

Corporate Social Responsibility and Customer Loyalty during the COVID 19 Pandemic: Evidence from Pharmacy Practice

Abstract

Purpose: In recent years, corporate social responsibility (CSR) has taken on a more prominent role in both large and small businesses due to its significant impact on various aspects of business performance. To date, a growing body of literature has demonstrated the mechanisms whereby CSR practices affect organizational outcomes; however, there has been little research examining how CSR practices contribute to customer loyalty within the pharmacy context. As such, this study explores how CSR practices influence the loyalty of pharmacy customers, particularly in relation to the mediatory effects of customer-company identification (CCI) and customer trust.

Design/methodology/approach: A survey questionnaire was developed and administered to collect the required data from the pharmacy context. The resultant data were subjected to exploratory factor analysis to identify the scale dimensions, followed by multiple regression analysis to test the hypotheses.

Findings: Analysis of the results (n=528) revealed that perceived CSR indirectly impacts loyalty through the mediatory effects of trust and CCI. All hypothesized effects were also confirmed via empirical testing.

Originality/value: The findings of this research suggest that not only are CSR activities responsive to societal concerns, but they can also promote customer identification with pharmacies and strengthen customer trust, which can, in turn, lead to long-term customer loyalty.

Keywords: Corporate social responsibility, Identification, Trust, Customer loyalty, Pharmacy

Introduction

Over the past decade, the pharmacy profession has become highly specialized (Duffull *et al.*, 2018) due to rapid growth in pharmaceutical expenditures (Mehralian *et al.*, 2017; Hoffman *et al.*, 2012; Levit *et al.*, 2003), the increasing complexity of pharmacy services, and a constantly-evolving business environment (Donthu and Gustafsson, 2020). As a result, two issues have become highly significant: on the one hand, as health service providers, pharmacists must strive to protect and promote their patients' health status, particularly by educating them on how they can protect themselves from illnesses, such as COVID-19 (Lima *et al.*, 2018); on the other hand, as business owners/managers, they must ensure that they are able to meet their financial goals and adapt to changing customer expectations, thereby securing their long-term ability to provide healthcare services to the public. Additionally, stakeholders such as customers, employees, and society at large have become much more aware of their needs and rights. To address these challenges, pharmacists should receive thorough training to equip them with the capabilities required to maintain and promote the success of their business (Duffull *et al.*, 2018).

The concept of corporate social responsibility (CSR) stresses that for-profit organizations should be accountable not only to their shareholders, but also to their customers and society as a whole (Azmat and Samaratunge, 2009; C. H. Kim *et al.*, 2013; Perrini *et al.*, 2007; Yin and Jamali, 2016). Over the past few years, businesses, such as pharmacies have come under tremendous societal pressure to implement CSR and to respond to emerging concerns and social issues surrounding their operations (Jaime *et al.*, 2019; Lin and Wu, 2014; Ramachandran, 2011; Wu and Duan, 2014; Broadstock *et al.*, 2020). At the same time, pharmacy managers are expected to run their businesses in a manner that adequately addresses the concerns of their respective communities as well as their stakeholders (Wood, 2010). This imperative has become especially crucial since the outbreak of the COVID-19 pandemic, as it has provided businesses—particularly those in the pharmaceutical and healthcare sectors—with tremendous opportunities to implement genuine CSR practices to address urgent global, social and environmental challenges (He and Harris, 2020). Indeed, as Sharma *et al.* (2020) note, the spread of COVID-19 has placed intense pressure on the healthcare sector, which makes it crucial for all partners in the sector to draw on past experience to deal with these unexpected changes effectively.

