Entrepreneurial orientation
Its importance and performance as a driver of customer orientation and company effectiveness among retail pharmacies

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Abstract
Purpose – Scholarship in the entrepreneurship and marketing literatures has helped advance thinking about how health care organizations create value for companies and consumers. However, there is an ongoing need for empirical research; hence, the purpose of this paper is to examine how entrepreneurial orientation and customer orientation influence healthcare (retail pharmacy) industry performance.

Design/methodology/approach – Using a sample of the US retail pharmacies, the study applies partial least squares structural equation modeling to identify the direct and indirect effects of the entrepreneurial orientation constructs on company performance. The study also includes importance–performance analyses to prioritize for managers which orientations, dimensions and respective manifest items merit the most critical attention as contributors to pharmacy performance.

Findings – We find that the entrepreneurial orientation has a significant impact on customer orientation and company effectiveness. We also find that three dimensions – innovation, risk-taking, and proactiveness – exhibit stronger importance and performance than autonomy and competitive aggressiveness.

Research limitations/implications – While the present study employs data from firms of various sizes, it is limited to firms in the pharmacy industry. Although this study included established EO measures, one of the risk taking items was dropped from the final analysis. In certain research contexts, this result may or may not be consequential. Finally, this study employed nonfinancial measures for measuring performance. Using such measures is not uncommon and can offer insightful linkages to long-term organizational strategies in ways not afforded by conventional financial measures (Fitner and Larcker 2000); however, future research should, if possible, aim to capture financial and nonfinancial data.

Practical implications – In the dynamic healthcare environment, entrepreneurial pharmacies that have the ability to innovate, take risks and be proactive can provide superior customer orientation and hence better performance.

Social implications – Health care industry in general and pharmacies in particular have to be entrepreneurial to meet customer needs and hence the wellbeing of the society. With the aging population and growth of complex diseases, pharmacies can provide better access to care delivery if they have entrepreneurial orientation.

Originality/value – In this study, partial least square modeling technique along with importance performance analysis was adopted for first time in this literature to identify key factors that contribute to EO. The findings will aid pharmacy managers to focus their initiatives on the three key dimensions to succeed in their retail pharmacy business.

Keywords Entrepreneurial orientation, Customer orientation, Importance–performance analysis, Company effectiveness, Retail pharmacies

Paper type Research paper
1. Introduction
Entrepreneurship represents the *élan vital*, or life force, of promising health care companies and their respective industries. A central component of entrepreneurship and strategy is *entrepreneurial orientation* (EO). It reflects managerial vision and informs the organizational efforts required to produce innovations that create value for customers and businesses that serve them. In short, EO represents the proclivity of organizational decision-making to support entrepreneurial activities within a firm (Lumpkin and Dess, 1996). While EO has a history in scholarship, which exceeds three decades, researchers have begun to give it greater attention in the last several years (Anderson *et al.*, 2015; Covin and Lumpkin, 2011; Lechner and Gudmundsson, 2014; Wales, 2016). In the hypercompetitive global business environment, companies are increasingly applying entrepreneurial approaches to scan and monitor environments (e.g. internal and external) with intentions to realize new opportunities for satisfying consumer needs, meeting organizational objectives and strengthening their competitive positions. Yet, marketing scholarship has done rather little to explore the importance of entrepreneurial orientation, and its relationship to marketing constructs, to our discipline. Webb *et al.* (2011, p. 537) remark, “Despite their tight integration in practice, marketing and entrepreneurship as domains of scholarly inquiry have largely progressed within their respective disciplinary boundaries with minimal cross-disciplinary fertilization”.

In the marketing literature, there has been extensive discussion on the role of market orientation, in general, and customer orientation, in particular, and its impact on business performance (Hult *et al.*, 2005; Kohli and Jaworski, 1990; Narver and Slater, 1990; Thoumrungroje and Racela, 2013). Noticeably absent from much of this discussion is the role played by EO. Acknowledging EO as a significant factor in the strategy-making process (Lumpkin and Dess, 1996; Thoumrungroje and Racela, 2013; Wiklund and Shepherd, 2003), business scholars have shown increasing interest in understanding the antecedents and consequences of EO. Specifically, questions abound concerning how EO conceptually differs from and relates to market orientation. In this study, we pursue three objectives, namely:

1. to bring the relevance and theoretical framework of EO to the marketing literature;
2. assess the role of organizational culture as an antecedent to EO; and
3. evaluate the impact of EO on customer orientation and company effectiveness.

Additionally, as per recent interest in discerning the specific impact of EO dimensions (Anderson *et al.*, 2015; Lechner and Gudmundsson, 2014), we use a novel set of importance–performance map analyses that illustrate construct- and item-level contributions of organizational culture, entrepreneurial orientation and customer orientation on company effectiveness, the focal outcome in our study.

Our research aims are particularly timely as scholarship has yet to yield consensus about whether entrepreneurial orientation should be measured as a unidimensional or multidimensional construct, or even how many dimensions – three, four or five – should be included in its measurement (Anderson *et al.*, 2015; Covin and Lumpkin, 2011; Lechner and Gudmundsson, 2014; Saha *et al.*, 2017). Consequently, scholars may be curious to understand the relative importance of those dimensions. Our research also acknowledges Webb *et al.*’s (2011) call for scholarship that investigates intersections of marketing and entrepreneurship, particularly with regard to organizational influences. In the next section, we discuss a theoretical framework of entrepreneurial orientation.
2. Theoretical framework

The research on EO can be traced to Mintzberg’s (1973) theory about strategic decision-making, wherein he conceives entrepreneurial strategy-making as a managerial predisposition to actively search for new opportunities in uncertain environments through which dramatic growth can be realized. Khandwalla (1977, p. 22) presents the concept of entrepreneurial management style as the “operating set of beliefs and norms about management held by the organization’s key decision makers when translated into action, constitute the organization’s strategy for survival and growth”. The idea of entrepreneurial orientation as a managerial disposition rooted in decision-making was subsequently adopted by Covin and Slevin (1989), Lumpkin and Dess (1996) and Miller and Friesen (1982). Miller and Friesen (1982, p. 5) regard entrepreneurial orientation as a firm level concept in which firms “innovate boldly and regularly while taking considerable risks in their product market strategies”. Miller (1983, p. 771) adds the concept of proactiveness to innovativeness and risk-taking, ultimately forming a set of three dimensions of entrepreneurial orientation. He states that the entrepreneurial firm is “one that engages in product–market innovation, undertakes somewhat risky ventures and is first to come up with ‘proactive’ innovations, beating competitors to the punch”. Innovativeness can be reflected by a firm’s genuine interest in and, consequently, conscientious pursuit of creative ideas, new experiences and other opportunities that ultimately can yield better value-based solutions (e.g. products, services and processes) for the market. Risk-taking refers to a firm’s willingness to make substantial resource commitments to projects or initiatives that face a fair chance of failure. Proactiveness speaks to a firm’s emphasis on anticipating future challenges related to market contingencies and competitors’ behaviors. Miller (1983) argues that innovativeness, risk taking and proactiveness must covary positively for EO to manifest. This notion assumes implicitly that EO has shared variance among these dimensions, and the absence of co-variation negates the presence of EO.

