry et al. (2019) describe corporate sustainability as an effort to achieve sustainable performance by companies through the balance of triple bottom line (planet, people and profit). Based on Porter and Kramer (2002) as well as Ofori-Parku and Koomson (2023), corporate sustainability is essential for businesses because it contributes to or produces success in the marketplace. As shown by several studies, the largest corporations in the world have realised that success in a highly competitive market is not guaranteed by short-term earnings and the policy of maximising short-term profits must be supplemented with the development of a long-term sustainable strategy (Hossain et al. 2022; Rebeka and Indradevi 2015; Mahdi et al. 2019). As a result, organisations must increasingly concentrate on ensuring sustainable performance by striking a balance between financial, social, and environmental objectives.

2.3 Training and Development (TAD)

Training and development is a formal programme that is executed to enhance the skills and competencies of individuals within a company (Bartel, 1989). In recent times, it has emerged as an integral part of organisational strategy and business function to outperform its rivals (Sekgala & Holtzhausen, 2016). Several studies evince that untrained employees tend to fail to perform up to the mark, comparing to those trained employees (Karim, 2019; Kaushal, 2019; Khan et al., 2011). Therefore, it is very necessary for the company to arrange employees training and development in order to achieve its overall goals splendidly.

2.4 Human Governance (HG)

According to Ahmad and Salleh (2008), human governance refers to an internal mechanism that is employed to navigate the behaviour and essence of human to be a good human being. It focuses on axiology, possessing the traits of value, conviction, culture, leadership and integrity so as to cultivate a better inner value of individuals that yields higher virtuous behaviour and ethical conducts (Hanapiyah et al., 2016). To organise the study, this research focuses only on three components of human governance, namely transformational leadership (TFL), integrity (INT) and collectivistic culture (also known as collectivism, COL) due to their high relevance to the context of corporate sustainability through the lenses of stewardship and transformational leadership theories.

2.5 Training and Development and Corporate Sustainability

A number of studies have provided evidences to support the positive relationship of employee training and development with the company's performance (Kaushal, 2019; Sekgala & Holtzhausen, 2016; Khan et al., 2011). This indicates that the training and development programme can, meanwhile, help to build up corporate performance in the sustainable development (Ji et al., 2012). Similarly, as noted in the study by Ramus (2002), environmental training and skill development are introduced as a technique that facilitates and redoubles employees' abilities and contribution to the ecological activities. Rather than solely underpin the financial objectives of a company, training and development could assist employees to contribute to the environmental management maturity (Silva et al., 2019; Jabbour, 2015).

Related to the above, Tang et al. (2017) and Jabbour (2011) append that training motivates employees to accomplish corporate sustainability through the education and increment of sustainable awareness. Colbert and Kurucz (2007) claim that through training and development, sustainability-framed business objectives can be infused into employees; thereupon shape their mindset of the desirability and importance of ecological and community concerns in the corporate context (Pellegrini et al., 2018). Moreover, training often facilitates fostering managers and employees in relation to business ethics, humanity and social responsibility (Kurz et al., 2019; Waid, 2019), such reinforced sense of ethics and responsibility should consequently help to promote the corporate sustainability practices in the organisation.

In view of the above contestations, training and development is predicted to have a positive relationship on corporate sustainability practice. This research has thereby proposed the following hypothesis:

Hypothesis 1: Training and development is positively related to corporate sustainability.

2.6 Human Governance and Corporate Sustainability

Opoku et al. (2015) evince that unique leadership styles, including transformational leadership, have a significant positive relationship to organisational sustainability practices. Other studies support this finding and indicate the vital impact of transformational leaders on the integration of corporate sustainability (Tabassi et al., 2016; Tollin et al., 2015). Similarly, according to the study by Jiang et al. (2017) that is based on a sample of employees from the construction industry in China, it reveals that transformational leadership of project managers has desirable influence on employees' sustainable performance in the construction project development.

As found by Ramus and Steger (2000), there is a weak association between supervisor support and employees' environmental competence building. In the recent studies, however, transformational leadership is confirmed as a mechanism for achieving corporate sustainability through the facilitation of employees' pro-environmental behaviours (Graves & Sarkis, 2018; Robertson & Barling, 2013). Furthermore, studies show that this leadership style is positively correlated to corporate environmental sustainability (Chen et al., 2014), social sustainability (Alonso-Almeida et al., 2017), as well as economic sustainability which is attained through the improvement of employees' innovative work behaviour (Li et al., 2019).

In line with the conclusions reached by all these scholars, this research expects that transformational leadership of a company's internal stakeholders could intensify the adoption of sustainable practices in the corporations. Thus, the following hypothesis is proposed:

Hypothesis 2: Transformational leadership is positively related to corporate sustainability.

Support was gained in various studies for a positive relationship between integrity and attainment of sustainable development. This is seen in the works of Roche and Campagne (2017) and Richter et al. (2003), where the authors manifest the promise of ecosystem integrity to the realisation of sustainability in the aspects of natural resources, environment and ecosystem. Not only ecological sustainability, it is argued that integrity could stimulate organisational sustainability with TBL focus as well. Biggemann et al. (2014) assert that integrity helps corporations to build commitment between stakeholders, which in turn, increases CSR and business sustainability.

