Brand personality and
customer trust in community
pharmacies

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Abstract

Purpose – The community pharmacy industry is an increasingly competitive sector, where independent pharmacies must compete with national and multinational chains for market share. Each pharmacy seeks to differentiate and earn customer trust. The purpose of this paper is to seek to better understand the effectiveness of differentiating via developing a unique corporate brand personality in the pursuit of customer trust.

Design/methodology/approach – A survey was conducted in a small city in Western Canada. Patients who have recently filled a prescription were asked to assess their perceptions about the brand personality of the pharmacy they last visited, and evaluate how much they trust the pharmacy. Data were analyzed using SPSS and structural equation modeling (SEM).

Findings – The results indicated that significant brand personality differences exist among various types of pharmacies. Customers rated independent pharmacies slightly more trustworthy than multinational mass merchandise and national chain pharmacies. SEM analysis revealed that sincerity and competence have the most significant impact on building customer trust.

Originality/value – The findings suggest that independent pharmacies may be able to differentiate themselves by developing a brand personality that is competent and sincere, whereby they earn the trust from their customers. The authors’ findings also suggest that a sophisticated appearance might be an expensive option that does not provide satisfactory return on the investment.

Keywords Canada, Community pharmacy, Brand personality, Customer trust, Differentiation, Competitive advantage, Structural equation models

Paper type Research paper

Introduction

There has been a noticeable trend of transformation in the landscape of the pharmacy industry in Canada. Loblaw’s, a major Canadian grocery chain with annual revenue estimated at $7 billion, has recently announced an aggressive expansion plan of its pharmacy division in the province of Ontario (Strauss, 2010). It is not alone. Large national and multinational corporations are gaining a larger portion of market share. Small independent community pharmacies are struggling to survive in the increasingly competitive pharmacy industry.

According to mainstream theories on corporate competitive strategies, such as Porter’s (1985) theory of competitive advantage, differentiation is one of the most effective and frequently deployed strategies. Several scholars have examined service quality and customer satisfaction in the context of retail pharmacy (Johnson et al., 1998;
Larson and MacKeigan, 1994; Schommer and Kucukarslan, 1997) and highlighted the need to adapt general marketing constructs, such as service quality and customer satisfaction to the unique environment of the pharmacy industry. Prior studies have indicated that another way of seeking differentiation is to develop a corporate brand (Anisimova, 2007; Davies, 2008; Keller and Richey, 2006). In this paper, we attempt to investigate the roles that perceived brand personality and customer trust play in the context of retail pharmacy.

The theory of brand personality asserts that brands often evolve into a state where consumers perceive them to have certain characteristics, much like human personality traits (Aaker, 1997). While brand identity is a common theme in consumer research, little has been done in the context of retail pharmacies. The few scattered studies on the brand identity of community pharmacists and the pharmacy profession were typically secondary to other research objectives.

Our study is intended to investigate what brand differentiation strategies independent community pharmacies might employ to compete in such a context. We are interested in examining long-term strategic alternatives that independent pharmacies can employ to differentiate. More specifically, this paper seeks to find the answers to two research questions. First, we seek to identify whether consumers perceive different types of pharmacies to have different brand personalities. Second, we attempt to examine the effects of brand personality types on customer trust and which type of brand personality customers trust more.

We chose to investigate the competitive dynamics among pharmacies in a small city in Western Canada. This city has a population of approximately 40,000 residents. It is located about 150 kilometers from a major center of the province. We believe that this selected setting is appropriate because this smaller city is isolated enough that consumers typically fulfill their pharmaceutical needs within the city; and it is small enough that most residents are aware of the only independent pharmacy in town. Our study included four pharmacies in the city – each possessing unique characteristics:

1. a pharmacy that is a department within a multinational mass merchandiser (Mass);
2. a franchised store of a national specialty pharmacy chain (Chain);
3. a pharmacy located within a multinational supermarket chain (Super); and
4. a local independent, owner-operated community pharmacy located in a downtown shopping mall (Indie).

While we do not take a particular stand against national and multinational corporations, we are particularly interested in understanding how small- to medium-sized enterprises, in this case a local independent pharmacy, compete with much stronger national and multinational corporations.

**Pharmacy management**
Pharmacies play an important role in the delivery of healthcare services (Gebauer, 2008). Pharmaceutical drug expenditures account for approximately 10 percent of healthcare costs in the USA (Rizzo and Zeckhauser, 2009). In Canada, pharmaceutical drug expenditures in 2008 accounted for 17.4 percent of healthcare costs, or $29.8 billion (Canadian Institute for Health Information, 2009). The healthcare industry has been
criticized for lagging behind other industries in creating innovative new products and services that address quality (Borkowski and Gordon, 2005). Phillips and Garman (2005) argued that while healthcare organizations are under tremendous pressure to control costs and continue to deliver high-quality care, structural and cultural barriers in healthcare organizations have impeded entrepreneurial behaviors. By removing such barriers, healthcare organizations would be able to secure alternative revenue sources and encourage entrepreneurial and intrapreneurial activities that are compatible with the traditional mission of the healthcare industry to provide the best healthcare possible. Furthermore, healthcare organizations need to transform their administration, build trusting relationships with stakeholders, and communicate better the concept of change (Borkowski and Gordon, 2005).

