

OVERCOMING MARKET COMPETITION: THE MODERATING  
EFFECT OF ENTREPRENEURIAL  
SELF-EFFICACY

by

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## ABSTRACT

Existing literature shows that firms in industries which experience high competition typically have lower subsequent performance in various areas across the firm. Overcoming this competition is integral to firms which wish to persevere and experience prolonged success. Entrepreneurs that are particularly effective at overcoming competition can have higher individual characteristics which make them more successful than their competitors. I believe that one of these characteristics is self-efficacy. In the context of entrepreneurs, self-efficacy is known as entrepreneurial self-efficacy. In this study, I examine the moderating effects of entrepreneurial self-efficacy in relation to high perceived competition and subsequent firm performance. My theories and findings indicate that entrepreneurial self-efficacy attenuates the negative relationship between high competition and subsequent firm performance. The results prove the importance of high entrepreneurial self-efficacy in the business venture process.

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## **INTRODUCTION**

Entrepreneurs are often faced with challenges that threaten the success of their business. More specifically, a pressing issue for both nascent and seasoned entrepreneurs is overcoming industry competition. This study will examine entrepreneurs' abilities to succeed in the face of high levels of competition. Past research has shown that firms are more likely to perform poorly in the face of increased levels of market competition (Kaufman, 2015; Roberts, 1999). There are certain characteristics of entrepreneurs that can overcome the difficulties faced by firms that are challenged by competition. I believe that one of these characteristics is self-efficacy.

Perceived self-efficacy can be defined as a person's belief about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives. Self-efficacy beliefs determine peoples' behavior, motivation, thoughts, and feelings. (Bandura, 1994). When put in the context of entrepreneurship, self-efficacy takes the form of entrepreneurial self-efficacy, or ESE. Entrepreneurial self-efficacy is the degree to which people perceive themselves as having the ability successfully perform the various roles and tasks of entrepreneurship (Chen, Greene, & Crick, 1998; De Noble, Jung, & Ehrlich, 199). Studies show that individuals with high levels of self-efficacy are more likely to set challenging goals, persist in attempt to achieve their goals, and quickly recover from failure (Bandura, 1997).

I have formed an initial hypothesis that as severity of market competition increases, firm performance will decrease. Previous studies have proved that self-efficacy is positively related to firm performance (Khedhaouria, Gurău, Torrès, 2015). That is to say, as self-efficacy increases, firms perform more successfully. For my study, entrepreneurial self-efficacy will serve as a moderator of the market competition and firm performance relationship.

The different dimensions of the aforementioned entrepreneurial tendencies have been linked to sustainability of entrepreneurial business development efforts. Entrepreneurs frequently elect independent employment as a career choice in spite of adverse events or lack of financial success (Kuratko, Hornsby, & Naffziger, 1997). This paper will explore an entrepreneur's ability to overcome industry competition as measured by his or her levels of entrepreneurial self-efficacy.

The research question at hand is: How does entrepreneurial self-efficacy affect an entrepreneur's ability to successfully overcome competition in business settings? This paper makes the following contributions: First, it reaffirms the notion that high industry competition has a negative effect on subsequent firm performance. Second, it illustrates the effects of entrepreneurial self-efficacy as a moderator of perceived competition's effects on firm performance. This paper will proceed with a literature review about market competition, entrepreneurship, the moderating effect of entrepreneurial self-efficacy, and entrepreneurial success over time. Subsequent to data analyses, implications of the research will be provided.

## **LITERATURE REVIEW**

### **Market Competition/Firm Performance**

Much prior evidence exists that suggests that firm performance is negatively affected by high market competition. Specifically, literature explains that as industry competition increases, reduced profits ensue (Roberts, P. 1999). Henderson and Mitchell (1997) expand upon this by arguing that organizational capabilities and market competition have great importance in determining a firm's actions and performance. They assert that firms develop organizational capabilities that condition a firm's reactions to changes in its environment, and those reactions and subsequent firm performance change the structure of the firm's industry (Henderson &

Mitchell, 1997). Research from Nickell (1996) agrees with this concept, detailing that high competition creates more opportunities for firms to act on opportunities either positively or negatively. And, the existence of other firms in an industry leads to a sharpening of effort incentives (Nickell, 1996).

Park et al. (2014) studied the effects of intense competition on a firm's ability to innovate, and how innovation affects subsequent firm performance. They cite claims that innovation and performance are stifled by intense competition. Park et al. (2014) conclude that at very high levels of competitive intensity, competition adversely affects a firm's innovation output. Later in their study, Park et al. (2014) relate their measurement to the utility of strategic alliances. They found that as the magnitude of competitive intensity becomes "very high," the benefits of strategic alliances begin to decline and become less effective (Park et al., 2014).