Based on the supply chain context in the United States, Castillo et al. (2018) show in their study that integrity, an internal organisational principle that is concerned for the welfare of others, has been proven to enhance corporate sustainability. Joseph et al. (2019) discover the evidences to support the above argument based on a study of 51 Malaysian and 34 Indonesian local authorities' websites, where integrity is unveiled to be a crucial role in ensuring an entity's accountability and transparency so as to actualise sustainable development goals.

Consistent with these observations, this research predicts that integrity is the essential tenet on which sustainable corporations must be framed. Therefore, the hypothesis proposes as follows:

Hypothesis 3: Integrity is positively related to corporate sustainability.

Research offers that collective individuals are more likely to cooperate as well as seek social bonding (Huang & Lu, 2017; Ning et al., 2012), and such focus on the welfare of group can consequently improve the initiatives of CSR and sustainability (Hur & Kim, 2017). Wu et al. (2018) likewise stress the need for collectivism to promote social happiness based on the urban equality.

Taylor and Wilson (2012), based on a sample of 62 countries, claim that collectivism could attenuate innovation rates; eventually, hindering a company's long-term success and sustainability. While a majority of the literature sees a positive relationship between collectivistic culture and organisational sustainability. As seen in the studies of Cho et al. (2013) and Ng and Burke (2010), individuals who were more collectivistic tend to express greater concern for the eco-friendly action. More recently, Zhao et al. (2019) portray a positive relationship between collectivistic values of employees and strategic CSR. People with a strong sense of collectivism are more likely to support pro-environmental and social goal—which, indeed, is reflected in sustainability (Tascioglu et al., 2017; Parboteeah et al., 2012).

Taking everything together, this research expects collectivism to improve sustainable practices in organisations. Hence, the fourth proposed hypothesis runs as follows:

Hypothesis 4: Collectivism is positively related to corporate sustainability.***2.7 Human Governance and Training and Development***

As stated by Hartman (2018), a great leader will advocate training and development programme to help followers learn to be effective employees. Transformational leadership which involves emphasising followers' moral engagement and empowerment, tends to offer all kinds of support for team development and training to aggrandise their quality and productivity (Dvir et al., 2002; Bass & Avolio, 1994). Besides, this leadership behaviour provides intellectual stimulation and a learning work environment, where employees are aware of their actions, and thus will attend training and development to go the extra mile (Milheim 2016).

A study conducted by Jia et al. (2018), based on a sample of medical firms in China, suggests that transformational leaders assist to organise green training and development programme, to strengthen the HR and employee development in respect of green action. Additionally, Gadirajurrett et al. (2018) postulate in their study that transformational leaders who attend to members' needs (individualised consideration) render the best principles and structure to team enhancement, this thereby increases the training and development opportunities for their members to enhance their task performance. Similar findings are found in Li et al. (2019) and Krishna (2011), where transformational leaders facilitate the development of team's potential and efficiency to achieve their job performance standard. Furthermore, Ahmad et al. (2017) pointed out the massive impact of both transformational leadership and training and development on organisational commitment.

In view of the above arguments, the transformational leadership is expected to have a positive relationship to the training and development. Following this line of reasoning, this research proposes to hypothesise:

Hypothesis 5: Transformational leadership is positively related to training and development.

Elnaga and Imran (2013) and Rawashdeh (2013) state that training and development programme requires the engagement of employees. Studies have concluded that organisational integrity will result in high work engagement as well as employees' development in the workplace (Ahmed et al., 2018; Kayes et al., 2007). In addition, the study from Engelbrecht et al. (2017) discovers that employees who perceive leaders as having integrity and being honest tend to be more participative in their work. Consequently, these employees will involve themselves actively in the job task training and development programme. Conforming to the study of Innocenti et al. (2012), managers' integrity is proved to have a positive impact on moulding employees' perceptions of HR practices, which include training and development.

Given the characteristics of integrity as identified from the previous findings, integrity is assumed to have a positive influence on employee training and development. Hence, the next proposed hypothesis of this research is raised as below:

Hypothesis 6: Integrity is positively related to training and development.

Various researchers exhibit that organisational culture has a tremendous impact on the different forms of learning in the workplace such as employee education as well as training and development. As seen in the study of Lee and Lee (2014), collectivism, which favours collective interests could dampen employees' personal talent and development. Furthermore, it has limited employees' learning and creativity since collectivists are prone to groupthink and hesitate in opposing others' ideas to avoid being ostracised (Hong et al., 2018).

However, Rogers and Spitzmueller (2009) contend that a high-level of collectivism displays a great learning motivation and training transfer intention. In addition, as postulated by Rode et al. (2016), collectivistic firms are found to earnestly promote interdependent self-views and training practice among their employees in order to increase their commitment and participation in the company. Aiming to actualise the commonly shared goals, Presbitero et al. (2017) posit that collectivists tend to accommodate an organisational learning atmosphere which is based on knowledge sharing and developing among individuals at the different organisational levels. In the same vein, collectivistic organisational culture promotes team-based training interventions and being supportive of its employees' growth (Grobler et al., 2019; Saha & Kumar, 2018).

