



The Impact of Corporate Social Responsibility and Food Health and Safety, on the Corporate Image of Hong Kong's Fast-Food Restaurants

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Authors' contributions

This work was carried out in collaboration between all authors. Authors TC and CT conceptualized the study and organized the literature. Author TC performed the statistical analysis. Author ATW checked the design of the whole study and statistical analysis, and also prepared and managed the draft of manuscript. Author CT read and approved the final manuscript.

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ABSTRACT

Recent years have witnessed various changes in the business world regarding technology and ecological degradation, which has seen corporate social responsibility increasingly used as a competitive tool in all industries. This research examined the perception of customers of fast-food restaurants in Hong Kong in order to assess the impact of corporate social responsibility and food health and safety implementation on corporate image. A quantitative survey was used for the study. The study population and unit of analysis were individual customers of fast-food restaurants and the sample size was set at 350 as recommended by previous studies. Multiple linear regression was used to analyse the collected. The findings reveal that corporate social responsibility has a positive correlation with food health and safety and corporate image. This study theoretically contributes to the existing body of knowledge on corporate social responsibility and corporate

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image. In addition, this study contributes in a practical sense by encouraging fast-food restaurants and other food related businesses to value food health and safety and make a voluntary move to fully comply with regulations. Managers can also take the initiative to show customers that their food is healthy and safe by displaying ingredients and by informing customers that the restaurant only sources from safe and reliable suppliers. Such actions will be more beneficial to a restaurant in terms of corporate image than merely complying with food health and safety regulations.

Keywords: Hong Kong; corporate social responsibility; corporate image; food and health safety; fast-food restaurant.

1. INTRODUCTION

Corporate social responsibility (CSR) is widely discussed amongst academics and practitioners alike, and its application in service retailing has become popular along with that industry's growing importance to the economy [1]. The proliferating service retailing is a complex sector, where players are striving to differentiate themselves from the competition. This complexity expands to the food retailing industry that is particularly sensitive to a myriad of changes in the environment [2,3,4].

The fast-food industry in Asia is more popularly known for its American counterparts due to the accustomed lifestyle of urbanites [5]. As with other Asian countries, Hong Kong is also facing fast growth and changes in its retail industry and more specifically in food retailing. Competition through product differentiation, ways to reach customers, and ambience of retail outlets, are insufficient for sustainability. Moreover, with constant and heightened issues relating to food supply, it is important for retailers to introduce relevant initiatives to strengthen corporate image (CI) as trusted brands tend to survive better during difficult times [3,6,7,8].

The assimilation of culture and lifestyle due to the movement of people and globalisation is a challenge for food retailers as expectations change. As such, food retailers globally find it difficult to articulate and communicate their CSR activities due to cultural differences [3]. Customers generally expect more than good food at food outlets and their perceptions of retail concept, service, and hygiene are prolific [9]. Though previous studies recognise CSR as a competitive tool, the relevance of CSR activities is becoming more important [7,10,11,12]. As such, it is simply not enough for a business to behave legally and ethically and expect that to be perceived by customers as CSR, because that behaviour is generally expected of a business.

Seminal relevant literature suggests that the power of CSR is in building an organization's CI [1,13,14,15]. CSR also has the ability to elicit positive behaviour from customers seeking service, thus it is an eminent concept in the service industry [12,16].

A dearth of studies on the constantly changing and paradoxical nature of CSR and its impact on consumer behaviour led to the development of the research questions for this study. To strengthen the position, fast-food retailers often embark on CSR activities that are relevant to the food industry. As such, this study empirically examined the impact of CSR activities on CI of fast-food restaurants in Hong Kong. It further studied the impact of customers' perception of food health and safety (FHS) on CI.

2. LITERATURE REVIEW

Over the past two decades, corporate social responsibility (CSR) has gradually become an essential part of an organization. Most companies now recognize the value of CSR to corporate image (CI) and many of them use their CSR certifications as business leverage [5,14,17]. Even though the notion of CSR in business was put forward as early as the 1950s, it is only relatively recently that retailers have realized the long-term benefits of practicing it [18,19]. However, introducing and practicing CSR that is unique and relevant to the business can be challenging. More recently, this has brought forth the notion of nature's sustainability, offering a range of opportunities to a myriad of related and relevant industries, pushing forward the innovation of CSR related activities.

2.1 Corporate Social Responsibility (CSR)

CSR was a simple declaration to establish business commitment to produce and sell by society's beliefs, values and economic expansion when it was initiated in the early 1950s [20,21].

An increasing number of researchers have been using CSR as an antecedent to understand its ability to improve customer retention, positive word of mouth, corporate image [21,22,23].