Like Miller (1983), Lumpkin and Dess (2001) describe EO as an organizational level strategy-making process. Lumpkin and Dess (1996, p. 136) suggest the following:

EO refers to the processes, practices and decision-making activities that lead to a new entry […]
It involves the intentions and actions of key players functioning in a dynamic generative process aimed at new ventures creating.

Ultimately, Lumpkin and Dess (1996) expand EO to include five dimensions, positing that it is comprised of innovativeness, risk-taking and proactiveness along with competitive aggressiveness and autonomy. Lumpkin and Dess (1996) define autonomy as independence to bring forth and implement new ideas and ventures, and competitive aggressiveness as a challenging attitude toward competitors that attempt to achieve entry or improve their position. Thus, in sum, entrepreneurial firms tend to develop creative and innovative projects in anticipation of the opportunities in the environment and to beat competitors’ actions, and their expectations of reward involve significant but calculated risks. In contrast, non-entrepreneurial firms tend to adopt reactive, risk-averse postures based on a policy of following and imitating competitors. Addressing the issue of covariance, Lumpkin and Dess (1996, p. 137) state as follows:

Innovativeness, risk taking, proactiveness, autonomy and competitive aggressiveness may be present when a firm engages in a new entry. In contrast, successful new entry may also be achieved when only some of these factors are operating to the extent that each of these dimensions is useful for predicting the nature of success of a new undertaking.

Thus, Lumpkin and Dess conceptualize EO as a multidimensional construct whose individual dimension must not necessarily covary.
Covin and Slevin (1991) describe entrepreneurial orientation as a set of sustained behaviors – innovativeness, proactiveness and risk-taking – that can ultimately foster a positive impact on company performance. Entrepreneurial companies are more innovative (Miller and Friesen, 1982; Thoumrungroje and Racela, 2013), proactive (Stevenson and Jarillo, 1990; Venkatraman, 1989) and inclined to act on calculated risks (Norton and Moore, 2002; 2006). Aside from these three factors, Lumpkin and Dess (1996) suggest that such companies can also be distinguished by the degree to which they support autonomy and value competitive aggressiveness.

2.1 Is entrepreneurial orientation different from market orientation?
Organizations driven by market orientation should focus their efforts on customers. Those driven by EO must constantly seek to exploit the dynamics of their macro and task environments (Miles and Arnold, 1991). The literature indicates that these two concepts are different and distinct (Miles and Arnold, 1991). In this study, we strive to understand how EO can influence market orientation, specifically customer orientation. Slater and Narver (1995) showed that businesses can achieve market orientation’s full potential when they are driven by an entrepreneurial proclivity (orientation) that is fostered by appropriate organizational design and structure.

2.2 Hypotheses
According to Miller (1983, p. 771), “an entrepreneurial firm is one that engages in product-market innovation, undertakes somewhat risky ventures, and is first to come up with proactive innovations, beating competitors to the punch”. A product–market focus provides some evidence that a company is demonstratively geared toward satisfying customers with organizational behaviors and market solutions. Furthermore, Khandwalla (1977), Mintzberg (1973) and others argue that entrepreneurial organizations are inclined to accept relatively greater risks and proactively seek out new market opportunities that can meet future organizational and customer objectives.

2.2.1 Influence of organicity of structure on entrepreneurial orientation.
Organicity of structure (ORGSTR) refers to the extent to which an organization is decentralized and informal and has an emphasis on lateral interactions and equitable distribution of information throughout the organization (Burns and Stalker, 1961; Lumpkin and Dess, 1996). The flexibility of an organic structure allows for the development of new product ideas into viable products (Altinay et al., 2016; Khandwalla, 1977; Mallén et al., 2016). Flexible organizations can facilitate information usage and develop effective responses to changes in the marketplace (Jaworski and Kohli, 1993). In contrast, mechanistic structures tend to be highly centralized and formal, characterized by a high degree of vertical integration and specialized differentiation between functions. Centralized organizations can inhibit a firm’s information dissemination and utilization processes (Matsuno et al., 2002), ultimately leading to less entrepreneurial goals and performances.

Boards of directors and senior management teams have the power and responsibility to shape organizational strategy and culture (Hambrick and Mason, 1984). The Institute of Directors (2011) acknowledges that board directors, as leaders of governance, perform an important role in setting general policies and strategic goals. Miles and Arnold (1991) stress that when groups of employee–innovators attempt to work together and generate new ideas, they are more successful within an organizational atmosphere that makes it conducive to do so. Russell (1999) suggests that companies respond best to dynamic market challenges when they allow appropriate decisions to be made away from top-level or centralized authority structures. Leadership plays an important role in fostering entrepreneurial processes and
activities through providing supportive communications, readily available financial resources and physical presence (Hisrich et al., 2002). Organizations create this entrepreneurial climate to the degree that they facilitate open exchange of information within the company, enable informal cooperation and coordination among employees and value employees’ situational expertise regardless of their position or tenure. Thus:

\[ H1. \] Organicity of structure has a positive impact on entrepreneurial orientation.

2.2.2 Influence of entrepreneurial orientation on customer orientation and company effectiveness. The ability to recognize opportunities and act upon them is fundamental to performance (Ahuja and Lampert, 2001). Thus, EO is likely to have a noticeably positive impact on company performance. Still, however, mediators of the relationship between EO and company performance have been identified (Covin et al., 2006). Indeed, Wang (2008) admonishes that to examine only a direct relationship between EO and company effectiveness (EFFECT) would be deficient. Thus, in this study, we consider not only this direct relationship, but also how it might also be influenced by customer orientation (CO) – a set of behaviors geared toward the fulfillment of customer and organizational objectives. Influenced by environmental factors, CO is a learned behavior that reflects the degree of attentiveness with which a firm learns and responds to customers’ needs (Alegre and Chiva, 2013; Narver and Slater, 1990; Real et al., 2014; Williams and Wiener, 1990).

