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Determinants of Corporate Social Responsibility Practices Among Private SMEs in Chengdu, China

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ABSTRACT

Corporate Social Responsibility (CSR) is vital for the sustained success of businesses. Traditionally, large enterprises have been the primary implementers of CSR, setting them apart from private small and medium-sized enterprises (SMEs). Consequently, this study investigates the factors influencing CSR practices in manufacturing SMEs among private businesses in Chengdu, China. Employing a quantitative approach and combining the Knowledge, Attitude, and Practice (KAP) theory with the four components of CSR, the research examines 15 hypotheses to explore the relationships between business owners' knowledge, attitude, and practices related to CSR justifications. The sample comprises 400 entrepreneurs from private manufacturing SMEs in Chengdu, selected through snowball sampling and surveyed via an online questionnaire. The results indicate that all corresponding knowledge, attitudes, and practices exhibit a significantly positive correlation, confirming the importance of knowledge and attitudes in shaping CSR practices among private manufacturing enterprises in Chengdu, China. The study concluded by highlighting its contribution to the existing body of knowledge and offering recommendations for future research.

Keywords: Business owners, corporate social responsibility practices, KAP theory, private businesses, SMEs

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INTRODUCTION

Corporate Social Responsibility (CSR) has become an increasingly important concept in global business and sustainable development, as firms are expected to integrate social and environmental concerns into their operations alongside economic objectives (Kucharska & Kowalczyk, 2018). The interpretation and implementation of CSR, however, vary across countries and

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evolve over time depending on institutional and economic contexts (Steurer, 2009).

In China, CSR has gained increasing attention since the 1990s, reflecting the country's rapid economic transformation and integration into the global economy (Chen et al., 2011). As the world's second-largest economy (HKU Common Core, 2023), China is home to a vast and dynamic business sector, with 181 million registered enterprises as of 2023. In this context, sustainable development has become a central concern for both policymakers and businesses.

Within China's corporate landscape, private enterprises play a dominant role. By 2023, they accounted for over 92% of all registered firms and contributed more than 60% of national GDP. Despite their economic importance, private firms often differ from state-owned and foreign-invested enterprises in terms of resource availability, governance structures, and long-term strategic orientation, which may affect their engagement with CSR practices.

Small and medium-sized enterprises (SMEs), the majority of which are privately owned, are particularly important for employment creation, innovation, and socio-economic development (Jin et al., 2020). Although research on CSR in SMEs has increased in recent years (Oduro et al., 2021), most studies have focused on large corporations, leaving CSR behaviour in private SMEs, especially in emerging economies such as China, relatively underexplored (Liu et al., 2020; Zhang et al., 2022).

Existing literature has also largely examined CSR from an organisational or reporting perspective, while less attention has been paid to how business owners' internal cognition influences CSR implementation. In particular, the relationship between CSR knowledge, attitudes, and practices remains insufficiently understood in the context of SMEs. This is critical, as entrepreneurs' perceptions and beliefs significantly shape business decisions and sustainability outcomes (Reijonen, 2008).

To address this gap, this study focuses on private manufacturing SMEs in China and investigates CSR from the perspective of business owners. Drawing on the Knowledge-Attitude-Practice (KAP) model, the study integrates the four CSR justifications proposed by Porter and Kramer (2006), namely moral obligation, sustainability, license to operate, and reputation, into the analysis of CSR cognition and behaviour. The KAP framework is particularly suitable for this study because it explains how individual cognition in the form of knowledge shapes evaluative orientation in the form of attitude, which subsequently influences actual behavioural outcomes in the form of practice, making it a useful lens for examining CSR implementation at the owner level. Accordingly, this study aims to:

RO1 : To assess the levels of CSR knowledge, attitudes, and practices among private manufacturing SMEs, including both overall CSR and the four CSR justifications.

RO2 : To examine the relationships between knowledge, attitudes, and practices across the four CSR justifications and overall CSR among private manufacturing SMEs.

We created a research model to examine the factors affecting business owners' CSR practices to achieve our research objectives, as illustrated in Figure 1. This study focuses on private manufacturing SMEs located in Chengdu, Sichuan Province, China. Accordingly, all references to SMEs in this study refer specifically to manufacturing SMEs in this regional context unless otherwise stated.

LITERATURE REVIEW

CSR is essential for fostering stakeholder trust and poses challenges in leadership, accounting, and public relations (Rossi et al., 2021). It involves not only owners but also employees, clients, and society, optimising operations through economic, social, and ethical considerations (Kaplan, 2020). Research indicates that CSR enhances brand loyalty through ethical behaviour (Quezado et al., 2022) and that stakeholder engagement strengthens CSR commitment (Adomako & Tran, 2022), despite potential confusion from unclear guidelines. Consumer perceptions play a critical role in trust and loyalty (Min et al., 2023), while CSR awards can elevate company value (Benjamin & Biswas, 2022).

In 2023, global GDP surpassed $100 trillion, with the U.S. leading at $26.94 trillion and China at $17.7 trillion; meanwhile, CSR has gained prominence in Chinese society, reflecting a shift towards ethical business practices. Although CSR originates from Western concepts, it has increasingly influenced Chinese businesses since the 1990s, as shown in Figure 1, addressing issues like environmental pollution as part of a sustainable development strategy.

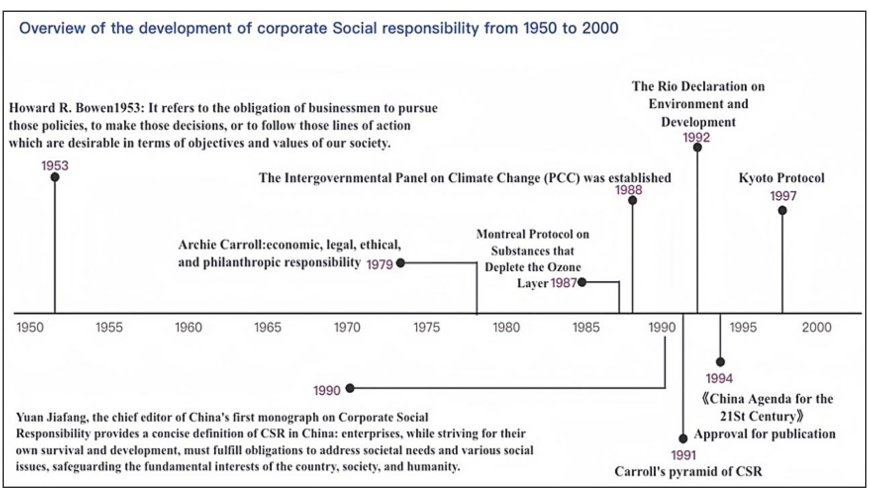

Figure 1. Overview of the development of corporate social responsibility from 1950 to 2000
Source: China Research Institute of Economics and Economics

The Chinese government promotes CSR as a political strategy, positioning it as a national priority that extends beyond mere profit, especially for state-owned enterprises (Yin & Zhang, 2012). Since the first national sustainable development policy in 1992, CSR initiatives have proliferated, evident in the rise of companies disclosing social responsibility reports from 10 in 2006 to 1,422 in 2021. Notably, President Xi Jinping highlighted the importance of CSR in global initiatives like the Belt and Road (2016). Despite limited research on CSR in China, recent studies show significant impacts of CSR on green innovation and the role of government in shaping these practices among Chinese firms (Bai et al., 2023).

From 1949 to the early 1990s, China's centrally planned economy restricted private enterprises, which are vital for innovation and job creation (Lee, 2024). The 2022 Fortune Global 500 list includes 86 state-owned enterprises with higher average revenues than 50 private firms, although private firms achieve better returns. Despite extensive research on CSR in Chinese enterprises, studies on private SMEs are scarce; only 5% of CSR research from 1992 to 2012 focused on SMEs (Zhou & Qian, 2012). Although SMEs are encouraged to adopt CSR due to their community roles, many view it as a cost (Shi, 2010).

Knowledge, Attitude, and Practice (KAP) Model

The knowledge, attitude, and practice (KAP) model, a cost-effective and resource-saving approach for assessing specific contexts, is used to develop the hypothesised relationships (Kwol et al., 2020). The theory posits that knowledge forms the foundation of behaviour change, while knowledge and attitudes drive this change (Owojori et al., 2022).