Carroll [24] classified CSR as a concept beckoning organizations to be accountable for their business actions; as a concept it is simple to understand yet paradoxical in many ways. Both academic and management research findings indicate that it is difficult to satisfy everyone with a single CSR initiative. However, in recent years CSR activities have become more comprehensive and used as a business strategy to meet stakeholders' demands, showing its proliferating importance [25,26]. In addition, CSR falls within a broad field of studies and is yet to be theoretically grounded. Towards the beginning of the millennium, [27] reviewed various empirical and theoretical studies to form a CSR pyramid. This pyramid explains the importance for organizations to economically strive to enable the execution of the rest of the CSR dimensions, hence the reason for economy resting at the bottom of the CSR pyramid. While organizations are formed to perform well economically, and are legally operated, ethics and philanthropic dimensions are usually forgone [27]. Thus, the true CSR practice is to be ethical and philanthropic; as such these have been assessed and placed as the top two dimensions on the CSR pyramid [27,28,29].

CSR is now accepted and is being adopted by organizations to fulfill a myriad of organizational objectives [3,22,30]. However, it is still unclear which CSR practices influence public opinion more and what the influences are. Moreover, organizations are unsure of the value of CSR practices, namely the moral act of their business [31].

2.2 CSR in the Fast-food Industry

The fast-food industry is proliferating with more local chain stores offering a similar marketing model of quickly served food. However, international brands are apparently more recognized and reputable in terms of quality of food and service, which is witnessed by repeat visits and purchases [32]. These international brands have been in the market long enough to understand the need to appease customers is not only with quality food and services but also with current concerns. These concerns include sustainability and CSR, which international brands have incorporated into their business models.

In view of this, altruistic CSR activities such as campaigns on healthy eating and serving more green and organic foods at fast-food restaurants may be a way to be involved in CSR leading to a position that improves CI [33]. Most fast-food restaurants are identified with unhealthy food that drips with oil and cheese [34]. However, in many parts of the world, fast-food restaurants are turning into caring retailers, serving healthier servings such as salad. However, this is not the scenario in Asian countries [35]. Some restaurants have started practicing CSR by stating the origin of the raw material they use in their restaurants. This helps customers to judge the quality of the products.

2.3 Corporate Image (CI)

Corporate image (CI) is essential to an organization and is a concept that emanates from strategically designed marketing communications [36]. Marketing proponents believe organizations develop a CI for themselves as what they would like stakeholders to view them as [37,38]. Hence, an organization's image can be altered and controlled [39]. In fact, the image a customer has of an organization can be different compared to what a supplier or employee has [40].

It has been found that CI plays a mediating role between organizational efforts and purchase intention and subsequent brand loyalty [41]. However, it is clear that CI tends to form a better attitude amongst customers. Marketing tenets show that CI is built by organizations using various marketing tools such as public relations, advertisement, endorsements, and CSR activities [37,41]. Kotler et al. [37] suggested holistic marketing, which closely relates to CSR and corporate social performance.

2.4 Challenges in Building Corporate Image

A good corporate has the ability to attract good quality customers. With well-established programmes to develop good corporate citizenship, an organization has the ability to increase customer loyalty, advocate positive word of mouth, a willingness to pay premium price, and decrease negative news about the company [42,43]. Fast-food restaurants have many factors to concentrate on when working on cultivating corporate image. As part of the service industry, fast-food restaurants are required to provide a clean appropriate eating

environment, tasty and good quality food, and well-trained employees to serve their customers. With so much to do to satisfy customers so that they pass on positive word of mouth and return to purchase, the service industry faces more challenges than a product industry [44].

The distinctive nature of service characteristics makes it more challenging to develop a strong corporate image [45,46]. The innate characteristics include the intangible nature of service, which is hardly consistent or is difficult to constantly deliver as it cannot be seen nor touched. As such the receiver of service will find it difficult to judge. Similarly, the heterogeneity nature of service shows the differences in service quality and type, every time it is delivered and by who delivers it. Hence with inconsistent delivery by the service personnel and at different times, the reputation of the service organization is bound to waver [46,47,48,49,50,51]. In food services such as fast-food restaurants, the food it serves may be consistent, and the physical restaurant may be appealing, but the service staff will differ from time to time as will the way the service is delivered [47].

2.5 Effect of CSR on Corporate Image

CSR activities such as workplace, employee and community relations are as important in building CI as is advertising and publicity [52,53]. Therefore, regardless of the CSR initiative, its impact on image is undeniable. On the contrary, a CSR initiative that does not comply with stakeholder liking and interest, can decrease customer buying intention and ruin the image of the organization [10,11,54].

Though previous research indicates that factors such as community and environmentally responsible actions influence CI, some findings show that CI is a necessity for CSR to be successful and positively affect performance, purchase intention, and loyalty [55]. Essentially good CI leads to stability in customer belief and other stakeholders' trust in the organization's contribution to sustainability [56,57,58].

