An Investigation into the Effect of Power on Entrepreneurial Motivations

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An Investigation into the Effect of Power on Entrepreneurial Motivations

By

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A Thesis Submitted in Partial Fulfillment of the
Requirements for the Degree of
Master of Arts

In

Industrial/Organizational Psychology

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ABSTRACT

The effects of power have been shown to exhibit a wide variety of effects on an individual’s psychology. The present study explored power, as a form of resources control, and its effects on an individual’s tendency to seek out entrepreneurship or entrepreneurial environments. According to various definitions of entrepreneurship, it can be argued that the process of entrepreneurship would represent a form of gathering power around oneself in the form of various resources. Attempts were made to determine whether a relationship existed between the experience of power, and an individual’s subsequent response to seeking entrepreneurial environments. The present study was able to find relationships between males experiencing power, and their propensity to seek environments emphasizing innovation. Although unable to find relationships between power and our other aspects of entrepreneurial orientation, it is possible that with a greater sample size, specifically for males, that more gender differences for the effects of power on EO may come to light. Theoretical implications of these findings, as well as recommendations for future directions, will be made in an attempt to explain these results.
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Chapter I

Introduction

What do individuals think of when they envision an entrepreneur? Is it the struggling lone wolf sitting in his or her garage trying to create a company from scratch? Or is it the head of a multinational corporation, at the seat of power with thousands of individuals at his/her call? In essence, depending on the entrepreneur’s stage in his or her career, either depiction could be accurate, as well as every stage in between. Successful entrepreneurs are often thought of as having abundant wealth. However, there are a wide variety of other resources the successful entrepreneur has to draw from such as status, wealth, human capital and other less tangible resources. In the end, this control over resources is a type of power. The start-up entrepreneur usually has minimal resources, but is trying to utilize whatever means are at his/her disposal to effectively leverage the few resources at their disposal in order to gather more funds, employees, status, etc. which s/he can control through the form of an organizational structure s/he created. In metaphorical sense, they are climbing a ladder of power, creating their own rungs as they climb. They are placing themselves at the highest point of resource control (owner, CEO, etc.) within a self-made power hierarchy.

This climb can also apply to an individual employee, trying to take ownership within an organization. When an employee is attempting to gather resources around themselves to grow new revenue streams in the organization, as well as move up in the organizational hierarchy, they are participating in a form of intrapreneurship, which will be covered in greater depth later.
This climb in power is often portrayed in a romantic sense to the outside public. Incredibly successful entrepreneurs are painted in the light of enigmatic geniuses, mastering some kind of hidden inner strength to accomplish great feats, such as Bill Gates or Richard Branson (Gates, 1998; Smith, 2005). While these powerful entrepreneurs are usually associated with positive stereotypes, they can also be characterized by negative stereotypes (Hogan et al., 1990). Attributes essential to becoming an entrepreneur, such as risk-taking, can initially be a blessing when the entrepreneur takes the first steps to becoming an entrepreneur, but can also become very costly to the organization should the entrepreneur take too many risks (Rauch & Frese, 2000). Are these common associations with entrepreneurs personality antecedents, or does the psychology of entrepreneurs slowly change as they gain greater and greater power brought on by their success? The goal of this study will be to tease apart the effects of this fundamental relationship between the feeling of power and its effects on entrepreneurship, in order to better understand the underlying psychology of the processes that drive this relationship. Specifically, we hope to find whether there is a relationship between a powerful mindset, and the careers choices and individual makes in life. If a powerful mindset causes individuals to seek out entrepreneurship, than our research may be able to determine a key element in predicting who becomes an entrepreneur in life.

**Power**

Power has come to encompass many different definitions throughout the years. Some define power as an allocation of resources resulting from an organization’s structure, such as within an organizational hierarchy (Ng, 1980). Additional definitions
see power as a form of asymmetric control over valued resources, like the control brought upon by an organizational hierarchy (Magee & Galinsky, 2008). Others conceptualize power mainly as a product of social relationships (Emerson, 1962).

Seminal work in establishing these different conceptualizations of power was conducted by French and Raven in 1959 with the goal establishing the foundations of bases of power from which an individual can draw. These bases were defined under the pretense of a dualistic relationship between the influencer and the influenced. This relationship can manifest in the form of referent, expert, legitimate, reward, and coercive power. Referent power occurs when followers feel that they are fond of and identify with the influencer. Expert power comes from when followers are influenced because of the influencer’s extensive knowledge. Legitimate power occurs when a position or rank gives one individual control over another. Reward power occurs when the influencer has the capacity to distribute resources, such as income. Finally, coercive power occurs when the influencer has it in his or her ability to punish another.