Many researchers have paid close attention to community pharmacies, and seen them as a special category within the retail industry. A prior study has revealed even many pharmacists would perceive that consumers view them as being analogous to grocers (Kisa et al., 2007).

In the broader retail industry context, researchers have documented, early on, the move from small independent retail stores to large superstores and hypermarkets (Whimster, 1981). Parker (1985) noted that small independent retail stores faced considerable problems due to the rapid growth of multiple supermarket companies. Empirical evidence has demonstrated that small independent retail stores can thrive in a fiercely competitive environment as long as they find an effective way to differentiate themselves from large competitors (Kiker and Kiker, 2008).

More recently, the retail pharmacy industry has undergone a similar trend of consolidation. Deregulation and competition from supermarkets, mass merchandisers, and other corporate chains have placed great pressure on independent community pharmacies (Schmidt and Pioch, 2005). It has been argued that independent community pharmacies must move away from inward-looking reactive and short-term approaches, and instead make use of opportunities of differentiation (Schmidt and Pioch, 2005). Location alone cannot promise a captured audience, as consumers are willing to travel longer distances to support stores that are perceived as better (Hodgson and Jacobsen, 2009). Many community pharmacists have undertaken the dual roles of retail business person and healthcare professional (Resnik et al., 2000). Because of this, researchers believe these community pharmacists are better positioned to understand the intrinsic relationship between satisfying customer needs and maintaining business profitability (Schulz and Brushwood, 1991).

Many pharmacists prefer to work with independent community pharmacies as a prior study has shown that pharmacists who primarily work in independent pharmacies have a more positive association with professionalism, work environment, and self-image than their counterparts in chain stores (Szeinbach et al., 1994). Eventually, many pharmacists want to have their own independent pharmacies (Kisa et al., 2007). Therefore, it appears that even though the rapid growth of corporate chain pharmacies has put considerable pressure on independent community pharmacies, there is still a raison d’être for independent community pharmacies because they are special. Considering the vast resources that the corporate chains possess, the independents must develop unique and effective competitive strategies to differentiate themselves in order to survive. Branding could have been one of such strategies.
Brand personalities of pharmacies

A brand is a symbol that encapsulates the associations made with a name (Gardner and Levy, 1955). Brand image concerns the remembered associations held of a brand; while brand personality is the human associations made with a brand (Aaker, 1997; Davies, 2008; Keller, 1998). Corporate brand personality is a form of brand personality specific to a corporate brand, and reflects the values and actions of the corporation and business (Keller and Richey, 2006).

A significant relationship exists between the consumer-perceived corporate brand and consumer attitude and loyalty. Corporate brand personality is one of the most critical and consistent predictors of both attitudinal and behavioral loyalty to that brand (Anisimova, 2007). Preserving and reinforcing the essence of brand personality can ensure the long-term viability of a brand’s equity (van Rekom et al., 2006). For example, Sung and Yang (2008) investigated corporate brand personality in a university context. They demonstrated that corporate brand personality is positively associated with outwardly perceived prestige and reputation, and has a positive influence on supportive customer attitudes. Davies (2008) argued that corporate branding and personality also impact internal stakeholders. He found, for example, that an agreeable corporate personality predicts employee satisfaction; the combination of perceived expertise and attractive corporate personality would enhance employee perception; of both differentiation and loyalty.

In the face of increased competition, independent stores need to develop distinctive competencies (McGee and Peterson, 2000). Under competitive environment, retail branding has been identified as an effective tool for independent pharmacists and pharmacies to improve their competitive positions (Schmidt and Pioch, 2005).

While little is known about how corporate brand personality applies to pharmacies, some investigative work has been done in closely related fields. Prior research has found that consumers often use corporate brand and brand personality as signals when assessing food and health information (Karstens and Belz, 2006). Consumers prefer stronger brands in retail stores; they will make more frequent visits, more purchases, and pay price premiums if they make a strong association and identification with a certain brand of retail stores (Henderson and Mihas, 2000). Therefore, for a small local independent pharmacy to survive among several national and multinational chains of pharmacies, it does not seem to be logical to engage in direct price competition. Instead, it would be much more effective for the independent pharmacies to differentiate themselves by developing a unique corporate brand personality, provided that customers can actually detect the differences in corporate brand personalities among various types of pharmacies:

\( \text{H1}. \) Customers perceive that independent community pharmacies have a different corporate personality than chain stores.