2.6 Effect of Food Health and Safety on Customer Perception

It is necessary that consumers have complete confidence in the fast-food product they purchase. Compliance with health and safety regulations by food retailers is essential in

changing customer perception [59,60,61]. One of the major challenges for fast-food restaurants is devising an effective CSR that reduces stakeholder skepticism. Tools such as health and safety in food and beverage retails enhance the ethics dimension of CSR [62].

In retail, ethical selling includes adhering to common rules and regulations and increasing customer confidence in the product obtained at that retail. Studies show long term benefits and sustainability are achieved by ethically run organizations [63,64]. Most apparent and minimal ethical conduct of food retailers is ensuring quality and food health and safety (FHS) in accordance with a set of regulation prepared by a government bodies such as European Union legislation [65,66,67,68].

As established earlier, ultimately an organization embarks on CSR activities to experience positive marketing results such as good word of mouth, repeat purchase, good image, credibility and image [5,69]. Some CSR initiatives can be very costly to sustain, hence it is essential to be selective in order to reap positive affect while being economically viable, as advocated by CSR's bottom line [27,70,71]. Moreover, it is crucial for stakeholders to experience those CSR initiatives as they understand, evaluate and perceive its importance to their personal and social well-being. Having the knowledge that what they are consuming is healthy and safe would give fast-food customers confidence, which leads to the formation of trust [61,72,73].

Some studies indicate that FHS information is especially important for fast-food restaurants since there is a growing perception that fast food is unhealthy [61,74]. More current issues are concerns over the supply of unsafe fresh products and call for more vigilance and transparency on the part of retailers. Labelling information is an ethical action taken by retailers to inform customers that their sources of supplies are legal, credible and reliable; it also sends a best practice message that there is a reliable food safety system in place to maintain the quality of its products [75]. The last two decades has witnessed a major change in food consumption around the world and the demand for fast food continues to increase with globalization [32,76]. Conversely, unwavering environmental issues have changed how fast-food restaurants serve, package and price their products [4,77,78].

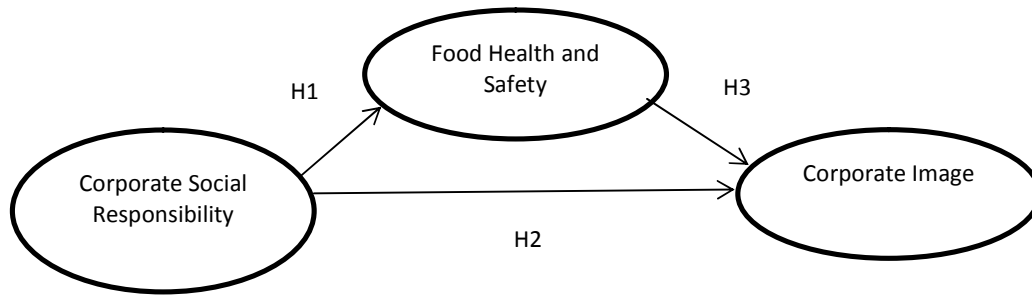


Fig. 1. Research framework

2.7 Hypotheses Development

CSR helps build an organization's CI, including in the very competitive fast-food industry in Hong Kong [35]. Whilst strong image is regarded as critical success factors for organizations [58], stakeholders' skepticism about why organizations practice CSR makes it harder to comprehend the consequences and outcomes of implementing CSR initiatives [55]. Therefore, the following hypotheses are posited from the perspective of Hong Kong's fast-food restaurant customers to evaluate the contribution of CSR and FHS to CI. Although FHS is a critical component of sustainable development and contributes to increasing food security and environmental protection [65], the foregoing literature review suggests contradicting notions of what customers perceived FHS to be about. However, in light of the recent FHS scandals in Hong Kong's fast-food industry, consumers now have a greater awareness and knowledge of FHS [60,61].

Though FHS is an ethical notion undertaken by fast-food retailers, customers' perception is essential in determining their purchasing behaviour. Moreover, FHS is theoretically a CSR initiative embarked upon by the food industry. As such, Hypothesis H1 below reflects the above notion and describes the direct relationship between Hong Kong fast-food restaurants' CSR activities and customers' perception of FHS.

Hypothesis H1: There is a significant and positive correlation between corporate social responsibility (CSR) and food health and safety (FHS) in Hong Kong's fast-food industry.

Studies consistently suggest CSR activities enhance CI [2,79,80,81]. CSR in the fast-food industry has drawn public attention in recent decades. While some studies have revealed the positive influence of CSR on the CI of a company

[77], other researchers contend that CSR activities should be relevant to the business and of interest to customers for CSR to have a positive effect on the CI of a company [7]. This suggests the following hypothesis.

Hypothesis H2: There is a significant and positive relationship between corporate social responsibility (CSR) and corporate image (CI) in Hong Kong's fast-food industry.