The implementation of CSR principles is critical for pharmacy managers wishing to maintain or expand their business' long-term profits (Martinez-Conesa *et al.*, 2017; Mehralian *et al.*, 2016; Russo and Tencati, 2009). In this regard, CSR can be viewed as a business strategy that aims to fortify the

association of society and shareholders' perspectives, while maximizing cumulative value for all stakeholders (Sahlin-Andersson, 2006; Salton and Jones, 2015). If implemented effectively, CSR can help to forge a mutual understanding between pharmaceutical service providers and patients; this mutual understanding is important, as it not only enhances patient trust, but it also enables continuous improvement in the quality of pharmacy services. In turn, this results in increased customer loyalty, which translates into a larger base of long-term customers. Although some recent research has emphasized the effects of CSR in today's business world, it remains unclear how CSR strategies contribute to customer loyalty (Choi and La, 2013). To address this matter, some scholars have explored variables such as trust (S. Kim, 2019; Vlachos *et al.*, 2009), satisfaction (Chen and Fu, 2015; Kasiri *et al.*, 2017; Shi *et al.*, 2014), economic-oriented aspects (Kaura *et al.*, 2015), brand personality (Perepelkin and Zhang, 2011), and customer-company identification (Brashear-Alejandro *et al.*, 2016; Haumann *et al.*, 2014; Hong *et al.*, 2010; Kang *et al.*, 2015; Martínez and Del Bosque, 2013) as potential factors that mediate this relationship. In addition, some scholars have called for more empirical research examining how CSR practices influence customer loyalty in different industries (He and Li, 2011; Pérez and Del Bosque, 2015). Accordingly, this study builds on social identity theory in an attempt to understand how CSR initiatives in a pharmacy setting contribute to customer loyalty as measured by repurchasing behaviors and word-of-mouth recommendations. More specifically, we adapt social identity theory to explain how CSR initiatives, particularly during the COVID-19 pandemic, help fulfill pharmacy customers' expectations, thus leading to loyal behavior. Although previous studies have examined the relationship between CSR initiatives and customer behavior, none have produced findings showing the mechanism whereby CSR affects business outcomes in a pharmacy context. Hence, we propose two paths through which CSR may potentially affect customer loyalty: trust and customer-pharmacy identification.

There are some features that make the pharmaceutical industry in general, and pharmacy practice in particular, a great context for studying SCR. First, pharmaceutical companies are highly accountable to society, as they play a crucial role in the global economy through their research and development of innovative medicines and services (Yousefi *et al.*, 2017; Leisinger, 2009). However, very few studies have examined CSR in this sector (LaVan *et al.*, 2021), with the majority having focused on the CSR reporting system rather than CSR as a strategic tool (Luu, 2020; Cook *et al.*, 2018). Second, this dynamic sector is made up of a diverse group of stakeholders, including patients, regulators, health professionals, and shareholders, all of whom require different attention. Building the capacity to provide

people with affordable medicines and appropriate services has been particularly crucial in developing countries over the last two decades (Mehralian and Shabaninejad, 2014a). As a result, pharmacies have significantly increased their CSR initiatives to address any social concerns related to these efforts. CSR initiatives are particularly important for the pharmaceutical sector in general because the day-to-day operations of these companies directly affect human well-being. Third, epidemiological shifts have further magnified the pressure on pharmaceutical companies to actively work to promote societal well-being. Demand for health services has increased substantially since the beginning of the COVID-19 pandemic; however, in countries with less regulations on healthcare products, many citizens have attempted to treat themselves and others with self-concocted sanitizers and medications. Given that pharmacies are widely available in Iran, they are generally the first place people go to fulfill their health needs, which creates an extraordinary work load for pharmacists and their assistants. Under these circumstances, pharmacies are expected to provide services in a socially responsible manner, not only to fulfill their social responsibility to society by reducing spread of illnesses and self-concocted therapies, but also to create conditions conducive to enhancing customer loyalty. Notably, pharmacies are also a major source of reliable information related to the prevention, detection, treatment, and management of coronavirus infections. It is quite obvious that pharmacies provide services that directly influence the health status of people in a society (Mehralian *et al.*, 2014b), which makes them an ideal context for studying CSR initiatives in the services sector, particularly during the COVID-19 pandemic.

The contribution of this research is threefold: first, this study tests its hypotheses exclusively within the context of the pharmacy environment; second, it presents a conceptual model designed to determine whether customer-pharmacy identification and trust mediate the relationship between CSR and customer loyalty; and third, the questionnaire developed for this work can be adapted for use in other settings. The theoretical background of this work and the hypotheses that will be tested are presented in the next section. With the theoretical background and hypotheses established, we then detail the research methodology, followed by a discussion of the results and some concluding remarks.