Further research exists that indicates competition is associated with lower firm valuations (Beiner, Schmid, & Wanzenried, 2011). This particular study cites work which explains that increasing competition lowers a firm's profits and thus reduces incentives to exert effort (Beiner, Schmid, & Wanzenried, 2011).

### **The Three Perspectives of Competition Shaping Capability**

The suggestion that severe competition shapes firm strategy and capabilities is well established through three related perspectives: economics, organizational ecology studies, and strategic management research. The economic perspective asserts that harsh competitive regimes force firms to choose between adopting best-practice techniques and exiting the industry. This subsequently creates an equilibrium in which all firms in an industry have the same capabilities. This equilibrium can arise through adaptation of inefficient individual firms or through inefficiently capable firms exiting the industry (Henderson & Mitchell, 1997).

The ecological perspective takes a harsher outlook on firms, however. Hannan and Freeman (1977), Aldrich (1979), and Carroll and Hannan (1992) have produced research which collectively argues that individual firms face strong “inertial constraints” on their ability to adapt successfully to environmental change. The premise of an ecological mindset is that competition shapes capabilities by forcing firms that do not fit the environment to exit. In other words, this is a “survival of the fittest” theory. Despite this, organizational ecology theory recognizes that most individual firms will, at the very least, attempt to adapt to a rapidly changing business environment, and some of those firms will in fact succeed in doing so (Henderson & Mitchell, 1997).

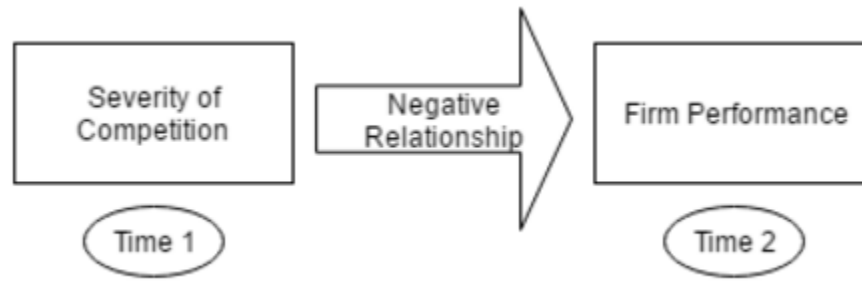
Lastly, traditional strategic management research emphasizes that firms can more easily adapt their strategies capabilities as competitive environments change. Because of this, Henderson & Mitchell (1997) cite that “...in this view, the distribution of capabilities in any given industry reflects purposive managerial action.”

We are thus reminded that competition undoubtedly shapes firm capabilities. Their study claims that whether a firm succeeds or fails is dependent upon its ability to adapt to a changing industry environment. Firms may prosper if environmental changes are consistent with a firm’s existing capabilities. However, firms will suffer in the face of highly competitive environments if changes are inconsistent with their capabilities, if other firms can adapt more quickly, or if new firms enter an industry with capabilities that better suit the changed environment (Henderson & Mitchell, 1997). These facts help form the basis for the first hypothesis.



### **Hypothesis 1:**

As entrepreneurs perceive severity of market competition to be high, subsequent firm performance will decrease. Thus, there is a negative relationship between market competition and firm performance. This is illustrated in Figure 1.



*Figure 1*

Past research has shown that individual characteristics of entrepreneurs can influence entrepreneurial performance (Cardon & Kirk, 2015; Pollack & Hoyt, 2012). In this study, we specifically acknowledge the influencing effects of entrepreneurial self-efficacy. However, it is crucial to first understand general self-efficacy and its sources, benefits, and effects in order to wholly conceptualize entrepreneurial self-efficacy as an important characteristics of entrepreneurs.

### **Self-Efficacy**

Before fully the notion of entrepreneurial self-efficacy, it is important to have a firm understanding of self-efficacy, or general self-efficacy (GSE). Bandura (1994) defines perceived self-efficacy as “people’s beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives.” He elaborates on the construct by outlining that self-efficacy beliefs determine how people feel, think, motivate themselves, and behave (Bandura, 1994).

According to Bandura (1994), a strong sense of self-efficacy can enhance human accomplishment and personal well-being in multiple ways. One of the most significant ways in which people with high self-efficacy operate, according to Bandura, is by viewing difficult tasks as challenges to be mastered rather than as threats to be avoided. Furthermore, particularly efficacious people set themselves challenging goals and maintain strong commitment to them. People with high self-efficacy also heighten and sustain their efforts in the face of failure, quickly recover their sense of efficacy after setbacks, attribute failure to insufficient effort or deficient knowledge and skills, and approach threatening situations with assurance that they can exercise control over them (Bandura, 1994).