Knowledge is a company's most valuable asset in a commercial context (Usai et al., 2018). The attitudes of business owners significantly impact SMEs, making it challenging to predict their behaviour (Ettl & Simon, 2017). KAP surveys are widely used to study behaviour affected by issues in areas like health, environment, education, and food safety (Kwol et al., 2020). KAP also informs sustainable business practices, although the link between attitudes and sustainable practices is weak (Ahmad, J., 2015).

Corporate Social Responsibility (CSR)

Since the 20th century, enterprise society has shaped Western disciplines, notably in Britain and the U.S., promoting business-society harmony. CSR has various interpretations and is defined as a strategic, proactive, and collaborative business philosophy (Panwar, 2006). The relationship between CSR and sustainability has gained increasing theoretical and practical importance (Behringer & Szegedi, 2016). From a sustainable development perspective, CSR is similarly seen as strategic and collaborative (Panwar, 2006). CSR is widely used to promote sustainable business development, and post-pandemic, businesses may reassess their CSR goals and strategies (Carroll, 2021).

Table 1
Corporate Social Responsibility justifications: (Porter & Kramer, 2006)

Justification	Arguments for it
Moral Obligation	• Companies have a duty to be a good citizen and "to do the right thing". • Achieve commercial success in ways that honor ethical values, respect people, communities and natural environment (the goal of Business for Social Responsibility-BSR)
Sustainability	• Company need to emphasise on environment and community stewardship • Meeting the need of the present without compromising the ability of future generations to meet their own needs (definition by Gro Harlem Brundtland used by WBCSD)
License to operate	• Every company needs tacit or explicit permission from governments, communities and numerous other stake- holders to do business.
Reputation	• CSR initiatives will improve company's image, brand, enliven morale and even raise value of its stock

Porter and Kramer identify four justifications for CSR: moral obligation, sustainability, license to operate, and reputation (Table 1). Moral obligation emphasises ethical practices, while sustainability addresses the triple bottom line and long-term viability. The license to operate underscores the need for government permissions, and reputation focuses on addressing external concerns. Porter and Kramer (2006) highlight CSR's importance for businesses and stakeholders.

HYPOTHESIS DEVELOPMENT AND RESEARCH MODEL

Knowledge of CSR (License to Operate, Sustainability, Moral Obligation, and Reputation) and Attitudes Towards CSR (License to Operate, Sustainability, Moral Obligation, and Reputation).

License to operate in CSR refers to the social approval and legitimacy granted by stakeholders, including communities, regulators, consumers, workers, and NGOs, for a company's operations (Moffat & Zhang, 2014). In this study, Knowledge on license to operate (KL) refers to business owners' understanding of legal and regulatory requirements vital for their operations. Attitude towards license to operate (AL) reflects a business owner's perception and agreement with the legal and regulatory requirements guiding their business. Environmental compliance knowledge positively influences green attitudes (Ramírez & Portillo, 2019).

Sustainability knowledge is defined in various contexts. In this study, knowledge on sustainability (KS) refers to business owners' awareness of environmental, legal, and community-related sustainability and CSR aspects. Attitude towards sustainability (AS) encompasses business owners' views, beliefs, and acceptance of sustainability's environmental, social, and regulatory aspects. Research shows that greater knowledge of sustainable development leads to more eco-friendly attitudes and behaviours (Paço & Lavrador, 2017).

Moral psychologists highlight the importance of moral awareness in social dilemmas (Kohlberg, 1984). Knowledge on Moral Obligation (KM) refers to business owners' awareness of the ethical responsibilities guiding workplace decisions. Attitude towards moral obligation (AM) reflects the business owner's view on the importance of integrating ethics into workplace practices (Preble & Reichel, 1988). Moral attitudes and behaviours are influenced by awareness of moral obligations.

Corporate reputation is a shared perception based on individual interpretations of how others view the company (Helm, 2007). Knowledge on reputation (KR) refers to business owners' understanding of the factors that shape and sustain their company's reputation. Attitude towards reputation (AR) reflects business owners' views on the importance of maintaining and improving reputation through actions related to product quality, innovation, long-term strategy, talent retention, and quality management (Marken, 2002). A strong corporate image positively impacts brand awareness and attitudes (Darmawan, 2019). Moreover, the influence of knowledge on attitudes has been demonstrated in many studies (Härtel et al., 2023; Yang et al., 2020). Based on the analysis, the research hypotheses are:

Ha1 : Knowledge on license to operate of business owner positively influences attitude towards license to operate.

Ha2 : Knowledge on sustainability of business owner positively influences their attitudes towards sustainability.

Ha3 : Knowledge on moral obligation of business owner positively influences their attitudes towards Moral obligation.

Ha4 : Knowledge on reputation of business owner positively influences attitude towards reputation.

Attitude Towards CSR (License to Operate, Sustainability, Moral Obligation, Reputation) and Practice on CSR (License to Operate, Sustainability, Moral Obligation, Reputation)

Practice on license to operate (PL) can be understood as the practical application of the contractual foundation for the legality of specific activities or projects within a company (Demuijnck & Fasterling, 2016). (Cohn & White, 1991) assessed such attitudes and discovered that they could predict rule-violating behaviour in college students, with those endorsing rule-breaking behaviours being more inclined to participate in such actions.

Organisations adopt sustainability practices to integrate environmental sustainability into their operations, covering areas such as corruption prevention, supplier management, sustainability prioritisation, risk handling, financial aspects, employee satisfaction, and customer expectations (Da Silva Batista & De Francisco, 2018). In the study, practice on sustainability (PS) refers to the actions and behaviours of company owners related to environmental and social sustainability within their business operations. A good attitude towards sustainability is frequently a motivator for the adoption and implementation of sustainable practices inside an organisation. A study by Abdul-Halim et al. (2021) was conducted with sustainable science students to examine their knowledge, attitudes, and practices toward environmental sustainability based on their year of study. (Lim et al., 2023) investigate the knowledge, attitude, and practices of operating room personnel towards ecologically sustainable practices in operating rooms. (Ahmad, J., 2015) hypothesised the relationship between student attitudes and sustainable environmental practices, the relationship between attitude and practice is low but significant.

While companies can informally promote ethical behaviour, many focus on implementing formal plans and policies to guide moral conduct (Weaver et al., 1999). Practice on Moral Obligation (PM) involves actions taken by business owners based on their awareness of moral and ethical obligations in CSR operations. It typically includes training, ethical assessments, and measures to address lapses in ethical standards (Weaver et al., 1999). In Porter and Kramer's CSR framework, moral obligation also encompasses respect for people and the environment. For example, Foroudi (2019) studied the relationship between hotel employees' environmental attitudes and their intentions to adopt environmentally friendly policies, predicting their behaviour.

Practice on reputation (PR) refers to how shareholders or business owners respond to the actions of an organisation, whether they are positive or negative, strong, or weak (Ural, 2002). The link between corporate reputation and surplus management practices as well as corporate borrowing capacity was examined and (Setiawan et al., 2017) verified their interrelationship. In addition, a clear relationship between attitude and behaviour has been confirmed by multiple scholars (Govaerts & Olsen, 2022; Venciute et al., 2023). Consequently, we hypothesised that:

Ha5 : Attitude towards license to operate of business owner positively influences practice on license to operate.

Ha6 : Attitude towards sustainability of business owner positively influences practice on sustainability.

Ha7 : Attitude towards moral obligation of business owner positively influences practice on moral obligation.

Ha8 : Attitude towards reputation of business owner positively influences practice on reputation.