Based on the foregoing discussion, it is clear that if there is collectivism in the workplace, then an organisation will promote employee training and development for ensuring the quality and growth of its employees. Thus, this observation is summarised and proposed in the following hypothesis:

Hypothesis 7: Collectivism is positively related to training and development.

2.8 Mediator Role of Training and Development

As contended in the preceding sub-sections, training and development (Waid, 2019; Tang et al., 2017), transformational leadership (Graves & Sarkis, 2018; Jiang et al., 2017), integrity (Joseph et al., 2019; Castillo et al., 2018), and collectivism (Zhao et al., 2019; Tascioglu et al., 2017; Ng & Burke, 2010) have direct positive relationships with the corporate sustainability. Apart from that, several past studies have confirmed the positive impact of transformational leadership (Li et al., 2019; Ahmad et al., 2017), integrity (Innocenti et al., 2012) and collectivism (Rode et al., 2016; Rogers & Spitzmueller, 2009) on training and development. Nevertheless, training and development is considered to be a critical embodiment of the company's sustainable development (Ji et al., 2012). It can facilitate the company in motivating and giving employees opportunities to have a better understanding of the importance of corporate sustainability (Pellegrini et al., 2018).

Thus, reflecting on the above-expatiated perspectives, this research considers training and development in mediating the components of human governance and corporate sustainability. In other words, training and development as a result of human governance would influence corporate sustainability. Accordingly, the following hypotheses were proposed:

Hypothesis 8: Training and development mediates the relationship between transformational leadership and corporate sustainability.

Hypothesis 9: Training and development mediates the relationship between integrity and corporate sustainability.

Hypothesis 10: Training and development mediates the relationship between collectivism and corporate sustainability.

2.9 Conceptual Framework

Based on the application of the S-O-R model, a proposed conceptual framework was developed (Figure 1). The framework illustrates that TAD (organism) as a mediator, intervenes the relationships between the respective components of human governance, namely TFL, INT and COL (stimuli) and company's implementation of CS (response).

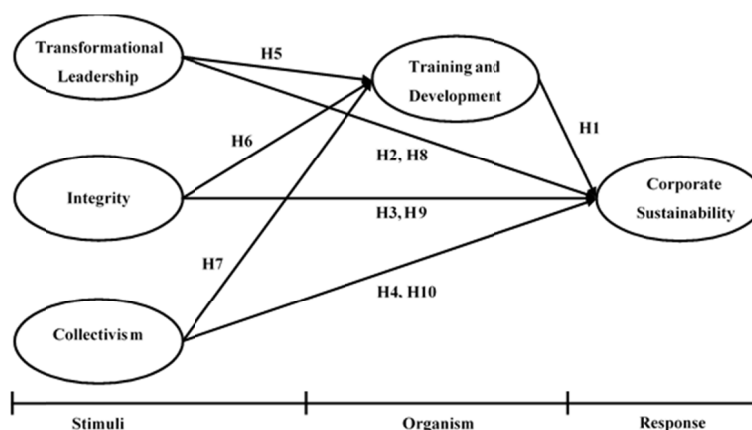


Figure 1. Conceptual framework

3. Methodology

3.1 Research Design

This study adopts quantitative research approach because it allows the researcher to examine the relationships among the components of human governance, training and development, and corporate sustainability via statistical analysis (Creswell, 2014). Primary data was collected from the internal stakeholders (i.e., employees of the construction industry in Malaysia) based on cross-sectional study via online questionnaire survey.

3.2 Measure

The questionnaire design consists of two components. Demographic variables were presented in Part A, including gender, age group, job level, and construction sector involved in by the respondents' companies. Whereas, Part B consists of the measurement items for all the variables. The measurement items of corporate sustainability can be divided into three dimensions (i.e., environmental sustainability, social sustainability and economic sustainability) because the triple bottom line conception of sustainability is applied in this research. A total of five measurement items for environmental sustainability (ENS) were adopted from Sarango-Lalangui et al. (2018) and Chow and Chen (2015). Social sustainability (SOS) was measured by five measurement items which were also adopted from Sarango-Lalangui et al. (2018) and Chow and Chen (2015). A total of seven measurement items for economic sustainability (ECS) were adopted from Sarango-Lalangui et al. (2018) and Collins et al. (2007). Training and development (TAD) was measured by five measurement items which were adopted from Hanaysha (2016). A total of five measurement items for transformational leadership (TFL) were adopted from Gong et al. (2009). Integrity (INT) was measured by eight measurement items which were adopted from Simons et al. (2007). A total of six measurement items for collectivism (COL) were adopted from Chan et al. (2010). All the measurement items for the respective variables were measured by 7 points Likert-scale anchored by "strongly disagree" (1) to "strongly agree" (7).

3.3 Sampling Design

Employees that worked in the Malaysian construction industry were targeted in the study because this industry is found to have a major impact on the nation's environment, society and economic development. The sample of the questionnaire survey was approached based on judgement sampling technique. The targeted sample size is 300. A total of 283 responses were collected from the online questionnaire survey. Statistical inferential analyses were carried out by utilising both SPSS Version 25.0 and SmartPLS 3.0.