Customer trust toward pharmacies

Since various types of community pharmacies have unique corporate brand personalities, we need to examine which type of personality is more trustworthy in the views of the customers. We choose customer trust as the measurement for the performance outcome of a pharmacy because of two reasons. Practically, it is relatively difficult to obtain financial information to assess the performance of each pharmacy. Theoretically, scholars have argued that customer-based perceptual measures have
long-term lasting implications (Kohli and Jaworski, 1990). Some of these customer-based indicators include perceived service quality, customer satisfaction, and customer trust. While these are closely related constructs, we focus on customer trust in this paper as scholars have argued that merely satisfying customers is not enough, citing high defection rates even among satisfied customers (Deming, 1986; Jones and Sasser, 1995; Reichheld, 1996; Stewart, 1997). Customer trust has been highlighted as a central antecedent to a solid and lasting customer commitment (San Martin et al., 2004). Trust is an important sub-process for regulating consumer patronage and subsequent recommendation intentions (Vlachos et al., 2009). Along with customer satisfaction, customer trust is an important stepping stone for building customer relationships (Kim et al., 2009). In situations where direct physical interaction between the customer and the service provider is limited or absent, such as in an online retail environment, trust is particularly important for building long-term successful customer relationships (Mukherjee and Nath, 2007). There is a strong relationship between customer trust and customer loyalty (Cho and Hu, 2009; Eisingerich and Bell, 2007).

A prior experimental study on trust formation revealed that consumers with high involvement and high anxiety build their trust primarily via a central route of information processing; conversely, consumers with low involvement and low anxiety build their trust via a peripheral route that relies upon heuristic cues (Yang et al., 2006). Since pharmacy consumers are likely to be in a high involvement and high anxiety situation, they are more likely to rely on objective evidence to build their trust, and less likely to base their trust on subjective heuristics, such as appearance.

Few studies have specifically reported customer trust issues in the domain of community pharmacy, but some scattered evidence has emerged to show its role in health-related industries. For example, research has shown consumer trust to be a determinant of consumer confidence in food safety (de Jonge et al., 2007). As several well-publicized food scandals in recent years, such as the 2008 Maple Leaf Foods listeriosis incident (Attaran et al., 2008), have shown, providing information to consumers is crucial but not sufficient. Building consumer trust has become an important goal for companies that have direct impact with consumer health (Meijboom et al., 2006). In the context of genetically modified foods, Huffman et al. (2004) showed that consumers are often bombarded by contradictory information from various sources, and better educated consumers are more likely to trust independent third-party information sources. Mancilla and Biedermann (2009) argued that with growing use of technology for creating, maintaining, and transmitting health information, complicated by an inherent consumer distrust of these systems and increasing privacy concerns, it is critical for healthcare professionals, including pharmacies, to build trust with consumers.

Patient counseling is a cornerstone of ethical pharmacy practice and high-quality pharmaceutical care, as counseling promotes patient compliance with prescription regimens and prevents dangerous drug interactions and medication errors (Resnik et al., 2000). However, economic, social, and technological changes in pharmacy practice often require pharmacies to fulfill their professional obligations of providing adequate counsel to their patients while maintaining business operational efficiency. Research has shown that competence and credibility have high explanatory power as antecedents of trust, which has a considerable impact on value chain relationships, consumer word-of-mouth behaviours, and purchase intentions (Sichtmann, 2007).
As such, we believe a pharmacy with a perceived “competent” type of brand personality would earn a higher level of customer trust:

H2. Customers perceive higher levels of trust in pharmacies that are competent.

Research method

Research setting

Prior studies in branding have commonly used surveys and interviews to investigate consumer perceptions. In this study, we used a survey method to test consumers’ experiences with, attitudes toward, and knowledge about, various retail pharmacies. Using computer-aided telephone interview technology, we randomly contacted residents in a small city in Western Canada with a population of approximately 40,000. We chose such a setting because the smaller size increases the chances of an independent pharmacy being recognized by the population. In larger cities, multiple independent community pharmacies exist. Consumers might be more likely to recognize and use only the independent pharmacy in close proximity of their residence or place of employment. Furthermore, each of these independent pharmacies would have different levels of service quality and brand personality. In the small city we selected, most people would know this independent pharmacy (hereafter referred to as the Indie) in town. Three other pharmacies were selected to be part of this study:

(1) the pharmacy department within a multinational mass discount merchandiser (hereafter referred to as the Mass);
(2) a large free-standing pharmacy specialty store being the local franchise of a large Canadian national pharmacy chain (hereafter referred to as the Chain); and
(3) the pharmacy department of a large international supermarket (hereafter referred to as the Super).

These four pharmacies all cater to retail customers, hence are community pharmacies. The fifth pharmacy in the city is a department of the local general hospital. It does not directly serve walk-in customers, hence excluded in this study.