Bandura (1994) elaborates by showcasing the opposite side of the matter – that people with low self-efficacy have virtually opposite tactics. “...people who doubt their capabilities shy away from difficult tasks which they view as personal threats. They have low aspirations and weak commitment to the goals they choose to pursue. When faced with difficult tasks, they dwell on their personal deficiencies...They slacken their efforts and give up quickly in the face of difficulties. They are slower to recover their sense of efficacy following failure of setbacks...it does not require much failure for them to lose faith in their capabilities (Bandura, 1994, p71-72).”

### **Sources of Self-Efficacy**

Bandura (1994) outlines four main sources of influence with regards to people's perceived self-efficacy. The first and most effective way of creating a strong sense of efficacy is through mastery experiences. Mastery experiences are successes in overcoming obstacles through perseverant effort (Bandura, 1994). However, if people only easily achieve success, they begin to expect quick results and are easily discouraged by failure. This makes resilient self-

efficacy more important in overcoming obstacles. Bandura does note, however, that some setbacks in human pursuits are useful in teaching that success requires sustained effort (Bandura, 1994).

The second means of creating strong self-efficacy is through social models. This means that when someone sees people similar to oneself succeed by sustained effort, the observer's self-efficacy is vicariously raised. However, it's important to acknowledge that this is a double-edged sword. If an observer notices the failure of someone in a similar situation, this can also lower the observer's perceived self-efficacy. The greater the perceived similarity, the greater the magnitude of the effect of a social model (Bandura, 1994).

A third way of bolstering perceived self-efficacy is through social persuasion. This signifies that people can be verbally persuaded that they have the capabilities to succeed, and are therefore more likely to muster increased effort and sustain it. Bandura explains that it is more difficult to instill high beliefs of personal efficacy by this method than to undermine it. People will tend to avoid challenging endeavors and give up more quickly if persuaded that they lack the capabilities to succeed (Bandura, 1994).

Lastly, people often rely on somatic and emotional states in evaluating their capabilities. Reactions such as stress and tension cause people to view themselves as vulnerable to poor performance. Positive moods enhance perceived self-efficacy, and negative moods diminish it. Bandura further clarifies by explaining that the intensity of emotional and physical reactions are not as important to self-efficacy as how those reactions are perceived and interpreted. Particularly efficacious people will view their heightened emotions as an "energizing facilitator of performance," and those with low self-efficacy view them as limiting (Bandura, 1994).

## **Benefits of High Perceived Self-Efficacy**

Bandura (1994) claims that more evidence is coming to light that supports the notion that human accomplishments and positive well-being are direct results of “an optimistic sense of personal efficacy.” According to Bandura, it is integral that people have a “robust” sense of personal efficacy in order to effectively persevere and achieve subsequent success. While Bandura acknowledges that a misattribution of personal efficacy can be detrimental, he illustrates that accurate self-appraisal has serious functional value.

When people incorrectly estimate their levels of self-efficacy, it is usually done in the manner of an overestimation (Bandura, 1994). However, Bandura argues that this is indeed a positive thing. He astutely points out that if “efficacy beliefs always reflected only what people can do routinely they would rarely fail but they would not set aspirations beyond their immediate reach nor mount the extra effort needed to surpass their ordinary performances,” (Bandura, 1994). Innovative achievements also require a heightened sense of self-efficacy. This is due to the fact that innovations frequently require a significant investment of time and effort despite the uncertainty of a positive outcome. Provided efficacy is not unrealistically exaggerated, it will foster positive well-being and accomplishment (Bandura, 1994). Park & John produced research which tested the use of personal branding in creating a sense of self-efficacy, and later concluded that higher senses of self-efficacy do indeed lead to better task performance (Park & John, 2014).

*“People with a high sense of efficacy have the staying power to endure the obstacles and setbacks that characterize difficult undertakings.” – Bandura, 1994*

Past organizational research in regards to self-efficacy has looked at several topics, including how it affects individuals’ perceptions of opportunities and threats (Krueger & Dickson, 1993), differences in self-efficacy with regards to gender (Javidan, Bullough, & Dibble,

2016), managerial self-efficacy (Fast, Burris, & Bartel, 2014), and even self-efficacy of students (Hiroshi & Kazuo, 2015). Not surprisingly, self-efficacy is also directly related to entrepreneurs.

### **Entrepreneurial Self-Efficacy**

Self-efficacy, when considered a key precursor to new venture intentions, is referred to as ESE, or Entrepreneurial Self-Efficacy (McGee et al., 2009). Multiple theories exist that indicate varying levels of self-efficacy in the context of entrepreneurship can be beneficial in different ways. Belief in the malleability of entrepreneurial ability traits such as self-efficacy has been found to mitigate negative effects of threats to entrepreneurial success (Pollack, Burnette, Hoyt, 2012).

