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Learning from own and others: The moderating role of performance aspiration



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ABSTRACT

This study uses an organizational learning perspective to examine how hotel experience (both accumulated from own and others) affects performance outcomes as evaluated by customer dissatisfaction. To this end, we show that hotel experience has a curvilinear effect on customer dissatisfaction, but the relationship has different shapes based on the source of learning (own vs. others). The learning outcome is also contingent on how a hotel aspires for performance improvement. We discuss the implications of these findings and highlight the fact that although learning from others can be more beneficial in the short term, hotels need to rely on their own experience as a source of learning for long-term benefits.

1. Introduction

Research on organizational learning acknowledges the importance of learning from own experience as well as the experience of others (i.e. competitors). The relationship between accumulated experience and performance (e.g. Wright, 1936; Levy, 1965; Adler and Clark, 1991), is contingent upon the source of learning (own vs. others) and the type of learning outcome being measured (March, 2010).

Scholars have emphasized that learning through accumulation of own experience depends on several dimensions such as exposure to different types of experience (Haunschild and Sullivan, 2002) and the recency of the experience (Argote and Epple, 1990). Learning from the experience of others depends on the clarity and relatedness (i.e. to our own) of the competitor activities (Ingram and Baum, 1997), among other things. What affects learning outcomes also depend on the firm's organizational structure (Bunderson and Boumgarden, 2010; Fang et al., 2010), social affiliations and networks (Reagans and McEvily, 2003), as well as other external factors surrounding the firm such as changes in government regulations or technological shifts (Bower and Christensen, 1996).

When assessing whether firms learn through experience, one would also need to consider the type of performance outcome being measured. Traditionally, learning was measured through improvements in internal performance criteria such as revenue (Mezias et al., 2002), market share growth (Greve, 2008), and return on assets (Greve, 2003).

However, the "new institutionalisms perspective" may highlight the importance of seeing learning outcomes through the lens of external stakeholders (DiMaggio and Powell, 1991), in particular, feedback on customer dissatisfaction (Lapré and Tsikriktsis, 2006). Customer-driven evaluations may encourage organizations to learn and improve in order to stay competitive in markets heavily influenced by such mechanisms. Despite the notable importance of external evaluations (DiMaggio and Powell, 1983; Smith, 2011), research assessing learning outcomes based on these external measures is scarce (Lapré and Tsikriktsis, 2006; Lapré, 2011).

In the current study, we differentiate from the present literature in two ways. First, we investigate learning outcomes based on customer dissatisfaction. We also differentiate between two important sources of learning: learning from own experience and learning from the experience of others. The first refers to how hotels learn from their own experience to reduce customer dissatisfaction over time, while the latter refers to how hotels learn from the experience of their close competitors to reduce customer dissatisfaction over time.

Second, this study examines the impact of the performance gap between own and their best performing competitors (i.e. performance aspiration) as a motivational factor for organizational learning. As customers seek the best value offerings among their choice sets, organizations may in turn set their point of reference to their best competitors (Moliterno et al., 2014; Peteraf and Shanley, 1997), compare their own performance with them, and set aspirations to learn and improve

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accordingly.

The rest of this paper proceeds as follows: First, we present out hypotheses and discuss the theoretical framework. We then present the data and measurements followed by the results, discussion, and concluding remarks.

2. Learning from own experience

Here we focus on learning from own experience (also referred to in the literature as "experiential learning"), through the lens of customer dissatisfaction over time. Customer generated feedback has been shown to influence the bottom-line performance of organizations in various industries such as lodging (Anderson, 2012) and movies (Duan et al., 2008). Realizing the impact of customer evaluation feedback, organizations can utilize such information to reflect on their own actions and experiences and consequently learn to improve their performance (Fan and Gordon, 2014). Customer feedback may not always present straightforward lessons for organization to learn. Organizations need to relate customer feedback to their own actions and experiences in order to find effective ways to improve.

According to the experiential learning theory, performance should improve as firms accumulate experience over time (Dutton and Thomas, 1984). The theory roots back to the Wright learning curve (Wright, 1936) in which accumulation of experience was linked to reduced cost in an airplane production facility. At the center of the organizational learning process, there exists learning cycles with inherent feedback and ability for learning (Zangwill and Kantor, 1998). In other words, the necessary mechanism for experiential learning involves reflection and adaptation on available feedback following a certain experience (March, 2010). Improvements in performance depend on feedback characteristics as well as the ability to draw effective causal links between an action and outcome.