For the purposes of this study, I have defined power according to Keltner, Gruenfeld, and Anderson’s (2003) definition as “An individual’s relative capacity to modify other’s states by providing or withholding resources or administering punishment (p. 265).” The resources under control can manifest themselves as “food, money, economic opportunity, physical harm, or job termination (p. 266).” It also applies to social resources, such as “knowledge, affection, friendship, decision-making opportunities, verbal abuse, or ostracism (p. 266).” (Keltner, Gruenfeld, & Anderson, 2003)
However, it is important to understand the varied contexts in which power may exist. Many of these constructs are commonly associated with power, but are not redundant with the definition of power. For example, while power can be directly related to status, it is not a one-to-one relationship with the level of power an individual truly has. Status is the perception of various attributes that creates differences in regards to respect or prominence (Blieszner & Adams, 1992; French & Raven, 1959; Kemper, 1991). Status can have an impact on the amount of resource allocation available to an individual. For example, political figures may be very corrupt, and have a terrible public image, but regardless of their low status among the public they still hold a significant amount of power for the duration of their term. These individuals would hold an extensive amount of legitimate power, but lack referent power.

Conversely, power can also exist in a vacuum without the resources provided by a formal role. A formal role allocating power is not necessary for an individual to hold power over the resources of another, such as when an individual holds referent power, but lacks legitimate power. In a given team, even if somebody is designated as the leader, the referent power of a single individual could be strong enough in the group that the team would be more likely to listen to this individual than the designated leader. Despite not being assigned the role of a leader in the group, they in reality hold greater power over the outcomes of the group. As these examples illustrate, power can take many different shapes. While an individual may exhibit high power in one of French and Raven’s power domains, they may also exhibit extremely low power in another. However, they may still hold enough power in any domain individually to enact
significant change. Theoretically, an individual at the height of power would exhibit high control in all five power domains.

It is worth noting that the exercise of power is highly dependent on the perception that the individuals actually have this level of power, particularly by those who depend on these resources. For example, prominent figures of moral power or cultural power often derive this power from belief (Fiske, 1992; Vasquez, Keltner, Ebenbach, & Banaszynski, 2001), which can be seen as a form of referent power. Another example would be the attitudes derived from interpersonal relationships, such as if a partner has less resources than their significant other, yet still controls their partner’s resources (Bugental et al., 1989; Howard, Blumstein, & Schwartz, 1986). One of power’s identified determinants has been the level of interpersonal control given to an individual (Pfeffer, 1992). However, this perception of power is only one side of the coin, because if the perception of power comes into too stark of contrast with the individual’s legitimate power, then the effect disappears (Bugental et al., 1989; Bugental & Lewis, 1999). For example, most individuals will give higher deference to a police officer than to an average individual because of their position, but if the officer drastically steps over the bounds designated by their position, then their exercise legitimate power would come into question and a citizen may stop complying. Specifically, for our study we chose to use Keltner, Gruenfeld, and Anderson’s definition (2003) stated earlier, because it does not have a restriction as to what type of resource can be controlled by power, which suggests that power exists in all contexts.
The Psychology of Power

When an individual experiences power, it has been shown to lead to a myriad of changes in affect, cognition, and behavior (Keltner et al., 2003). The experience of power can take the form of an individual directly or indirectly controlling the resources of another, or simply recalling a time in which they had this resource control over another. This is supported by research showing that mental constructs can be stored in the memory of an individual, and when properly evoked cause the individual to move toward specific goals given the right stimulus to activate this construct, such as power (Bargh, Raymond, Pryor, & Strack, 1995; Chen et al., 2001).

Further, power has also been shown to bring out the latent traits or personality of individuals. A common misconception perpetrated by popular culture is the idea that power corrupts. In a simulation in which managers were given control of the resources of their subordinate’s resources, managers were found to increase their attempts at coercion (Kipnis, 1972,1976). As a result of these studies, Kipnis (1976) created their metamorphic model of power, which postulates that the exercise of power causes individuals to become more self-obsessed as well as more prone to subjugation of their subordinates. Kipnis argues that power gives individuals the ability to act in accordance with their latent desires or personalities, especially given that they are no longer restrained by the outside constraints normally imposed upon the powerless. However, recent research has shown that power will not only bring out negative trait behaviors, but positive ones as well (Chen, Lee-Chai, & Bargh, 2001). For example, communally-oriented individuals are more likely to act in an altruistic manner if given power, while exchange-oriented individuals are more likely to become self-serving upon obtaining
power. As a result, the effects of power can be ambiguous as to both their positive and negative effects. For example, as I mentioned earlier risk-taking can be both a positive and negative attribute for entrepreneurs, depending on whether or not the risk pays off. The effects of priming an individual with power have been shown to effect psychological attributes related to entrepreneurship, such as an individual’s risk perception, cognition, and action-orientation, which will be discussed in greater detail later. Because these elements are important parts of an entrepreneur's psychology, I believe that if an individual experiences power it will in turn increase an individual's entrepreneurial orientation. As stated earlier, a successful entrepreneur would theoretically become more powerful as their career progresses, as this increase their resource control (Keltner, Gruenfeld, & Anderson, 2003).