Knowledge of CSR (License to Operate, Sustainability, Moral Obligation, and Reputation) and CSR Practices (License to Operate, Sustainability, Moral Obligation, and Reputation)

Understanding the licensing requirements is a prerequisite for effectively putting them into practice. Knowledge guides action, and well-informed business owners are more likely to adopt practices that comply with operating license requirements. (Toleuov et al., 2023) A conclusion was made about the influence and the importance of the qualities of legal awareness on the nature of the legal behaviour of the individual. (Abdullahi et al., 2016) validated a statistically significant correlation between workers' awareness of adherence to slaughterhouse regulations and their practice. Individuals' beliefs in sustainability influence their attitudes toward practices, and consequently, their sustainable knowledge shapes behaviour. Knowledge has a positive significant (though weak) bivariate correlation with behaviour (Heeren et al., 2016). Research indicates that increased environmental awareness positively influences responsible environmental behaviour (Pavalache-Ilie & Cazan, 2018). (Buerke et al., 2016) finds that consumer knowledge and pro-sustainability attitudes both exhibit a positive correlation with responsible consumer practice. Increased ethical awareness in accounting students corresponds to enhanced proficiency in ethical decision-making (Anggraini et al., 2020). (Haines et al., 2007) finds that moral awareness has a positive impact on the ability to make ethical decisions. However, there is limited research in the current literature on the relationship between ethical knowledge and ethical practices in CSR. Positive corporate reputations offer strategic advantages for the firms that hold them (Weigelt & Camerer, 1988). Reputation Practice involves the specific actions that business owners take in their daily business operations related to reputation management, etc. (Roberts & Dowling, 2002) affirms a positive correlation between reputation and financial performance. Therefore, we propose that:

Ha9 : Knowledge on license to operate of business owner positively influences practice on license to operate

Ha10 : Knowledge on sustainability of business owner positively influences practice on sustainability.

Ha11 : Knowledge on moral obligation of business owner positively influences practice on moral obligation.

Ha12 : Knowledge on reputation of business owner positively influences practice on reputation.

Knowledge on CSR, Attitudes Towards CSR and Practices on CSR

The KAP model encompasses knowledge, attitude, and practice. In business, knowledge is a key asset that, when integrated and stored, transforms into organisational capability (Usai et al., 2018). Attitude reflects an individual's beliefs and evaluations regarding a particular issue and is influenced by knowledge. Practice, the final KAP stage, is shaped by attitudes. The theory highlights the interconnection among knowledge, attitudes, and behavioural practices.

Eua-Anant et al. (2011) found that SMEs owners/managers' CSR awareness impacts CSR practices. Consumer CSR knowledge significantly improves consumer environmental attitude (Mahmud, 2024). Mueller and Theuvsen (2014) identified customer opinions on political engagement as a key factor influencing attitudes. Rosati et al. (2018) showed that highly educated employees exhibit more favorable CSR attitudes. Muya (2016) explored the KAP of individuals in private colleges and universities regarding CSR. To examine the relationship between KAP and CSR, the following hypotheses are proposed:

Ha13 : Knowledge on CSR of business owner positively influences attitudes towards CSR

Ha14 : Attitudes towards CSR of business owner positively influences practices on CSR

Ha15 : Knowledge on CSR of business owner positively influences practices on CSR

Research Model

The Knowledge–Attitude–Practice (KAP) model is widely applied in medical and public health research but has been less frequently used in business and CSR studies. Prior research has only limitedly examined CSR-related knowledge, attitudes, and practices in SMEs contexts. For instance, Maluleka and Ross (2024) explored SMEs owners' CSR knowledge, attitudes, and practices in Johannesburg using qualitative methods, while Ayobami et al. (2019) found that small business owners often lack CSR knowledge and demonstrate weak CSR-related attitudes.

Building on these gaps, this study develops a conceptual framework to examine CSR practices among SMEs owners by integrating the KAP model with the CSR framework proposed by Porter and Kramer (2006). The four CSR justifications—moral obligation, sustainability, license to operate, and reputation—are incorporated as the substantive domains of CSR cognition within the KAP structure.

Specifically, CSR knowledge refers to SMEs owners' cognitive understanding of these four CSR justifications, including awareness of ethical responsibility (moral obligation), understanding of environmental and social sustainability, recognition of legitimacy requirements for maintaining a license to operate, and knowledge of the strategic value of corporate reputation. CSR attitude reflects owners' evaluative judgments and personal agreement with these CSR dimensions, including the perceived importance of ethical responsibility, support for sustainability practices, recognition of social legitimacy as a condition for business continuity, and belief in the value of reputation management. CSR practice refers to the actual implementation of CSR-related actions in business operations, including ethical decision-making (moral obligation), environmental and sustainable practices (sustainability), compliance with legal and social expectations (license to operate), and reputation-building activities such as quality management and stakeholder communication.

By operationalising the four CSR justifications across the three KAP dimensions, this study proposes an integrated conceptual model that links CSR cognition to behavioural outcomes in SMEs. The model examines the relationships among CSR knowledge, attitudes, and practices of business owners, as illustrated in Figure 2.

MATERIALS AND METHODS

The Procedure Used for the Collection of Data

The completed questionnaire was hosted on Questionnaire Star (Wenjuanxing; http://www.wjx.cn), a widely used online survey platform in China (He et al., 2019). The study focuses on owners of private SMEs in the manufacturing sector in Chengdu, Sichuan Province, China. According to Chengdu Industry and Information Technology data (2022), private enterprises in Chengdu are the optimal target for this research, as shown in Table 2.

Manufacturing SMEs are classified into medium, small, and micro enterprises according to the Several Opinions of the State Council on Further Promoting the Development of Small and Medium-sized Enterprises (State Council [2009] No. 36). Medium-sized enterprises have annual sales revenue between RMB 20 million and RMB 400 million, while small and micro enterprises have revenue below RMB 20 million. The manufacturing sector includes industries such as apparel, chemicals, industrial equipment, metals, textiles, electronics, food, automotive, and plastics.

The manufacturing sector is selected because of its central role in China's economic development (Zhang et al., 2025). Manufacturing SMEs are more exposed to environmental regulations, supply chain

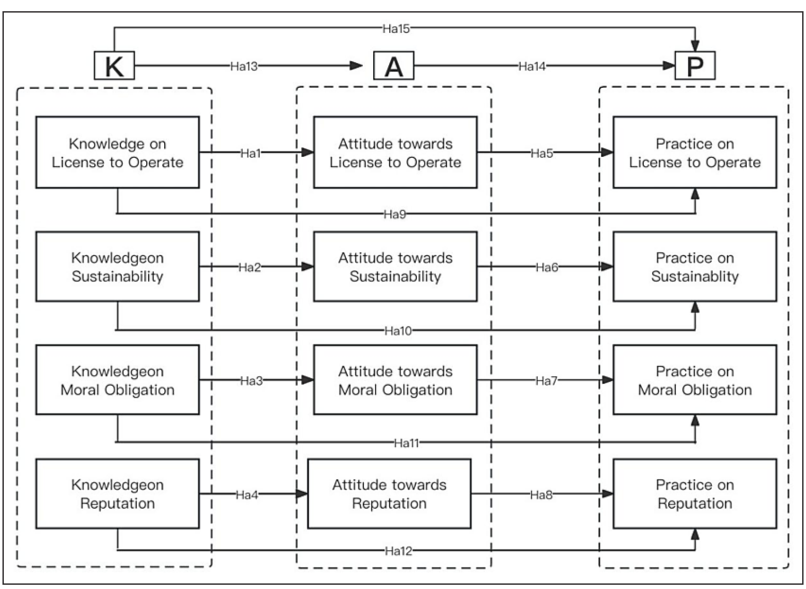

Figure 2. Research model [adapted from Porter & Kramer (2006)]

Table 2
Data on private SMEs in manufacturing industry in Chengdu, Sichuan, China

Data	
Private Economic Added Value	1,015.684 billion yuan
Share of GDP	48.8%
Total Market Entities	3.6389 million (ranked second in China)
Private Firms' Job Contribution	70% of jobs, 90% of new positions
Manufacturing Contribution	¥484.24Billion
Manufacturing as % of GDP	24.3%
High-Tech Zone Output Value:	Hundreds of billions of yuan
Industrial Enterprises (≥10Billion)	3
Listed Manufacturing Enterprises	26
National Specialties & "Small Giants"	70
Chengdu's Overall Economic Rank in China	7
Chengdu's Industrial Added Value Rank	14
SMEs Classification in Manufacturing	
• Medium Enterprise	Annual sales revenue: RMB 20M - 400M
• Small and Micro Enterprises	Annual sales revenue: Up to RMB 20M

Source: Chengdu Industry and Information Technology Data (2022); State Administration of Taxation

pressures, and sustainability expectations than firms in other sectors, making them particularly suitable for examining CSR knowledge, attitudes, and practices. In addition, Chengdu's manufacturing industry represents a rapidly developing component of western China's industrial economy, providing a relevant and meaningful empirical context for this study.