Huber (1991) argues that experiential learning is enhanced by an increased availability of accurate feedback on actions and outcomes. Thus, noise and ambiguity in the feedback can lead to "superstitious learning" by learning false lessons through misattributing unrelated consequences to organizational actions (Argyris and Schön, 1978; Levitt and March, 1988). Temporal and spatial dis-contiguity between an action or experience and the outcome makes learning from feedback prone to errors. Sorenson (2003) showed that the difficulty in direct observation of outcomes and the interruption and lack of effective information communication in highly vertically-integrated organizations negatively affects learning ability. Similarly, Repenning and Sterman (2002) showed that time delay between an action and its outcome feedback may also lead to erroneous interpretation and misattribution of an action's outcome.

Acknowledging that the ability to draw accurate causation from feedback information is dependent on how they are related to current organizational knowledge (Cohen and Levinthal, 1990), the process of learning from a dynamic and complex environment requires a series of cause-effect relationships assessments to develop the required knowledge that explains the experienced events and their performance implications (Mukherjee et al., 1998). However, to achieve that required knowledge, firms may experience low performance at times due to the challenge of correctly attributing a customer's feedback to the course of actions that the firm has taken prior to the feedback. As firms accumulate experiences that are similar in nature, accompanied by an increased likelihood of observing similar feedback, the likelihood of discovering a 'correct theory' increases. That, in turn, increases the chance of establishing incremental change into the current knowledge with a greater possibility of enhancing performance (Radner, 1975). Therefore, we hypothesize:

H1. The level of own experience has an inverted U-shaped relationship with customer dissatisfaction; in the short-run customer dissatisfaction will increase, but as firms accumulate further experience in the long-run,

customer dissatisfaction will decrease.

3. Learning from the experience of others

The intensity of competition may influence the learning outcomes for organizations. Spence (1981) showed that with stronger market competition, a firm's motivation to achieve competitive advantage will provide more incentive for learning. The author also posited that the presence of a knowledge spill-over effect from competition affects learning motivation and decreases the willingness to learn from own experience. That is, the pursuit of profit maximization and risk aversion drive organizations to evaluate the cost and benefit related to a learning process. In that sense, realization of a known knowledge in the environment does not justify the cost of learning for one's self. Rendell et al. (2010) showed that, although own experiential learning provides more accurate information about a task, learning from others (i.e. vicarious learning) through observing and exploiting others' successful experience has a higher pay-off. In other words, 'social' learners can lower the risk associated with the trial-error process of learning from own and save the cost of searching for successful strategies according to their own experience (Smith, 1988; Laland, 2004).

Empirical evidence on the benefit of vicarious learning for competing firms is present in the literature. In studying the impact of the sources of experience on learning in U.S. railroad organizations, Baum and Dahlin (2007) found that to reduce their accident costs, railroad organizations benefit more from the experience of other similar organizations than from their own experience. Similarly, using time-series data from 1135 hotel chains from 1896 to 1985, Ingram and Baum (1997) found that while own operating experience benefitted an organizations in the short-run, it had a negative effect in the long-run because of the overreliance on own knowledge and inertia created through exploiting current routines. The authors found that industry operation and competitive experiences consistently motivated hotels to succeed.

Cohen and Levinthal (1990) argue that excessive reliance on knowledge acquisition from others can also be dysfunctional for organizations. To realize its benefits, the experience from others must be absorbed and integrated into the current organizational knowledge (Cohen and Levinthal, 1990; Kogut and Zander, 1992). Thus, exploitation of such external experience is limited to the extent to which an organization can integrate the knowledge into its own current knowledge. As a result, the benefit of such exploitation becomes smaller as the need for knowledge integration increases. Furthermore, a high level of integration introduces a greater level of variability to current routines (knowledge) and imposes disruption to own knowledge due to the increasing need to modify the importing experience in accordance to current knowledge (Dodgson, 1993; Kim, 1998). Particularly, due to limited absorptive capacity for external knowledge acquisition (Cohen and Levinthal, 1990), the effective integration of external knowledge becomes more costly as the amount of available external experience increases.