Essentially, we assert that in many cases, entrepreneurial processes may antecede and foster opportunity recognition. In fact, Webb et al. (2011, p. 540) note that while market orientation may provide an awareness of particular customers, EO as an antecedent provides “alertness or the motivation to create an image of the future that leads individuals to knowledge search, make connections across knowledge stocks and evaluate new knowledge”. In turn, marketing, via a customer orientation, can focus on how to best exploit recognized opportunities and translate knowledge into value for a given, or yet to be discovered, set of customers.

Market orientation has long been one of the cornerstone constructs in marketing literature and has even been viewed as an organizational prerequisite of superior performance (Deshpandé et al., 1993; Kohli and Jaworski, 1990; Narver and Slater, 1990; Slater and Narver, 1995, 2000). The popular conceptualization (Narver and Slater, 1990; Slater and Narver, 1995) splits market orientation into various dimensions including inter-functional coordination, long-term focus, profitability, customer orientation and competitor orientation, and finds examples of inter-functional coordination in the utilization of the market information. Despite its elevated status with many marketing scholars, the market orientation concept has also been strongly criticized and its relevance continues to be the subject of debate (Harris, 2000; Henderson, 1998; Mason and Harris, 2005). Therefore, this study focuses more narrowly on the concept of customer orientation (CO), which reflects the organization’s ability to understand customers’ needs and create value for targeted buyers (Narver and Slater, 1990). The link between customer orientation and firm performance has been established in prior research and recent meta-analyses (Rodriguez Cano et al., 2004; Kirca et al., 2005). Yet, previous studies have suggested that customer orientation alone is not enough for some companies (e.g. software), and that sustainable performance requires a technological resource base geared to developing new products (Giarratana and Fosfuri, 2007).

The dimensions of EO may also point toward efforts to understand customers better (Atuahene-Gima and Ko, 2001; Baker and Sinkula, 2009; Bhuian et al., 2005; Li et al., 2009). The argument for the relationship between entrepreneurial orientation and customer orientation is two-fold. First, being proactive can lead entrepreneurs to search out new
customer needs, as they have a tendency to seek new business opportunities, which can also be found from within the present customer relationships (Li et al., 2009). Second, risk-taking entrepreneurial companies tend to have an inclination to invest, not only in customer acquisition, but also in the current customer relationships.

Companies that foster entrepreneurship view customer orientation as a means to learn more discretely what the market wants, and to calibrate or fine-tune, innovations accordingly. For example, quality innovations are often imperfect at their conception or first launch, but are refined over time to improve their value to customers. These innovations are initially the product of entrepreneurial vision, and ultimately, the product of better knowledge resulting from customer research, trial and feedback. Being proactive and taking calculated risks, entrepreneurial firms consider customer opinions and preferences as insights that can help reduce those risks. Furthermore, CO speaks not only to addressing customers’ observed, known or articulated needs, but also, if not more so, creating them (Berthon et al., 2004; Drucker, 1954). Thus, only after entrepreneurial activity – which does not necessarily presuppose the existence of a customer (Carpenter et al., 1997) – has either identified such needs through opportunity recognition, can the company be oriented toward those known/learned customer needs.

Berthon et al. (2004, p. 1067) suggest the following:

[...] there are aspects of business, which come before the customer, which enable the creation of the customer, and are concerned with technological innovation – the creation of innovative products and services. In many instances, needs, wants, and even values co-arise when products are created.

EO, with its focus on innovativeness, proactiveness, risk-taking and autonomy, represents one such aspect of business that enables creation of products and customers. Underscoring the antecedent issue alluded to by Day and Wensley (1988), Narver and Slater (1990, p. 21) state, “A customer orientation requires that a seller understand a buyer’s entire value chain, not only as it is today but also as it will evolve over time subject to internal and market dynamics”. Thus, an EO should lead to a sustained interest in customer orientation that can ultimately lead to market acceptance of product innovations and returns for risk-taking. As asserted by Barringer and Bluedorn (1999), organizations without a true EO generally assume a “wait and see” posture that does not inspire focus on customer learning, interaction or value.

Entrepreneurial behavior is commonly believed to change an organization’s relationship with the environment by reallocating resources through product and market development (e.g. Slater and Narver, 2000). Our assertion is that EO enables companies to balance the demands of current customers and new technology development. Other researchers have also suggested that, generally, balancing several orientations ensures better performance and makes companies more viable moving forward (Atuahene-Gima and Ko, 2001; Bhuian et al., 2005; Grinstein, 2008). Further, in their assessment of past research on EO, Rauch et al. (2009) and Anderson et al. (2015) affirm that EO is an important and significant predictor of business performance.

Therefore, in summary, we hypothesize that EO has a positive direct impact on EFFECT, and exerts a positive indirect impact through its positive impact on CO. Stated formally:

H2. Entrepreneurial orientation has a positive impact on customer orientation.

H3. Entrepreneurial orientation has a positive impact on company effectiveness.

2.2.3 Influence of customer orientation on company effectiveness. Hamel and Prahalad (1994) suggest that companies that espouse CO ultimately realize enhanced business performance,
regardless of their size or industry. Entrepreneurship empowers companies to identify market opportunities and produce innovations that are carefully aligned with those opportunities.

CO involves activities that deal with gathering information about customers, understanding their problems (e.g. wants, needs and desires), discerning the actual solutions (e.g. goods and services) they demand and, ultimately, creating value for them. Companies that aim to satisfy customer and organizational objectives realize that they must perform these activities on a consistent basis. That is, these activities must be managed in ways that keep pace with the dynamism of customers’ changing demands for value over time. Narver and Slater (1990) suggest that this dynamism requires companies have a readiness to adapt to business conditions, as noted above.

The positive effect observable between CO and firm performance has been established since the 1990s (Anderson et al., 2015; Jaworski and Kohli, 1993; Narver and Slater, 1990). The relationship has also been confirmed in small and medium-sized enterprises (Lechner and Gudmundsson, 2014; Pelham, 1999). Recent meta-analyses verify further the positive link across various environmental conditions (Rodriguez Cano et al., 2004; Rauch et al., 2009; Shoham et al., 2006). CO affects company performance by increasing customer commitment and loyalty and, additionally, the company’s innovativeness and quality (Kirca et al., 2005). Therefore:

\[ H4. \] Customer orientation has a positive impact on company effectiveness.