This study obtained a sample size of 400, which exceeds the minimum requirements suggested by Hair et al. (2014) for PLS-SEM, including the 10-times rule and the minimum sample size indicated by G*Power analysis. These guidelines were used as indicators of minimum sample adequacy to ensure the stability of the PLS-SEM estimates rather than to claim statistical representativeness. Due to the lack of a full sampling frame, owners of private manufacturing SMEs in Chengdu were recruited via snowball sampling, a non-probability sampling approach. This approach is widely used in SMEs research to access hard-to-reach populations and may improve response diversity where sampling frames are unavailable (Baltar & Brunet, 2012; Kirchherr & Charles, 2018). It should be noted that, due to the use of snowball sampling, the findings are not statistically generalisable to SMEs in Chengdu. The questionnaire included screening questions to ensure that participants were private manufacturing SMEs owners in Chengdu's manufacturing sector (see Appendix A for details). Non-qualifying respondents were excluded, and a reminder encouraged participants to forward the survey to others in their network. Data analysis was conducted using SPSS version 26.0.

Measurement of Variables

We had 12 constructs. Additionally, all the items were derived from previous research. The constructs of knowledge on license to operate, attitude towards license to operate, and practice on license to operate were adapted from Deephouse and Suchman (2008), Scott (2008), and Puspa and Wijaya (2018). The constructs of knowledge on sustainability, attitude towards sustainability, and practice on sustainability were adapted from the work of Birou et al. (2019) and Oriade et al. (2021). The constructs of knowledge on moral obligation, attitude towards moral obligation, and practice on moral obligation were adapted from the previous study of Pusriadi et al. (2021). The constructs of knowledge on reputation, attitude towards reputation, and practice on reputation were adapted from Helm (2010), Chun (2005), Foroudi et al. (2014), and Helm (2007).

All items were assessed using a 5-point Likert scale, ranging from 'Strongly Disagree' to 'Strongly Agree'. The questionnaire was translated into Chinese by a certified company and back-translated to English for equivalence. Verification confirmed the translation's accuracy. To address inconsistencies and biases, a pilot study was conducted with 47 samples, yielding 40 valid responses after excluding invalid ones. Reliability was assessed using SPSS, with Cronbach's alpha ranging from 0.70 to 0.90, indicating no need for item modification.

RESULTS

Descriptive Analysis on Demographic Variables

Table 3 shows that most respondents are male (55.5%), with females at 44.5%. The majority hold a bachelor's degree (41.3%), followed by a diploma (16.8%) and a master's (12.8%), while 13% have less than a high school education. Owners and owner-managers each account for 51.2%. The largest sector is food manufacturing (22.5%), followed by apparel/footwear (22.3%), with automotive being the smallest (2.5%). Nearly half (47.3%) have operated for 1–5 years, while 22.8% exceed 10 years. Small/micro enterprises dominate (66.5%), with medium firms at 33.5%, reflecting a diverse sample.

Reliability and Validity

Reliability analysis assesses a tool's consistency in producing stable results. Cronbach's α indicates reliability, with higher values showing greater consistency. Validity measures how well an instrument captures its intended target (Kimberlin & Winterstein, 2008), covering content, construct, and accuracy of validity. Table 4 shows the reliability of the measurement scales for Knowledge (K), Attitude (A), and Practice (P). The scales demonstrate strong internal consistency, with Cronbach's α values of 0.925, 0.876, and 0.897, respectively. The Kaiser-Meyer-Olkin (KMO) values for sampling adequacy are 0.954, 0.899, and 0.919 for K, A, and P, all above the 0.7 threshold. These results confirm the reliability and validity of the

Table 3
Distribution of respondents according to demographic characteristics

Variables	Attribute	Frequency	Percentage (%)
Gender	Male	222	55.5
	Female	178	44.5
Education level	Less than high school	52	13
	High school	35	8.8
	Diploma	67	16.8
	Bachelor	165	41.3
	Master	51	12.8
	PHD	30	7.5
Position	Owner	205	51.2
	Owner and Manager	195	48.8
Industry	Apparel and footwear	89	22.3
	Chemical industry	19	4.8
	Industrial equipment	30	7.5
	Metal	41	10.3
	Textile manufacturing	50	12.5
	Computer and electronics manufacturing	20	5
	Food manufacturing	90	22.5
	Furniture	20	5
	Automotive	10	2.5
	Plastic industry	20	5
	Others	11	2.8
Firm age	Less than 1 year	50	12.5
	1-5 years	189	47.3
	6-10 years	70	17.5
	More than 10 years	91	22.8
Firm size	Medium-sized enterprise	134	33.5
	Small and Micro enterprise	266	66.5

Note. N = 400

Table 4
Cronbach's Alpha values and KMO and Bartlett's test results

Variable	N	Cronbach's α	KMO
K	20	0.925	0.954***
A	20	0.876	0.899***
P	20	0.897	0.919***

measurement tools for assessing the study's constructs.

Descriptive Statistics of Variables

Table 5 summarises the means and standard deviations for CSR-related variables across 400 respondents. The highest knowledge was in "License to operate" (M=4.11, S. D=0.809), while the lowest was in "Sustainability" (M=3.76, S. D=0.803). Attitudes were most positive towards "License to operate" (M=4.43, S. D=0.633) and least positive towards "Sustainability" (M=4.39, S. D=0.704). Practices showed the highest engagement in "License to operate" (M=4.18, S. D=0.435) and the lowest in "Sustainability" (M=3.55, S. D=0.457). Overall, K (M=3.94, S. D=0.658) and A (M=4.34, S. D=0.496) were higher, while P is moderate (M=3.78, S. D=0.360). This indicates stronger knowledge and attitudes towards "License to operate" but highlights the need for more focus on "Sustainability" in both knowledge and practices.

Preliminary Analysis Correlation Analysis between Business Owners' CSR Knowledge, Attitudes, and Practice

Spearman's rank correlation (ρ) is a nonparametric method assessing rank dependence and monotonic relationships, suitable for non-linear data (Gibbons & Chakraborti, 2011). This study uses ρ to analyse CSR-related knowledge, attitudes, and practices among private business owners. A ρ value near ±1 indicates a strong correlation, with positive values showing a positive link and negative values indicating a negative one.

Table 5
Summary of means and standard deviation for key variables

Variables	M	(S.D)
Knowledge on License to operate	4.11	0.809
Knowledge on Sustainability	3.76	0.803
Knowledge on Moral Obligation	3.77	0.815
Knowledge on Reputation	4.04	0.822
Attitude towards License to operate	4.43	0.633
Attitude towards Sustainability	4.39	0.704
Attitude towards Moral Obligation	4.25	0.858
Attitude towards Reputation	4.18	0.841
Practice on License to operate	4.18	0.435
Practice on Sustainability	3.55	0.457
Practice on Moral Obligation	3.53	0.528
Practice on Reputation	3.75	0.484
Knowledge	3.94	0.658
Attitude	4.34	0.496
Practice	3.78	0.360

Note. N = 400

The correlation between each knowledge variable and attitude variable is tested, and the results are presented in Table 6. In the correlation test between KL and AL, ρ=0.301, P=.000, indicating a significant correlation between the two. Similarly, in the correlation test between KS and AS, ρ=0.279, P<0.001, signifying a significant correlation. The correlation test between KM and AM revealed ρ=0.335, P=.000, indicating a significant relationship. Furthermore, in the correlation test between KR and AR, ρ=0.322, P=.000, suggesting a significant correlation. Lastly, in the correlation test between A and K, ρ=0.549, P=.000, demonstrating a significant relationship between the two.