FHS has become relevant and essential in the fast-food industry as there is wide spread interest in eating right and healthy [59,82,83]. The literature further argues on the importance of transparency to exude positive customer behaviour [11,84]. Revealing important details about products and services, allows customers to make more informed decisions. However, customers will need to perceive this information as critical for them to trust an organization and make the correct decision. As such, it is important to verify if FHS is perceived relevant and critical for customers and consequently influence CI of fast-food restaurants in Hong Kong. This notion suggests the following hypothesis.

Hypothesis H3: There is a significant and positive relationship between food health and safety (FHS) and corporate image (CI) in Hong Kong's fast-food industry.

2.8 Research Framework

Fig. 1 shows the research framework of this study of the three constructs: corporate social responsibility (CSR), food health and safety (FHS) and corporate image (CI).

3. METHODOLOGY

The following descriptions provide a summary of methodology of this research applied.

3.1 Sampling

The research population for this study is the customers of fast-food restaurants in Hong Kong who are 18 years old and above, which is a large population; therefore, a sample was drawn from the population for practical purposes. Social studies relating to marketing suggest that a sample size should be anywhere between 150 and 500 to represent the research population [85,86]. Previous quantitative studies on customers in relation to CSR have used a sample size between 300 and 400 [11,87]. A sample size of 350 was deemed sufficient for a population above 100,000 to secure a quality set of data for studying CSR, FHS and CI [88]. The sampling structure for the analysis was generated from a database of fast-food restaurants in Hong Kong obtained from a public domain where databases on Hong Kong's major fast-food restaurants are listed. In this study, the researcher approached potential respondents outside pre-determined fast-food restaurants based on his or her walk toward or away from that restaurant. Moreover, as the potential respondents were approached for the purpose of screening them for their eligibility as research participants, a convenience sampling technique was applied.

3.2 Research Design and Data Collection Method

The data collection method and analyses of the collected data for this research determines the research design. Some studies are undertaken for the sole purpose of understanding patterns of behaviour over a specific cycle, thus a longitudinal study is deemed suitable, however, cross-sectional studies are suitable for data collection at one point time. The timing of data collection may be important for some studies while in others, especially studies relating to common goods, general and an ongoing issue, timing of data collection may not be a major concern [89,90,91]. Cross-section data collection design is commonly used when studying respondents' attitude and perception at a specific time [85,86]. This study therefore used a cross-sectional study, applying a positivist paradigm to collect data from fast-food consumers to investigate the effect of corporate social responsibility (CSR) on the CI of an organisation. The questionnaire designed for this research was distributed personally to fast-food restaurant customers outside predetermined restaurants. The completed questionnaires were

collected immediately to ensure a higher response rate [90,92].

3.3 Measuring Items

This study involves attitude and behaviour of customers, which are impossible to study with minor disparities; as such measuring with a 10-point scale is more difficult than with a 5-point scale [93]. Hence, the study adapted a 7-point measurement scale as it has the ability to measure marketing constructs in the service industry [85,86,92]. Moreover, the items for the study are multi-item questions that were borrowed from well-established research articles as listed in Table 1. Multi-item questions allow better reliability and validity [94].

The CSR construct was represented with 6 items, FHS with 5 items and CI with 5 items. The 7-point scale was measured as 1 for 'strongly agree' and 7 for 'strongly disagree'.

3.4 Data Analysis

The data collection exercise for this study provided 350 completed questionnaires. The research applied exploratory factor analysis for validity test and Cronbach's Alpha for reliability test. The study also applied Confirmatory factor analysis (CFA) which is a measurement scale validity tool that simultaneously verifies relationships postulated for a research model. The hypotheses are tested by using Structural Equation Modelling (SEM).

4. RESULTS OF DATA ANALYSIS

The statistical analysis includes sample characteristics, validity and reliability tests and hypotheses testing.

4.1 Sample Characteristics

The characteristics of the sample are summarized in Table 2.

4.2 Validity Test Using Exploratory Factor Analysis (EFA)

Exploratory factor analysis was undertaken by loading all items into data reduction mode in SPSS statistical software. Before interpreting the EFA outcomes, the assumption for EFA stipulates the requirement for sampling adequacy, whereby the Kaiser-Meyer-Olkin (KMO) test was undertaken to ensure the sample size taken for this study was sufficient for the

EFA. Table 3 shows that the KMO value is 0.907 that is greater than 0.9. It indicates excellent sampling according to the KMO decision rule [95]. Table 3 also shows that $X^2 = 2629.645$, $df = 120$, $p\text{-value} = 0.0001$. As $p\text{-value}$ is smaller than 0.05, it is the standard rule to reject the null hypothesis, the identity matrix is considered not to exist.

With the assumption met, EFA was started for all three constructs using the extraction method of principal component analysis (PCA) and Varimax rotation, which is shown in Table 4.