2. Theoretical background and development of hypotheses

This section contains a discussion of the literature related to the present research, as well as the development of the hypotheses that will be investigated.

2.1. Corporate social responsibility and customer loyalty (CSR-CL) relationship

The concept of CSR has been extensively studied by social scientists since the 1950s. Although a wide range of definitions have been provided for this concept, Carroll's (1991) holistic definition has gained wide acceptance among scholars. As stated by Carroll (1991), CSR refers to for-profit companies' economic, legal, ethical, and philanthropic responsibilities to society. A growing body of literature has adopted Carroll's definition, as it emphasizes not only a company's obligations to its community, but also systematically establishing a strategic alliance between profits and societal concerns (Perrini *et al.*, 2007; Yin and Jamali, 2016). Despite the growing adoption of Carroll's definition, there remains no universally accepted definition of CSR. For example, Lantos (2001) suggests that CSR consists of three dimensions—the ethical, altruistic, and strategic dimensions—and further argues that, by adapting CSR activities to its goals, a company can improve its corporate image and increase motivation and loyalty among shareholders, employees, customers, and society in general.

Loyalty is the best metric of customers' satisfaction with corporate performance, and it is closely linked to company profitability (García de los Salmones and Rodríguez del Bosque, 2011). Customer loyalty can be defined as a deep feeling of commitment to consistently re-purchase a product or service or re-patronize a business in the future, regardless of circumstances or marketing attempts to change this preference (García de los Salmones and Rodríguez del Bosque, 2011). Most companies have developed programs that reward customer loyalty with incentives, both financial and otherwise (Sharp and Sharp, 1997). Such perks can affect customers' purchasing behaviors, influence perceptions of social status, and enhance their relationship with the company (Henderson *et al.*, 2011). For instance, Vlachos *et al.*'s (2009) findings revealed a positive relationship between consumer perceptions of a business' CSR activities and their intentions to re-patronize or recommend that business to others. Similarly, Pérez and Del Bosque (2015) found that customer loyalty is significantly influenced by CSR practices in the banking sector. Thus, the first hypothesis is formulated as follows:

***H1:** Corporate social responsibility has a significant and positive association with customer loyalty.*

2.2. The mediating impact of customer-company identification (CCI) on the CSR-CL relationship

The concept of CCI originates in Social Identity Theory (SIT). Based on this theory, people construct a sense of self-development based on their social identities (Tajfel, 1974), which often consist

of memberships in different social categories and associations in different organizations. Organizational identification is formed when an individual develops a sense of connectedness with an organization and begins to associate themselves with it (Ashforth and Mael, 1996). In general, customers tend to try to maintain a positive sense of self (Tajfel, 1974), often using company identities to promote their psychosocial perception (Bhattacharya *et al.*, 1995). Therefore, organizational identification can be defined as the extent to which a person's self-cognition and perception of an organization support each other (Bhattacharya *et al.*, 1995). The development of social identification fosters customer satisfaction and loyalty based on recognized self-enhancement through the expression of a positive self-concept to society (Tajfel, 1974). Achieving identification also requires the effective communication of the company's identity. To enhance organizational identification, firms should engage their stakeholders by applying strategies such as CSR practices and increasing the visibility of highly desirable organizational attributes (Dutton *et al.*, 1994).

A growing number of articles show that CCI leads consumers to have: higher levels of interest in and emotional commitment to the company (Algesheimer *et al.*, 2005; Martínez and Del Bosque, 2013); more positive assessments of the company (Bhattacharya and Sen, 2003); a greater sense of loyalty to the company (Lichtenstein *et al.*, 2010); and higher purchase intentions (Ahearne *et al.*, 2005). Maignan and Ferrell, (2004) proposed that CSR practices impact consumers' attitudes and commitment, thereby influencing their purchasing intentions. In fact, as a mechanism of expressing corporate personality due to social values, CSR practices are able to generate CC. Overall, prior findings have supported the existence of a strong association between CSR practices and CCI (Lichtenstein *et al.*, 2010; Martínez and Del Bosque, 2013). In addition, the influence of CCI on customer loyalty has been well documented in the relevant literature (Batra *et al.*, 2012; Stokburger-Sauer *et al.*, 2012). However, as noted above, the mechanisms by which CSR influences customer loyalty within a pharmacy context remain largely under-researched. Given that pharmacies provide their communities with healthy goods and services, if properly developed, CCI can significantly contribute to individual health over time, leading to a healthy society. Therefore, the following hypotheses are proposed:

H2a: *Corporate social responsibility has a significant and positive association with customer-company identification.*

H2b: *Customer-company identification has a significant and positive association with customer loyalty.*

H2c: Customer-company identification has a significant mediating effect on the relationship between CSR and customer loyalty.