Table 7 shows significant correlations between attitude and practice variables. The correlation between AL and PL is ρ=0.616, P=.000; between AS and PS, ρ=0.605, P=.000; between AM and PM, ρ=0.752, P<0.001; and between AR and PR, ρ=0.727, P=.000. The correlation between P and A is ρ=0.799, P=.000, all indicating significant relationships.

Table 6
Correlation between knowledge and attitude

Correlation			KL	KS	KM	KR	K
Knowledge and Attitude	**AL**	ρ	0.301***	-	-	-	-
		Sig.	.000	-	-	-	-
	AS	ρ	-	0.279***	-	-	-
		Sig.	-	.000	-	-	-
	AM	ρ	-	-	0.335***	-	-
		Sig.	-	-	.000	-	-
	AR	ρ	-	-	-	0.322***	-
		Sig.	-	-	-	.000	-
	A	ρ	-	-	-	-	0.549***
		Sig.	-	-	-	-	.000

Table 7
Correlation between attitude and practice

Correlation			AL	AS	AM	AR	A
Attitude and Practice	**PL**	ρ	0.616***	-	-	-	-
		Sig.	0.000	-	-	-	-
	PS	ρ	-	0.605***	-	-	-
		Sig.	-	0.000	-	-	-
	PM	ρ	-	-	0.752***	-	-
		Sig.	-	-	0.000	-	-
	PR	ρ	-	-	-	0.727***	-
		Sig.	-	-	-	0.000	-
	P	ρ	-	-	-	-	0.799***
		Sig.	-	-	-	-	0.000

The correlation tests between cognitive and behavioural variables are shown in Table 8. The correlations between KL and PL (ρ=0.784, P=0.000), KS and PS (ρ=0.703, P=0.000), KM and PM (ρ=0.704, P=0.000), KR and PR (ρ=0.756, P=0.000), and overall knowledge (K) and overall practice (P) (ρ=0.848, P=0.000) all show significant relationships.

DISCUSSION

RO1 : To assess the levels of CSR knowledge, attitudes, and practices among private manufacturing SMEs, including both overall CSR and the four CSR justifications.

The findings indicate that private manufacturing SMEs owners in Chengdu generally demonstrate positive levels of CSR knowledge, attitudes, and practices. Among the four CSR justifications, license to operate received the highest scores across knowledge, attitudes, and practices, while sustainability awareness was comparatively lower, and moral obligation showed the lowest level of practical implementation.

The strong emphasis on license to operate may reflect the regulatory and business environment in which Chinese manufacturing SMEs operate. Business owners may view CSR primarily as a means of maintaining legitimacy, complying with regulations, and ensuring business continuity. This may explain why licenses to operate received stronger support than the other CSR justifications. The comparatively lower level of sustainability awareness may be attributed to the resource constraints commonly faced by SMEs. Compared with larger firms, SMEs often prioritise short-term business survival and growth over long-term sustainability initiatives. This suggests that sustainability-oriented CSR is still developing among manufacturing SMEs in Chengdu. The findings also show that attitudes toward CSR were generally stronger than actual

Table 8
Correlation between knowledge and practice

Correlation			KL	KS	KM	KR	K
Knowledge and Practice	**PL**	ρ	0.784***	-	-	-	-
		Sig.	0.000	-	-	-	-
	PS	ρ	-	0.703***	-	-	-
		Sig.	-	0.000	-	-	-
	PM	ρ	-	-	0.704***	-	-
		Sig.	-	-	0.000	-	-
	PR	ρ	-	-	-	0.756***	-
		Sig.	-	-	-	0.000	-
	P	ρ	-	-	-	-	0.848***
		Sig.	-	-	-	-	0.000

practices. While business owners appear to recognise the importance of CSR, practical implementation may be constrained by limited resources and operational pressures. This highlights the challenges SMEs face in translating positive CSR attitudes into concrete actions.

RO2 : To examine the relationships between knowledge, attitudes, and practices across the four CSR justifications and overall CSR among private manufacturing SMEs.

The results confirm the KAP framework, showing that knowledge translates into attitudes and subsequently into CSR practices across all four CSR justifications (Table 9 and Table 10). While previous studies have examined the links between CSR and KAP (Ayodele et al., 2019), this study extends the literature by integrating KAP theory with Porter and Kramer's four CSR justifications. Among the relationships examined, the association between CSR knowledge and practice shows the strongest effect, indicating that knowledge plays a particularly central role in driving CSR implementation among private manufacturing SMEs in Chengdu.

Table 9
Descriptive statistical results of variable KAP

	Mean	**Standard Deviation**
Knowledge	3.94	0.658
Attitudes	4.34	0.496
Practices	3.78	0.360

The findings indicate that greater CSR knowledge among SMEs owners contributes to more favourable attitudes towards CSR, consistent with previous studies linking knowledge with perceptions of regulatory legitimacy, moral obligation, sustainability, and reputation (Liao, 2022; Paço & Lavrador, 2017; Ramírez & Portillo, 2019). However, the strength of this relationship varies across the four CSR justifications. License to operate emerges as the most influential dimension, while sustainability and moral obligation are relatively weaker. This pattern suggests that CSR engagement among Chengdu's manufacturing SMEs is primarily shaped by regulatory and legitimacy-oriented concerns rather than long-term ethical or sustainability-driven motivations. This finding aligns with the institutional context of China, where regulatory compliance and government-led governance mechanisms strongly influence SMEs behaviour. This study also finds a significant relationship between knowledge and CSR practices, which aligns with previous studies highlighting the direct role of knowledge in shaping practice (Abdullahi et al., 2016; Anggraini et al., 2020; Haines et al., 2007; Roberts & Dowling, 2002). This may be because CSR knowledge enhances SMEs owners' ability to understand practical implementation requirements and recognise appropriate CSR actions in daily business operations. In addition, higher knowledge reduces uncertainty in decision-making, making it more likely that awareness is translated into actual CSR behaviour.

Table 10
Summary of the research objective 2 and hypotheses

	Research Objective 2 and Hypothesis Statements	Result
RO2:	To examine the relationships between knowledge, attitudes, and practices across the four CSR justifications and overall CSR among private manufacturing SMEs.	
Ha1:	Knowledge on license to operate of business owner influences attitude towards license to operate.	Supported
Ha2:	Knowledge on sustainability of business owner positively influences their attitudes towards sustainability.	Supported
Ha3:	Knowledge on moral obligation of business owner positively influences their attitudes towards Moral obligation	Supported
Ha4:	Knowledge on reputation of business owner positively influences attitude towards reputation.	Supported
Ha5:	Attitude towards license to operate of business owner positively influences practice on license to operate	Supported
Ha6:	Attitude towards sustainability of business owner positively influences practice on sustainability.	Supported
Ha7:	Attitude towards moral obligation of business owner positively influences practice on moral obligation.	Supported
Ha8:	Attitude towards reputation of business owner positively influences practice on reputation.	Supported
Ha9:	Knowledge on license to operate of business owner positively influences practice on license to operate.	Supported
Ha10:	Knowledge on sustainability of business owner positively influences practice on sustainability.	Supported
Ha11:	Knowledge on moral obligation of business owner positively influences practice on moral obligation.	Supported
Ha12:	Knowledge on reputation of business owner positively influences practice on reputation.	Supported
Ha13:	Knowledge on CSR of business owner positively influences attitudes towards CSR.	Supported
Ha14:	Attitudes towards CSR of business owner positively influences practices on CSR.	Supported
Ha15:	Knowledge on CSR of business owner positively influences practices on CSR	Supported

Overall, the findings suggest that knowledge, attitudes, and practices operate as a reinforcing mechanism in shaping CSR engagement among private manufacturing SMEs in Chengdu. By integrating the KAP framework with Porter and Kramer's CSR justifications, this study provides a more context-specific explanation of CSR formation mechanisms within Chinese manufacturing SMEs.

CONCLUSION

This study investigates factors influencing CSR practices in Chengdu's manufacturing SMEs, focusing on the relationships among knowledge, attitudes, and practices through the lens of KAP theory and CSR components. Findings indicate that CSR knowledge significantly impacts attitudes and practices, offering a framework to analyse CSR dynamics in this context. Methodologically, the study applies a quantitative approach tailored to this context, providing insights to enhance long-term CSR strategies and regional socioeconomic development.