Sample

We randomly selected 1,000 individuals from the digital local telephone directory. The decision of selecting 1,000 names is based on considerations for intended research power, estimated response rate, and desired research power. Insufficient power would make it difficult to detect differences, while excessive power would make even trivial differences statistically significant. In the context of this study, the power of a one-way ANOVA, for example, is a function of degrees of freedom ($\nu_b = 3$), expected effect size (medium, $\Delta = 0.5\sigma$), acceptable type-I error ($\alpha = 0.05$), and sample size. Suppose we expect to have a balanced conditions, with $n_1 = n_2 = n_3 = n_4 = 50$, the value of non-centrality parameter would be $\Phi = 1.77$. According to the power curve chart provided by Pearson and Hartley (Glass and Hopkins, 1996), the approximate power of the test would be approximately 0.82. While there is no consensus on what level of statistical power is ideal, several researchers have suggested that 0.80 would be an acceptable level of power for most statistical analyses in social sciences (Glass and Hopkins, 1996; Kline, 2005). The actual power of the test might be slightly lower if the group size is smaller or unbalanced.
For the intended structural equation modeling (SEM), the power of the test is dependent upon the number of specified parameters and sample size. For SEM, estimating power is more complicated and tedious. MacCallum and Austin (2000) surveyed over 500 published papers that used SEM and found about 20 percent of the papers had less than 100 cases in the data. Kline (2005) suggests that 200 cases would be considered as “large.” MacCallum et al. (1996) provided a rough table for estimating statistical power in SEM with degrees of freedom and root mean square error of approximation (RMSEA). A full SEM with both measurement models and structural relationships between multi-dimensional latent variables would have about 100 degrees of freedom. A sample size of 132 would yield a statistical power equal to 0.80 for a close-fit model (RMSEA = 0.08). We intended to have a sample size of 200. The actual sample size of this study is 149.

Potential respondents were first screened on the basis of age for research ethics concerns. Only those over the age of 18 years were invited to answer any further questions. Next, we screened potential respondents by asking whether they had filled prescriptions in the previous six months at one of the four pharmacies in our study. In order to assure that our participants have a reasonably accurate perception about the pharmacy they were assessing, we wanted to control that they have recently visited it. We successfully identified 351 individuals that meet our screening criteria: over the age of 18 and have had prescriptions filled within the previous six months. A total of 149 people agreed to participate in our study, yielding a response rate of 15 percent of random sample, and 43 percent of qualified sample. Among the participants, the numbers of individuals who had filled their prescription at Mass, Super, Chain, and Indie were 32, 52, 52, and 13, respectively. Demographic characteristics of the respondents indicated that our respondents came from a wide spectrum of professions and were somewhat widely distributed in terms of age and income. Using \( \chi^2 \) analysis, we compared the age and income distribution of respondents from each pharmacy with that of the whole sample. The results indicated that respondents who frequented the Indie store were considerably more likely to be older and have lower income. The patrons for the Mass store had lower than average income, but had no significant difference with regard to age (Tables I and II).

<table>
<thead>
<tr>
<th></th>
<th>Overall</th>
<th>Indie</th>
<th>Mass</th>
<th>Chain</th>
<th>Super</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>14</td>
<td>2</td>
<td>15.4</td>
<td>4</td>
<td>12.5</td>
</tr>
<tr>
<td>%</td>
<td>9.4</td>
<td>0.7</td>
<td>15.4</td>
<td>5.1</td>
<td>3.8</td>
</tr>
<tr>
<td>20-30 years</td>
<td>14</td>
<td>2</td>
<td>15.4</td>
<td>4</td>
<td>12.5</td>
</tr>
<tr>
<td>31-40 years</td>
<td>22</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>21.9</td>
</tr>
<tr>
<td>41-50 years</td>
<td>30</td>
<td>1</td>
<td>7.7</td>
<td>6</td>
<td>18.8</td>
</tr>
<tr>
<td>51-60 years</td>
<td>39</td>
<td>4</td>
<td>30.8</td>
<td>6</td>
<td>18.8</td>
</tr>
<tr>
<td>61 years and plus</td>
<td>43</td>
<td>6</td>
<td>46.2</td>
<td>9</td>
<td>28.1</td>
</tr>
<tr>
<td>Total</td>
<td>149</td>
<td>13</td>
<td>100</td>
<td>32</td>
<td>100</td>
</tr>
<tr>
<td>( \chi^2 )</td>
<td>38.14 (^a)</td>
<td>7.32</td>
<td>11.26 (^a)</td>
<td>11.93 (^a)</td>
<td></td>
</tr>
</tbody>
</table>

Notes: \(^a\)The critical value for \( \chi^2 \) is 11.07 (\( v = 5, \alpha = 0.05 \)); \(^b\)the critical value for \( \chi^2 \) is 15.09 (\( v = 5, \alpha = 0.01 \))
Measurement

Brand personality. Aaker’s (1997) brand personality scale was used to measure customers’ perceptions on the personality of each type of pharmacy in our study. Several researchers have questioned the universality of the construct, and argued for the need to develop derivative brand personality constructs that are more qualitative in nature and more specific to certain research context (Arora and Stoner, 2009). For example, Braunstein and Ross (2010) developed a brand personality typology that is specific to sports. To the best of our knowledge, there have been no pharmacy-specific brand personality scales. Aaker’s (1997) original scale remains one of the most widely employed measurement tool in diverse industry contexts including hotels (Lee and Back, 2010), toys and video games (Lin, 2010), fast food (Sophonsiri and Polyorat, 2009), or country of origin, such as India (Purkayastha, 2009). Aaker’s (1997) brand personality scale included 42 items over five dimensions, including sincerity, excitement, competence, sophistication, and ruggedness. A sincere brand means that it is perceived as honest and down-to-earth; excitement refers to being daring and spirited; a brand is perceived as competent when it is reliable and intelligent; sophisticated brands are charming and upper-class; and rugged brands are tough and outdoorsy.