It is important to distinguish self-efficacy, or general self-efficacy (GSE) from entrepreneurial self-efficacy (ESE). According to McGee et al. (2009), “GSE captures an individual’s perception of their ability to successfully perform a variety of tasks across a variety of situations.” This also goes to say that GSE refers to one’s confidence in accomplishing task demands, regardless of what those demands may be (McGee et al., 2009). Researchers are rather large proponents of using a specific measure of GSE in order to fulfill the diverse set of roles and skill sets that entrepreneurs require. Researchers also believe that it would be too difficult to establish a comprehensive, itemized list of tasks explicitly associated with entrepreneurial activities. Among practical considerations, it is substantially easier to measure GSE than explicitly capture the nuances of ESE. If the measurement of self-efficacy can be refined to a task specific method, it will be more predictive of efficacy’s task-specific outcomes in research (McGee et al., 2009).

ESE is particularly useful since it incorporates personality in conjunction with environmental factors, and is thought to be a strong predictor of entrepreneurial intentions and

ultimately action (McGee et al., 2009). Self-efficacy is a useful concept for explaining human behavior, as research reveals that it plays an influential role in determining an individual's choice, level of effort, and perseverance. Individuals with high self-efficacy for a certain task are more likely to pursue and then persist in a task than those individuals who possess low self-efficacy (Bandura, 1997).

Persistence has been shown to be particularly important in entrepreneurship (Cardon & Kirk, 2015). Entrepreneurs who are tenacious in pursuit of their goals have a greater chance of success. When an entrepreneur is confident in their abilities to perform the tasks necessary to start and run a new venture, they are more likely to attempt those tasks and to continue attempting to succeed (Cardon & Kirk, 2015). If ESE breeds persistence, and persistence leads to increased chances of success, it can be reasonably hypothesized that higher magnitudes of entrepreneurial self-efficacy will affect firm success.

It is quite natural to assume that lower levels of ESE will thus cause an opposite effect on entrepreneurs. Yet, evidence exists that suggests that some self-doubt about one's performance efficacy can act as a motivator for entrepreneurs (Bandura, Locke, 2003). This does not imply, however, that it is necessary to undermine one's sense of efficacy in order to succeed. Bandura and Locke (2003) also found that instilling a strong sense of efficacy enhances the development of competencies. It is thus apparent that excess levels of self-doubt will negatively affect one's ability to execute skills. Performance efficacy is essential in sustaining effort necessary to succeed (Bandura, 1997). Bandura and Locke go on to state that a "resilient sense of efficacy provides the necessary staying power in the arduous pursuit of innovation and excellence. During difficult endeavors, people have to invest a great deal of time and effort and have to be willing to take risks under uncertainty." Those with high self-efficacy tend to focus on opportunities worth

pursuing, while those with low self-efficacy generally concentrate on what risks should be avoided (Krueger & Dickson, 1993, 1994).

### **Dimensions of ESE**

Most theorists argue that ESE is best conceptualized as a multi-dimensional construct. Despite this, much empirical research exists that only provides a unidimensional measure of ESE (McGee et al., 2009). In a study to discover whether managers and entrepreneurs showed different levels of ESE, Chen et al. identified five factors of ESE as a construct, yet the study was based off of a total/limited ESE measure. They were able to effectively identify different dimensions of ESE that served as bases for factor analysis. The dimensions were: (1) marketing, (2) innovation, (3) management, (4) risk taking, and (5) financial control. Chen et al. also effectively distinguished entrepreneurs and managers. Despite this, their results gave little insight into the importance of the aforementioned specific dimensions. Thus, a “total” measure of ESE was shown to inadequately provide insight into which specific areas of self-efficacy prove most influential to entrepreneurs. This means that it is not possible to determine whether a higher magnitude of self-efficacy in areas such as risk-taking or marketing is more influential in furnishing entrepreneurial intentions than having a high level of self-efficacy in innovation (McGee et al., 2009).

Barbosa et al. (2007) further investigated the relationship between cognitive styles and four task-specific types of ESE. These types were: opportunity-identification self-efficacy, relationship self-efficacy, managerial self-efficacy, and tolerance self-efficacy. Findings concluded that the various types of self-efficacy and their underlying dimensions had unequal and unique relationships to multiple dependent variables, particularly entrepreneurial intentions and nascent behavior (Barbosa et al., 2007).

## **ESE's 4 Phases**

McGee et al. (2009) claim that previous measurements of ESE have failed to account for three things: a clear distinction between GSE and self-efficacy related to specific tasks associated with venture creation, the multi-dimensional nature of ESE, and inclusion of nascent entrepreneurs in samples used. In order to combat this, McGee et al. used a multi-phase method of research, which will also be closely followed in this research. The phases are divided as follows: searching, planning, marshaling, and implementing.

The *searching* phase involves the advancement of an entrepreneur's unique idea and/or identification of a special opportunity. This phase elaborates upon an entrepreneur's creativity and innovation. As research suggests, entrepreneurs are particularly skilled (in comparison to managers) at identifying and seizing opportunities before they are recognized by others (McGee et al., 2009).