The output in Table 4 shows the Rotated Component Matrix in EFA, which shows a factor loading that is above 0.5, iterating 20 items. At an eighteen value of 1, the factor loading converged at five interactions. All four items of FHS loaded highly as component 1 with factor loadings between 0.924 and 0.634. Also, four items of Corporate Social Responsibility loaded highly as component 3, these being items CSR3, CSR4, CSR5 and CSR6, with loading factors between 0.892 and 0.596. The 3 items of CI loaded highly as component 4, with factor loadings between 0.846 and 0.565.

Table 1. Sources of measuring items

Constructs	Source of measuring items	Number of items
Corporate social responsibility	[96,97]	6
Food health and safety	[68,98]	5
Corporate image	[40,99,100]	5

Table 2. Descriptive analysis of demographic data

Demographic characteristics	Frequency	Percentage (%)
Gender		
Male	167	47.70
Female	183	52.30
Age		
21<	117	33.40
21-40	81	23.10
41-60	109	31.10
>60	43	12.40
Marital status		
Single	187	53.40
Married	163	46.60
Education level		
Primary	20	5.70
Secondary	118	33.70
Tertiary	182	52.00
Post Graduate	30	8.60
Salary status		
\$10,000 and below	167	47.70
\$10,001 - \$20,000	71	20.30
\$20,001 - \$40,000	74	21.10
Above \$40,000	38	10.90
Total:	350	100

Table 3. KMO and Bartlett's tests

Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy.		0.907
Bartlett's Test of Sphericity	Approximate Chi-Square	2629.645
	Degree of freedom	120
	Significant value	0.000

H0: identity matrix exists, H1: identity matrix does not exist

Table 4. Rotated component matrix in exploratory factor analysis

Questions	Component		
	FHS	CSR	CI
FHS2: The food from this fast-food restaurant is more consistent and reliable in comparison with its competitors.	0.924		
FHS1: The food from this fast-food restaurant is better than its competitors.	0.732		
FHS3: The food quality of this fast-food restaurant is higher than its competitors.	0.718		
FHS4: This fast-food restaurant makes sure that the food that customers eat is safe.	0.634		
CSR4: This fast-food restaurant commits to using a substantial portion of its profits to help communities where it does its business.		0.892	
CSR5: This fast-food restaurant includes charity work in its business activities.		0.886	
CSR6: This fast-food restaurant shows concern over environmental degradation.		0.635	
CSR3: This fast-food restaurant is very involved with the local community.		0.596	
CI1: This fast-food restaurant has a distinctive character.			0.846
CI3: I hear positive feedback about this fast-food restaurant.			0.584
CI2: I often say positive things about this fast-food restaurant.			0.565

After the above simulation, four items were withdrawn because they did not load as highly into component factors where the loading factors are below 0.5. These four items are: "CSR1 - This fast-food restaurant provides a safe and relaxed dining environment for customers"; "CSR2 - This fast-food restaurant offers good working conditions for its employees"; "FHS5 - This fast-food restaurant provides enough healthy foods choices for you to choose from"; and "CI4 - I would happily recommend this fast-food restaurant to my friends and family".

However, the EFA shows the distinctive loading of the three constructs of this study, with the removal of four weakly related items. The three distinct components are FHS, CSR and CI respectively. With these, convergent and determinant validity requirements are met [95].

Table 5 shows the percentage of variances explained by the constructs in this research. This output indicated a total of 65.99% of the variances in the remaining 16 items in the study. FHS explained 40.72% of the variation, the remaining two items of CSR revealed 6.57% variation, and the three items of CI explained 5.3% of the variation. As the total variances explained are rather high at 65.99%, the study items satisfy the requirement set by [95] for further significance analysis. This shows that there are 34.01% of variances that went

unexplained, which could be other constructs that are closely related to CSR and CI.

4.3 Reliability Analysis

Upon completion of the validity tests, the reliability test using Cronbach's alpha as suggested by Cronbach [101] was undertaken. Table 6 indicates that CSR's Cronbach's alpha = 0.796 with four items, mean = 16.48, and standard deviation of 3.815. The FHS 4 items recorded a Cronbach's alpha = 0.814, mean = 18.59, and standard deviation of 3.881. Meanwhile, CI 3 items recorded a Cronbach's alpha of 0.782 with three items, mean of 14.31, and standard deviation of 2.662. All three Cronbach's Alpha values show a score above 0.7, indicating satisfactory reliability [95,102,103].

4.4 Significance Testing of Hypotheses

The significance testing of the three hypotheses was based on the Structural Equation Modeling (SEM) regression weights output. Table 7 shows the results of SEM analysis. Although CMIN = 218.478, df = 84, p-value = 0.0001, Cmin/df = 2.601, indicating a significant reduction Cmin/df, the measurement model is to be a satisfactory model as p-value of this X² test is less than 0.05. Also, GFI = 0.921, CFI = 0.965, AGFI = 0.86 and RMSEA = 0.0068 satisfy the rule for a satisfactory model [104,105].