**Entrepreneurship**

Entrepreneurship has many definitions, and a problem commonly encountered in entrepreneurship is how to operationalize a construct that is as broad as entrepreneurship. Some definitions label entrepreneurship as the initial creation of the business. For example, Gartner (1989) defined entrepreneurship simply as the initial forming of an organization. Others define entrepreneurship as more of a process, which is the current trend in the entrepreneurial research. For example, Shane and Venkataraman (2000) define entrepreneurship as the process of moving from the initial discovery of an opportunity, then evaluating and exploiting all possible avenues of this discovery.

Definitions of entrepreneurship and its constructs have many different conceptualizations as to what levels of the organization are appropriate to measure. The
common conception of entrepreneurship is that it is a phenomena applying to individuals only, which portrays entrepreneurship in the realm of a “lone wolf” pursuit (Kilby, 1971). Others see entrepreneurship as encompassing only small businesses, as they are thought to account for the majority of jobs and economic growth within an economy (Birch, 1979). The latest trend in entrepreneurship research is to see it as an organization wide construct, regardless of the size or age of the organization (Guth & Ginsberg, 1990). The phenomenon is of being an entrepreneur within an organization is defined as *intrapreneurship*, which constitutes an individual taking the responsibility for innovating aspects of the company as an employee (Pinchot, 1985).

A common term found in the entrepreneurial literature is the concept of entrepreneurial orientation. Entrepreneurial orientation attempts to define entrepreneurship according to the characteristics of successful entrepreneurial individuals. Entrepreneurial orientation consists of three main constructs: Innovativeness, risk-taking, and proactivity (Covin and Slevin, 1986). For the purposes of our study, I will focus on this conceptualization of entrepreneurship. Specifically, I would like to analyze these perceptions when taking into account the effects power has on an individual’s psychology. It is important to note that the concept of entrepreneurial orientation is not a mutually exclusive term when taken in context of the other definitions; it is an integral piece of the bigger picture that is entrepreneurship.

The concept of entrepreneurial orientation has been shown to be one of the few predictors of organizational success in the entrepreneurial literature, and is found to be highly predictive and reliable. In a meta-analysis conducted by Rauch et al. (2009), researchers were able to show a meta-analytic correlation of .242 for micro-business
success and entrepreneurial orientation. There have been two attempts in the past to make entrepreneurial orientation as more of a psychology construct apparent in individuals predictive of firm success, rather than an overall organizational construct, and promising results have been found in their ability to predict future success (Koop et al., 2000; Krauss et al., 2005). Finally, the relationship between entrepreneurial orientation and firm success has been found to be particularly predictive in the presence of difficult entrepreneurial environments (Frese et al., 2002), suggesting it is of critical importance when determining whether a business will survive in harsh conditions. I believe that tangential research provides justification for the premise that power priming will increase the appeal of innovative, high-risk, and proactive careers, which are the constructs underlying the entrepreneurial orientation scale.

**Power and Cognition**

The first element of the entrepreneurial orientation scale is innovativeness. Innovativeness entails the willingness of an organization to introduce newness and novelty through the creative use of experimentation brought about by devoting resources to change (Miller & Frieson, 1984). In essence, innovation takes existing or novel information available to the organization as a catalyst for a change in processes, products, or services (Utterback & Abernathy, 1975). This new combination of ideas must meet the needs of current customers or as-of-yet untapped consumer markets, and produce a viable stream of revenue for the organization (Christensen & Bower, 1996; Tushman & O’Reilly, 1997). Intrapreneurial firms use the process of innovation as a source of strategic advantage that allows them to renew their value propositions (Brown & Eisenhardt, 1998; Hamel, 2000) This is paramount in the careers of entrepreneurs or
intrapreneurs, as this creativity allows them to break out of the patterns established within the organization or by competitors.

Entrepreneurs are constantly presented with scenarios in which the correct course of action is unknown given the wide range of solutions that need to be considered. This is made even more difficult by the incredible amount of information that must be processed. In another meta-analytic study conducted Rauch and Frese (2007), they found entrepreneurs to be more innovative when compared to other people (corrected $r = .235$). Further, Rauch et al. (2009) conducted a meta-analysis and found innovativeness and success to be positively correlated ($r = .195$). In 1997, Busenitz and Barney were able to show that entrepreneurs who went on to found their own successful companies were more likely to rely on decision heuristics to solve complex problems than leaders within companies whom had no part in their organization’s founding. It is widely thought among the research community that this preference for relying on decision heuristics helps to compensate for the high uncertainty present in the entrepreneurial ventures, as entrepreneurial ventures often entail incomplete or ambiguous information with no clear course of action (Gaglio, 2004).