The *planning* phase includes activities in which the entrepreneur molds an initial idea into a viable business plan. While a written business plan may or may not be present, the entrepreneur must begin to allocate substance to the plan during this phase. This substance will address important questions regarding size and demographic of a target market, location of the business, manufacturing processes, financing, growth strategies, and more (McGee et al., 2009).

The *marshaling* phase involves the assembly of resources which will allow the conception of the venture. Marshaling will transition the venture from an abstract concept to a physical entity.

Lastly, the *implementing* phase requires entrepreneurs to grow and sustain a growing business. In order to do this, good management skills and principles are required. The



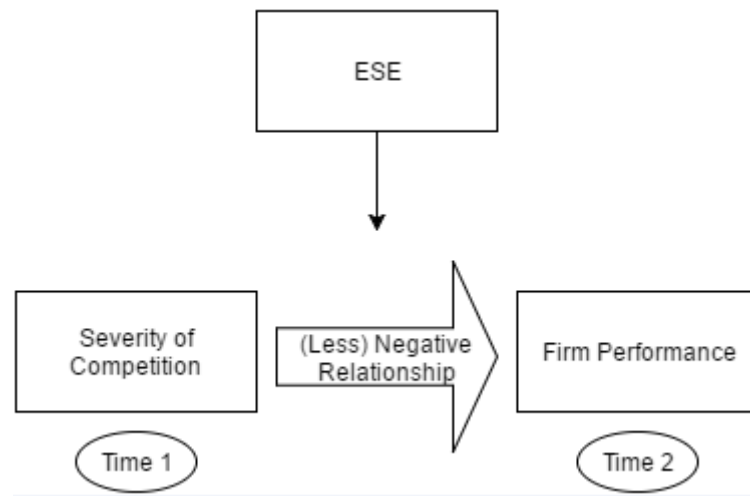
entrepreneur must also engage in strategic planning initiatives and management of multiple business relationships. This requires adequate entrepreneurial vision and problem solving skills.

McGee et al. (2009) confirmed that ESE is best viewed as a multi-dimensional construct. Furthermore, when refined to the divisional phases and activities mentioned before, ESE proved a particularly accurate representation of nascent entrepreneurs and their ESE belief. They also found that nascent entrepreneurs were more likely to achieve higher scores among ESE measures. In addition, ESE showcased a positive relationship between nascent entrepreneurship and the aforementioned dimensions of ESE (McGee et al., 2009). Despite this study's important findings, McGee et al. mentioned that "future research is needed to explore the relationship between ESE and *subsequent* venture performance. The literature suggests that higher levels of ESE influence the likelihood of successfully launching a new business. However, there is still limited understanding of ESE's role in the new venture's performance after start-up."

In the context of overcoming competition, I believe there are certain facets of ESE that are particularly relevant to this study. These facets include estimating customer demand for entrepreneur's products and/or services, determining a competitive price for products/services, estimating the amount of working capital needed to run a business, and designing an effective marketing/advertising campaign for a business. Given that these dimensions of ESE pertain to generic, necessary functional abilities of entrepreneurs, these can be applied to businesses which must overcome competition in order to ensure survivability. Since the planning phase of ESE requires an entrepreneur to answer so many vital questions, I believe that entrepreneurs that handle the planning phase effectively will also respond efficaciously to the above facets. I therefore believe that this renders the planning phase the most important to analyze when studying ESE's moderating effects on firm success.

## **Hypothesis 2**

The negative relationship between severity of competition and firm performance will remain. However, planning ESE will moderate the effect, and attenuate/mitigate the perceived severity of competition and its related effects to subsequent firm performance. In other words, firm performance will still be negatively affected by perceived high competition, but the magnitude of that effect will not be as great. This is illustrated by Figure 2.



*Figure 2*

In order to properly test these hypotheses, the following methodology was used.

## **METHODS**

To examine this study, I interpreted data from previously-collected surveys of firms within various industries within the Arlington, Texas area. A sample of 136 small firms was obtained at two different time periods. The first wave of surveys was sent out and collected in 2006. The second wave, consisting of responses from the same firms, was sent out and collected in 2010. The firms in the samples belong to 13 broad industries, including: retail, food service, hospitality, logistics and trade, real estate, entertainment/tourism, telecommunications, computer

services, financial services, legal services, other professional services, other personal services, and “other.” Firm performance was measured as perceived comparative net income.

Entrepreneurs surveyed fell between the ages of 20 and 68; the average age was 43.3. The sample consisted of 67.7% males and 32.3% females. Approximately 37% of respondents identified as a minority. The average year of conception for the firms was 2001.