In summary, this study hypothesizes a set of positive relationships from ORGSTR to EO; from EO to CO and EFFECT; and from CO to EFFECT. The hypotheses are presented in graphical form within Figure 1.

3. Methodology

3.1 Sample selection and data collection

The sample for this study was obtained from the retail pharmacy industry and included independent pharmacies, retail chain pharmacies and hospital pharmacies. These organizations vary in their ORGSTR. Some pharmacy organizations are formalized, with rigid policies and procedures, while others tend to be informally structured. There are an estimated 60,000 pharmacies in the USA. The retail pharmacies traditionally can be described using firm size and product/service mix criteria. Sole units primarily comprise independent pharmacies, usually owned by pharmacists. Other sole units can be outlets operated by larger organizations, such as a hospital or clinic. Multiple unit pharmacy organizations, or chains, can be divided into small chain and large chain (e.g. 30 or more units).

In addition to firm size, the retail pharmacy industry can be characterized by the product/service mix of the firms, though there is some blurring of this distinction. Some traditional
categories include mass merchandisers (e.g. Walmart and Target), supermarkets (e.g. Albertsons and Safeway) and drug stores (e.g. Walgreens, CVS). In 2010, the roughly 60,000 retail pharmacy outlets comprise nearly 20,000 drug store units, over 19,000 independents, almost 9,000 supermarket units and more than 6,000 mass merchandise units (NACDS 2011).

A mail survey was sent to a random sample of 630 pharmacies from nine states – Arizona, CT, FL, IA, NJ, TN, TX, WA and Wisconsin. Collectively, the pharmacies represented each of the four US census regions and nine US census divisions. The survey was addressed to the pharmacy manager, accompanied by a non-personalized cover letter, stamped return envelope and token incentive. The sample included different types of pharmacies to enable generalizability of the results for the retail pharmacy industry. Respondents were asked to self-classify their type of pharmacy into one of six categories, namely, independent, small pharmacy chain (i.e. less than 11 units), large pharmacy chain, food–drug combination chain, mass merchandise chain or outpatient hospital pharmacy.

3.2 Measures
All research measures were adopted from Doucette and Jambulingam (1999) (see Appendix). ORGSTR and the five EO dimensions were measured with multi-item seven-point Likert-type scales (1 – Strongly disagree; 7 – Strongly agree). The outcome measures of CO and company effectiveness (EFFECT) were measured using three-item scales. One item asked about the position of the respondent within the pharmacy, and another asked about the respondent’s level of involvement (1 – very low; 5 – very high involvement) in the pharmacy.

Fifteen of the surveys distributed were undeliverable. Of the 615 surveys delivered, 234 were returned (38.05 per cent) in analyzable form. The pharmacy types were of several types:

- 105 independent;
- 54 large pharmacy chains;
- 34 food–drug combination chains;
- 23 small pharmacy chains (less than 11 units);
- 18 mass merchandise chains; and
- 17 hospital pharmacies.

In total, 88 per cent of respondents performed the role of pharmacy owner–manager, pharmacy director or pharmacy manager; 13 per cent were staff pharmacists; and the remainder identified as “Other”.

3.3 Measurement procedures and model evaluation
We evaluated the research model and hypothesized relationships using partial least squares (PLS), a component-based form of structural equation modeling (SEM; Chin et al., 2003; Lohmöller, 1989; Wold, 1982, 1985). We used SmartPLS 2.0 M3 (Ringle et al., 2005) with a path-weighting scheme to estimate parameters for the outer and inner models. As noted by Moreno and Casillas (2008), PLS–SEM is well-suited for this EO study, as it involves several relationships among latent constructs (e.g. ORGSTR, EO, CO) and aims to maximize explained variance of endogenous latent variables (e.g. EFFECT). Aside from its strengths for prediction, PLS–SEM is generally more appropriate for research on topics that are still developing in terms of theory (Chin and Newsted, 1999) such as entrepreneurial orientation (Moreno and Casillas, 2008; Miller, 2011).
All latent constructs were assessed in reflective mode with items purified for reliability and validity. The measures for each construct are described in detail below; items used to measure each construct are presented in the Appendix. Means, composite reliabilities, average variance extracted (AVE) and correlations for all latent constructs are shown in Table I. Loadings and cross-loadings for items associated the latent constructs are shown in Table II.

We tested the composite reliability ($r_c$) for the constructs as it superior to Cronbach’s alpha and more appropriate for the PLS–SEM method (Chin, 1998). We examined AVE for each construct’s indicators to determine satisfactory convergent validity. We confirmed discriminant validity based upon examination of cross-loadings (Chin, 1998; Grégoire and Fisher, 2006) and comparisons of constructs’ AVE with inter-construct correlations (Fornell and Larcker, 1981).

ORGST was measured using five items. The scale exhibited satisfactory psychometric properties with $\text{AVE} = 0.631$ and $r_c = 0.895$. 

Table I. Latent constructs’ average variance explained, composite reliability and correlations

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>AVE</th>
<th>CR</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<tbody>
<tr>
<td>1</td>
<td>CO</td>
<td>5.580</td>
<td>0.563</td>
<td>0.793</td>
<td>0.750</td>
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<td>2</td>
<td>EFFECT</td>
<td>4.973</td>
<td>0.782</td>
<td>0.915</td>
<td>0.518</td>
<td>0.884</td>
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<td>3</td>
<td>EO</td>
<td>4.767</td>
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<td>0.933</td>
<td>0.543</td>
<td>0.506</td>
<td>0.711</td>
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<tr>
<td>4</td>
<td>ORGST</td>
<td>4.252</td>
<td>0.631</td>
<td>0.895</td>
<td>0.182</td>
<td>0.077</td>
<td>0.458</td>
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Notes: AVE = Average variance explained; CR = Composite reliability; Square roots for AVEs appear along italic diagonal

Table II. Loadings and cross-loadings for items associated with latent constructs