For example, when information is incomplete, and decisions need to be made quickly, and entrepreneur would need to rely on route methods to make decisions. Research has shown that experts do not think about their goals as much as novices, because they think more holistically and follow their routines more, with similar decision processes are found in entrepreneurs (Dew et al. 2009). Research has shown that specified plans of when and where actions should be taken convert goals into actions (Gollwitzer, 1996). It is thought that automating these processes frees up cognition for
the more difficult decisions encountered in entrepreneurship, as well as helps with the creativity needed for new ideas and implementation (Frese, 2009).

Individuals who are in positions of high power have been shown to construct events in a fashion in which top-down processing is emphasized, similar to the decision heuristics found in entrepreneurs. For example, individuals possessing high levels of power leads them to process social events in a more automatic manner (Fiske, 1993; Neuberg & Fiske, 1987). Individuals found to be higher in power also tend to increase their use of stereotypes, which is considered a form of decision heuristic when it comes to evaluating individuals (Goodwin, Gubin, Fiske, & Yzerbyt, 2000).

Higher power has been shown to also lead to positive affect, which is linked to automatic social cognition (Bodenhausen, Sheppard, & Kramer, 1994; Lerner & Keltner, 2000). In a study conducted by (Galinsky, Magee, Inesi, & Gruenfeld, 2006) researchers primed individuals with power and then presented them with two separate problem-solving scenarios using a “perspective taking manipulation.” In the first scenario, participants were encouraged to take another person’s perspective. In the second scenario they were encouraged to think what they themselves would do. Further, they were also provided with either complete information or incomplete information. Individuals primed with power in the partial information scenario were able to perform much better than their counterparts if they were encouraged to take the other person’s perspective. This supports the findings stated earlier that power increases automatic social cognition as well as helps to use decision heuristics to solve incomplete information.
Coinciding with positive affect, the powerful have also been shown to be more optimistic, which has been associated with higher levels of executive functioning (Anderson & Galinsky, 2006). Low power has also been found to decrease executive function, which represents the individual’s ability to coordinate and plan decisions (Smith, Jostmann, Galinsky, 2008). Conversely, reduced power has been associated with problems with depression and anxiety, which in turn leads to a more controlled (less automatic) level of social cognition (Bodenhausen et al., 1994; Lerner & Keltner, 2001). Increased power has also been linked to greater creativity as well as a decreased likelihood of being influenced by others creative ideas (Galinsky et al., 2008).

Given that power induces positive affect, it is possible that broaden and build theory applies (Fredrickson, 2001) to powers effects on cognition. Broaden and build theory suggests that individuals with positive affect are more flexible in their thinking and as a result are able to build up more resources around them to sustain their positive state. Also, this building of resources would constitute a form of power, and by extension the positive affect would reinforce itself in a manner consistent with the broaden and build theory.

Given powers effects on decision-making, information processing and creativity, it is reasonable to hypothesize that feeling powerful may lead to an increase in innovation as defined by the entrepreneurial orientation scale.

*Hypothesis 1:* Power priming will increase participant’s propensity to seek companies emphasizing innovation on the EO scale.
**Power and Risk**

The second component of the entrepreneurial orientation scale is risk-taking. Risk-taking involves taking action despite uncertainty or the presence of competitive threats (Baird & Thomas, 1985; Shapira, 1995). McMullen and Shepherd (2006) compiled research pertaining to risk, and broke it down into three key features summarized below:

Uncertainty in the context of action acts as a sense of doubt that (1) produces hesitancy by interrupting routine action (Dewey, 1933)...(2) promotes indecision by perpetuating continued competition among alternatives (Goldman, 1986)....and (3) encourages procrastination by making prospective options seem less appealing (Yates & Stone, 1993). (pp. 135)

Taking risks is an inherent element to entrepreneurship given the effect it has on constraining resources of the individual and their family (Kodithuwakku & Rosa, 2002). Risk-taking would take into account all of the resources that the entrepreneur or organization would be willing to risk while pursuing this opportunity, such as money, time, and other less apparent opportunity costs. If the individual holding power decreases their sensitivity toward these risks, then their reduction in salience would further increase the individual’s belief in future success.

Entrepreneurs have been shown to have a higher level of risk taking than the rest of the population (Begley & Boyd, 1987). The actions one undertakes as an entrepreneur are typically within uncertain situations (McMullen & Shepherd, 2006). A meta-analytic study conducted by Rauch, Frese, and Utsch (2005) found a small, but significant, positive relationship between risk-taking propensity and entrepreneurship (r
Further, Rauch et al. (2009) demonstrated via meta-analysis that risk-taking propensity and success have a positive relationship ($r = .139$) (Rauch et al., 2009). However, it has been shown that a high-risk taking propensity is not always associated with business success, and that the research has produced very mixed results (Rauch & Frese, 2000). It is possible that this is due to the high failure rate of entrepreneurial ventures. While it is necessary for an entrepreneur to have a low risk-sensitivity, it does not guarantee entrepreneurial success. In fact, it has been found that organizations that are initially in complex or risky environments have a lower mortality rate, but beyond a certain age actually have a higher success rate than organizations founded in stable environments (Swaminathan, 1996). This could implicate that risk removes the weaker organizations from the population at a much greater rate, thus risk seems like a negative factor in start-ups. However, the advantage provided by the ability to survive these known risks would outweigh the costs and create an organization that, in the end, would be more capable. Another possibility argued by Rauch and Frese (2007) is that risk-orientation has more of a curvilinear relationship. Too little risk-orientation will prevent an entrepreneur from taking any risk, while too high of a risk-orientation could cause the entrepreneur to take extreme risks or too many risks to the point that it is dangerous for the company to have such a high risk propensity.