2.3. Customer trust mediating effects on the CSR-customer loyalty relationship

Based on the stakeholder theory, CSR practices may enhance brand image, not only for customers, but also for employees and other stakeholders (Freeman *et al.*, 2010). Therefore, such practices can subsequently enhance customer trust, employee commitment, and retention rates. Given these relationships, it can be inferred that CSR practices affect businesses performance indirectly.

By definition, customer trust is the belief that providers of products or services will strive to act in a manner that serves its customers' long-term interests (Crosby *et al.*, 1990). It is known that trust is a prerequisite in establishing and maintaining long-term company-customer relationships (Morgan and Hunt, 1994). As observed by Reichheld and Schefter (2000), gaining the trust of customers is paramount to obtaining their loyalty. In addition, Sirdeshmukh *et al.* (2002) argue that customer trust consists of two components: performance and benevolence. The performance component refers to the extent to which a customer believes that the company is able to offer the promised information, products, or services, while the benevolence component reflects the degree to which the customer believes that expressions of care, concern, and honesty on the part of the company are genuine, and that they play a key role in day-to-day decision making. In contrast, Hess (1995) argues that trust can be operationalized in three dimensions: altruism, honesty, and reliability. Altruism refers to selfless acts by individuals intended to benefit others or the community, despite potential harm to one's self (Nagel, 1978), while honesty refers to the refusal to pretend that facts of reality are other than what they are. In a corporate context, honesty refers to the quality of a proposition, particularly its ability to demonstrate the integrity and consistency of an organization's behavior (Becker, 1998). Cox *et al.* (2006) define reliability as an organization's ability to avoid failure via active management strategies for controlling and minimizing the intrinsic risks that make various technical operations vulnerable to failure, rather than simply relying on good fortune.

It is widely accepted that CSR contributes to customer trust, which in turn increases loyalty. Customer trust is mainly achieved when companies communicate well with their customers and listen to their concerns and priorities. It has been argued that CSR practices have the greatest impact on trust, as these practices consist of activities that demonstrate the company's concern for social issues, rather than simply profits. If well-formed, customer trust has great potential to boost customer loyalty. For example, Martínez and Del Bosque (2013) presented a model showing the effects of CSR on customer loyalty at

Spanish hotels. Notably, their model showed that customer loyalty was positively mediated by trust, customer identification, and customer satisfaction. Similarly, Choi and La (2013) examined the mediating impact of consumer trust on the relationship between CSR and consumer loyalty among undergraduate business students; thus, their findings showed that CSR practices had an indirect effect on loyalty through customer trust. Therefore, we propose that consumer perceptions of a business' CRS efforts will be a critical factor in promoting customer loyalty. As such, we propose the following hypotheses:

H3a: Corporate social responsibility has a significant and positive association with customer trust.

H3b: Customer trust has a significant and positive association with customer loyalty.

H3c: Customer trust has a mediating effect on the relationship between CSR and customer loyalty.

1. Methods

3.1. Research model

The conceptual model and research hypotheses used to investigate the impact of CSR on customer loyalty are shown in Figure 1.

“Insert Figure 1 About Here”