Respondents were asked to rate the pharmacy that they have most frequently visited on a five-point Likert scale to indicate their degree of agreement with each item description, such as “XXX pharmacy is down-to-earth,” from 1 – strongly disagree, to 5 – strongly agree. A scale reliability analysis revealed that the measurement scale performed well on all five dimensions, with Cronbach’s alphas equaling 0.95, 0.97, 0.79, 0.96, and 0.93, respectively.

Customer trust. Hess’ (1995) perceived brand trust scale was used to measure customers’ perceived trust toward the pharmacy that they have visited most frequently. This scale includes 11 items over three dimensions (altruism, honesty, and reliability). Respondents were asked to rate the pharmacy that they had frequently visited on a five-point Likert scale to indicate their degree of agreement with each item description, such as “XXX pharmacy will do whatever it takes to make me happy,” from 1 – strongly disagree, to 5 – strongly agree. The respective sub-scales that measure altruism, honesty, and reliability dimensions demonstrated acceptable to good scale reliability, with Cronbach’s $\alpha = 0.86, 0.67,$ and $0.85,$ respectively.

Table II. Income distribution by pharmacy type

<table>
<thead>
<tr>
<th>Income range</th>
<th>Overall</th>
<th>Indie</th>
<th>Mass</th>
<th>Chain</th>
<th>Super</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $20,000</td>
<td>7</td>
<td>4.7</td>
<td>1</td>
<td>7.7</td>
<td>3</td>
</tr>
<tr>
<td>$20,000-$40,000</td>
<td>22</td>
<td>14.8</td>
<td>3</td>
<td>23.1</td>
<td>7</td>
</tr>
<tr>
<td>$40,000-$60,000</td>
<td>31</td>
<td>20.8</td>
<td>5</td>
<td>38.5</td>
<td>9</td>
</tr>
<tr>
<td>$60,000-$100,000</td>
<td>32</td>
<td>21.5</td>
<td>3</td>
<td>23.1</td>
<td>4</td>
</tr>
<tr>
<td>More than $100,000</td>
<td>25</td>
<td>16.8</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>No answer</td>
<td>32</td>
<td>21.5</td>
<td>1</td>
<td>7.7</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>149</td>
<td>100</td>
<td>13</td>
<td>100</td>
<td>32</td>
</tr>
</tbody>
</table>

$\chi^2$ statistics:

<table>
<thead>
<tr>
<th>Income range</th>
<th>Overall</th>
<th>Indie</th>
<th>Mass</th>
<th>Chain</th>
<th>Super</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $20,000</td>
<td>47.40$^b$</td>
<td>21.00$^b$</td>
<td>13.34$^a$</td>
<td>5.90</td>
<td></td>
</tr>
</tbody>
</table>

Notes: $^{a}$The critical value for $\chi^2$ is 11.07 ($\nu = 5, \alpha = 0.05$); $^{b}$the critical value for $\chi^2$ is 15.09 ($\nu = 5, \alpha = 0.01$)
Results

Comparing means using ANOVA. We contrasted the four types of pharmacies on each of the five dimensions using ANOVA. The results indicated that statistically significant differences existed among the various stores along the competence \((F = 3.45, p = 0.02)\) and sincerity \((F = 2.96, p = 0.03)\) dimensions (Tables I and II). A posthoc Tukey test was used to detect pair-wise honest significant differences. The results indicated that Super scored significantly higher than Chain on sincerity (mean difference = 0.40, \(p < 0.05\)) and competence (mean difference = 0.35, \(p < 0.05\)) dimensions.

The differences in other dimensions were not statistically significant. Therefore, \(H1\) is partially supported. The means scores of each pharmacy on each dimension of the measure and subsequent ANOVA results are reported in Table III.