Contributions

This study provides valuable insights into CSR practices among Chengdu's private manufacturing SMEs by integrating CSR and KAP theories, highlighting the role of knowledge and attitudes in shaping CSR practices. Theoretically, it extends the KAP framework by exploring CSR components such as license to operate, moral obligation, sustainability, and reputation, offering a holistic perspective on CSR justifications. Methodologically, its quantitative approach with a large sample size enhances reliability and serves as a framework for future research. Practically, the findings offer actionable recommendations for business owners, policymakers, and stakeholders to enhance CSR engagement, address manufacturing SMEs challenges, and promote sustainable development in Chengdu.

Implications

This research confirms all 15 proposed hypotheses, highlighting the significant impact of business owners' CSR knowledge on their attitudes and practices. A deeper understanding of CSR justifications positively influences both attitudes and actions. However, business owners tend to rate their knowledge lower than their attitudes, indicating a need for enhanced CSR education. The study also finds a strong positive connection between attitudes and CSR practices, with attitudes toward the license to operate, sustainability, moral obligation, reputation, and CSR all playing key roles in driving CSR practices in private enterprises. Among the CSR components, "license to operate" is particularly influential in improving overall CSR practices, emphasizing the need for targeted awareness campaigns. The findings provide valuable insights for practitioners, policymakers, and scholars, underscoring the importance of informed decision-making to promote CSR in Chengdu's private enterprises. Overall, the research demonstrates the interconnectedness of knowledge, attitude, and practice within CSR, offering a framework to advance CSR practices and guide strategies to strengthen CSR engagement in the private sector.

LIMITATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

Limitations include potential representation gaps despite a 400-participant sample. Future studies could expand the sample or use stratified random sampling for better reliability. Snowball sampling may introduce bias, warranting alternative methods. Adding variables like owner willingness could deepen insights. Expanding to other regions and industries may enhance CSR understanding. Comparing private manufacturing SMEs with large firms could further clarify CSR differences across corporate scales.

To strengthen CSR practices among SMEs in Chengdu, this study suggests enhancing CSR education through industry-tailored training, expert-led workshops, and government-backed incentives such as tax benefits. SMEs should also improve their public image by adopting transparent business practices and engaging in CSR initiatives aligned with global standards. For long-term business sustainability, SMEs must refine internal management, adopt digital strategies, and learn from large enterprises to enhance operational resilience. At the national level, China should establish supportive policies, funding schemes, and regulatory frameworks to create a business environment conducive to CSR-driven growth among manufacturing SMEs.

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REFERENCES

Abdul-Halim, N. S., Ruslan, N. S., Idris, N. S. U., & Nawawi, S. A. (2021). Knowledge, attitude and practice of environmental sustainability among Sustainable Science students in Universiti Malaysia Kelantan. *IOP Conference Series Earth and Environmental Science*, *842*(1), Article 012048. https://doi.org/10.1088/1755-1315/842/1/012048

Abdullahi, A. Y., Hassan, A., Kadarman, N., Saleh, A., Baraya, Y. S., & Lua, P. L. (2016). Food safety knowledge, attitude, and practice toward compliance with abattoir laws among the abattoir workers in Malaysia. *International Journal of General Medicine*, 79. https://doi.org/10.2147/ijgm.s98436

Adomako, S., & Tran, M. D. (2022). Stakeholder management, CSR commitment, corporate social performance: The moderating role of uncertainty in CSR regulation. *Corporate Social Responsibility and Environmental Management*, *29*(5), 1414-1423. https://doi.org/10.1002/csr.2278

Ahmad, J., Noor, S. M., & Ismail, N. (2015). Investigating students' environmental knowledge, attitude, practice and communication. *Asian Social Science*, *11*(16). https://doi.org/10.5539/ass.v11n16p284

Anggraini, F. R. R., Siswanto, F. a. J., & Dewi, N. (2020). Accounting students' ethical awareness and ability to make ethical decisions. *Anatolian Journal of Education*, *5*(2), 37-50. https://doi.org/10.29333/aje.2020.523a

Ayobami, A. O., Alex, A. A., & Olanireti, A. M. (2019). Knowledge and Attitude of Corporate Social Responsibility by Selected Small Businesses in Ado-Ekiti, Nigeria. *American Journal of Social Sciences and Humanities*, *4*(4), 535-545. https://doi.org/10.20448/801.44.535.545

Baltar, F., & Brunet, I. (2012). Social Research 2.0: Virtual Snowball Sampling Method using Facebook. *Internet Research*, *22*(1), 57-74. https://doi.org/10.1108/10662241211199960

Behringer, K., & Szegedi, K. (2016). The role of CSR in Achieving Sustainable Development - Theoretical approach. *European Scientific*

Journal, ESJ, *12*(22), 10. https://doi.org/10.19044/esj.2016.v12n22p10

Benjamin, S. J., & Biswas, P. K. (2022). Does winning a CSR Award increase firm value? *International Journal of Disclosure and Governance*, *19*(3), 313-329. https://doi.org/10.1057/s41310-022-00142-8

Birou, L., Green, K. W., & Inman, R. A. (2019). Sustainability knowledge and training: outcomes and firm performance. *Journal of Manufacturing Technology Management*, *30*(2), 294-311. https://doi.org/10.1108/jmtm-05-2018-0148

Chen, S., Sun, Z., Tang, S., & Wu, D. (2011). Government intervention and investment efficiency: Evidence from China. *Journal of Corporate Finance*, *17*(2), 259-271. https://doi.org/10.1016/j.jcorpfin.2010.08.004

Chun, R. (2005). Corporate reputation: Meaning and measurement. *International Journal of Management Reviews*, *7*(2), 91-109.

Cohn, E. S., & White, S. O. (1991). Legal Socialisation: A study of Norms and Rules. *Contemporary Sociology*, *20*(3), 432. https://doi.org/10.2307/2073730

Da Silva Batista, Á. A., & De Francisco, A. C. (2018). Organisational Sustainability Practices: A study of the firms listed by the Corporate Sustainability Index. *Sustainability*, *10*(1), 226. https://doi.org/10.3390/su10010226

Darmawan, D. (2019). The effect of corporate image on brand awareness and brand attitude. *Jurnal Translitera: Jurnal Kajian Komunikasi dan Studi Media, 8*(1), 13-26. https://doi.org/10.35457/translitera.v8i01.595

Deephouse, D. L., & Suchman, M. C. (2008). Legitimacy in organisational institutionalism. In *SAGE Publications Ltd eBooks* (pp. 49-77). https://doi.org/10.4135/9781849200387.n2

Demuijnck, G., & Fasterling, B. (2016). The social license to operate. *Journal of Business Ethics*, *136*(4), 675-685. https://doi.org/10.1007/s10551-015-2976-7

Ettl, K., & Simon, J. (2017). Entrepreneurs' views on corporate social responsibility communication in SMEs insights from Germany. *International Journal of Entrepreneurship and Innovation Management*, *1*(1), 1. https://doi.org/10.1504/ijeim.2017.10018303

Eua-Anant, P., Ayuwat, D., & Promphakping, B. (2011). Relations between positive impacts of CSR, external support, CSR knowledge and the degree of CSR practices in Thai small and medium enterprises. *International Business & Economics Research Journal*, *10*(11), 17. https://doi.org/10.19030/iber.v10i11.6401

Foroudi, P. (2019). Influence of brand signature, brand awareness, brand attitude, brand reputation on hotel industry's brand performance. *International Journal of Hospitality Management*, *76*, 271-285. https://doi.org/10.1016/j.ijhm.2018.05.016

Gibbons, J. D., & Chakraborti, S. (2011). Nonparametric statistical inference. In Springer eBooks (pp. 977-979). https://doi.org/10.1007/978-3-642-04898-2_420

Govaerts, F., & Olsen, S. O. (2022). Consumers' values, attitudes and behaviours towards consuming seaweed food products: The effects of perceived naturalness, uniqueness, and behavioural control. *Food Research International*, *165*, Article 112417. https://doi.org/10.1016/j.foodres.2022.112417

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2014). *A primer on partial least squares structural equation modeling (PLS-SEM)*. http://ci.nii.ac.jp/ncid/BB15179462

Härtel, T., Randler, C., & Baur, A. (2023). Using Species Knowledge to Promote Pro-Environmental Attitudes? The Association among Species Knowledge, Environmental System Knowledge and Attitude towards the Environment in Secondary School Students.