Table 8 indicates that all relationships are significant.

From Table 8, beginning with the relationship between CSR and FHS, which produced a C.R. = 4.915 and p-value = 0.0001 which is smaller

than 005, this relationship is considered significant. The regression weights estimate of 0.385 with standard error (S.E) of 0.078, showed a positive relationship between CSR and FHS. Thus, hypothesis H1 is supported.

Table 5. Percentage of variances explained

Component	Initial eigenvalues			Extraction sums of squared loadings		
	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %
Food health and safety	6.516	40.724	40.724	6.516	40.724	40.724
Corporate social responsibility	1.051	6.570	60.694	1.051	6.570	60.694
Corporate image	0.848	5.300	65.993	0.848	5.300	65.993

Table 6. Reliability analysis output

Constructs	Cronbach's alpha	No. of items	Mean	Standard deviation
CSR	0.796	4	16.48	3.815
FHS	0.814	4	18.59	3.881
CI	0.782	3	14.31	2.662

Table 7. Measurement model by SEM

Model	CMIN	DF	P	CMIN/DF	GFI	AGFI	CFI	RESEA
Default model	218.478	84	0.000	2.601	0.921	0.644	0.965	0.068
Saturated model	0.000	0	-	-	1.000	-	1.000	-
Independence model	2370.644	105	0.000	22.578	0.337	0.295	0.000	0.249

CMIN: Chi square; DF: degree of freedom; P: p-value; GFI: Goodness-of-fit; AGFI: Adjusted goodness-of-fit; CFI: Comparative Fit Index; RESEA: Root Mean Square Error of Approximation

Table 8. Regression weights (Group number 1 – Default model)

	Hypothesized relationships		Estimate	S.E.	C.R.	P
FHS	<---	CSR	0.385	0.078	4.915	***
CI	<---	CSR	0.141	0.040	3.547	***
CI	<---	FHS	0.484	0.052	9.229	***
CSR6	<---	CSR	1.017	0.102	10.009	***
CSR5	<---	CSR	0.889	0.098	9.064	***
CSR4	<---	CSR	0.806	0.088	9.120	***
CSR3	<---	CSR	1.000			
FHS4	<---	FHS	0.752	0.078	9.651	***
FHS3	<---	FHS	1.039	0.066	15.868	***
FHS2	<---	FHS	0.851	0.059	14.479	***
FHS1	<---	FHS	1.000			
CI3	<---	CI	1.293	0.124	10.400	***
CI2	<---	CI	1.535	0.138	11.136	***
CI1	<---	CI	1.000			

Note: *** = p-value < 0.05, C.R. > 1.96

For the relationship between CSR and CI, the value of C.R. = 3.547 with p-value = 0.0001, as p-value is less than 0.05, thus CSR significantly influences CI. The regress weights estimate = 0.141 with standard error (S.E.) = 0.04, showing a positive value and that CSR is positively correlated with CI. This indicates that hypothesis H2 is supported.

The direct relationship between FHS and CI showed that the value of C.R. = 9.229 with p-value = 0.0001, as p-value less than 0.005, this relationship is significant. The regression weight estimated as 0.484 with a standard error (S.E.) of 0.052, as such a positive relationship is observed confirming the significant positive relationship postulated in H3.

In conclusion, the direct relationships postulated between CSR, FHS and CI are supported, indicating that CSR activities carried out by fast-food restaurants in Hong Kong, and their involvement in FHS programmes, positively influences their CI.

Table 9 shows the correlation matrix for the constructs for this study, where all correlations are above 0.346 showing moderate to significance relationships between the variables.

Table 9. Correlation matrix

	CSR	FHS	CI
Corporate social responsibility (CSR)	1.000	0.346	0.427
Food health and safety (FHS)	0.346	1.000	0.803
Corporate image (CI)	0.427	0.803	1.000

5. DISCUSSION

The results of the statistical analysis about the testing of the significance tests indicate that all three hypotheses postulated to study the relationships between CSR, FHS and CI, are supported. Based on previous studies, this outcome is as expected. Nevertheless, FHS is unique to the food and beverage industry, requiring special rationalisation. Moreover, the fast-food industry in Hong Kong attracts urban, busy, young and knowledgeable customers. These customers, with distinct characteristics, have indicated that CSR is important to build corporate image.

According to the testing results of hypothesis H1 about the significant and positive correlation between corporate social responsibility (CSR) and food health and safety (FHS) in Hong Kong's fast-food industry, the supported positive correlation shows that the restaurant's involvement in CSR activities generates positive views about FHS at the restaurant. Therefore, there may be a stereotyped perception that a CSR oriented organization is also concerned about offering quality, healthy and safe products.