Research has demonstrated important implicated for the effects of power on risk-sensitivity. Individuals high in power exhibit a decreased sensitivity toward threats (Croizet & Claire, 1998, Zander & Forward, 1968). Those with high levels of power also show less deliberation when making decisions, specifically spending less time weighing the pros and cons of a situation (Gruenfeld, 1995; Gruenfeld & Kim, 2003). The need for
power is also positively correlated with a number of risky behaviors, for example gambling, drinking, and sexual impulsivity (Winter, 1973; Winter 1988; Winter and Barenbaum, 1985). For example, Galinsky, Gruenfeld, & Magee (2003) found that after priming participants with power, they were more likely to draw a card in a simulated blackjack game. Participants were presented with a 16, and asked if they would like to draw another card. In the game of blackjack, if an individual draws a card that brings their total over 21 then it represents an automatic loss. Individuals in the power-primed condition were found to draw another card 92% of the time, while individuals in the control situation were found to draw a card only 59% of the time. Individuals primed in the low-power condition only drew a card 58% of the time. Another interesting result of this simulation was that those who were more risk-prone in this scenario were more successful at blackjack. This example demonstrates how power orientation will not only reduce an individual's aversion to risk, but also increase their action orientation as well (the third component of entrepreneurial orientation). Another example of power priming increasing risk-taking, but in a business context, can be found in Anderson and Galinsky’s study in 2006, in which individuals were presented with two alternatives in a business simulation. One plan entailed the company saving one out of three of its plants and 2000 jobs. The other plan would save all three plants and 6,000 jobs, but only has a one in three chance of success. Those primed with high power were more likely to choose the second option entailing high risk.

Given that risk-taking is an essential element of an entrepreneurial orientation, and that experiencing power decreases aversion to risk, it is reasonable to postulate that
experiencing power will increase an individual’s predisposition toward taking risks according to the entrepreneurial orientation scale.

_Hypothesis 2:_ Power priming will increase participant’s propensity to seek companies emphasizing risk-taking on the EO scale.

**Power and Action**

The third element of the entrepreneurial orientation scale is proactivity. Proactivity is the process of using a forward-thinking mentality in order to seek out opportunities before they are readily apparent (Miller, 1983). A proactive entrepreneur takes actions to make sure they are able to explore market opportunities. While proactivity helps to capitalize on opportunities before competitors (Miller, 1983) it can also have an internal focus in the form of greater innovation. Rauch et al. (2009) were able to demonstrate via met-analysis a positive relationship between proactivity and performance ($r = .178$).

Entrepreneurship, by its inherent nature, requires a stronger action-orientation than is found in the average employee or even manager (Utsch et al., 1999). According to Frese and Fay (2001), an active entrepreneur is characterized by three aspects; Self-starting, long-term proactivity, and persistence in the face of barriers and obstacles. Self-starting is characterized by an individual's innate inclination to innovate or create without any pressure to do so from outside forces. The opposite of this could be considered a reactive individual, in that they are unable to accomplish anything without an explicit motivator pushing them to do so. Long-term proactivity represents the ability to look foresee future trends or opportunities in the environment, and assembles resources or creates the structure to accommodate for these future changes before they come about.
Power and Entrepreneurship

(Dimov, 2007; Hamel & Prahalad, 1994), and has been shown to positively correlate with entrepreneurial success (Frese, 2000). Finally, persistence has been described as the ability to overcome adversity (Kodithuwakku & Rosa, 2002). Adversity includes any obstacles that an entrepreneur encounters while trying to actualize their plans or goals. While I will not be looking at these elements individually, it is important to understand the inherent components underlying action-orientation going forward.