<table>
<thead>
<tr>
<th>Brand personality measures</th>
<th>Indie</th>
<th>Mass</th>
<th>Chain</th>
<th>Super</th>
<th>ANOVA F-value</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sincerity (Mean)</td>
<td>4.4601</td>
<td>4.0898</td>
<td>4.0007</td>
<td>4.3985</td>
<td>2.956</td>
<td>0.035</td>
</tr>
<tr>
<td>SD</td>
<td>0.53467</td>
<td>0.87281</td>
<td>0.85569</td>
<td>0.68062</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Min.</td>
<td>3.55</td>
<td>2.27</td>
<td>1.22</td>
<td>2.55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Max.</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excitement (Mean)</td>
<td>3.8618</td>
<td>3.3289</td>
<td>3.3273</td>
<td>3.5265</td>
<td>0.993</td>
<td>0.398</td>
</tr>
<tr>
<td>SD</td>
<td>0.87338</td>
<td>1.20211</td>
<td>1.07683</td>
<td>1.16084</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Min.</td>
<td>2.27</td>
<td>1.27</td>
<td>1.09</td>
<td>1.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Max.</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competence (Mean)</td>
<td>4.4487</td>
<td>4.1825</td>
<td>4.2070</td>
<td>4.5612</td>
<td>3.454</td>
<td>0.018</td>
</tr>
<tr>
<td>SD</td>
<td>0.53155</td>
<td>0.63349</td>
<td>0.77571</td>
<td>0.53725</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Min.</td>
<td>3.44</td>
<td>2.78</td>
<td>2.00</td>
<td>2.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Max.</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sophistication (Mean)</td>
<td>3.2821</td>
<td>3.0878</td>
<td>3.2255</td>
<td>3.4306</td>
<td>0.644</td>
<td>0.588</td>
</tr>
<tr>
<td>SD</td>
<td>1.42463</td>
<td>1.12207</td>
<td>1.03055</td>
<td>1.07903</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Min.</td>
<td>1.00</td>
<td>1.00</td>
<td>1.50</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Max.</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ruggedness (Mean)</td>
<td>2.5128</td>
<td>2.6448</td>
<td>2.3685</td>
<td>2.4523</td>
<td>0.307</td>
<td>0.820</td>
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<td>SD</td>
<td>1.11401</td>
<td>1.27939</td>
<td>1.11880</td>
<td>1.33895</td>
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</tr>
<tr>
<td>Min.</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Max.</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer trust measures</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Altruism (Mean)</td>
<td>4.1410</td>
<td>3.9661</td>
<td>3.9760</td>
<td>4.2163</td>
<td>0.834</td>
<td>0.477</td>
</tr>
<tr>
<td>SD</td>
<td>0.78276</td>
<td>0.90717</td>
<td>0.96414</td>
<td>0.82517</td>
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<td></td>
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<tr>
<td>Min.</td>
<td>2.00</td>
<td>1.00</td>
<td>1.00</td>
<td>2.00</td>
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<tr>
<td>Max.</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td></td>
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<tr>
<td>Honesty (Mean)</td>
<td>4.2115</td>
<td>3.8568</td>
<td>3.9696</td>
<td>4.0946</td>
<td>1.043</td>
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<tr>
<td>SD</td>
<td>0.81551</td>
<td>0.71506</td>
<td>0.81750</td>
<td>0.66442</td>
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<tr>
<td>Min.</td>
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<td>1.25</td>
<td>1.00</td>
<td>2.25</td>
<td></td>
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</tr>
<tr>
<td>Max.</td>
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<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td></td>
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</tr>
<tr>
<td>Reliability (Mean)</td>
<td>4.3846</td>
<td>4.3125</td>
<td>4.3077</td>
<td>4.6154</td>
<td>1.746</td>
<td>0.160</td>
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<tr>
<td>SD</td>
<td>0.82004</td>
<td>0.78408</td>
<td>0.92141</td>
<td>0.50868</td>
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<tr>
<td>Min.</td>
<td>3.00</td>
<td>1.00</td>
<td>1.00</td>
<td>3.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Max.</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table III. Personality and trust scores by stores
We also conducted a mean comparison analysis using ANOVA to contrast customers’ perception of trust on these four different pharmacies. The results indicated that Indie scored higher than any other store on the honesty dimension. The overall difference, however, was not statistically significant ($F = 1.04, p = 0.37$).

On the altruism ($F = 0.84, p = 0.48$) and reliability ($F = 1.75, p = 0.16$) dimensions, Indie performed slightly better than Mass and Chain, but not as well as Super. All of these differences, while noticeable, were not statistically significant. The relatively small sample size might have been partially responsible for this lack of statistical significance. In the next section, we employed SEM to detect the relationships among constructs.

**Testing structural relationships using SEM.** We have used the two-step approach in SEM with Amos16 software. We first conducted confirmatory factor analyses (CFA) to ensure the goodness of fit for the measurement models. We then specified a structural model to test the relationships between latent variables.

**Measurement model of trust.** We specified trust as a second-order latent variable with three dimensions (altruism, honesty, and reliability). Each dimension was measured with intended indicator items (Figure 1). The results suggested that our data fit very well with the theoretical structure of the construct. Although there is no universally agreed upon standard for assessing the quality of SEMs, over the years...
the conventional approach has been to examine a basket of criteria against a set of rule-of-thumb acceptable levels. For example, the model is expected to exhibit a reasonably small error in relation to its complexity ($\chi^2/df < 2$), RMSEA should be low (RMSEA < 0.08), Tucker-Lewis Index (TLI, also known as non-normed fit index) and normed fit index should be high (NFI > 0.90), and comparative fit index should be high (CFI > 0.90) (Bentler, 1990; Joreskog, 1978; Kline, 2005). With that in mind, our measurement model for Trust exhibited a reasonably good fit ($\chi^2 = 75.12, df = 41, \chi^2/df = 1.83, NFI = 0.928, CFI = 0.965, TLI = 0.944, and RMSEA = 0.075$).