<table>
<thead>
<tr>
<th>AUTON</th>
<th>COMPAG</th>
<th>CO</th>
<th>EFFECT</th>
<th>INNOV</th>
<th>ORGST</th>
<th>PROACT</th>
<th>RISK</th>
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<td>AUTON1</td>
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<td>0.4006</td>
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<td>0.3598</td>
<td>0.6008</td>
<td>0.4625</td>
<td>0.6824</td>
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<td>AUTON2</td>
<td>0.8711</td>
<td>0.4052</td>
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<td>0.3081</td>
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<td>COMPAG1</td>
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<td>0.4531</td>
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<td>0.2227</td>
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<td>0.8888</td>
<td>0.3693</td>
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<td>0.3985</td>
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<td>0.4459</td>
<td>0.3728</td>
<td>0.8922</td>
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<tr>
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<td>0.3703</td>
<td>0.4500</td>
<td>0.3917</td>
<td>0.9262</td>
<td>0.3143</td>
<td>0.6529</td>
</tr>
<tr>
<td>INNOV3</td>
<td>0.5644</td>
<td>0.3642</td>
<td>0.4397</td>
<td>0.3800</td>
<td>0.9352</td>
<td>0.3231</td>
<td>0.6576</td>
</tr>
<tr>
<td>ORGST1</td>
<td>0.3823</td>
<td>0.1852</td>
<td>0.1479</td>
<td>0.0360</td>
<td>0.2882</td>
<td>0.8190</td>
<td>0.2634</td>
</tr>
<tr>
<td>ORGST2</td>
<td>0.4763</td>
<td>0.1878</td>
<td>0.1661</td>
<td>0.0883</td>
<td>0.2970</td>
<td>0.7910</td>
<td>0.3052</td>
</tr>
<tr>
<td>ORGST3</td>
<td>0.4161</td>
<td>0.2736</td>
<td>0.1954</td>
<td>0.1384</td>
<td>0.3522</td>
<td>0.7698</td>
<td>0.3835</td>
</tr>
<tr>
<td>ORGST4</td>
<td>0.3436</td>
<td>0.1841</td>
<td>0.0711</td>
<td>0.0888</td>
<td>0.2224</td>
<td>0.8177</td>
<td>0.2074</td>
</tr>
<tr>
<td>ORGST5</td>
<td>0.2762</td>
<td>0.1535</td>
<td>0.1009</td>
<td>0.0052</td>
<td>0.1870</td>
<td>0.7715</td>
<td>0.1914</td>
</tr>
<tr>
<td>PROACT1</td>
<td>0.5966</td>
<td>0.4794</td>
<td>0.4069</td>
<td>0.3837</td>
<td>0.6240</td>
<td>0.2895</td>
<td>0.8728</td>
</tr>
<tr>
<td>PROACT2</td>
<td>0.6961</td>
<td>0.5288</td>
<td>0.5065</td>
<td>0.4528</td>
<td>0.6458</td>
<td>0.3228</td>
<td>0.9024</td>
</tr>
<tr>
<td>PROACT3</td>
<td>0.6252</td>
<td>0.5765</td>
<td>0.4799</td>
<td>0.4917</td>
<td>0.6265</td>
<td>0.3641</td>
<td>0.8947</td>
</tr>
<tr>
<td>RISK1</td>
<td>0.3966</td>
<td>0.2726</td>
<td>0.1780</td>
<td>0.1454</td>
<td>0.4081</td>
<td>0.3391</td>
<td>0.4634</td>
</tr>
<tr>
<td>RISK2</td>
<td>0.3851</td>
<td>0.2747</td>
<td>0.1370</td>
<td>0.0873</td>
<td>0.4454</td>
<td>0.3515</td>
<td>0.4668</td>
</tr>
</tbody>
</table>
EO was assessed as a second-order construct, comprised of autonomy (AUTON), competitive aggressiveness (COMPAG), innovativeness (INNOV), proactiveness (PROACT) and risk-taking (RISK). This represents a slight, but important, departure from many EO studies that have typically examined only one or a subset of these dimensions, namely, innovativeness, risk-taking and proactiveness (Miller, 2011). Consistent with Lumpkin and Dess (1996), we examined EO as a molecular, second-order reflective construct (Chin and Gopal, 1995; Edwards, 2001), consequently deciding upon a repeated indicators approach (Lohmöller, 1989; Wetzels et al., 2009; Wilson, 2010; Wold, 1982). Supporting this reasoning, Reinartz et al. (2003, p. 19) note:

A second order factor is directly measured by observed variables for all the first order factors. While this approach repeats the number of manifest variables used, the model can be estimated by the standard PLS algorithm.

We used 15 indicators (three indicators for each dimension) adopted from the PHARMEO measure (Doucette and Jambulingam, 1999) to assess EO. After observing an unacceptable loading for one risk-taking indicator, we proceeded with fourteen total indicators.

Individually, the dimensions of EO demonstrated acceptable psychometric properties as follows: AUTON: AVE = 0.742; \( \rho_c = 0.896 \); COMPAG: AVE = 0.741; \( \rho_c = 0.896 \); INNOV: AVE = 0.843; \( \rho_c = 0.941 \); PROACT: AVE = 0.792; \( \rho_c = 0.920 \); and RISK: AVE = 0.891; \( \rho_c = 0.943 \). Overall, EO exhibits favorable properties as well (AVE = 0.505; \( \rho_c = 0.933 \)).

EFFECT (AVE = 0.782; \( \rho_c = 0.915 \)) was measured using three items dealing with the organization’s achievement of performance goals and annual objectives. Given the difficulty of getting access to accurate, precise and reliable objective information about market share and financial performance, we asked managers to provide perceived evaluations of effectiveness. In their meta-analysis of EO research, Rauch et al. (2009, p. 780) note that nonfinancial outcomes are important and remark that potential problems such as “common method variance, memory decay, or social desirability associated with self-reporting of performance does not generally pose a threat to the validity of the EO-performance relationship”.

3.3.1 Evaluation of inner model and research hypotheses. After verifying the quality (i.e. reliability and validity) of the outer model, we proceeded to evaluate the research hypotheses within the inner model. The results are shown in Figure 2 and summarized in Table III.

As PLS–SEM focuses on maximizing the explained variance in an endogenous construct (s), its primary criterion for evaluating a structural model is \( R^2 \), the coefficient of determination. The structural model relationships yield satisfactory \( R^2 \) values of 0.210 (EO), 0.295 (CO) and 0.339 (EFFECT). Path coefficients indicate the relative impact of a latent exogenous construct on a latent endogenous construct. Following Chin (1998), we performed nonparametric bootstrapping using individual sign changes (Henseler et al., 2009) and 5,000
samples (Hair et al., 2011) to determine the statistical significance (t-values) of each path coefficient (β).