3.2. Research tools and measures

A 5-point Likert scale anchored at 1 (complete disagreement) and 5 (complete agreement) was used to measure CSR, CCI, trust, and customer loyalty. Given the prior research works along with the available literature, CSR practices were measured with respect to their impact on society, employees, and customers using 5, 5, and 7 items, respectively. It is important to note that, in this study, we conceptualized CSR as second order construct. As there were no existing measurement items for CSR within a pharmacy context, we developed customized items to measure CSR in this context based on a selection of prior studies (Martínez and Del Bosque, 2013; Pérez and Del Bosque, 2015; Salton and Jones, 2015; Yin and Jamali, 2016). To this end, an extensive literature review was conducted to identify all potential items, which were then categorized based on the framework proposed by Pérez and Del Bosque (2015). Once the items had been categorized, we enlisted the help of experts to thoroughly scrutinize the proposed scales. In this research, a multidimensional perspective was employed to

measure customer trust. Specifically, trust consists of three sub-dimensions: altruism, honesty, and reliability. In total, 11 items were used to measure the trust variable: 3 items for altruism, 4 items for honesty, and 4 items for reliability (Hess, 1995; Perepelkin and Zhang, 2011). CCI was measured by adapting five items from Pérez and Del Bosque (2015). Based on the literature and expert opinions, it was determined that customer loyalty (i.e., recommendation behavior and repurchase behavior) could be measured using four items (Chen and Fu, 2015; Kasiri *et al.*, 2017; Sirdeshmukh *et al.*, 2002). However, we also developed additional questions aimed at obtaining more accurate data about the participants' demographic information. The experts' opinions were used to confirm the validity of the questionnaire's content. Accordingly, 10 experts in the area of pharmacy practice and social pharmacy were asked to evaluate the relevance, clarity, and comprehensiveness of the main research questions, with the final questionnaire being developed based on their feedback. The reliability of the items was ensured by calculating the Cronbach's alpha with the help of the initial data gathered in the pilot study. Table 1 shows the reliability results for all measurement items and scales.

“Insert Table 1 About Here”

3.3. Sampling design and collection of data

As mentioned earlier, the present work focuses on the context of community pharmacies, as they are among Iran's most common and socially-oriented small business entities. Like other healthcare professionals in Iran, pharmacists have played a key role during the COVID-19 pandemic by interacting directly with the community, continuing to assist in the care of chronic diseases, and providing pharmaceutical services to COVID-19 patients. Community pharmacists provide their services as part of a multidisciplinary team, either through a collaborative practice agreement, or as a part of the patient's healthcare team.

The statistical population of this project consisted of customers who frequent community pharmacies in Tehran. Due to Tehran's considerable geographic variation and its abundance of community pharmacies, data were collected via multi-cluster sampling. The sample size was determined using the Cochran formula, which is one of the most commonly used methods for calculating optimal sample sizes. Based

on these results, eight pharmacies from each of Tehran's 22 districts were selected for participation, with three questionnaires being collected from each pharmacy. Customer data was acquired via face-to-face interviews conducted by research team members who had received training on the principles of social surveys. In total, 528 questionnaires were completed and returned, with the research period running from April 2020 to August 2020.

Over half of the respondents were men (58.8 percent), and 32.3 and 23.5 percent of participants were between 26-35 and 36-45 years old, respectively. Most customers (55.0 Percent) had visited the pharmacy within the past month. Furthermore, 21.3 percent of respondents reported obtaining products or services from the pharmacy within the past one to six months, while 13.8 percent said they had done so within the past seven to 12 months. With respect to education, 60.8% of customers reported having a high school diploma, 30.8% held a bachelor's or master's, and the rest had completed a doctorate degree or higher.

3.4. Statistical approach

After checking the data distribution normality, the research structure and framework was analyzed via multiple regression analysis, as it is powerful method of predicting the unknown value of a variable based on the known value of two or more other variables (Roediger *et al.*, 2001; Wei and Lau, 2010). The proposed research model was tested using the SPSS version 24 statistical software package. This package was mainly selected for its ability to estimate and test the proposed research model and the identified causal relationships.

2. Results

4.1. Common source bias

Since all information relating to the studied variables was provided by customers, a number of methods were employed to restrict the possibility of common source bias (Podsakoff *et al.*, 2003). Firstly, the participants were assured that their responses would be kept anonymous and confidential to mitigate the likelihood that they would provide socially desirable responses due to fear of reprisal or other negative consequences. Secondly, filter items were included in the questionnaires to reduce any perceptions of associations among the constructs. Finally, the Harman (1976) one-factor test was applied to assess common method variance (Podsakoff *et al.*, 2003); this test was able to explain 37.25% of the total variance. Therefore, common method variance was not a significant concern in the present study.