4. Data Analysis and Finding

4.1 Preliminary Data Analysis

In non-response bias analysis, the responses of early respondents and late respondents received are compared. The result indicated that there was no significant difference in corporate sustainability practice between early respondents and late respondents as the $p > 0.05$. The Harman's single factor test was undertaken with the purpose to mitigate potential common method bias. Table 1 shows the percentage of variance extracted, being 42.71% (less than 50%), betokens that common method variance is not a major concern in this research (Podsakoff et al., 2003). Pursuant to the recommendation of Tabachnick and Fidell (2013), this research used both skewness and kurtosis to perform normality test. As exhibited in Table 2, the inspection of both skewness and kurtosis indicates that the values are within the recommended levels of ± 2 (for skewness and kurtosis) by Pituch and Stevens (2016), as well as < 3 (skewness) and < 10 (kurtosis) by Kline (2016); hence, no adjustment or transformation remedy of data is required.

Table 1. Common method variance analysis

Total Variance Explained			
Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	17.511	42.709	42.709

Note. The principal component analysis via extraction method was used.

Table 2. Normality analysis

	<i>CS</i>	<i>TAD</i>	<i>TFL</i>	<i>INT</i>	<i>COL</i>
Skewness	-0.216	-0.351	-0.162	-0.173	-0.166
Standard Error of Skewness	0.145	0.145	0.145	0.145	0.145
Kurtosis	-0.251	-0.345	-0.543	-0.412	-0.065
Standard Error of Kurtosis	0.289	0.289	0.289	0.289	0.289

4.2 Descriptive Analysis

The demographic profile of respondents is shown in Table 3, demonstrating the characteristics of the sample (283 cases) with regard to gender, age group, job level and the main construction sector that the respondents' companies are engaged in. Additionally, Pearson product-moment correlation analysis was conducted to determine the direction and significance of the association between variables. As reported in Table 4, there are positive correlations among the five constructs: CS, TAD, TFL, INT and COL.

Table 3. Respondents' demography

<i>Demographic Variables</i>	<i>Categories</i>	<i>Frequency (N)</i>	<i>Percentage (%)</i>
Gender	Male	162	57.2
	Female	121	42.8
Age Group	18 to 24	107	37.8
	25 to 34	95	33.6
	35 to 44	26	9.2
	45 to 54	24	8.5
	55 and over	31	11.0
Job Level	Senior Management	61	21.6
	Middle Management	46	16.3
	Junior Management	107	37.8
	Management Trainee	69	24.4
Construction Sector Involved in by Respondents' Companies	Industrial Sector	53	18.7
	Institutional and Commercial Sector	48	17.0
	Civil Engineering and Roads Sector	43	15.2
	Residential Sector	139	49.1

Table 4. Pearson product-moment correlations among constructs

<i>Constructs</i>	<i>Mean</i>	<i>Standard Deviation</i>	<i>Pearson Correlation</i>				
			<i>CS</i>	<i>TAD</i>	<i>TFL</i>	<i>INT</i>	<i>COL</i>
CS	89.61	12.92	1				
TAD	27.52	4.47	0.701**	1			
TFL	27.68	4.27	0.629**	0.621**	1		
INT	42.71	6.61	0.658**	0.602**	0.709**	1	
COL	31.63	5.14	0.575**	0.448**	0.501**	0.539**	1

Note. Number of Cases: 283; 1-tailed Significant: **0.01 level.

4.3 The Findings of the Measurement Model

Internal consistency reliability was assessed based on Cronbach's alpha (α), composite reliability (ρ_c) and Dijkstra-Henseler's rho (ρ_A) measures. Table 5 displays that all values in the assessments of α , ρ_c and ρ_A have exceeded the threshold of 0.70 (Hair et al., 2019), indicating the consistency and stability of the items within each construct. Both factor loadings of the items for each construct and average variance extracted (AVE) were tested via confirmatory factor analysis to calculate the convergent validity of this research. As exhibited in Table 6, all factor loadings for each of the construct, ranging from 0.730 to 0.898, were above the acceptable value of 0.708, delineating that the latent constructs (CS, TAD, TFL, INT and COL) can explain at least 50% of their indicator's variance (Hair et al., 2017); the values of AVE, ranging from 0.610 to 0.759, satisfied the recommended level of 0.50 (Hair et al., 2017). Moreover, a discriminant validity was performed by comparing the square root of AVE (diagonal) with the inter-correlation values (off-diagonal) among the latent constructs, as per the criterion of Fornell and Larcker (1981). Table 7 shows that the off-diagonal inter-correlation values of constructs are smaller than the values of square root of AVE, signifying that the latent construct measurement is

totally discriminant with each other (Hair et al., 2017). Furthermore, the assessment for discriminant validity utilising the Heterotrait-Monotrait (HTMT) technique was conducted. Table 8 illustrates that the latent measurement constructs are clearly discriminant with each other as their correlations are highly significant (all p -values < 0.001) and are below the recommended value of 0.85 (Kline, 2016).