Therefore, lower levels of accumulated experience from others, due to higher levels of available absorptive capacity, increases learning ability and provides adaptive benefits. As external knowledge absorption increases, the disruptive effect outweighs the benefit of adaptation at a higher rate because of decreasing capacity for absorption and increasing disturbance to the current knowledge. Based on these arguments, we hypothesize the following:

H2. The level of external experience (experience from others) has a U-shaped relationship with customer dissatisfaction; in the short-run customer dissatisfaction decreases by exploiting external experience, but in the long-run, a further dependence on external experience has a negative impact on customer dissatisfaction.

4. Performance gap as a learning motivator

Aspiration-performance feedback plays a motivating role in organizational learning (Gavetti et al., 2012; Greve, 2003; March and Shapira, 1987). Similar to how individuals compare themselves to their reference group for the purpose of self-assessment or self-enhancement (Wood, 1989), competitive organizations also form aspiration levels for performance improvement by comparing their performance relative to that of similar organizations representing their reference groups (Cyert and March, 1963). Greve (2003) showed that decision makers' learning pattern differs with their evaluation of current performance relative to "aspiration level". Duncan (1979) posits that a persistent gap in performance indicates lack of knowledge and motivates organizations to learn. The extent of performance gaps determines the intensity of effort to reduce the gap (March and Simon, 1958). According to Greve (2003), performing near aspiration level initiates more local-searches and exploitation of current knowledge within an organization, while larger performance gaps trigger non-local and more exploratory searches for new practices (Greve, 1998, 2003). Therefore, with larger gaps, learning from own experience is deemphasized in favor of exploring and learning from others (Baum and Dahlin, 2007).

In addition, as emphasized earlier, utilizing customer feedback to reflect on own experience requires a continuous course of trial and error. The realization of an actual pay-off may be uncertain, at least in the short-run. Such uncertainty decreases the propensity of utilizing such feedback in favor of exploiting current own knowledge, even with lower pay-offs. That implies that firms benefit from their own experiential learning with a relatively lower benefit rate of learning. That is because of the longer learning time required to learn from own experience and also a higher relative value of learning from the experience of others available within the market. Thus, we hypothesize:

H3a. The performance gap flattens (reduces) the inverted U-shaped relationship between own experience and customer dissatisfaction. In other words, the negative effect of lower levels of own experience on performance as well as the positive effect of higher levels of own experience become weaker with an increase in performance gap.

Similarly, when the performance gap increases, motivation to use experience from others also increases. That is, a higher gap between own and a competitor's performance may deemphasize the reliance on own experiences. In other words, a larger extent of underperformance (increased performance gap) can lower the resistance to change and import experience from others as a learning source. While this learning mechanism may benefit underperforming firms to some extent, firms may incur a higher risk of successfully implementing the outside experience when they become abundant and the need for absorbing and integrating the external experience increases. The risk is attributable to a relative lack of reliance on own knowledge necessary to absorb the external experience (Cohen and Levinthal, 1990; Zahra and George, 2002).

Accordingly, we hypothesize:

H3b. The performance gap steepens the U-shaped relationship between the experience from others and customer dissatisfaction. In other words, the negative effect of lower levels of experience from others on customer dissatisfaction as well as the positive effect of high levels of experience from others become stronger as the performance gap increases.

5. Method

5.1. Data and sample

Fig. 1 summarizes our conceptual framework and the hypotheses we discussed above. In this study, we utilize a single market of hotels to control for the complexity impact that can affect the knowledge creation within an organization. Hotels are characterized as rather simple

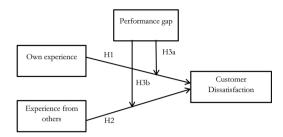


Fig. 1. Conceptual Framework.

organizations and less knowledge intensive compared to manufacturing or high-tech organizations. In addition, considering only a single market in a specific geographical area enables the study to assume that organizations can observe and learn from their competitors' practices. Also, geographical proximity can be a facilitating factor for knowledge spill-over effect. The sample encompasses hotels of different service quality categories. Categorization of hotels is based on their average room price level; this is the primary method used by Smith Travel Research, one of the leading global hotel information providers (Kalnins and Chung, 2004; McCann and Vroom, 2010). Hotels in the sample include 5 categories from 1 to 5; with 5 indicating the highest quality (price) level.