**Measurement model of personality.** Using the same technique, we specified personality as a second-order latent variable with five dimensions (sincerity, excitement, competence, sophistication, and ruggedness). The data did not fit with the theoretical structure very well ($\chi^2 = 1,954.13, df = 814, \chi^2/df = 2.40$, RMSEA = 0.097). We re-specified the model without the second-order latent variable and let the five first-order latent dimensions to freely co-vary (Figure 2). This modification slightly improved the model fit by reducing the $\chi^2(1,878.83)$ and $\chi^2/df(2.32)$ results. This improvement of fit can be attributed to relaxing the second-order latent variable construct structure. The covariance among some of the dimensions was apparently low. Ruggedness, for example, was only modestly related to competence (Cov. = 0.226, $p < 0.01$). Covariances among each personality dimension are reported in Table IV.

While the covariance and correlation pattern were not surprising, they were insightful. A pharmacy can be high on certain dimensions of personality, but low on others. This pattern suggests that corporate brand personality should not be considered as a whole. In other words, there is no such thing as having more personality; there are only different personalities. Companies develop corporate brand personality in different magnitudes only at the dimensional level. Each company could pursue a differentiation strategy by cultivating a unique brand personality type. For example, the Indie in our study is more competent and sincere than its competitors, but not as sophisticated. Next, we seek to test whether such lack of sophistication has held it back from earning more customer trust.

**Structural relationship between personality and trust.** Again, using Amos16, we specified a SEM model to test the relative strength of relationships between various dimensions of corporate brand personality and customer trust. In this model, we retained the second-order latent variable specification for the construct of trust. For the construct of personality, we retained the five dimensions by letting them freely co-vary (Figure 3) standardized regression weights are reported in Table V.

This model exhibited reasonable fit with data ($\chi^2 = 2760.73, df = 1307, \chi^2/df = 2.11$, RMSEA = 0.087). More interestingly, the result indicated that both sincerity and competence had positive and significant impact on customer trust ($\beta = 0.751, p < 0.01; \beta = 0.273, p = 0.017$, respectively). In comparison, excitement ($\beta = -0.030, p = 0.825$), sophistication ($\beta = -0.139, p = 0.432$), and ruggedness ($\beta = 0.026, p = 0.785$) did not exhibit any statistically significant impact on gaining customer trust. This suggests that customer trust is related to brand personality, but only the sincere and competent type. This finding supports $H2$.

**Discussion, implications, and future research**

This study examined one aspect of how community pharmacies compete with each other. More specifically, we hypothesized that if a pharmacy develops a unique
corporate brand personality, it could pursue an effective differentiation strategy to gain customer trust. The extant literature is equivocal on what is meant by having a unique personality. By definition, any personality is unique. We believe that companies should seek to develop the type of personality that is best-aligned with their
corporate objectives. In this study, we have employed customer trust as the outcome measurement. We have identified sincerity and competency as desirable personality types that will help pharmacies to earn better customer trust, because pharmacy customers typically have high involvement and process information systematically.

<table>
<thead>
<tr>
<th></th>
<th>Sincerity</th>
<th>Excitement</th>
<th>Competent</th>
<th>Sophistication</th>
<th>Ruggedness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sincerity</td>
<td>1</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excitement</td>
<td>0.468*</td>
<td>1</td>
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<tr>
<td>Competent</td>
<td>0.325*</td>
<td>0.434*</td>
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<tr>
<td>Sophistication</td>
<td>0.359*</td>
<td>0.732*</td>
<td>0.305*</td>
<td>1</td>
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<tr>
<td>Ruggedness</td>
<td>0.277*</td>
<td>0.733*</td>
<td>0.226*</td>
<td>0.637*</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: *p < 0.001

Table IV. Covariance among dimensions of personality

![Diagram of Personality-trust relationship: a structural equation model]

<table>
<thead>
<tr>
<th>DV</th>
<th>IV</th>
<th>Standardized regression weight</th>
<th>SE</th>
<th>Sig.</th>
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</thead>
<tbody>
<tr>
<td>Trust</td>
<td>Sincerity</td>
<td>0.751**</td>
<td>0.183</td>
<td>0.001</td>
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<tr>
<td></td>
<td>Excitement</td>
<td>-0.030</td>
<td>0.089</td>
<td>0.825</td>
</tr>
<tr>
<td></td>
<td>Competent</td>
<td>0.273*</td>
<td>0.123</td>
<td>0.017</td>
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<tr>
<td></td>
<td>Sophistication</td>
<td>-0.139</td>
<td>0.151</td>
<td>0.432</td>
</tr>
<tr>
<td></td>
<td>Ruggedness</td>
<td>0.026</td>
<td>0.061</td>
<td>0.785</td>
</tr>
</tbody>
</table>