Table 5. Reliability tests

<i>Constructs</i>	<i>Cronbach's Alpha, α</i>	<i>Composite Reliability, ρ_c</i>	<i>Dijkstra-Henseler's Rho, ρ_A</i>
ENS	0.852	0.894	0.856
SOS	0.867	0.904	0.871
ECS	0.892	0.916	0.894
TAD	0.906	0.930	0.907
TFL	0.891	0.920	0.894
INT	0.942	0.949	0.943
COL	0.872	0.904	0.874

Table 6. Convergent validity

<i>Latent Variables</i>	<i>Indicators</i>	<i>Factors Loadings</i>	<i>AVE</i>
CS	ENS	0.822	0.759
	SOS	0.891	
	ECS	0.898	
TAD	TAD1	0.819	0.727
	TAD2	0.868	
	TAD3	0.874	
	TAD4	0.859	
	TAD5	0.843	
TFL	TFL1	0.861	0.696
	TFL2	0.823	
	TFL3	0.831	
	TFL4	0.792	
	TFL5	0.863	
INT	INT1	0.742	0.712
	INT2	0.886	
	INT3	0.865	
	INT4	0.859	
	INT5	0.840	
	INT6	0.860	
	INT7	0.850	
	INT8	0.841	
COL	COL1	0.730	0.610
	COL2	0.751	
	COL3	0.755	
	COL4	0.816	
	COL5	0.834	
	COL6	0.797	

Table 7. Fornell-Larcker discriminant validity

<i>LV</i>	<i>TFL</i>	<i>INT</i>	<i>COL</i>	<i>TAD</i>	<i>CS</i>
TFL	0.834				
INT	0.713	0.844			
COL	0.504	0.541	0.781		
TAD	0.620	0.604	0.450	0.853	
CS	0.636	0.663	0.580	0.705	0.871

Note. LV = Latent Variables; the value in the diagonal (bold) is a square root of the AVE of each latent variable; and the element off the diagonal value is the inter-correlation value between latent variables.

Table 8. HTMT discriminant validity

LV	TFL	INT	COL	TAD	CS
TFL	-				
INT	0.775**	-			
COL	0.568**	0.593**	-		
TAD	0.690**	0.652**	0.504**	-	
CS	0.725**	0.740**	0.668**	0.800**	-

Note. LV = Latent Variables; ** $p < 0.001$.

4.4 The Findings of the Structural Model

Multicollinearity analysis is one of the crucial tests in the structural model. Table 9 displays that there is no multicollinearity between the independent variables as their VIF values are below 5.0 and tolerance values are above 0.10, thus indicating the reliability of the model used (Hair et al., 2019). In order to verify the hypotheses, the partial least squares structural equation modelling (PLS-SEM) was applied by utilising SmartPLS 3.0. The assessment of the coefficient of determination (R^2) was carried out to demonstrate the amount of variance in the exogenous constructs (predictors) on endogenous construct (criterion) of the model (Hair et al., 2017). As indicated in Table 10, 63% (0.631) of the variance in CS and 45% (0.447) of the variance in TAD were explained by the exogenous variables. Both the R^2 of 0.631 and 0.447 are above the level of 0.26, illustrating that they have a substantial level of variance explained (Cohen, 1988).

In addition, the assessment of Cohen's f^2 was undertaken. According to the guideline of Cohen (1988), Table 11 shows that the TAD ($f^2 = 0.239$) has a medium effect size on CS (endogenous variable), whilst other exogenous variables, namely, TFL ($f^2 = 0.018$), INT ($f^2 = 0.052$) and COL ($f^2 = 0.089$) have a relatively small effect size on CS; at the same time, TFL ($f^2 = 0.109$), INT ($f^2 = 0.066$) and COL ($f^2 = 0.016$) have a small effect size on TAD (endogenous variable). The assessment of Stone-Geisser's Q^2 was likewise conducted to gauge the overall predictive relevance of each endogenous construct in the path model. As seen in Table 12, the Q^2 assessment shows that both CS and TAD have an adequate predictive relevance effect in this research's model because their resulting Q^2 values (0.447 and 0.300 respectively) are above zero (Hair et al., 2017).

In this research, the path coefficient assessment was carried out by using SmartPLS's bootstrapping procedure with 5,000 bootstrap samples (Hair et al., 2017). As Table 13 shows, six out of the seven direct hypotheses were supported. TAD (path coefficient = 0.399, $t = 7.462$, $p < 0.01$), TFL (path coefficient = 0.125, $t = 2.197$, $p < 0.05$), INT (path coefficient = 0.213, $t = 3.516$, $p < 0.01$) and COL (path coefficient = 0.222, $t = 4.801$, $p < 0.01$) were found to be positively related to CS; the reason being, their t -values were above the recommended value of 1.96 and p -values were lower than 0.05 (Hair et al., 2017), thus, H1 to H4 were well supported. Similarly, it was found that TFL (path coefficient = 0.358, $t = 5.301$, $p < 0.01$) and INT (path coefficient = 0.286, $t = 3.655$, $p < 0.01$) were positively related to TAD, supporting H5 and H6. COL, however, was found to be not significantly related with TAD (path coefficient = 0.115, $t = 1.851$, $p > 0.05$), H7 was not supported. The model's loading value and bootstrapping value results in the PLS-SEM analysis can be seen in Figures 2 and 3 respectively.