### **Measures**

*Study variables.* In the surveys collected, entrepreneurs were asked to rate their abilities to perform 17 different tasks. For the purposes of this study, four of these tasks were deemed particularly relevant and used for measurement. As mentioned earlier, those tasks are “Estimate customer demand for my products and/or services,” “Determine a competitive price for my products and/or services,” “Estimate the amount of working capital needed to run my business,” and “Design an effective marketing/advertising campaign for my business.” Each of these tasks required a response on a 7-point scale, with increasing values corresponding to higher planning ESE.

*Control variables.* I used two control variables for the study. First, I used firm age as a control, which was the number of years since the firm was founded, prior to 2006. Second, I used a dummy variable that captured whether the firm as a franchise or not, since a franchise is likely to receive support in ways that a stand-alone company would not. After centering the primary study predictors and our comparative net income outcome variable, I used linear regression to test the hypotheses. In order to encompass the main and moderating effects, I first included the control variables, then later included the study variables.

## **RESULTS**

The results of the study are shown in Table 2. The first hypothesis states that as entrepreneurs perceive severity of competition to be high, subsequent firm performance will decrease. Model 2 of Table 2 of the regression analyses shows the significant effects for this hypothesized relationship ( $\beta = -.12, p < .03$ ). Hypothesis 2 states that the negative relationship between severity of competition and firm performance will remain. However, ESE will moderate the effect, and attenuate the perceived severity of competition and its related effects to subsequent firm performance. Analyses shows that this hypothesis also proved true as illustrated by Model 2 of Table 2 ( $\beta = .02, p < .05$ ).

A graph of the interaction between firm performance and high competition (as moderated by ESE) is shown in Figure 3. Results indicate that regardless of the level of ESE, firm performance was negatively affected by increasing levels of market competition. However, high levels of ESE were shown to correspond with better firm performance than low levels of ESE, regardless of the level of competition.

## **DISCUSSION**

This study advances research on ESE and its moderating effects on relative firm performance. This study also highlights several important empirical studies which contribute to the ultimate findings. The aforementioned empirical studies illustrate that high levels of competition can have varying, but largely negative effects on firm performance. They also delve into the importance of general self-efficacy in defining individual intentions. Lastly, the studies show that entrepreneurial self-efficacy is largely indicative of an entrepreneur's intentions.

This study also elaborates on previous research by using ESE as a temporal measure. Previous studies have examined ESE on a fixed scale – multiple time periods were not covered. By using ESE temporally, researchers can better understand the predictive nature of the

construct. For example, future research can more reasonably expect firms with particularly efficacious entrepreneurs to perform much more efficiently.

On the other hand, my study has also proven that entrepreneurs who perceive high market competition have a higher propensity to perform poorly amidst that competition. As an example, an entrepreneur who owns a restaurant and perceives there to be many other restaurants nearby will likely perform more poorly than a restaurant owner that did not feel tremendous pressure from other nearby restaurants. This assertion raises an important issue for future studies. Later studies may require researchers to indicate to what degree other variables influence the relationship between perceived market competition and firm success.

My study also highlights the importance of ESE in nascent entrepreneurs. I believe that the ability for nascent entrepreneurs to develop ESE early on in his or her entrepreneurial venture is crucial to sustained success. ESE is proven to attenuate the effects of high competition in entrepreneurs. Thus, a nascent entrepreneur can especially benefit from the ability to foster ESE from the very beginning of a venture. This will allow him or her to persist despite adversity that may otherwise derail or discourage the entrepreneur.

ESE is a characteristic that can be taught. Given that it is indicative of higher firm performance and mitigates the negative effects of high competition, I believe that it would be particularly useful to teach university business students how to develop ESE. This might be done through specific ESE-centered curriculum, as a subset of entrepreneurial curriculum, or in extracurricular learning opportunities. Implementing this would likely encourage more students to take on entrepreneurial ventures, and may even lead to higher personal performance in entry-level jobs. Further studies may research levels of ESE in university business students and

measure subsequent performance in subsequent entrepreneurial ventures, entry-level positions, or even academic performance.

### **CONCLUSIONS**

This study has several implications which open doors for future research. First, the study's findings suggest that in most cases, regardless of an individual's self-efficacy, firm performance will be negatively affected if an entrepreneur perceives there to be a high level of competition. This assertion is supported by comparing entrepreneurs that perceive a high level of competition to their respective levels of net income. In this comparison, entrepreneurs with higher perceived levels of competition generally corresponded to lower net incomes.

Secondly, in the context of entrepreneurial intentions, general self-efficacy isn't all that matters for firm performance. This study proves the usefulness of ESE in business venture for entrepreneurs. It is inherently necessary for entrepreneurs to account for varying levels of competition. ESE is what aids entrepreneurs in tackling the adversity of competition. Lastly, this study illustrates that ESE will lead entrepreneurs to more effectively tackle the aforementioned entrepreneurial activities of the planning phase. Support for these statements was garnered by assessing the moderating effect of ESE in regards to perceived levels of competition and a firm's subsequent net income over time.