Animals, *13*(6), 972. https://doi.org/10.3390/ani13060972

Heeren, A., Singh, A. S., Zwickle, A., Koontz, T. M., Slagle, K. M., & McCreery, A. C. (2016). Is sustainability knowledge half the battle? *International Journal of Sustainability in Higher Education*, *17*(5), 613-632. https://doi.org/10.1108/ijshe-02-2015-0014

Helm, S. (2007). The role of corporate reputation in determining investor satisfaction and loyalty. *Corporate Reputation Review*, *10*(1), 22-37. https://doi.org/10.1057/palgrave.crr.1550036

Helm, S. (2010). Employees' awareness of their impact on corporate reputation. *Journal of Business Research*, *64*(7), 657-663. https://doi.org/10.1016/j.jbusres.2010.09.001

HKU Common Core. (2023, August 14). *CCCH9007 – China in the Global Economy | HKU Common Core*. HKU Common Core | Exploring Issues of Profound Significance to Humankind. https://commoncore.hku.hk/ccch9007/

Jin, S., Hu, X., Yunxiong, L., & Feng, T. (2020). Does the Belt and Road Initiative Reshape China's Outward Foreign Direct Investment in ASEAN? Shifting Motives of State-Owned and Private-Owned Enterprises. *The Singapore Economic Review*, *66*(01), 161-183. https://doi.org/10.1142/s0217590819500772

Kaplan, S. (2020). Why social responsibility produces more resilient organisations. *MIT Sloan Management Review*, *62*(1), 85-90. https://pesquisa.bvsalud.org/global-literature-on-novel-coronavirus-2019-ncov/resource/en/covidwho-826886

Kimberlin, C. L., & Winterstein, A. G. (2008). Validity and reliability of measurement instruments used in research. *American Journal of Health-System Pharmacy*, *65*(23), 2276–2284. https://doi.org/10.2146/ajhp070364

Kirchherr, J., & Charles, K. (2018). Enhancing the sample diversity of snowball samples: Recommendations from a research project on anti-dam movements in Southeast Asia. *PLOS ONE*, *13*(8), e0201710. https://doi.org/10.1371/journal.pone.0201710

Kohlberg, L. (1984). Essays on moral development: The psychology of moral development (Vol. 2).

Kucharska, W., & Kowalczyk, R. (2018). How to achieve sustainability?—Employee's point of view on company's culture and CSR practice. *Corporate Social Responsibility and Environmental Management*, *26*(2), 453-467. https://doi.org/10.1002/csr.1696

Kwol, V. S., Eluwole, K. K., Avci, T., & Lasisi, T. T. (2020). Another look into the Knowledge Attitude Practice (KAP) model for food control: An investigation of the mediating role of food handlers' attitudes. *Food Control*, *110*, Article 107025. https://doi.org/10.1016/j.foodcont.2019.107025

Lamberti, L., & Lettieri, E. (2008). CSR Practices and Corporate Strategy: Evidence from a Longitudinal Case Study. *Journal of Business Ethics*, *87*(2), 153-168. https://doi.org/10.1007/s10551-008-9876-z

Lee, S. (2024). The Master in Bondage: Factory workers in China, 1949-2019. *The Journal of Asian Studies*, *83*(2), 436-437. https://doi.org/10.1215/00219118-11015707

Liao, X., Nguyen, T. P. L., & Sasaki, N. (2022). Use of the knowledge, attitude, and practice (KAP) model to examine sustainable agriculture in Thailand. *Regional Sustainability*, *3*(1), 41-52.

Lim, B. L., Narayanan, V., & Nah, S. A. (2023). Knowledge, attitude, and practices of operating theatre staff towards environmentally sustainable practices in the operating theatres. *Pediatric Surgery International*, *39*(1), 152. https://doi.org/10.1007/s00383-023-05400-6

Liu, J., Ma, C., & Zhu, P. (2020, November). Research on Optimisation Strategy of Financial Management in Private Enterprises. *In 2020*

2nd International Conference on Economic Management and Cultural Industry (ICEMCI 2020) (pp. 458-461). Atlantis Press. 10.2991/aebmr.k.201128.087

Liu, Y., Dai, W., Liao, M., & Jiang, W. (2020). Social Status and Corporate Social Responsibility: Evidence from Chinese Privately Owned Firms. *Journal of Business Ethics*, *169*(4), 651-672. https://doi.org/10.1007/s10551-020-04547-9

Mahmud, A. (2024). How and when consumer corporate social responsibility knowledge influences green purchase behaviour: A moderated-mediated model. *Heliyon*, *10*(3), e24680. https://doi.org/10.1016/j.heliyon.2024.e24680

Maluleka, S. M., & Ross, E. (2024). Ubuntu or Compliance? Knowledge, Attitudes, and Practices of Owners of Small- Medium-Sized Enterprises in Johannesburg, South Africa Regarding Corporate Social Responsibility. *Journal of African Business*, 1-20. https://doi.org/10.1080/15228916.2024.2361504

Maráková, V., Wolak-Tuzimek, A., & Tučková, Z. (2021). Corporate social responsibility as a source of competitive advantage in large enterprises. *Journal of Competitiveness*, *13*(1), 113-128. https://doi.org/10.7441/joc.2021.01.07

Marken, G. A. (2002). One-minute corporate reputation management. Public Relations Quarterly, 47(4), 21.

Min, J., Kim, J., & Yang, K. (2023). CSR attributions and the moderating effect of perceived CSR fit on consumer trust, identification, and loyalty. *Journal of Retailing and Consumer Services*, *72*, Article 103274. https://doi.org/10.1016/j.jretconser.2023.103274

Moffat, K., & Zhang, A. (2014). The paths to social licence to operate: An integrative model explaining community acceptance of mining. *Resources Policy*, *39*, 61-70. https://doi.org/10.1016/j.resourpol.2013.11.003

Mueller, H., & Theuvsen, L. (2014). Influences on consumer attitudes towards CSR in agribusiness. *RePEc: Research Papers in Economics.* https://doi.org/10.22004/ag.econ.166108

Muya, G. R., & Luansing, B. M. (2016). Knowledge, attitudes and practices regarding corporate social responsibility In Selected Private Higher Education Institutions in Region Iva. Philippines, 4(4), 1-19.

Oduro, S., Bruno, L., & Maccario, G. (2021). Corporate social responsibility (CSR) in SMEs: what we know, what we don't know, and what we should know. *Journal of Small Business & Entrepreneurship*, *1-32*. https://doi.org/10.1080/08276331.2021.1951064

Oriade, A., Osinaike, A., Aduhene, K., & Wang, Y. (2021). Sustainability awareness, management practices and organisational culture in hotels: Evidence from developing countries. *International Journal of Hospitality Management*, *92*, Article 102699. https://doi.org/10.1016/j.ijhm.2020.102699

Owojori, O. M., Mulaudzi, R., & Edokpayi, J. N. (2022). Student's Knowledge, Attitude, and Perception (KAP) to Solid Waste Management: A Survey towards a More Circular Economy from a Rural-Based Tertiary Institution in South Africa. *Sustainability*, *14*(3), 1310. https://doi.org/10.3390/su14031310

Paço, A. D., & Lavrador, T. (2017). Environmental knowledge and attitudes and behaviours towards energy consumption. *Journal of Environmental Management*, *197*, 384-392. https://doi.org/10.1016/j.jenvman.2017.03.100

Panwar, R., Rinne, T., Hansen, E., & Juslin, H. (2006). Corporate responsibility: Balancing economic, environmental, and social issues in the forest products industry. *Forest Products Journal*, *56*(2), 4-13. https://agris.fao.org/agris-search/search.do?recordID=US201301063791

Porter, M. E., & Kramer, M. R. (2006). Strategy and society: The link between competitive advantage and corporate social responsibility. *Harvard Business Review*, *84*(12), 78-92.