FHS has become a significant issue in Hong Kong. With the recent discovery of McDonalds and KFC offering substandard foods, and local supermarkets and restaurants selling tainted beef from Brazil, FHS has become a major public concern. Nevertheless, the affluent urban society expects FHS from fast-food restaurants. As fast-food is not cheap and primarily connected to foreign brands, this expectation has increased over the years with people now generally aware of CSR and expecting food to be healthy and safe to consume. Some studies use FHS and CSR synonymously, since FHS relates to ethical selling whereby the retailer ensures the product sold adheres to healthy and safe regulations set by specific government bodies [65,66,68]. Hence, concurring with previous studies, this study found a positive and significant correlation between CSR and FHS which are consistent with the previous studies.

As fast-food restaurants are retail outlets selling freshly cooked food, customer confidence is crucial for sustainable business [63,64]. An ethically run business needs time for customers to adjust and adapt, but once they have done so, sustainability is possible through positive word of mouth contributing to loyalty.

As the significant and positive relationship between corporate social responsibility (CSR) and corporate image (CI) in Hong Kong's fast-food industry is supported, this is not surprising as CSR is a popular topic amongst young adults in most developing countries as found by [5,14,17,52,53]. In the competitive fast-food industry, good CI is vital for sustainability. However, this industry faces a myriad of adversities. Dealing with stakeholders and food related controversies such as pesticide farming and tainted meat can be perplexing. Moreover, this study further confirms that CI is not only built through a corporate logo, public relations, media and advertising, but also through carefully

developed and managed CSR activities [106].

The significant and positive relationship between food health and safety (FHS) and corporate image (CI) in Hong Kong's fast-food industry shows that fast-food restaurants' initiatives in ensuring their products are safe and healthy will lead to better corporate image. Therefore, similar to CSR, FHS is also crucial in image building; again defying the fundamental idea that CI is built via a company's strategically designed marketing communications [36]. FHS may be viewed separately from CSR, though they are one. The findings are the same to the previous studies that it is pertinent for organizations to develop CSR activities that are relevant to an organization's product or service, such as transparency [10,11,84,87].

Also, concurring fundamental theories suggest that image is built via an organization's efforts in creating awareness of its CSR activities, such as FHS. Customers may not be aware of an organization's efforts in CSR activities, such as charity giving and energy saving, due to insufficient publicity. However, efforts that are relevant to customers and the organization, such as being transparent in pricing, interest rates, additional charges by banks and quality, are known and acknowledged by customers [11]. As such, FHS is clearly relevant to the fast-food business.

Some image proponents may view FHS as part of public relations effort, whilst FHS proponents may view them as essential component for food establishments. FHS is not a requirement that must be met by all food establishments. Although regulatory bodies monitor FHS, some establishments may find that complying with the regulations is too difficult in a competitive environment and deliberately ignore them; this, however, could ruin their CI. Food establishments may have traditionally used their tasty food to attract customers, but in recent years customers' increased expectations have forced food establishments to initiate FHS. With customers who are exposed to a plethora of information through food bloggers, social media, and television food channels, and who are consequently familiar with such terms as organic and pesticide-free, food establishments are facing greater demands for hygienically prepared food that is safe to consume. It is evident that 21st century food establishments cannot just rely on tasty food alone.

5.1 Theoretical Implications

FHS is an activity organized by food and beverage establishments to conduct business ethically and as such is a CSR activity. Though convoluted, CSR has been widely studied and theories have been established that divide CSR into four distinct dimensions [24]. The outcomes of this study theoretically extend the knowledge of CSR in the food and beverage retail industry. Although studies on CSR and CI have been widely conducted, FHS's role adds a new dimension to the understanding of CSR. Previous studies have established that ethically run organizations are more likely to be sustainable [63,64], which were verified by this study with the additional finding that FHS has significant positive relationships with CSR and CI, and is the visible part of CSR. Relevant CSR activities are theoretically a necessity in operating a business. Therefore, all CSR activities that are not part of day-to-day operations, such as charity donations, may add value to the organization but are not what really matters to customers.

Since there is lack of understanding of the role of FHS in the food retail industry, this study introduced FSH as a new construct derived from CSR to examine its relationships with CI as a theoretical contribution. The significant correlation between CSR and FHS found in H1 corroborates many previous studies, which categorize CSR into four interrelated dimensions including an ethics dimension. However, no study has used FHS as a form of ethical conduct on the part of a restaurant to firstly understand its effect on CI of an organization, and secondly to understand its role in the relationships between CSR and CI. Based on the first notion, the study adds theoretical knowledge by elucidating that besides general CSR practiced in an organization, a CSR initiative that is closely related to the function of the business may be more critical in terms of the organization's CI being viewed positively. In the case of fast-food restaurants, even though general CSR activities are conducted, complying with FHS standards set by a regulatory body are nevertheless pertinent.