As hypothesized, ORGST has a positive impact on EO (H1: β = 0.458, t = 9.578). Likewise, EO exhibits a positive impact on CO (H2: β = 0.543, t = 8.449), and EFFECT (H3: β = 0.318, t = 5.094). Further, CO has a positive impact on EFFECT (H4: β = 0.345, t = 5.279). Both ORGST (β = 0.232) and EO (β = 0.506) showed positive total effects on EFFECT. In summary, we found support for all four of our hypotheses. We also analyzed changes in $R^2$ to determine the effect size ($f^2$) for the relative impact of each latent exogenous variable on the latent endogenous variable.

3.4 Moderators
As an outcome, EFFECT can be affected by a mix of internal and external factors (Pelham, 1997, 1999). As shown here, internal factors, such as EO and CO, exert significant positive influences on EFFECT. A review of the literature suggests the potential for environmental and organizational factors to moderate the influence of entrepreneurial orientation on company performance (Lumpkin and Dess, 2001). Thus, in addition to tests of our four hypotheses, we expanded our model to include competitive intensity and resource munificence as moderators. Neither moderator showed a significant moderating impact.

3.5 Importance–performance map analysis of partial least square results
As noted above, we take the position that EO is a distinct firm-level orientation and acknowledge the differences of opinion between Covin and Slevin (1989) and Lumpkin and Dess (1996) regarding its multidimensionality. Moreover, we agree with Anderson et al. (2015) and Lechner and Gudmundsson (2014) that EO researchers should contribute greater knowledge about the shared and distinct contributions of EO’s components. Indeed, Lechner and Gudmundsson (2014) caution that impact of EO’s components on target variables (e.g., effectiveness and other outcomes) could differ in sign or significance across different situations. Thus, we heed the concerns of Lumpkin and Dess (1996) who stress the need to understand the distinct contributions of EO’s components (or indicators even). Gonzalez-Benito et al. (2009, p. 503) support this view, “Nevertheless, we also acknowledge that the separate consideration of each component could provide additional insights into the role of entrepreneurship on firms’ strategic behaviour and performance”. Most recently, Covin and Lumpkin (2011, p. 867) suggest, “A challenge faced by researchers employing the multidimensional conceptualization of EO is determining what might be done with the individual measures in a collective sense”. We directly address that challenge in this section of our study.

Beyond determining the direct impact and total impact (i.e. path coefficients) of an exogenous latent variable on an endogenous latent variable, PLS–SEM can be extended for conducting importance–performance map analysis (IPMA) that provides greater insights into the managerial attention warranted for further diagnoses (Ringle and Sarstedt, 2016).

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Relationship</th>
<th>Sign</th>
<th>β</th>
<th>t-value</th>
<th>Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>ORGST → EO</td>
<td>(+)</td>
<td>0.458</td>
<td>9.578</td>
<td>Yes</td>
</tr>
<tr>
<td>H2</td>
<td>EO → CO</td>
<td>(+)</td>
<td>0.543</td>
<td>8.449</td>
<td>Yes</td>
</tr>
<tr>
<td>H3</td>
<td>EO → EFFECT</td>
<td>(+)</td>
<td>0.318</td>
<td>5.094</td>
<td>Yes</td>
</tr>
<tr>
<td>H4</td>
<td>CO → EFFECT</td>
<td>(+)</td>
<td>0.345</td>
<td>5.279</td>
<td>Yes</td>
</tr>
</tbody>
</table>
In our research model, we showed that EO and CO each impart a positive, significant impact on EFFECT. We find, for instance, that a one-unit increase in the index value (performance) of EO could result, *ceteris paribus*, in a 0.318 increase in EFFECT. Likewise, a one-unit increase in the index value (performance) of CO could result in a 0.345 increase in EFFECT. However, pharmacy managers may wish to know more about how particular variables (and their measurement items) actually drive key outcomes and, thus, should merit attention as priorities for the firm (Hock et al., 2010; Kristensen et al., 2000; Ringle and Sarstedt, 2016; Slack, 1994). In short, IPMA generates a priority map based on total impact scores and performance indices. Martensen and Grønholdt (2003, p. 143) note, “Such a data presentation is appealing from a managerial viewpoint and useful in priority setting and strategy development”.

We present results of our first IPMA, with EFFECT as the target variable, in Table IV and Figure 3. In terms of importance, EO is the greatest driver (0.506), followed by CO (0.345) and then ORGST (0.232). In terms of performance (0-100, least to greatest), CO (76.348) is greatest, followed by EO (62.782) and then ORGST (54.199). On the basis of this analysis, pharmacy managers should prioritize their attention first to EO, second to CO and third to ORGST in trying to improve EFFECT. One takeaway from this analysis is that companies may perform better in terms of CO but they yield greater impact on EFFECT through EO. Therefore, EO is more important and should take precedent in strategic priorities.

Given the importance of EO and its influence on EFFECT, we applied IPMA as a diagnostic to compare all of EO’s measurement items/indicators per relative importance and performance, and make recommendations about which items/indicators should merit greater attention from pharmacy managers trying to foster success for their organizations.

<table>
<thead>
<tr>
<th>Latent variable</th>
<th>Index value</th>
<th>Total effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>EO</td>
<td>62.782</td>
<td>0.506</td>
</tr>
<tr>
<td>CO</td>
<td>76.348</td>
<td>0.345</td>
</tr>
<tr>
<td>ORGST</td>
<td>54.199</td>
<td>0.232</td>
</tr>
<tr>
<td>EFFECT</td>
<td>66.223</td>
<td>(target construct)</td>
</tr>
</tbody>
</table>

**Table IV.** Index values and total effects on company effectiveness (EFFECT)

**Figure 3.** Importance–performance map for company effectiveness (EFFECT)
Indeed, our approach is a direct response to Lumpkin et al.’s (2011, pp. 64-65) recent call for action:

We believe it is potentially problematic for researchers to prescribe specific interventions to achieve organizational or venture success based on a unidimensional conceptualization of EO. A singular conceptualization could not distinguish between the effects of, for instance, autonomy and innovativeness. If new venture failure is caused by a lack of autonomy of firm members, it is implausible to believe that it could be rectified by an increased level of innovativeness. In contrast, a conceptualization of EO with clearly defined dimensions offers the possibility of prescribing more finely tuned sets of activities to deliver specific new venture success outcomes. Because one of the primary goals of measurement is precision of prediction, a focus on an accurate understanding of the various dimensions of EO can lead to clear, meaningful, and useful prescriptions for entrepreneurs.