Interestingly, the effects of power also lead individuals to become more action-oriented. The theory behind power and action-orientation originates from the logic that the powerful are held back by fewer constraints than the powerless, and as such are more likely to act upon their inclinations (Galinsky, Gruenfeld, & Magee, 2003). It is theorized that power activates a “behavioral approach system,” while powerlessness effects behavioral inhibition (Keltner et al. 2003). Those found to be high in power are more likely to activate approach related behaviors, while powerlessness conversely has an effect of inhibiting behavior (Keltner, Gruenfeld et al. 2003). Likewise, power has been shown to cause a number of further effects which could help to explain an action-orientation, such as an increase in positive affect (Keltner, Young, Heerey, Oemig, & Monarch, 1998), while also decreasing negative affect (Keltner et al. 2003). High power individuals are also found to be more extraverted (Anderson, John, Keltner, & Kring, 2001), making them more likely to engage with their environment. Finally, individuals who are found to be high in power are also found to exhibit heightened sensitivity to rewards, a higher proclivity toward strategizing their approach to acquiring those rewards (Croizet & Claire, 1998, Zander & Forward, 1968).
The increases in automatic processing stated earlier in this article also helps to explain the action-orientation present in entrepreneurs. In fact, those found to spend an increased amount of time deliberating upon complex information commonly results in a failure to take action (Lerner & Tetlock, 1999), which could result in disastrous results for an entrepreneur. This deliberation is often associated with doubt, from which one must be free if they want to act effectively (Gollwitzer, 1996; Moskowitz, Skurnik, & Galinsky, 1999). Research has found that those who rely on the logic of decision heuristics shorten their reaction time to adapt to change, as well as increase their chances to utilize new discoveries (Alvarez & Busenitz, 2001). One could assume that this doubt could stem from the risks inherent in entrepreneurship and the high occurrence of start-up failure. It is possible that if an individual were to have a higher power orientation it would help to mitigate the effects of this risk-aversion.

In their 2003 study, Galinsky, Gruenfeld, & Magee found three separate implications for power-priming individuals and action orientation. First, they found that those who possessed power exhibited a greater proclivity to act than those who did not, while those found to be low in power were more likely to inhibit behavior. Second, those who were primed with high power were more likely to act in manners consistent with achieving their goals than those who were not primed. Finally, those who were primed with high power were more likely to take action, regardless of whether they were acting in self-interest, or when it serves the public image, thus showing that the negative aspects associations of power are not as polarized as commonly portrayed. Key in these findings was the implication that individuals do not have to actually possess any power for these changes to be brought about; they simply need to be primed with power.
Given that being proactive is considered a critical component for success according to the entrepreneurial orientation scale, and that power has been shown to increase action-orientation, it is reasonable to postulate that being primed with power will increase an individual’s propensity to seek proactive environments.

_Hypothesis 3:_ Power priming will increase participant’s propensity to seek companies emphasizing proactivity on the EO scale.

**Entrepreneurial Orientation**

The research on personality dispositions found in entrepreneurs has been mixed and heavily criticized. However, in recent years meta-analytic techniques have found a number of significant personality factors leading to successful entrepreneurs, such as risk-taking, innovativeness, autonomy, locus of control, and self-efficacy (Rauch & Frese, 2007). These characteristics, which are found in the entrepreneurial orientation scale, are very similar to those found in powerful individuals. According to the Person-Environment Fit Theory (Caplan, 1983), individuals and organizations have a dualistic relationship in which the individual seeks organizations similar to one’s characteristics, and vice versa.

Therefore, I hypothesize that the effects of power will overall bring out the traits common in entrepreneurs. If individuals are given power, or remember a time in which they have power, it will help to bring out these latent traits commonly found in entrepreneurially-oriented individuals. As a result, individuals who feel powerful will seek out entrepreneurially focused careers, whether through self-initiated entrepreneurship, or through finding employment at an organizations with an intrapreneurially supportive environment.
Hypothesis 4: Power priming will collectively increase a participants’ EO, and as a result participants will be more attracted to employers with a strong entrepreneurially orientation

Hypothesis 5: Power priming will increase an increase participant’s intentions to become an entrepreneur in the future.
Chapter II

Method

Participants

I recruited 125 undergraduate students studying psychology to serve as my sample. Participants received extra credit in their psychology courses for participating in the study. My sample was composed of 84% females (105) and 16% males (20). My sample identified themselves as 81% Caucasian, 8% Asian/Pacific Islander, 4% African/African American, 2% Hispanic/Latino, 3% identified as Other, and 2% preferred not to say. Eighty-seven percent of my sample was between the ages of 18 and 23 years old, with my remaining participants (13%) indicating they were above 24 years in age. The sample was composed of 21% freshmen, 11% sophomores, 31% juniors, 36% seniors, and 1% Graduate Students. Fifty percent of my sample indicated that their GPA was between 3.5 and 4.0, 40% were between 3.0 and 3.49, 11% were between 2.5 and 2.99, while 1% were between 2.0 and 2.49.

Measures

Entrepreneurial Intentions. I measured “Entrepreneurial Intentions” by utilizing a five-point Likert-based response format to measure how much respondents agree with the statement “I would like to start my own business in the future.”

Entrepreneurial Orientation and Subcomponents. A modified version of the Entrepreneurial Orientation Scale (Covin and Slevin, 1986) was also used. The modified Entrepreneurial Orientation Scale required respondents to indicate via nine bipolar statements “the characteristics you would like to see in a company you would work for in
the future.” Our three subscales of innovation, risk-taking, and proactivity were each assessed with three items from our nine-item Modified EO scale. Overall, the Modified EO Scale exhibited adequate internal consistency, as demonstrated by a Cronbach’s Alpha of .716. See Appendix A for the modified Entrepreneurial Orientation Scale.