4.2. Assessing the measurement model

Cronbach's alpha was independently applied to all of survey constructs as it is a well-known technique for testing the reliability of research instruments. The results confirmed that all sections were in the admissible range (>0.70). In addition, the selection of the factors was congruent to the criteria recommended by Kaiser (1958), namely, an Eigenvalue >1 and an absolute factor loading value >0.5 . The Kaiser-Meyer-Olkin (KMO) value was then applied to determine whether the data set was suitable for factor analysis. For this test, values over 0.5 were regarded as satisfactory (Mehralian *et al.*, 2014c; Valmohammadi, 2011). The psychometric properties of the studied constructs were further tested via confirmatory factor analysis, with the results confirming an acceptable fit between the model and the data ($\chi^2/df = 1.27$, CFI (comparative fit index) = 0.92, IFI (incremental fit index) = 0.91 and RMSEA (root mean square error of approximation) = 0.052). Convergent validity was assessed by considering the factor loadings as well as the t-values. The results of this analysis showed that all multi-item constructs met the acceptable threshold, with the factor loading being significantly related to its underlying factor (t-values less than -1.96 or greater than 1.96) (Fornell and Larcker, 1981). Furthermore, discriminant validity was assessed using Fornell and Larcker's (1981) method, where the AVE for every construct must be greater than the construct's squared correlation with any of the other constructs.

4.3. Descriptive statistics and the results of hypotheses testing

Table 2 shows the means, standard deviations, and correlations between variables. As can be seen, CSR was positively correlated with CCI ($r = 0.87$, $p < 0.01$), customer trust ($r = 0.53$, $p < 0.01$), and customer loyalty ($r = 0.79$, $p < 0.01$). Similarly, CCI and customer trust were positively correlated with customer loyalty. The variance inflation factor (VIF) expresses the multicollinearity intensity in a typical least squares regression analysis. Additionally, the VIF provides an index that quantifies increases in the variance of a specific estimated regression coefficient due to collinearity (Liao and Valliant, 2012). Notably, the obtained VIF values indicate that there was no serious collinearity effect.

“Insert Table 2 About Here”

Multiple regression analysis was performed to test the effects of CSR, CCI, and customer trust on customer loyalty (as a dependent variable). The results of these tests are shown in Table 3. In the first model (M1), the initial step involved entering the control variables into the model, followed by the

addition of the independent variables in the subsequent steps (M2, M3, and M4). Model 1 showed a positive significant effect of age (0.10, $p < 0.05$) and number of pharmacy visits (0.18, $p < 0.01$), and a negative significant effect of education (-0.12, $p < 0.05$), on customer loyalty. Next, CSR was entered into the regression analysis as the independent variable (Model 2). The results showed that CSR has a positive and significant effect on customer loyalty (0.77, $p < 0.01$), thus confirming H1. In Model 3, the effect of CSR on customer loyalty slightly decreased when CCI was entered as an additional independent variable, which confirms H2. The Sobel (1982) test was applied to further verify these mediating effects, with the results confirming the mediating impact of CCI on the relationship between CSR and customer loyalty ($z = 2.95$, $p = .018$). The last model (M4) investigated the mediating effect of customer trust on the relationship between CSR and customer loyalty. Similar to M3, the correlation between CSR and customer loyalty decreased after entering CSR and customer trust into M4 as independent variables. Once again, the Sobel (1982) test was implemented to verify the mediating effect of customer trust on the CSR-CL relationship, and, once again, the results supported this effect ($z = 2.44$, $p = .007$), thus confirming H3.

“Insert Table 3 About Here”

3. Discussion

Given the potentially significant contributions of CSR activities within the current global context, the present research sought to understand how such practices have affected the loyalty of pharmacy customers, particularly during the COVID-19 pandemic. To address this question, three main pathways were introduced and tested. The results revealed that CCI and trust mediate the relationship between CSR and customer loyalty.