This study uses 241,512 online customer reviews from TripAdvisor and their ratings for 61 hotels in Manhattan, New York within a period of 30 months (From January 2013 to June 2015). Monthly panel data, for the purpose of this study, are used to observe the performance of hotels over time. New York City also represents a very competitive market for hotels across a variety of hotel classes due to an increase in hotel supply (King, 2015) and year-round demand for this market. The sample also includes hotels of various sizes as well as both independent and chain hotels. Table 1 provides a description of all variables included in the study.

5.2. Performance

We measure performance using the degree of customer dissatisfaction (the proportion of negative reviews (including 'poor' and 'terrible' ratings) to the total number of reviews for each hotel during a period of a month)¹. Hence, we define customer dissatisfaction as when customers give 'poor' and 'terrible' ratings to hotels along with their reviews. Although other reviews may also contain some negativity and complaining voice, these two specific groups of review are the most indicative measures of overall customer complaints and dissatisfaction.

We obtained all data from TripAdvisor, which seems to be an appropriate choice based on the purpose of this study. Negative reviews represent a genuine source of information on dissatisfactory performance for hoteliers. Hotel managers can utilize this information and easily monitor both their own and their competitors' performance in terms of customer dissatisfaction.

5.3. Experience (own and others)

The variable experience (both from own and others) is operationalized by accounting for cumulative number of total reviews that hotels receive from customers. Since it is unlikely that customers post multiple reviews on a single hotel stay, the number of posted reviews on TripAdvisor can be used as a proxy of sale (i.e. number of rooms sold). Similar operationalization was used in other studies in which hotel reviews were used as a proxy of sale (Ye et al., 2011; Ye et al., 2009). In the same fashion, we used the accumulation of prior reviews on hotels within the same quality level to measure the experience from others.

 $^{^{\}rm 1}\,{\rm We}$ adjusted this proportion by the number of hotel rooms.

Table 1 Description of the main variables.

Variable	Description
Performance (DV) ^a	(Number of "terrible" and "poor" rated reviews/ the number of total reviews received at time t) adjusted by hotel size
Own Experience (IV)	Accumulated number of reviews received at time t-1
Experience of Others (IV)	Accumulated number of reviews received for hotels within the same group (the star-level) at time t-1
Performance Gap(moderator)	The difference between own performance and the best rival's performance (within the same group) at time t-1

^a Although performance can be measured relative to other metrics such as staff training, R&D expenses, organizational culture, managerial orientation, we believe that our performance measure reflects better the two different types of experience we are trying to test (e.g. Ingram and Baum, 1997; Baum and Dahlin, 2007).

^b Best performance is reflected by the least amount of customer dissatisfaction.

5.4. Performance gap (moderator), control variables

This study measures the aspiration level (performance gap) as the difference between a hotel's own and its best competitor's performance. Usually, hotels within each class compete with each other. By monitoring its competitors' ratings based on customer reviews, a hotel can compare and consequently realize the possible gap. For the purpose of the current study, the gap between a hotel's dissatisfaction rate and the best performing hotel within its peer group represents the performance gap measure.

Due to inherent seasonality in the travel industry, we introduce dummy variables for four quarters to control for variation in sales. By including dummy variables for each hotel, we also control for fixed unobserved heterogeneity among hotels. We also controlled for ownership type (chain versus independent hotels) as a possible factor that may impact the dissatisfaction rate.

5.5. Data analysis

In this study we used panel (cross-sectional time-series) data. As Lant (1992) mentioned, pooling cross-sectional time-series data creates three estimation problems: heteroscedasticity, contemporaneous correlation, and autocorrelation. In this study, we expect to observe autocorrelation (typical in learning curve studies), cross-sectional correlation (because data were obtained from the hotels in the same geographical market), and heteroscedasticity (because the variance in the error terms may be related to each specific hotel). Hence, consistent with the estimation procedure used in Lapré and Tsikriktsis (2006), we corrected for panel specific autocorrelation using first-order autoregressive specification and standard error terms as well as cross-sectional correlation using the procedure "xtpsce" in Stata.

We also considered the possibility that the learning curve might be a function of calendar time as an alternative proxy for the experience variable (Hora and Klassen, 2013; Lapré et al., 2000). However, the results did not show support for such an alternative model. Additionally, we included and ran a two-way fixed effect model by including month dummies (29 dummies for 30 months under study) in model (3) to test for any unobserved time variant variables affecting the learning curve; however, the shapes of learning curves for both own and experience from others remain unchanged.