**Procedure**

In order to test the effects of power on entrepreneurship, I employed the experimental power prime used by Galinsky, Gruenfeld, and Magee (2003), in which participants are induced with either high-power or low-power through recalling particular incidents in their lives. Those participants assigned the high-power condition were asked to write about the following:

Please recall a particular incident in which you had power over another individual or individuals. By power, I mean a situation in which you controlled the ability of another person or persons to get something they wanted, or were in a position to evaluate those individuals. Please describe this situation in which you had power --- what happened, how you felt, etc.

Those participants assigned the low-power condition will be asked to write about the following:

Please recall a particular incident in which someone else had power over you. By power, I mean a situation in which someone had control over your ability to get something you wanted, or was in a position to evaluate you. Please describe this situation in which you did not have power --- what happened, how you felt, etc.
Participants were then asked to answer the Entrepreneurial Intentions question, as well as the modified Entrepreneurial Orientation scale.

The current study utilized this method by asking participants to complete the survey online. Ultimately, 125 participants completed the study online. I opted to use an online methodology based upon personal conversations held with Dr. Gruenfeld, who indicated that an unpublished study noted no systematic differences between online and face-to-face methodology (Gruenfeld, personal communication, March 23, 2014). These participants were asked to write about either the high or low power incident for 1000 characters, and then an electronic version of the EO scale and Entrepreneurial Intentions.
Chapter III

Results

In order to test $H_1$, a simple regression was utilized. Items composing innovation on the Modified EO Scale were combined to create a composite score, as the individual items were equally weighted. This composite score was then regressed on power. Results indicated that power was not predictive of participant intention to seek innovation oriented companies on the Modified EO Scale ($\beta=.091, p>.05$). Further regressions were conducted using solely males or females. Results indicated power was predictive of participant intention to seek innovation when using only our male subjects ($\beta=.50, p<.05$). However, power was not predictive of innovation seeking for females $\beta=-.001, p>.05$) in isolation. Hence, power priming significantly increased propensity to seek environments emphasizing innovation for males, but not females.

In order to test $H_2$, a simple regression was again utilized. Items composing risk-taking on the Modified EO Scale were combined to create a composite score, as the individual items were equally weighted. This composite score was then regressed on power. Results indicated that power was not predictive of participant intention to seek risk-taking oriented companies on the Modified EO Scale ($\beta=.092, p>.05$). Further regressions were conducted using solely males or females. Results were found to be consistent when looking at both males ($\beta=-.023, p>.05$) and females ($\beta=.11, p>.05$) in isolation. Hence, power priming did not significantly increase propensity to seek risk-taking environments.

In order to test $H_3$, a simple regression was again utilized. Items composing proactivity on the Modified EO Scale were combined to create a composite score, as the
individual items were equally weighted. This composite score was then regressed on power. Results indicated that power was not predictive of participant intention to seek proactively oriented companies on the Modified EO Scale ($\beta = -.062, p > .05$). Further regressions were conducted using solely males or females. Results were found to be consistent when looking at both males ($\beta = .032, p > .05$) and females ($\beta = -.082, p > .05$) in isolation. Hence, power priming did not significantly increase propensity to seek proactive environments.

In order to test $H_4$, a simple regression was again utilized. Items composing innovation, risk-taking, and proactivity on the Modified EO Scale were combined to create a composite score, as the individual items were equally weighted. This composite score was then regressed on power. Results indicated that power was not predictive of participant intention to seek entrepreneurially oriented companies on the Modified EO Scale ($\beta = .059, p > .05$). Further regressions were conducted using solely males or females. Results were found to be consistent when looking at both males ($\beta = .315, p > .05$) and females ($\beta = .019, p > .05$) in isolation. Although insignificant, it appears that the effects of power are stronger on men than on women. These findings, coupled with the fact that our sample size for males represents only 20 individuals, suggest that gender may influence how power priming affects entrepreneurial orientation.

In order to test $H_5$, a simple regression was again utilized. Entrepreneurial Intentions was regressed on power. Results indicated that power was not predictive of participant intention to start a business in the future ($\beta = -.084, p > .05$). Further regressions were conducted using solely males or females. Results were found to be
consistent when looking at both males (β = -.182, p > .05) and females (β = -.067, p > .05) in isolation.