H1 demonstrates that CSR practices that address the concerns of society, customers, and employees result in meaningful improvements in customer loyalty. Thus, H1 establishes that customer loyalty is largely rooted in customer perceptions about a business' CSR practices. For example, if a pharmacy's CSR initiatives are focused on environmental conservation, customers who share such concerns will be more likely to manifest their loyalty via repurchasing behaviors and word-of-mouth recommendations. In addition, pharmacies' efforts with respect to patient education and the proper use of medicines has great potential to create a positive image for these businesses. Indeed, the results of numerous studies have shown (e.g., S. Kim, 2019; Vlachos *et al.*, 2009) that customers tend to exhibit a greater preference (i.e., view more positively) for pharmacies that prioritize patient education.

H2 was confirmed by the findings demonstrating that CCI mediates the influence of CSR practices on customer loyalty. That is, businesses—in this case, pharmacies—that strive to build good relationships with their customers, listen to their concerns, communicate well, and show them respect are able to foster stronger CCI. Consequently, this increased CCI can bring about changes in customer behavior in relation to repurchasing intentions and word-of-mouth recommendations (Martínez and Del Bosque, 2013).

Given the critical role of trust in customer retention, a growing number of scholars have turned their focus to examine its role in business performance (Choi and La, 2013; Reichheld and Scheffer, 2000; Sirdeshmukh *et al.*, 2002). The confirmation of H3 establishes that customer trust positively mediates the effect of CSR practices on customer loyalty. This finding provides a deeper understanding of CSR initiatives within the pharmacy context, and they mirror those of studies performed in other sectors (e.g., García de los Salmones and Rodríguez del Bosque, 2011; Sirdeshmukh *et al.*, 2002; and Vlachos *et al.*, 2009). As our findings show, customers are more likely to have higher levels of trust for pharmacies that are perceived as being honest and responsible in their delivery of services and decision making. Therefore, concentrating on CSR activities can be effective in enhancing trust between pharmacies and their customers. However, as Keh and Xie (2009) have argued, the contribution of trust may not persist in the long-run, and may be highly dependent on other factors.

4. Managerial implications, conclusion, and further research

This research has produced a number of key findings. First, CSR is widely recognized as an important tool in managing not only large enterprises, but also small ones, as their survival highly depends on it. To maintain and expand their businesses, pharmacy managers should develop CSR strategies, encourage their staff to implement them, and inform the community about these efforts as much as possible, as such actions can substantially increase customer loyalty, in addition to attract new customers.

Second, given the critical role of CSR in the development of CCI, CSR can be a highly useful instrument in establishing and strengthening close communication with customers. Pharmacy managers can use this tool to gain a better understanding of their customers' concerns and how they can meet their needs properly, thus leading to better performance. This work contributes to the body of CSR communication research by focusing more intently on how service providers can harness CSR communication to meet customer expectations.

Third, considering the important role of CSR in establishing customer trust, the implementation of CSR strategies is a great approach to improving customer loyalty and building a long-term customer-business relationships. Hence, pharmacy managers should implement CSR initiatives in order to maintain and grow customer trust, which will in turn help to foster stronger long-term relationships. Finally, our proposed model serves as a framework that provides better insights into how the careful implementation of CSR practices can allow pharmacies to build customer loyalty. In terms of practical applications, this research suggests that community pharmacy managers can improve their business' financial and non-financial performance by engaging in CSR activities that not only address social concerns, but that also promote customer identification and strengthen customer trust, which can in turn foster long-term customer loyalty (Henderson *et al.*, 2011). With regards to implementation, , pharmacies managers should routinely measure how effective their CSR activities are at building customer trust.

As Maignan and Ralston (2002) notes, customer expectations of CSR are significantly influenced by their cultural context. Therefore, future research should consider other cultural contexts to expand the generalizability of our findings. In addition, to address the limitation of cross-sectional bias, further research using the experimental or lagged-time method to collect data is recommended. Moreover, future research should also examine the views of other stakeholders, such as physicians and nurses, to better understand the implications of CSR initiatives by pharmacies. This study focused a single industry, pharmacy practice; as such, future research could explore whether our findings hold in other service industries with different levels of communication and customization, such as the grocery and restaurants sectors.