6. Results

Table 2 reports the descriptive statistics of all variables including the means, standards deviations, and correlations. Table 3 contains the

Table 2
Means, standard deviations and correlations.

	variables	Mean	S.D.	1	2	3	4
1 2 3 4	Failure rate Own Experience Experience from Others Performance gap	45.83 583.53 8231.69 0.09	117.45 590.65 7970.06 0.13	1 0.25 -0.04 0.44	1 0.70 -0.07	1 -0.21	1

regression results. We estimated five different models. Model 1 includes only the control variables. Models 2 and 3 measure the impact of each experience variable separately 2 . Model 4 includes both experience variables but excludes the interaction terms from the model. Model 5 includes both experience variables as well as the interaction terms. Hence, Model 5 represents the full theoretical model.

As shown in Table 3, the results show that the effect of own experience on customer dissatisfaction is positive and significant, and the effect of its squared term is negative and significant. Such results are consistent across Models 3, 4 and 5. These results seem to strongly support Hypothesis 1 predicting that the accumulation of own experience and customer dissatisfaction have an inverted U-shaped relationship³. While the effect of experience from others seem to be inconsistent between Models 2, 4 and 5, we believe that the results should be based on the full theoretical model (i.e. Model 5) in which we see a sign of U-shaped relationship between experience of others and customer dissatisfaction. However, we cannot fully claim that we have a U-shaped relationship within our range of data (see footnote 3).

Hypothesis 3a predicts that with an increase in performance gap, the inverted U-shaped relationship between customer dissatisfaction and own experience would be reduced. In Model 5 (Table 3), the coefficient of the interaction between own experience and performance gap is negative and non-significant. Also, the interaction between performance gap and the squared term of "experience from others" is not significant. Thus, the moderating effect of performance gap on the effect of own experience on customer dissatisfaction is not supported. However, Hypothesis 3b predicting the moderating effect of the performance gap on learning from others is supported. The interaction of performance gap and the squared term of the "experience from others" is positive and significant indicating that the relationship is moderated by the increase in performance gap. However, given that our results did not fully support a U-shaped relationship, we cannot fully support a steepening moderation here.

7. Discussions

In this study, we integrate the organizational learning from experience (both from own and other similar organizations) with a motivational factor for learning (performance gap) to examine how the relationship between accumulated experience and an external performance measure, customer dissatisfaction, differs when the gap in performance increases. We hypothesized and found evidence for two learning patterns. First, we found that learning from own experience follows an inverted U-shaped curve. This finding indicates that with increase in own experience, organizations face higher customer

² For space limitation we do not report the results from two other models where we included the interaction terms with each of the experience variables separately, but the results were largely in line with Model 5.

³We also tested for both inverted and U-shaped relationships using the three steps approach recommended by Haans et al. (2016). The turning point for the inverted U-shape is well within the data range and the slopes at the low and high end of the X-range are also significant. The results however failed to completely support the full U-shaped relationship between the experience from others and customer dissatisfaction.

Table 3
Main Results.