Miller (2011) notes that research has yielded mixed results regarding which dimensions of EO are most important. By analyzing the relative importance versus performance of each EO indicator, we can directly address this issue and offer some guidance for future EO research. As shown in Figure 4, the most important items/indicators driving EO are associated with PROACT, INNOV and AUTON. By contrast, items associated with RISK and COMPAG (with a single exception) are marginal in terms of their relative importance and performance within our research context. On the basis of these results, pharmacy managers should prioritize their attention and resources in ways that foster PROACT, INNOV and AUTON. These factors are impactful, yet as shown by their performance scores, they still exhibit some room for improvement.

We apply the same item-level IPMA approach to understand the most meaningful contributors of ORGSTR. On the basis of the priority map shown in Figure 5, pharmacy managers should be most concerned about relaxing formal procedures to facilitate tasks and fostering informal coordination. Next, pharmacy managers should focus on valuing knowledge of experts who may not have formal authority and allowing employees to discern best practices for job-specific behaviors. Performance is basically even but not optimal across all of these factors for organizations in our research context. Therefore, priorities are easy to identify, but all of the issues related to ORGSTR exhibit room for improvement.
3.6 Alternative for describing effects of entrepreneurial orientation dimensions
As noted earlier, our structural model presents EO as a second-order construct, thereby allowing us to derive the (indirect) effect of its first-order constructs on targeted outcomes (e.g. EFFECT) (Wetzels et al., 2009). Thus, we can state that the greatest indirect impacts on EFFECT emanate from INNOV (0.291) followed by AUTON (0.267), COMPAG (0.266), PROACT (0.221) and RISK (0.194) (see Table V). This explanation supports the more detailed insights revealed by the IPMA.

4. Discussion
Entrepreneurial activities and customer-oriented marketing are “central and complementary” priorities of profit-seeking firms (Drucker, 1954; Mohr and Sarin, 2009; Webb et al., 2011, Miles et al., 2016); however, extant literature suggests a demand for more knowledge about how EO and customer orientation might contribute to firm performance (Lechner and Gudmundsson, 2014; Wales, 2016). The present study shows that organicity of structure is an antecedent to entrepreneurial orientation. The study also provides evidence that entrepreneurial orientation and customer orientation exert positive impacts on company effectiveness. Additionally, results indicate that entrepreneurial orientation has significant direct and total effects on company effectiveness.

Complementing the above results, this study offers some new insights regarding current knowledge about the multidimensionality of EO (Anderson et al., 2015). As noted recently by Covin and Lumpkin (2011, p. 867), “the majority of empirical EO research has used the unidimensional approach” to operationalizing EO. Departing from conventional approaches, here we assess EO as a second-order, molecular construct comprising five dimensions. Ultimately, our findings not only validate the multidimensionality of EO but also reinforce the unique structure and contribution of each dimension identified by Lumpkin and Dess (1996, 2001). By combining PLS–SEM and importance–performance map analyses, we also respond to a call by Suddaby, Bruton and Si (2015) to help build “indigenous theory” in EO.

<table>
<thead>
<tr>
<th>EO dimension</th>
<th>EO loading</th>
<th>Impact on CO</th>
<th>Impact on EFFECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTON</td>
<td>0.841</td>
<td>0.457</td>
<td>0.267</td>
</tr>
<tr>
<td>COMPAG</td>
<td>0.835</td>
<td>0.453</td>
<td>0.266</td>
</tr>
<tr>
<td>INNOV</td>
<td>0.915</td>
<td>0.497</td>
<td>0.291</td>
</tr>
<tr>
<td>PROACT</td>
<td>0.696</td>
<td>0.378</td>
<td>0.221</td>
</tr>
<tr>
<td>RISK</td>
<td>0.611</td>
<td>0.332</td>
<td>0.194</td>
</tr>
</tbody>
</table>

Table V. Indirect impact of EO dimensions on CO and EFFECT
Accordingly, this study is among few known studies to specify for managers which EO dimensions and items/indicators should merit the greatest attention as drivers of company effectiveness. We offer these methodologies and results in alignment with the reasoning of Kreiser et al. (2002, p. 89) for "studies comparing the link between different configurations of entrepreneurial orientation and performance would help assess which sub-dimensions of EO are most important in particular situations". We find that items related to Covin and Slevin's (1991) original dimensions of EO – innovation, risk-taking and proactiveness – exhibit comparatively greater importance and performance than the two additional dimensions proposed by Lumpkin and Dess (1996) – autonomy and competitive aggressiveness. By analyzing the distinct contribution of each dimension, we answer Covin and Lumpkin's (2011) call to fathom individual measures in a collective sense and, thereby, provide another important contribution to the existing literature. In sum, the findings are useful as they speak directly to Baumol's (1986) argument that some firms could decide to initiate or imitate some entrepreneurial activities. As Kreiser et al. (2002, p. 88) note the following:

According to this reasoning, both innovators and fast followers can be considered entrepreneurial. Entrepreneurial firms could thus seek to develop various combinations of the three dimensions to increase their performance in a given context.

5. Limitations and future research
This study, including its approach and results advance current understanding of relationships between entrepreneurship processes and marketing activities (Short et al., 2010; Webb et al., 2011; Zachary et al., 2011), making several important contributions to the literature. While the present study uses data from firms of various sizes, it is limited to firms in the pharmacy industry. Although this study included established EO measures, one of the risk-taking items was dropped from the final analysis. In certain research contexts, this result may or may not be consequential. Finally, this study used nonfinancial measures for measuring performance. Using such measures is not uncommon and can offer insightful linkages to long-term organizational strategies in ways not afforded by conventional financial measures (Ittner and Larcker, 2000); however, future research should, if possible, aim to capture financial and nonfinancial data.

Our findings regarding the affect, importance and performance of EO's dimensions should be compared against other/future research studies of firm in other contexts. This study considered customer orientation, which is one aspect of market orientation. We found that it has a positive impact on company effectiveness. While market orientation has been measured in many ways and shown to affect company outcomes (Farrell, 2002), it may be helpful to examine the comparative importance versus performance of each market orientation dimension. Implementing that kind of approach could help scholars determine whether certain combinations of market orientation's dimensions can be effectively initiated by innovators or imitated by fast followers. This approach could include investigations of the individual dimensions of market orientation in relation to EO and company effectiveness.