In accordance with the suggestion by Hair et al. (2017), bootstrapping approach was used to test the mediational model. Table 14 exhibits the bootstrap results for the mediational effects. Findings shows that TAD mediated the relationship between TFL and CS, as well as the relationship between INT and CS since their results of the 95% boot confidence interval bias corrected [0.084, 0.212], [0.048, 0.190] did not straddle a zero in between, thus H8 and H9 were supported. Conversely, the mediating effect of TAD was non-significant on the relationship between COL and CS as its 95% boot confidence interval [-0.002, 0.097] did contain a zero, demonstrating that H10 was not supported.

Table 9. Multicollinearity analysis

Model		Collinearity Statistics	
		Tolerance Value	VIF
1	TAD	0.553	1.808
	TFL	0.428	2.335
	INT	0.424	2.358
	COL	0.671	1.491

Note. The dependent variable is corporate sustainability (CS); VIF = Variance Inflation Factor.

Table 10. R^2 assessment of the structural model

Endogenous Variables	R^2	Remarks for R^2
CS	0.631	Substantial
TAD	0.447	Substantial

Table 11. f^2 assessment of the structural model

Variables		f^2	Remarks for f^2
Endogenous Variable	: CS		
Exogenous Variable	: TFL	0.018	Small
Exogenous Variable	: INT	0.052	Small
Exogenous Variable	: COL	0.089	Small
Exogenous Variable	: TAD	0.239	Medium
Endogenous Variable	: TAD		
Exogenous Variable	: TFL	0.109	Small
Exogenous Variable	: INT	0.066	Small
Exogenous Variable	: COL	0.016	Small

Table 12. Q^2 assessment of the structural model

Endogenous Variables	Q^2	Remarks for Q^2
CS	0.447	Sufficient
TAD	0.300	Sufficient

Table 13. Path coefficients assessment of the structural model

Hypothesis	Relationship	PC	Std. Error	t-value ^a	p-value	Decision
H1	TAD → CS	0.399	0.054	7.462**	< 0.01	Supported
H2	TFL → CS	0.125	0.057	2.197*	0.014	Supported
H3	INT → CS	0.213	0.060	3.516**	< 0.01	Supported
H4	COL → CS	0.222	0.046	4.801**	< 0.01	Supported
H5	TFL → TAD	0.358	0.067	5.301**	< 0.01	Supported
H6	INT → TAD	0.286	0.078	3.655**	< 0.01	Supported
H7	COL → TAD	0.115	0.062	1.851 (NS)	0.053	Not Supported

Note. PC = Path Coefficient; NS = Not Significant; ^a the path coefficient is significant at 95% confidence level (*) if t -statistic > 1.96 ($p < 0.05$) and the path coefficient is significant at 99% confidence level (**) if t -statistic > 2.57 ($p < 0.01$).

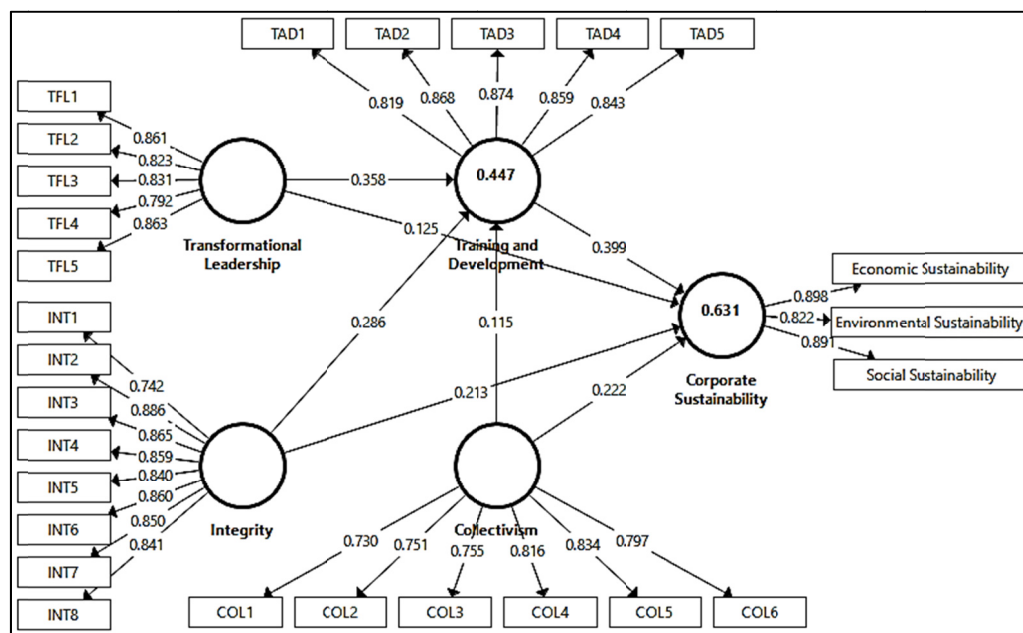


Figure 2. Structural model (Loading Value)

