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# Practice makes perfect: Entrepreneurial-experience curves and venture performance☆

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ABSTRACT

This study tackles the puzzle of why increasing entrepreneurial experience does not always lead to improved financial performance of new ventures. We propose an alternate framework demonstrating how experience translates into expertise by arguing that the positive experience–performance relationship only appears to expert entrepreneurs, while novice entrepreneurs may actually perform increasingly worse because of their inability to generalize their experiential knowledge accurately into new ventures. These negative performance implications can be alleviated if the level of contextual similarity between prior and current ventures is high. Using matched employee–employer data of an entire population of Swedish founder-managers between 1990 and 2007, we find a non-linear relationship between entrepreneurial experience and financial performance consistent with our framework. Moreover, the level of industry, geographic, and temporal similarities between prior and current ventures positively moderates this relationship. Our work provides both theoretical and practical implications for entrepreneurial experience—people can learn entrepreneurship and pursue it with greater success as long as they have multiple opportunities to gain experience, overcome barriers to learning, and build an entrepreneurial-experience curve.


## 1. Executive summary

Central to the entrepreneurship literature is the conventional wisdom that entrepreneurs and investors alike use experience as a vital clue for anticipating future performance—the level of financial success in new ventures. Extant literature suggests that entrepreneurs who have more experience found better-performing ventures, their experience enabling them to generalize knowledge from one setting and to apply it effectively to a new situation. However, according to learning studies, experience may not necessarily trigger increased performance if incorrect inferences are drawn from previous experiences. The objective of our study is to investigate these contrasting theoretical arguments in entrepreneurship.

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In this paper, we argue that entrepreneurs, despite their experience, may actually perform worse in subsequent ventures because of conditions that prevent learning from automatically occurring from one venture to the next. We refer to these conditions as *barriers to learning*, which we define as "obstacles encountered by entrepreneurs that prevent them from extracting appropriate knowledge from their prior venturing or from applying their existing knowledge appropriately to new ventures." Our study uses theories of experience curves and superstitious learning from the organizational learning literature to propose an alternate framework that demonstrates how the positive experience-performance relationship only appears to expert entrepreneurs, while less-experienced entrepreneurs may be unable to apply their experiential knowledge accurately and successfully to new ventures. While expert entrepreneurs have the necessary general awareness to make more effective connections and to place particular events into their proper contexts, entrepreneurs with lower levels of venture experience attempt to apply lessons learned from experiences they believe to be similar but in practice are inherently different.

To investigate the experience-performance relationship, we developed a set of predictions derived from the experience curve literature to show a number of barriers to learning based on content- and context-domain differences. We described our predictions specifically in terms of three context-domain differences between prior and current ventures: industry, geographic, and temporal. For each of these three context-domain characteristics, we predicted that, at low to moderate levels of experience, high context similarity weakens the negative direct relationship between experience and venture performance. At moderate to high levels of experience, we predicted that high context similarity strengthens the positive direct relationship between experience and venture performance.

We tested our theory by using matched employee–employer data of an entire population of Swedish founder-managers between 1990 and 2007. Consistent with our theoretical predictions, we found evidence to support our framework predicting why limited experience lowers performance while enhanced financial performance only occurs at substantial levels of experience. We observed that contextual similarities among prior and current ventures positively moderated the direct experience–performance relationship.

Our work provides both theoretical and practical implications for entrepreneurial experience—people can learn entrepreneurship and pursue it with greater success as long as they have multiple opportunities to gain experience, overcome barriers to learning, and build an entrepreneurial-experience curve. As such, this study provides new insights for the experience curve literature by challenging the assumption that repeated task experience generates automatic and consistent returns to performance. In demonstrating the contours of entrepreneurial-experience curves, we provide a corrective to mixed evidence reported in the literature regarding the experience–performance relationship. Just as critically for aspiring entrepreneurs, our work shows that extensive practice enables them to learn entrepreneurship and makes for the possibility of better performing ventures.

## 2. Introduction

Entrepreneurs and investors alike use experience as a vital clue for anticipating future performance—the level of financial success in new ventures. In its simplest form, entrepreneurial experience is past involvement in founding a business. Entrepreneurs tap into the knowledge gleaned from their prior ventures to formulate and execute their plans in new ventures. Investors, on the other hand, regularly tout a philosophy of "betting on the jockey rather than the horse" when evaluating potential entrepreneurs to back with their financial support. But for both parties, entrepreneurial experience serves as a proxy for expertise—an underlying ability to generalize knowledge from one setting and to apply it effectively to a new situation (Eisenhardt and Martin, 2000; Hayes, 1989). Thus, conventional wisdom dictates that entrepreneurs who have more experience would also found better-performing ventures, a relationship consistent with experience curve theory (Argote and Todorova, 2007).[3] Acceptance of this null argument depends on the validity of the assumption that learning from prior ventures is cumulative and automatic with each successive effort (Hayes and Clark, 1985; Yelle, 1979). However, we also know from learning studies that experience may not necessarily trigger increased performance if incorrect inferences are drawn from previous experiences, a theoretical concept known as superstitious learning (e.g., Levitt and March, 1988). In particular, infrequent events are more difficult to learn from due to the lack of repetitiveness or the time decay of learning (e.g., March et al., 1991; Parker, 2012).

The purpose of our study is to investigate these contrasting theoretical arguments in entrepreneurship. Despite their experience, entrepreneurs may actually perform worse in subsequent ventures because of conditions that prevent learning automatically occurring from one venture to the next (Bingham et al., 2007; Rerup, 2005; Shepherd, 2003). We refer to these conditions as *barriers to learning*, which we define as obstacles encountered by entrepreneurs that prevent them from extracting appropriate knowledge from their prior venturing or from applying their existing knowledge appropriately to new ventures. We develop arguments for why some experienced entrepreneurs are unable to overcome these barriers fully—and why they experience poorer entrepreneurial performance—by comparing experience curve and superstitious learning theories.

We investigate our research questions using a unique longitudinal dataset of new ventures in Swedish knowledge-intensive sectors from 1990 to 2007. This comprehensive, historical, and time-varying information about the owner-managers of these ventures allows us to examine carefully the experience-venture performance relationship. Our analyses reveal a non-linear relationship between these two facets of entrepreneurship, such that entrepreneurs actually perform progressively worse between low to moderate levels of experience and improve only at moderate to high levels of experience. The strength of this non-linear relationship varies depending on industry, geographic, and temporal similarities between the entrepreneurs' current and prior ventures.

[3] Initially introduced in psychology, the term has acquired a broader interpretation over time, and expressions such as "learning curve" and "progress curve" are often used interchangeably ( Epple et al., 1991).