5.2 Practical Implications

This research verifies the findings of previous related studies. The three relationships tested confirms the existence of those relationships, which may prove to be useful knowledge for

marketers who may be able to reap benefits by being more stringent in their quality control, which will help reduce non-compliance and possible returns. Marketers in the food retail industry face more issues, as this industry is as much a service industry as it is a product industry. Thus it would be helpful and competitive to be more transparent with regard to a product's ingredients and source of supplies. Some restaurants have even opened their kitchen for customers to view their production process. Hence, innovative ways of convincing customers of the quality of food that is prepared for them can help reduce apprehensiveness. Some fresh product retailers have taken the initiative to state the country of origin of their meat, seafood and vegetables, giving their customers an opportunity to make an informed decision to purchase.

In examining FHS's role in the relationships between CSR and CI, the research addresses a gap in CSR knowledge. The study verifies that FHS is an initiative taken by a restaurant to ethically conduct business, which shows that it is taking its responsibilities seriously. Recent years have witnessed various changes in the business world in terms of technology and ecological degradation, which have seen CSR increasingly used as a competitive tool. This study adds theoretical knowledge to the role of FHS as a part of CSR to gain a competitive advantage in the food and beverage retail industry. However, as suggested by previous studies, sustainable opportunities are more likely to be gained by businesses that are not only perceived to be operating ethically but can be seen as doing so [63,64]. FHS has the ability to be visible to stakeholders such as customers, whereas CSR activities such as charity giving, though important, may not have the same long lasting positive impact on stakeholders.

Adding new erudition with regards to FHS and its role in the relationships between CSR and CI and CR is a contribution to the CSR theoretical body of knowledge. The correlation between CSR and FHS shown in addressing hypothesis one concurs with the findings from previous research. However, since all the direct hypotheses are supported in this research, the study further elucidates that though CSR adds overall value to a business, relevant CSR activities matter more for enhancing CI.

With regards to the study's practical contribution, the finding that there are positive relationships between CSR, FHS and CI corroborates the

findings from previous CSR related studies that highlights the significance of CSR to a sustainable business [107,108]. In order to be sustainable in the competitive food and beverage retail industry, it is no longer sufficient to have a great chef or delicious recipes; compliance with FHS rules and regulations and conducting business in an ethical manner is now crucial to success in the industry. In light of the findings from this study, managers who are tasked with implementing CSR activities might consider introducing visible and innovate compliances with FHS that would be appreciated by customers and that will ultimately enhance CI.

6. LIMITATIONS AND FUTURE RESEARCH

The primary limitation of this study is the lack of generalizability of findings due to the convenience sampling technique used to collect the data from a non-probability population [92,93]. A sample taken using the quota sampling technique may have given a better representation of the population. Moreover, bias due to social desirability could have taken place. In convenience sampling, respondents to whom questionnaires were administered were those heading to and out of fast-food restaurants. Some of them may have followed friends and family, thus were not paying customers, frequent customers, or regular fast-food enthusiasts. This may have happened since a large number of respondents were younger than 20 years old, with less responsibility, limited buying power, and may not have been the buyer even though they may have decided what to purchase. This group of fast-food customers may be buying and consuming fast food out of desperation, due to the absence of parents and home cooked [2,4,5]. They are also more likely to ignore efforts taken by the retailer to be more ethical, trustworthy and credible and place more importance on taste, convenience, and brand name [109,110]. Hence, future research on CSR and FHS initiatives taken by fast-food retailers is recommended to use quota sampling to distribute questionnaires for more generalizability.

7. CONCLUSION

Corporate social responsibility (CSR) activities undertaken by fast-food restaurants need to be enhanced by FHS. Although some studies suggest that food and health safety (FHS) is a legal requirement and therefore not undertaken by restaurants voluntarily, this study indicates

that it is immaterial whether or not FHS is voluntary in terms of customers' perception of it as being CSR. It is therefore a must for restaurants to voluntarily go beyond the regulations to ensure their food is healthy and safe in order to enhance their corporate image (CI).

This study theoretically contributes to the existing body of knowledge on CSR and CI. The addition of FHS as a construct in an existing CSR framework indicates that though FHS is a dimension of CSR, having a clear initiative relating to the business is more important. This should be an initiative that can be seen, experienced and understood by customers, compared to an initiative such as charity giving, which is not directly related to the business and does not affect the customers.

The study also contributes in a practical sense by encouraging fast-food restaurants and other food related businesses to value FHS and make a voluntary move to fully comply with regulations. Managers can also take the initiative to show customers that their food is healthy and safe by displaying ingredients and by informing customers that the restaurant only sources from safe and reliable suppliers. Such actions will be more beneficial to a restaurant in terms of CI than merely complying with FHS regulations.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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