Notes: *p < 0.05; **p < 0.01

Table V. Standardized regression weights on trust
Bounded by small sample size and other limitations of the study, our descriptive information seems to suggest that the independent retail pharmacy accounts for a much smaller market share in comparison to its competitors. The customers who actually visited this independent store rated it well. In fact, customers seemed to have trusted the independent pharmacy slightly more than some of the corporate chains. Customers perceived the independent pharmacy to have a sincere and competent brand personality. While these brand personality differences were statistically significant, they are not enough to produce statistically significant advantage on customer trust. Judging from customer feedback, the independent store was also evaluated to be more exciting than all the other stores. This store has apparently invested considerable resources and efforts in differentiating itself as the more exciting store in town. Anecdotal observations suggest that many small independent pharmacies often try hard to be exciting. We have seen some pharmacies plan events for kids and pets, sometimes in the parking lots, hoping to project the image of being exciting and appealing to more customers. Unfortunately, customers do not reward investments in excitement. This is reflected in the overall negative but insignificant relationship between excitement and trust.

We have also seen some pharmacies investing heavily in renovations to project the image of ultra-modern sophistication. These tactics often do not work because customers might perceive “exciting events” as gimmicky and “sophisticated décor” as cold and unfriendly. Our data have confirmed this. In our sample, customers have considered excitement, sophistication, and ruggedness as not important, even slightly negative, in the context of choosing and trusting a pharmacy.

Our results from simultaneous SEM analysis revealed that sincerity and competence were the only positive and significant contributing factors to the formation of customer trust. Given that independent community pharmacies typically operate under stringent budget limitations, our findings provide insights as to what aspect of brand personality would deliver the best result. Perhaps, the independent store should avoid trying so hard to be exciting, or investing so heavily for the sophisticated look. Our findings suggest that the best return on investment in developing brand personality is to focus on competence and sincerity.

The result of our CFA has demonstrates diversity in brand personality and challenges whether personality can be construed as a second-order latent variable. In other words, our findings suggest that one cannot be considered as having more (or less) personality than another. Based on our empirical evidence, we believe that corporations cannot be compared on their respective levels of the magnitude of overall personality, but only on certain dimensions of personality. One company cannot have more personality than another, but it can certainly try to be more sincere, more sophisticated, or more rugged. Our results demonstrate that customers will trust a company to a greater extent if they perceive it as being more sincere and competent.

Ultimately, the intended impact of our research is to better serve the community – more specifically, the customers who receive/purchase retail pharmacy services. With this end goal in mind, we believe that our findings also have implications for the chain corporation in our study. For example, with its broad influence and seemingly unparalleled level of resources, Walmart Pharmacy has performed poorly in comparison with other companies in almost all indicators. Walmart typically competes on price leadership. In Canada, where healthcare is universal, and many employers provide
pharmaceutical coverage, price may not be a definitive success factor. For the pharmacy
departments in mass merchandisers, there is a lot of room for improvement in terms of
perceived competence. There is a lesson to be learned for Shoppers Drug Mart, the
national specialty chain store, as well. Despite the chain’s apparent and repeated efforts
to define itself as the expert in pharmacy, it has failed to outperform its competitors.

Our research has many limitations. One major limitation was its small sample size. We
expected that the number of individuals who frequent the independent pharmacy
would be small. However, we were surprised that we found such a small number of
patrons for the Mass. The overall sample size of 149 was limited by research budget
constraints. We anticipate that larger scale future research would produce more
statistically significant results.

Our second major limitation rests in the trade-off between specificity and
generalizability. We have chosen to examine a single small city in Western Canada,
thus limiting application of the research, as the pharmacy industry is typically heavily
regulated, and each jurisdiction around the world may have different regulations.
Furthermore, each independent pharmacy is unique. Idiosyncratic factors would
certainly dampen the generalizability of our findings. The competitive strategy or
performance by the independent pharmacy in our study cannot and should not be
interpreted as applicable to all independent retail pharmacies. It would be interesting to
examine and benchmark the diversity and effectiveness of how each independent
pharmacy competes. To this end, we intend to employ quasi-experimental research
method to implement alternative strategies in future action-based studies.

As highlighted in the literature review, the impact of deregulation in the retail
pharmacy industry and resulting increase in large corporate chain pharmacies has
been grossly understudied, and the future of independent pharmacies, as well as other
independent businesses (i.e. hardware stores) remains uncertain. In many locations,
particularly rural and inner-city neighbourhoods, the independent pharmacy is often
the only option, and in some case the only retail store in close proximity. Therefore, the
survival of independent pharmacies is vital to some communities in which they
operate. We believe that our findings have furthered the understanding of various
strategies available to different types of retail pharmacies. Our findings can help, albeit
in a limited way, independent retail pharmacies and other small business owners
develop strategic competitive advantages by cultivating a unique and profitable
corporate brand personality.

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