6. Conclusion
As shown in this research, firm with EO tend to realize greater customer orientation and effectiveness. Additionally, the evidence suggests that pharmacy managers should consider how the organicity of their company structure may affect EO. Firms that espouse EO are well poised to discover market needs, exploit opportunities and remain viable contenders in
industry (Li et al., 2009). In today’s competitive environment, retail pharmacies can effectively pursue their performance goals by implementing entrepreneurial activities en masse or selecting a smaller mix of prioritized activities.

References


Reinartz, W., Kraft, M. and Hoyer, W. (2003), Measuring the Customer Relationship Management Construct and Linking It to Performance Outcomes, INSEAD.
Ringle, C.M., Wende, S. and Will, S. (2005), SmartPLS 2.0 (M3), Hamburg, available at: www.smartpls.de


Further Reading


### Appendix 1

<table>
<thead>
<tr>
<th>Mean</th>
<th>Dimension</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>AUTON₁</td>
<td>New service ideas suggested by employees are acted upon by decision-makers</td>
</tr>
<tr>
<td>2</td>
<td>AUTON₂</td>
<td>Management approves of independent activity by employees to develop new services</td>
</tr>
<tr>
<td>3</td>
<td>AUTON₃</td>
<td>Identifying new business opportunities is the concern of all employees</td>
</tr>
<tr>
<td>4</td>
<td>COMPAG₁</td>
<td>We are responsive to maneuvers of our rivals</td>
</tr>
<tr>
<td>5</td>
<td>COMPAG₂</td>
<td>Our actions toward competitors can be termed aggressive</td>
</tr>
<tr>
<td>6</td>
<td>COMPAG₃</td>
<td>We always respond to actions of our competitors</td>
</tr>
<tr>
<td>7</td>
<td>INNOV₁</td>
<td>Our pharmacy is known as an innovator among pharmacies in our area</td>
</tr>
<tr>
<td>8</td>
<td>INNOV₂</td>
<td>We promote new, innovative services in our pharmacy</td>
</tr>
<tr>
<td>9</td>
<td>INNOV₃</td>
<td>Our pharmacy provides leadership in developing new services</td>
</tr>
<tr>
<td>10</td>
<td>PROAC₁</td>
<td>Our pharmacy usually takes action in anticipation of future market conditions</td>
</tr>
<tr>
<td>11</td>
<td>PROAC₂</td>
<td>Because market conditions are changing, we continually seek out new opportunities</td>
</tr>
<tr>
<td>12</td>
<td>PROAC₃</td>
<td>We constantly try to position ourselves to meet emerging demands</td>
</tr>
<tr>
<td>13</td>
<td>RISK₁</td>
<td>Taking gambles is part of our strategy for success</td>
</tr>
<tr>
<td>14</td>
<td>RISK₂</td>
<td>Taking chances is an element of our business strategy</td>
</tr>
</tbody>
</table>

**Notes:** Indicate the number that best shows your agreement with each statement; 1 – Strongly disagree 2 – Moderately disagree […] 6 – Moderately agree 7 – Strongly agree

### Appendix 2

<table>
<thead>
<tr>
<th>Mean</th>
<th>Dimension</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ORGST₁</td>
<td>(1) Tight formal control based on rules and procedures</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(7) Coordination through informal relationships based on cooperation</td>
</tr>
<tr>
<td>2</td>
<td>ORGST₂</td>
<td>(1) A strong emphasis on giving most say in decision-making to upper managers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(7) A tendency to let the expert in a given situation have the most say, even over managers</td>
</tr>
<tr>
<td>3</td>
<td>ORGST₃</td>
<td>(1) Definitely holding fast to tried management principles despite changes in business conditions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(7) An emphasis on changing circumstances without too much concern for past practices</td>
</tr>
<tr>
<td>4</td>
<td>ORGST₄</td>
<td>(1) A strong emphasis on getting personnel to follow formal procedures</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(7) A strong emphasis on getting things done even if this means disregarding formal procedures</td>
</tr>
<tr>
<td>5</td>
<td>ORGST₅</td>
<td>(1) A strong emphasis on getting personnel to adhere to formal job descriptions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(7) A strong tendency to let requirements of the job and the individual’s personality define proper on-the-job behavior</td>
</tr>
</tbody>
</table>

**Notes:** Indicate the number from 1-7 that best shows your agreement with each statement; in general, the management philosophy at my pharmacy favors […]

---

**Table AI.** Scale items for entrepreneurial orientation (EO) (seven-point type scale)

**Table AII.** Scale items for organicity of structure (ORGSTR) (seven-point scale)
### Table AIII.
Scale items for customer orientation (CO; seven-point Likert-type scale)

<table>
<thead>
<tr>
<th>Mean</th>
<th>Dimension</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CO\textsubscript{1}</td>
<td>The welfare of our customers is a primary concern for us</td>
</tr>
<tr>
<td>2</td>
<td>CO\textsubscript{2}</td>
<td>The customers’ interests always come first, ahead of the owners’</td>
</tr>
<tr>
<td>3</td>
<td>CO\textsubscript{3}</td>
<td>We regularly ask our customers about the value of our services</td>
</tr>
</tbody>
</table>

**Notes:** Indicate the number that best shows your agreement with each statement; 1 – Strongly disagree 2 – Moderately disagree [. . .] 6 – Moderately agree 7 – Strongly agree

### Table AIV.
Scale items for company effectiveness (EFFECT; seven-point Likert-type scale)

<table>
<thead>
<tr>
<th>Mean</th>
<th>Dimension</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>EFFECT\textsubscript{1}</td>
<td>We consistently meet our organizational performance goals</td>
</tr>
<tr>
<td>2</td>
<td>EFFECT\textsubscript{2}</td>
<td>Our pharmacy always achieves its stated goals</td>
</tr>
<tr>
<td>3</td>
<td>EFFECT\textsubscript{3}</td>
<td>More often than not, we meet our annual objectives</td>
</tr>
</tbody>
</table>

**Notes:** Indicate the number that best shows your agreement with each statement; 1 – Strongly disagree 2 – Moderately disagree [. . .] 6 – Moderately agree 7 – Strongly agree

**Corresponding author**
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