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Table 1 Measurements items and scale reliability

Variables		Measurement Items	Factor loading	AVE	Cronbach's alpha	t-value	
Corporate Social Responsibility	Society	Help solving social problems (such as Covid-19, addiction, and microbial resistance)	0.76	0.58	0.74	2.59	
		allocate financial resources to cultural as well as social events	0.63				
		Help increasing health literacy within the society	0.76				
		Preserving the environment (through the management of medicines and nylon waste)	0.52				
		Donates a portion of social budget or spends it on social projects to improve the conditions of the most deprived groups in the community (donating face-Mask and disinfectant)	0.76				
	Employee	Low rate of workforce turnover shows job security	0.77	0.52	0.81	4.58	
		Paying attention to the safety and health of pharmacy staff	0.75				
		Shows fair treatment toward its workforce (with no discriminations or abuses)	0.83				
		Provides its workforce with training as well as professional opportunities	0.53				
		Warmth and cheerful climate of the pharmacy	0.54				
	Customer	Treats its customers honestly	0.73	0.59	0.79	7.51	
		Respecting secrecy when dealing with customers	0.62				
		Providing customers and patients complete information	0.51				
		Properly recognize and consider customers' concerns	0.58				
		Taking ethical principles when dealing with customers	0.82				
		Takes satisfaction of the customers into account to promote marketing of the products or services	0.59				
		Devises processes through which the customers' complaints are addressed	0.54				
	Customers-Pharmacy Identification	Having mutual friendship and respect with my pharmacy	0.81	0.56	0.73	14.19	
		My pharmacy matches my personal traits	0.76				
		I am satisfied with being a customer of my pharmacy	0.82				
		I feel closely linked to my pharmacy	0.78				
Telling other people about being a customer of this pharmacy		0.55					
Customer Trust	Altruism	Looking to improve pharmacy's response to customers' needs	0.54	0.66	0.84	13.97	
		Considering customers interests when problems arise	0.58				
		Making sacrifices for customers in the past	0.62				
	Honesty	Protecting customers' right of choice	0.68			0.74	13.62
		Being sincere with consumers	0.71				
		Bing honest in dealing with customers and not making false claims	0.74				
		Being honest about the problems such as delays	0.72				
	Reliability	Trust in the quality of this pharmacy's products	0.59			13.75	

		Being consistent in terms of pharmacy's policies	0.81			
		Having a suitable guarantee in case of products' defects	0.79			
		Making reliable promises to the pharmacy's customers	0.56			
Customer Loyalty		Recommending this pharmacy to others	0.78	0.59	0.76	10.67
		Repurchasing from this pharmacy at future	0.75			
		Collaborating with this pharmacy as much as possible in receiving services and goods	0.83			
		Positive attitude to the quality of the pharmacy services in comparison with other pharmacies	0.68			

Table 2 Means, SD, and correlation Matrix

	Variables	Mean	SD	1	2	3	4	5	6	7
1	Age	37.51	14.75	1						
2	Education	2.2	0.91	0.36*	1					
3	The number of visits	1.79	1.02	0.37*	-0.06	1				
4	CSR	3.35	0.81	0.16*	-0.29*	0.20*	1			
5	CCI	3.31	0.98	0.16*	-0.28*	0.22*	0.57*	1		
6	Customer trust	3.65	0.52	0.02	-0.05	-0.02	0.53*	0.47*	1	
7	Customer loyalty	3.28	1.01	0.17*	-0.01	0.23*	0.59*	0.54*	0.58*	1

*. P <0.01 (2-tailed) was considered as the level of significance.

Table 3 Results of Regression Analysis Predicting customer loyalty^a

Variables	M1	CCI (H2a)	Trust (H3a)	Customer loyalty		
				M2 (H1)	M3 (H2b-H2c)	M4 (H3b-H3c)
Age	0.10*	0.008	0.05	0.02	0.01	0.02
Education	-0.12*	-0.036	-0.02	-0.06	-0.03	-0.61*
Number of visits	0.18**	0.041	-0.07	0.06	0.03	0.06
CSR		.36**	0.22**	0.47**	0.32**	0.28**
CCI					0.38**	
Trust						0.22**
R ²	0.27	0.26	0.24	0.24	0.25	0.26
Adjusted R ²	0.07	0.24	0.23	0.23	0.23	0.25
ANOVA F	10.58**	34.79**	28.24**	27.01**	22.93**	31.23**

^a Constant term involved. Standardized coefficients are indicated.

*p ≤ 0.10, **p ≤ 0.01