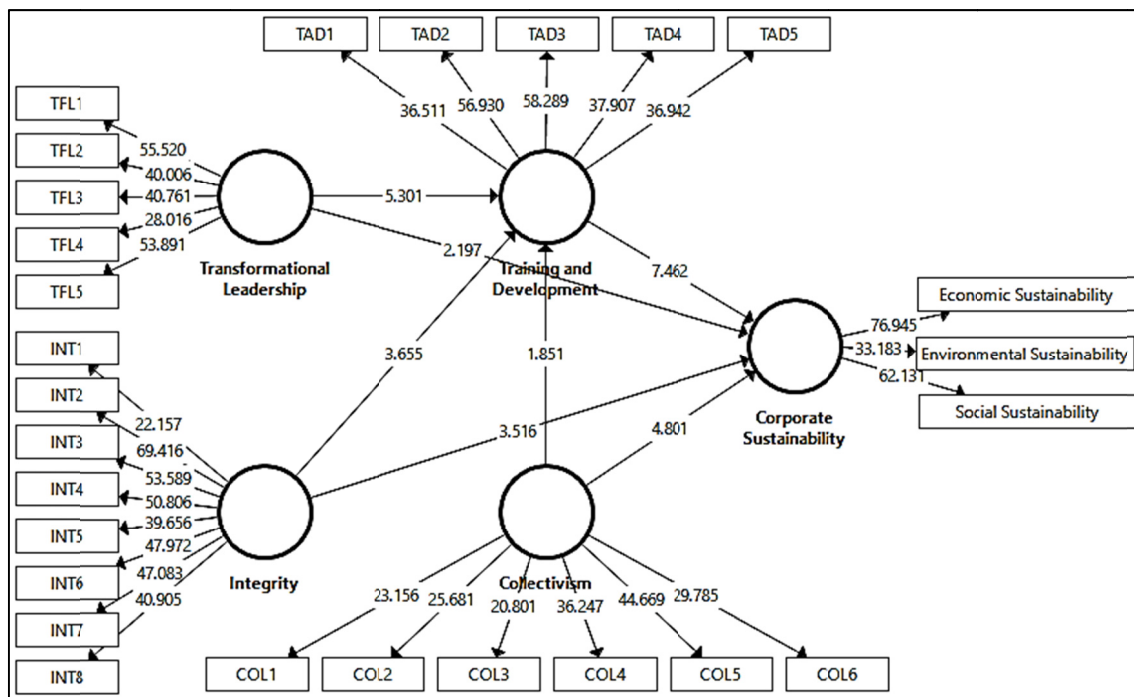


Figure 3. Structural model (Bootstrapping Value)

Table 14. Bootstrap results for mediational effects

Hypothesis	Relationship	PC	Std. Error	95% Boot CI BC		Decision
				LL	UL	
H8	TFL → TAD → CS	0.143	0.033	0.084	0.212	Supported
H9	INT → TAD → CS	0.114	0.036	0.048	0.190	Supported
H10	COL → TAD → CS	0.046	0.026	-0.002	0.097	Not Supported

Note. PC = Path Coefficient; NS = Not Significant; CI BC = Confidence Interval Bias Corrected; LL = Lower Level; UL = Upper Level.

5. Conclusion

In this research, a conceptual framework is established to examine the impact of the components of human governance (i.e., transformational leadership, integrity and collectivism) on corporate sustainability through the mediating role of training and development. The research findings demonstrated that the components of human governance (i.e., transformational leadership, integrity and collectivism) and training and development have a positive relationship on corporate sustainability. Both transformational leadership and integrity, but not collectivism, were positively related with training and development. Furthermore, the results revealed that transformational leadership and integrity (but not collectivism) have a positive relationship on corporate sustainability through training and development. In another words, the assumptions that the direct relationship between collectivism and training and development as well as training and development acts as a mediator in mediating the relationship between collectivism and corporate sustainability are not significant in this research. A potential explanation for the insignificant relationships could be due to the groupthink practice among the employees in Malaysia as Malaysia is a collectivistic society. Hong et al. (2018) and Lee and Lee (2014) claimed that collectivists often agree with groupmates' ideas without deliberating, thus, diminishing development and training opportunities among employees.

This research has built a robust gestalt by extending the research on human governance (transformational leadership, integrity and collectivism) and HRM strategy (training and development) with the aim to examine the determinants of corporate sustainability. Little empirical research has been done about human governance. This research enhances human governance literature by giving a detailed picture of the extent to which human governance is infused in an organisation. Despite the positive relationships between transformational leadership, integrity and collectivism respectively towards corporate sustainability have been established in the previous literatures (Joseph et al., 2019; Jiang et al., 2017; Ng & Burke, 2010), this research provides further evidence

that human governance is a crucial concept to be applied in justifying corporate sustainability initiatives. In other words, findings of the present research contribute a novel avenue of literature surrounding corporate sustainability, which expands beyond the studies that have been previously conducted.