Variables	Models				
	(1)	(2)	(3)	(4)	(5)
Constant	-34.895 ^{***} (9.565)	11.356*** (2.150)	10.764*** (2.444)	11.304*** (2.518)	11.111*** (2.668)
Controls					
Season 1	-5.077** (2.170)	-3.956** (1.879)	-2.613 (2.206)	-3.421 [*] (2.017)	-3.331 (2.031)
Season 2	-0.607 (2.201)	-0.172 (1.857)	1.147 (2.213)	0.083 (2.032)	0.123 (2.059)
Season 3	-2.160 (2.365)	-1.477 (1.974)	-1.083 (2.312)	-1.447 (2.101)	-1.538 (2.113)
Chain	49.775***(9.383)	48.117***(8.164)	46.715***(8.321)	29.553***(4.942)	30.054***(4.591)
Quality level 3	134.632***(12.122)	-56.489***(7.981)	-52.697***(8.578)	-34.583 ^{***} (5.655)	-35.042***(5.340)
Quality level 4	37.510*** (9.415)	-7.971 (11.625)	-0.501 (11.338)	17.215** (8.682)	17.831** (8.294)
Quality level 5	37.260*** (9.436)	-8.866** (2.601)	-7.043 ^{**} (2.679)	-11.851*** (2.731)	-11.708*** (2.756)
Predictors					
Performance Gap (lag)		15.563 (14.296)	9.842 (14.206)	9.597 (14.295)	1.555 (14.929)
Own Experience (lag)			0.010*** (0.002)	0.020*** 0.005)	0.019** (0.005)
Own Experience ² (lag)			$-1.2 \times 10^{-5**}$	$-1.8 \times 10^{-5**}$	$-1.8 \times 10^{-5**} (6.9 \times 10^{-6})$
			(5.7×10^{-6})	(6.9×10^{-6})	
Experience from Others (lag)		$3.9 \times 10^{-4***} (1.1 \times 10^{-4})$		$-7.1 \times 10^{-4**}$	$-6.5\times10^{-4**}$ (2.7×10 ⁻⁴)
				(2.7×10^{-4})	
Experience from Others ² (lag)		$-5.0\times10^{-9}(1.6\times10^{-8})$		$6.0 \times 10^{-8**} (2.0 \times 10^{-8})$	$6.3 \times 10^{-8^{**}} (1.9 \times 10^{-8})$
Interactions		5.0×10 (1.0×10)		0.0 × 10 (2.0 × 10)	0.5 × 10 (1.5 × 10)
Own experience (lag) X performance gap (lag)					-0.141(0.135)
Own Experience ² (lag)X performance gap (lag)					$9.0 \times 10^{-6} (1.2 \times 10^{-4})$
Experience from Others (lag) X performance					0.008(0.005)
gap (lag)					0.008(0.003)
Experience from Others ² (lag)X performance					$5.33 \times 10^{-7*} (3.0 \times 10^{-7})$
1 0 1					5.55 × 10 × (5.0 × 10 ×)
gap (lag) Hotels fixed effect	Noc	VOC	Voc	voc	voc
	yes	yes	yes	yes	yes
Wald χ^2	1.2×10 ⁶	1.2×10 ⁷	2.3×10 ⁶	1.1×10 ⁶	2.6×10^6
\mathbb{R}^2	0.73	0.75	0.77	0.78	0.79
$N \times T$	1529	1478	1478	1478	1478

Note: Dependent variable: Failure rate. Panel corrected standard errors are included in the parentheses.

Three stars indicate singificance at 0.1% level; Two stars indicate significance at 5% level and more; One star indicates significance at the 10% level.

dissatisfaction in the short-run, but in the long-run they eventually improve their performance by reducing their customer dissatisfaction. This finding contradicts the study conducted on US airlines, in which the authors found a U-shaped learning curve for airline customer dissatisfaction (Lapré and Tsikriktsis, 2006). One possible explanation for our finding is that, unlike airlines, hotel businesses may involve more customer interactions and receive various types of complaints, which may prove not to be easily interpretable. Hence, the learning part (improvement phase) of the curve may occur with some time lag.

Second, we showed that learning from accumulated experience of other similar organizations does not have necessarily a U-shaped relationship with customer dissatisfaction. However, when controlling for own experience, the results seem to indicate a potentially U-shaped relationship which theoretically reflects two mechanisms in learning from other competitors in the market. First, organizations benefit from adaptation to the market (i.e. experience from others) by utilizing current successful practices. However, organizations usually manifest limited ability to absorb external experience, which is needed to apply and integrate such experience into their own organization (Lane and Lubatkin, 1998). Second, a disruptive mechanism dominates such beneficial learning. With further increases in external experience (i.e. experience from others) and dominantly resorting to it as a source of learning, both the interpretability and ability to integrate the external experience into a firm's own knowledge will be impaired (Haleblian and Finkelstein, 1999; Zollo and Singh, 2004). In addition, external experience becomes a dysfunctional learning practice, which interferes with current knowledge within an organization.

These findings suggest that the process of experiential learning requires a balance between utilizing both types of experience (both from own and others) within the market (Baum et al., 2000; Levitt and March, 1988)⁴.

Organizations with low levels of experience may benefit from using "experience from others" within the market in which they operate. However, in the long-run, such benefits may not be long-lasting. Instead, an on-going process of interpretation and reflection regarding own organization experience should help build and reinforce a knowledge base within an organization for creating and sustaining a competitive advantage in the market.

We also found potential evidence of the existence of a motivational factor for learning in a competitive market. The magnitude of the performance gap shows both advantages and disadvantages of learning from similar organizations. In other words, the larger the gap, the more motivation organizations have to stay on par with their competitors in terms of performance. This conjecture is consistent with the findings from the study of learning behavior in railroad companies (Baum and Dahlin, 2007). The authors found that companies tend to rely on the experience of similar firms when their performance is well below other companies.