Future studies should seek a more exhaustive approach to this study. Whereas I deemed four of the tasks in the planning phase to be most relevant, more research is required to determine a more holistic conclusion. It is possible that an extreme lack of ESE in one of the other tasks of the planning phase may counteract a strong sense of self-efficacy in the tasks

utilized in this study. Other tasks outlined in the surveys include, but are not limited to, “Recruit and hire employees,” “Manage the financial assets of my business,” “Design a product or service that will satisfy customer needs and wants,” and “Deal effectively with day-to-day problems and crises.” It may also be worthwhile for future studies to select entirely different tasks which do not include those used in this study. Using the same methods as this study, if results were to again hold true under different tasks, the conclusions of this study would further be solidified.

*Table 1:* Descriptive Statistics of means (M), Standard deviations (SD), and inter-correlations. (n=136)

<b>Variable</b>	<b>M</b>	<b>SD</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>1. Tenure</b>	<b>5.25</b>	<b>4.23</b>	<b>-</b>			
<b>2. Franchise</b>	<b>1.73</b>	<b>0.45</b>	<b>0.09</b>	<b>-</b>		
<b>3. Market Comp.</b>	<b>3.02</b>	<b>1.36</b>	<b>-0.08</b>	<b>-0.03</b>	<b>-</b>	
<b>4. ESE</b>	<b>21.08</b>	<b>4.3</b>	<b>0.12</b>	<b>-0.04</b>	<b>-0.06</b>	<b>-</b>
<b>5. Performance</b>	<b>2.98</b>	<b>0.8</b>	<b>0.16</b>	<b>0.06</b>	<b>-0.17</b>	<b>.23*</b>

Tenure coded as actual reported years with business; Franchise coded (1=yes, 2=no); Challenge coded as 5 categories (0=not severe competition through 5=extremely severe competition); ESE coded as 7-point cumulative scale; Performance coded at 2<sup>nd</sup> time period as 5 categories (0=net income much worse than similar firms in industry through 5=net income much better than similar firms in industry).



*Table 2:* Regression Analyses

<u>Variable</u>	<u>Model 1</u>	<u>Model 2</u>
Firm Age	.02(.02)	.02(.02)
Franchise	.12(.17)	.19(.16)
Market Competition	-.11(.06)*	-.12(.03)*
ESE	-	.05(.01)**
Mkt. Comp. X ESE	-	.02(.05)*
-----		
Adjusted R <sup>2</sup>	.04*	.10**
$\Delta R^2$		.08**

Values are unstandardized coefficients (std. errors). All variables centered prior to analyses.