The subsequent theoretical implication includes the understanding of how the training and development programme intervenes the relationship between human governance and corporate sustainability. Prior studies on the corporate sustainability tend to relate employees' attitude towards sustainable performances (Chang & Slaubaugh, 2016; Ahmad, 2014). Directly connecting employees' attitude to a company's sustainable practice may mask the sophisticated strategies of HR. Noticing the emerging roles of HRM in providing training and development courses to employees (Silva et al., 2019; Ji et al., 2012), this research stresses the influence of human governance on shaping training and development, which in turn, enhances the performance of a company in achieving sustainability. The current research sheds light on the influence of the mediating role of training and development in the relationship between human governance and corporate sustainability, hence, renders insightful contributions to research on organisational sustainability achievement.

The findings of this research reveal a number of practical implications for companies striving to achieve corporate sustainability. Companies should create an environment that is conducive to sustainable development prior to launching corporate sustainability initiatives. Employers should be judicious in building human governance that moulds their employees' essence and behaviour. Likewise, it may be advantageous for companies to revisit their policies and guidelines particularly related to behavioural governance so as to affirm that pertinent elements (i.e., transformational leadership, integrity and collectivism) are perceived by all employees. In addition, management should elevate the functions of HRM to a strategic level. With this strategic role, HRM can customise training and development courses that emphasise human governance and corporate sustainability. HRM should keep in mind the need to structure training and development so that employees may acquire a better understanding and awareness that corporate sustainability is truly a vital part of a company's goals. This is of paramount importance as the findings of this research validate that training and development is likely to be influenced by transformational leadership and integrity, which in turn, shapes employees' behaviour to initiate corporate sustainability.

This research has a number of limitations. For instance, given that the adoption of the components of human governance for this research are limited only to leadership, integrity and collectivism. As such, the research findings may not be fully reflective of the nature of corporate sustainability by human governance outside the chosen elements. In near future, a wider set of human governance elements including religiosity, spirituality and internal policy control may be employed to further understand the sustainable behaviour of employees. Besides, Ahmad and Salleh (2008) argue that the inculcation of human governance could be accomplished when there is a clearer picture of what propels employees in organisations. Due to the fact that this research only studies the impact of human governance on corporate sustainability, the right incentives or motivators of human governance remain pressing. Future endeavours can be dedicated to focus on the motivators of human governance so as to instil such inner-out and values-based belief systems in the workplace.

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Appendix A

Table A I. Questionnaire Items

<i>Constructs</i>	<i>Items</i>	<i>References</i>
Environmental Sustainability	1) My company takes initiatives in the pollution prevention management by reducing the risk of environmental accidents, spills and releases 2) My company consistently updates itself on possible climate change impacts on the business 3) My company has installed different initiatives to reduce and conserve materials consumption 4) My company has installed different initiatives to reduce and conserve water consumption 5) My company has installed different initiatives to reduce and conserve energy consumption	Sarango-Lalangui et al., 2018; Chow and Chen, 2015
Social Sustainability	1) My company protects its employees' claims, rights, health and safety matters 2) My company is concerned with its employees' professional and personal development 3) My company complies with current local legislation related to dismissals and retirement processes 4) My company recognises and acts on the needs of the local community 5) My company considers interests of stakeholders in decision making through formal dialogue	Sarango-Lalangui et al., 2018; Chow and Chen, 2015
Economic Sustainability	1) My company consistently increases its customer purchase by meeting their demands 2) My company is recognised for both its customer service and product quality 3) My company's employees are well-paid compared to its competitors 4) My company gives procurement preference to the suppliers that are socially responsible 5) My company has a good working relationship with its suppliers and customers 6) My company is profitable and well-managed 7) My company contributes to the industrial growth for the national economy	Sarango-Lalangui et al., 2018; Collins et al., 2007
Training and Development	1) My company provides training and development opportunities to meet the changing needs of my workplace 2) Training and development are encouraged and rewarded in my company 3) Overall, the on-the-job training I receive is applicable to my job 4) Overall, the training I receive on the job meets my needs 5) Overall, I am satisfied with the amount of training I receive on the job	Hanaysha, 2016
Transformational Leadership	1) My leader acts in ways that build my respect 2) My leader talks to us about his/her most important values and beliefs 3) My leader expresses his/her confidence that we will achieve our goals 4) My leader spends time teaching and coaching me 5) My leader seeks differing perspectives when solving problems	Gong et al., 2009
Integrity	1) There is a match between my manager's words and actions 2) My manager delivers on promises 3) My manager practises what he/she preaches 4) My manager does what he/she says he/she will do 5) My manager conducts himself/herself by the same values he/she talks about 6) My manager shows the same priorities that he/she describes 7) When my manager promises something, I can be certain that it will happen 8) If my manager says he/she is going to do something, he/she will	Simons et al., 2007
Collectivism	1) Individuals should sacrifice self-interest for the group 2) Individuals should stick with the group even through difficulties 3) Individuals should pursue their goals only after considering the welfare of the group 4) Group welfare is more important than individual rewards 5) Group success is more important than individual success 6) Group loyalty should be encouraged, even if individual goals suffer	Chan et al., 2010

Note. All the measurement items for the respective variables were measured by 7 points Likert-scale anchored by “strongly disagree” (1) to “strongly agree” (7).

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