Prashar, A., & M, V. S. (2020). A bibliometric and content analysis of sustainable development in small and medium-sized enterprises. *Journal of Cleaner Production, 245*, Article 118665. https://doi.org/10.1016/j.jclepro.2019.118665

Preble, J. F., & Reichel, A. (1988). Attitudes towards business ethics of future managers in the US and Israel. *Journal of Business Ethics*, *7*(12) 941-949.

Puspa, T., & Wijaya, N. J. (2018). Analysis The dimension of CSR towards the relationship between psychological contract and knowledge sharing. *Indonesian Journal of Sustainability Accounting and Management*, *2*(2), 107. https://doi.org/10.28992/ijsam.v2i2.51

Pusriadi, T., Kadarusman, K., Ilmi, Z., Kurniawan, E. H., & Darma, D. C. (2021). Ethical Work Climate and Moral Awareness during Covid-19 - A case study. *Annals of Contemporary Developments in Management & HR*, *3*(1), 11-23. https://doi.org/10.33166/acdmhr.2021.01.002

Quezado, T. C. C., Fortes, N., & Cavalcante, W. Q. F. (2022). The influence of corporate social responsibility and business ethics on brand fidelity: the importance of brand love and brand attitude. *Sustainability*, *14*(5), 2962. https://doi.org/10.3390/su14052962

Ramírez, R. R., & Portillo, A. F. (2019). Green Start-Ups' Attitudes towards Nature When Complying with the Corporate Law. *Complexity*, *2019*, 1-17. https://doi.org/10.1155/2019/4164853

Reijonen, H. (2008). Understanding the small business owner: what they really aim at and how this relates to firm performance. *Management Research News*, *31*(8), 616-629. https://doi.org/10.1108/01409170810892172

Roberts, P., & Dowling, G. R. (2002). Corporate reputation and sustained superior financial performance. *Strategic Management Journal*, *23*(12), 1077-1093. https://doi.org/10.1002/smj.274

Rosati, F., Costa, R., Calabrese, A., & Pedersen, E. R. G. (2018). Employee attitudes towards corporate social responsibility: a study on gender, age and educational level differences. *Corporate Social Responsibility and Environmental Management*, *25*(6), 1306 -1319. https://doi.org/10.1002/csr.1640

Rossi, M., Festa, G., Chouaibi, S., Fait, M., & Papa, A. (2021). The effects of business ethics and corporate social responsibility on intellectual capital voluntary disclosure. *Journal of Intellectual Capital*, *22*(7), 1-23. https://doi.org/10.1108/jic-08-2020-0287

Scott, W. R. (2008). Institutions and organisations: ideas and interests. I*n Sage eBooks*. http://ci.nii.ac.jp/ncid/BA84316791

Setiawan, A., & Hermawan, A. A. (2017, August). The effect of earnings management practice on corporate borrowing capacity through corporate reputation. In *Proceedings of the 6th International Accounting Conference* (IAC 2017).

Shi, Y. (2010). Study on the status and realising of SMEs CSR. *China Business & Trade*, *2*, 235-236.

Steurer, R. (2009). The role of governments in corporate social responsibility: characterising public policies on CSR in Europe. *Policy Sciences*, *43*(1), 49-72. https://doi.org/10.1007/s11077-009-9084-4

Toleuov, Z., Saktaganova, I., Zhenissov, S., Abdrasulov, E., & Saktaganova, A. (2023). Legal awareness and its significance when determining the nature of a person's legal behaviour. *International Journal of Electronic Security and Digital Forensics*, *15*(1), 1-15. https://doi.org/10.1504/ijesdf.2023.10052307

Ural, E. G. (2002). İtibar yönetimi değer yaratan bir halkla ilişkiler çalışması olarak itibar yönetimi. *DergiPark (Istanbul University)*. https://dergipark.org.tr/tr/pub/ticaretfbd/issue/21342/228944

Usai, A., Scuotto, V., Murray, A., Fiano, F., & Bresciani, S. (2018). Do entrepreneurial knowledge and innovative attitude overcome “imperfections” in the innovation process? Insights from SMEs in the UK and Italy. *Journal of Knowledge Management*, *22*(8), 1637-1654. https://doi.org/10.1108/jkm-01-2018-0035

Venciute, D., Kazukauskaite, M., Correia, R. F., Kuslys, M., & Vaiciukynas, E. (2023). The effect of cause-related marketing on the green consumption attitude–behaviour gap in the cosmetics industry. *Journal of Contemporary Marketing Science*, *6*(1), 22-45. https://doi.org/10.1108/jcmars-08-2022-0019

Weaver, G. R., Treviño, L. K., & Cochran, P. L. (1999). Integrated and decoupled corporate social performance: Management commitments, external pressures, and corporate ethics practices. *Academy of Management Journal, 42*(5), 539-552. https://doi.org/10.2307/256975

Weigelt, K., & Camerer, C. F. (1988). Reputation and corporate strategy: A review of recent theory and applications. *Strategic Management Journal*, *9*(5), 443-454. https://doi.org/10.1002/smj.4250090505

Yang, K., Liu, H., Ma, L., Wang, S., Tian, Y., Zhang, F., Li, Z., Song, Y., & Jiang, X. (2020). Knowledge, attitude and practice of residents in the prevention and control of COVID-19: An online questionnaire survey. *Journal of Advanced Nursing*, *77*(4), 1839-1855. https://doi.org/10.1111/jan.14718

Yin, J., & Zhang, Y. (2012). Institutional Dynamics and Corporate Social Responsibility (CSR) in an Emerging Country Context: Evidence from China. *Journal of Business Ethics*, *111*(2), 301-316. https://doi.org/10.1007/s10551-012-1243-4

Zhang, L., Zhang, X., An, J., Zhang, W., & Yao, J. (2022). Examining the Role of Stakeholder-Oriented Corporate Governance in Achieving Sustainable Development: Evidence from the SME CSR in the Context of China. *Sustainability*, *14*(13), 8181. https://doi.org/10.3390/su14138181

Zhang, T., Yin, Z. H., & Choi, C. H. (2025). Industrial transformation and environmental sustainability: the case of China’s “Made in China 2025” policy. *SAGE Open*, *15*(4). https://doi.org/10.1177/21582440251382556

Zhou, Y., & Qian, C. (2012). Social responsibility driving factors of SMEs in the transitional period. *Journal of Tongling University*, *3*, 54-57.

APPENDIX A: INITIAL QUESTIONNAIRE FOR BUSINESS OWNERS IN ENGLISH

A Survey on Private SMEs

Screening Questions

Q1. Is your enterprise located in Chengdu?
☐ Yes ☐ No → End survey

Q2. Is your enterprise a private enterprise?
☐ Yes ☐ No → End survey

Q3. Does your enterprise operate in the manufacturing industry?
☐ Yes ☐ No → End survey

Q4. Are you the owner of this enterprise?
☐ Yes ☐ No → End survey

Q5. Is your enterprise classified as a small or medium-sized enterprise (SMEs) with an annual revenue not exceeding 400 million RMB?
☐ Yes ☐ No → End survey

Demographic Information and Firm Information

Gender
☐ Male ☐ Female

Education level:
☐ Less than high school ☐ High school ☐ Diploma
☐ Bachelor ☐ Master ☐ PHD

Position
☐ Owner ☐ Owner and Manager

What type of sector does your enterprise belong to?
☐ Apparel and footwear ☐ Chemical industry
☐ Industrial equipment ☐ Metal ☐ Textile manufacturing
☐ Computer and electronics manufacturing ☐ Food manufacturing
☐ Furniture ☐ Automotive ☐ Plastic industry
☐ Other, please specify ______________________.

How long ago was your enterprise established?

☐ Less than 1 year ☐ 1-5 years ☐ 6 to 10 years ☐ More than 10 years

Manufacturing industry firm size

☐ Medium-sized enterprise (20 million yuan≤Annual Sales<400 million yuan)

☐ Small and Micro enterprise (annual sales < 20 million yuan)