\*  $p < .05$

\*\*  $p < .01$

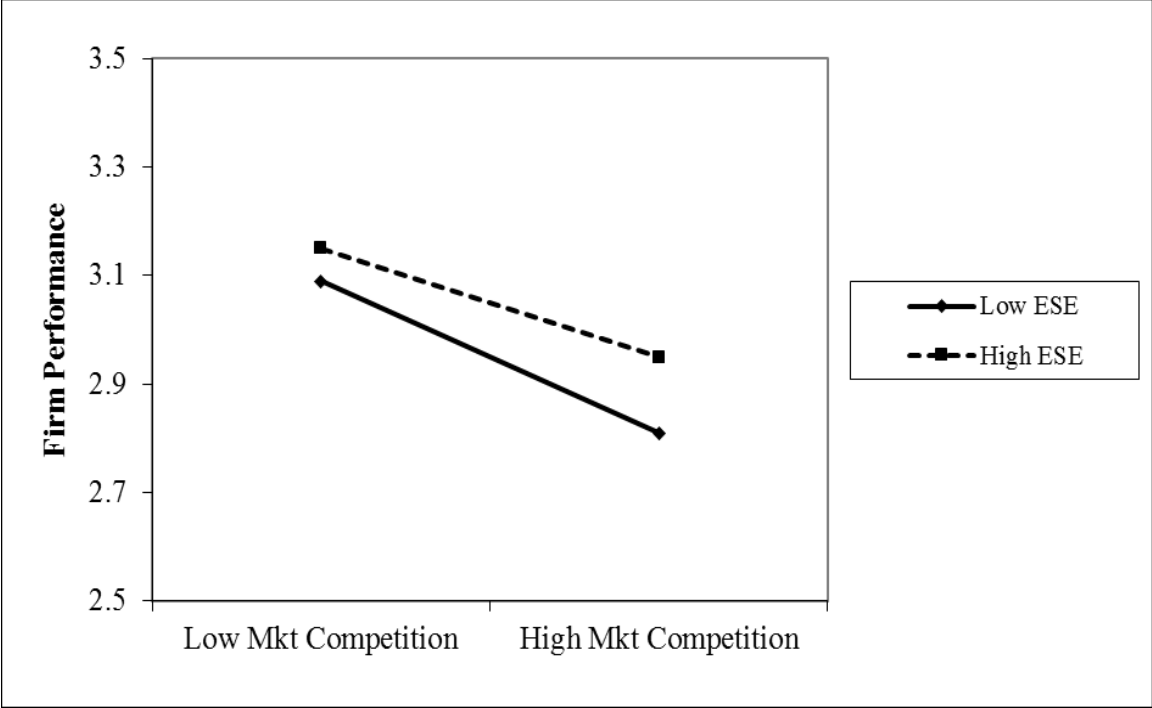


Figure 3: Firm Performance vs. Market Competition as moderated by ESE

## REFERENCES

- Aldrich, H.E. (1979). *Organizations and Environments*. Prentice-Hall, Englewood Cliffs, NJ.
- Bandura, A. (1994) Self-efficacy. *Encyclopedia of Human Behavior*. 4 p71-81.
- Bandura, A. (1997). *Self-efficacy: The Exercise of Control*. New York: Freeman.
- Bandura, A., & Locke, E. (2003). Negative self-efficacy and goal effects revisited. *Journal of Applied Psychology*. 88(1) p87-99.
- Barbosa, S., Gerhardt, M., & Kickul, J. (2007). The role of cognitive style and risk preference on entrepreneurial self-efficacy and entrepreneurial intentions. *Journal of Leadership & Organizational Studies*. 13(4) p86-104.
- Beiner, S., Schmid, M., & Wanzenried, G. (2011). Product market competition, Managerial incentives and firm valuation. *European Financial Management*. 17(2) p331-366
- Cardon, M., & Kirk, C. (2015). Entrepreneurial passion as mediator of the self-efficacy to persistence relationship. *Entrepreneurship: Theory & Practice*. 39(5) p1027-1050
- Carroll, G. & Hannan, M. (1992). *Dynamics of Organizational Populations*. Oxford University Press, New York.
- Chen, C., Greene, P., & Crick, A. (1998). Does entrepreneurial self-efficacy distinguish entrepreneurs from managers? *Journal of Business Venturing*. 13(4) p295-316.
- Fast, N., Burris, E., & Bartel, C. (2014). Managing to stay in the dark: Managerial self-efficacy, ego defensiveness, and the aversion to employee voice. *Academy of Management Journal*. 57(4), p1013-1034.
- Hannah, M. & Freeman, J. (1997). The population ecology of organizations, *American Journal of Sociology*. 82, p929-964

- Henderson, R., & Mitchell, W. (1997). The interactions of organizational and competitive influences on strategy and performance. *Strategic Management Journal*. 18(1) p5-14.
- Hiroshi, K., & Kazuo, M. (2015). A preliminary study of increasing self-efficacy in junior high school students: Induced success and a vicarious experience. *Psychological Reports*. 117(2), p631-642.
- Javidan, M., Bullough, A., & Dibble, R. (2016). Mind the gap: Gender differences in global leadership self-efficacies. *Academy of Management Perspectives*. 30(1) p59-73.
- Kaufman, B. (2015, March). Market competition, HRM, and firm performance: The conventional paradigm critiqued and reformulated. *Human Resource Management Review*. 25(1), p107-125.
- Krueger, N. F., Jr., & Dickson, P. R. (1993). Self-efficacy and perceptions of opportunities and threats. *Psychological Reports*. 72, p1235–1240.
- Krueger, N. F., Jr., & Dickson, P. R. (1994). How believing in ourselves increases risk taking: Perceived self-efficacy and opportunity recognition. *Decision Sciences*. 25, p385–400.
- Kuratko, D., Hornsby, J., & Naffziger, D. (1997). An examination of owner's goals in sustaining entrepreneurship. *Journal of Small Business Management*. 35(1), p24-33.
- McGee, J., Mueller, S., Peterson, M., & Sequeira, J. (2009). Entrepreneurial self-efficacy: Refining the measure. *Entrepreneurship: Theory & Practice*, 33(4).
- Nickell, S. (1996). Competition and corporate performance. *Journal of Political Economy*. 104(4) p724-747.
- Park, J., & John, D. (2014). I think I can, I think I can: Brand use, self-efficacy, and performance. *Journal of Marketing Research*. 51(2) p233-247.

Pollack, J., Burnette, J., & Hoyt, C. (2012). Self-efficacy in the face of threats to entrepreneurial success: Mind-sets matter. *Basic & Applied Social Psychology*. 34(3) p287-294

Roberts, P. (1999). Product innovation, product-market competition and persistent profitability in the U.S. pharmaceutical industry. *Strategic Management Journal*. 20(7). p655-670

Schumpeter, J. A. (1934). *The Theory of Economic Development*. Cambridge, MA: Harvard University Press