However, our hypothesis predicting the moderating effect of performance gap on own experiential learning did not confirm that larger performance gap generates less motivation to learn from own experience. Social comparison at the inter-organizational level may influence the learning orientation in terms of cost-benefit evaluation for different sources of learning. Therefore, the impact of larger gap, in our case, does not seem to be systematically discouraging the learning process within organizations. A possible explanation for such result may be that learning from own experience may be more of an internal process driven by organizational factors that systematically facilitate the knowledge interpretation and integration within an organization. Learning based on customer feedback may represent an unsystematic process that requires a built-in process of interpretation, internationalization, and implementation of knowledge throughout an organization (Crossan et al., 1999). Building such a required process may in turn need internal motivational factors such as a reward system for

⁴ See Gupta et al. (2006) for a review.

knowledge sharing (Bartol and Srivastava, 2002) and motivational leadership to stimulate internal learning (Vera and Crossan, 2004).

8. Implications and concluding remarks

Following the calls by Argote (1999) and Lapré and Tsikriktsis (2006) for further research on organizational learning with a focus on market-generated measures, the findings of this study contribute to the current literature on organizational learning by studying customer dissatisfaction as an external performance measure. This study also combines a contextual factor, in this case performance gap relative to the best competitor, with two types of experience in studying organizational learning patterns. While several studies have shed light on the impact of customer evaluations on firm performance (e.g. Anderson, 2012; Chevalier and Mayzlin, 2006; Duan et al., 2008), its impact as a competitive motivational factor on learning has not been previously addressed. In fact, Argote and Miron-Spektor (2011) called for more research on the impact of contextual elements moderating the organizational learning curve. Finally, the study contributes to the literature on vicarious learning (learning from others) by including very relevant rivals' profile to investigate the associated learning curve. Previous studies have not been necessarily clear about the criteria for defining rivals. Using hotels allow this study to select very similar rivals in terms of location, operational characteristics (reflecting in their quality level), and target markets. We believe such consideration significantly helps this study to single out the effects of vicarious learning more appropriately.

According to Levinthal and March (1993), firms may increase their reliability (reducing variability in their performance) by repeating certain tasks and accumulating experience; however, reliability alone does not guarantee success for firms in competitive markets. Customer needs and expectations change rapidly, and hotel managers should be sensitive to the voice of their customers. Therefore, the role of experience in learning needs to be reexamined. We suggest that organizations that face fierce competition with low experience may enjoy more benefits by utilizing the experience from others and knowledge available in their competitive market instead of learning to improve on their own through a trial-error processes. However, over-reliance on the experience of others may inhibit organizations from building their own competencies, which in the long-term may jeopardize their performance due to a lack of reliance on embedded knowledge in their organizations.

Practically speaking, hotels need to rely on their own experience as a source of learning for long-term benefits. That is because hotels may have more control over their own learning experience and know-how over time and use that accumulated own experience as an asset to differentiate themselves from others. In other words, although, learning from others could direct hotels to meet critical performance factors in order to be competitive, it may not give the hotel unique enough differentiation leverage to sustain its performance over time.

To this end, turning what is learned from the complex environment into an asset of operant resources reflective of customer feedback may require the establishment of a series of cause-effect relationships between the internal and external firm environments. Therefore, hotels own operand resources could be augmented through what is also learned from others to propel performance. There is no question that hotel performance is influenced by environmental factors from their competitive sets as well as their own prior experience. The challenge is then how to configure the use of such resources as input-to-outcome performance measures. Because it is clear that customer-driven evaluations may encourage organizations to learn how to stay competitive in the market place, it is equally imperative that hotels know how to utilize both their own operand resources and what they have gained from outside as an operant to reduce customer dissatisfaction over time.

We acknowledge several limitations in our study. First, our research is limited to only one external firm evaluation criterion. Using more

diverse ways to externally evaluate organizations may help generalize our findings. For instance, analyzing the differences in terms of media rankings can be one way to conceptualize the organizational competitive position. Secondly, we used a sample of a limited number of hotels in one specific location. This may affect the generalizability of our findings. Using a larger sample from different markets and competitive levels may depict different learning patterns.

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