**Further Analyses**

In order to further understand the relationship between the Modified EO Scale and whether an individual would like to become an entrepreneur in the future, exploratory analyses were conducted between our innovation, risk-taking, proactivity sub-scales, as well as my composite EO scores, and my entrepreneurial intentions item. Results indicated that innovation and entrepreneurial intentions were not correlated (r = -.004, p > .05). Further, risk-taking and entrepreneurial intentions were not correlated (r = .174, p > .05). However, proactivity and entrepreneurial intentions were significantly correlated (r = .187, p < .05). Finally, our composite EO scores were not found to be correlated with entrepreneurial intentions (r = .166, p > .05). Future research may need to explore in greater depth the relationship between proactivity with entrepreneurial intentions.
Chapter IV

Discussion

Past research has shown that power can affect many aspects of an individual’s psychology, in a wide variety of settings. This research has shown that power can result in a myriad of changes in cognition, risk-taking, and action-orientation. The present study attempted to expand upon the effects of power, and determine if links existed between the experience of power and the motivations of entrepreneurship; the end goal of which would be to provide a theoretical framework to better understand what motivates one to become an entrepreneur, or to seek entrepreneurial environments. Hypothetically, this information would help researchers to understand the drivers of entrepreneurship, and thus utilize this information to help individuals become more entrepreneurial.

I hypothesized that power would be related to entrepreneurial orientation and its subscales of innovation, risk-taking, and proactivity. I was able to find a significant relationship between power and innovation, when looking at gender differences between participants. Specifically, it appears that innovation-oriented environments are more appealing to males after they experience power. It is possible that due to the fact that males are overrepresented in positions of power, that the effects of recalling a time in which they felt powerful are stronger with males since they have more experiences to draw from. However, I was unable to extend these findings on gender differences to our constructs of risk-taking, proactivity, and EO as a whole, so this assertion does not appear to hold true for our other hypotheses. Further research will need to delve into why powerful males are more likely to pursue innovation-oriented environments. While tangential research has shown that power influences psychological factors that appear to
be related (at face value) to entrepreneurial orientation, our results indicate that there is generally not a significant relationship between the effects of power and one’s tendency to seek entrepreneurial-oriented environments (hypothesis 4). However, the directionality of our results when looking at gender differences between seeking EO environments suggests men exhibit higher inclinations toward seeking EO environments. Although this relationship did not reach significance, the effect size was moderately large; it is possible that the link between power and ambition is inherently gendered. For example, researchers have noted that need for achievement is primarily played out in the workplace for men, whereas for women, it unfolds both on professional and domestic fronts (Jenkins, 1987). Furthermore, previous studies have demonstrated a link for men but none for women using other predictors of entrepreneurship (Hansemann, 2003).

Finally, I hypothesized that power would influence the intentions of participants to start their own business in the future and become entrepreneurs themselves, but again my results failed to demonstrate this link. It is possible that while power may enact these psychological changes for a short duration and effect small tasks, it may not generalize to the scope of as large an undertaking as starting a business would entail.

**Limitations and Future Research Directions**

Specifically when breaking down my findings by gender differences, it appears that the directionality of my findings for EO overall trend in the correct direction as exhibited by my beta values. As stated earlier, our low sample size for males could be an explanation for why these differences are not significant.

Another plausible limitation of my research was that my sample was composed of undergraduates. Undergraduates may lack the experience needed to discern between
various characteristics among employers, as they have not been employed at a wide
enough range of organizations to understand what different employer characteristics they
may want to seek. Further, this problem may be exacerbated by the fact that psychology
students do not have the most direct career path, meaning students do not graduate with a
degree in psychology and have definitive careers as psychologists. Perhaps it would be
better to study the effects of power among students with majors exhibiting more direct
career outcomes, such as business or engineering students.

Further, another problem lay with the motivations for undergraduates to choose
Psychology. Psychology undergraduates may not be the most entrepreneurially oriented
to begin with, as they are pursuing a field studying the humanities, a path not commonly
associated with being the most lucrative. Although I originally thought the composition
our subject pool would not be as critical of a factor, as I was measuring the difference in
participants’ entrepreneurial orientation between low power and high power conditions, it
is possible that the difference between our conditions would be more extreme in other
subject pools like business majors, rather than psychology undergraduates who may be
unfamiliar with the concept of entrepreneurship. Although past research studying power
has mainly utilized psychology undergraduates as their subject pools, they did not study
these students under the context of business simulations, as I will discuss in greater depth
later.

Future research would benefit from understanding whether or not these factors of
innovation, risk-taking, and proactivity actually manifest themselves in business
environments. For example, although cognition appears to become more effective and
automatic when individuals feel powerful, this has not been studied exclusively in the
business environment. Risk-taking, although studied in the context of a single hypothetical business scenario (Anderson & Galinsky, 2006), was not studied in other contexts of business. Finally, research on proactivity and power was studied solely in lab environments. While power has been shown to have clear effects on cognition, risk-taking, and proactivity in the lab, it has not been conclusively extended to business contexts, and as a result we do not understand power in organizational environments. I would recommend that further research attempt to understand the factors underlying power in actual businesses, and link these effects to specific business outcomes, such as managerial effectiveness.

Another area future research would benefit from understanding would be to determine whether power evokes entrepreneurial characteristics to begin with. Specifically, it would be advantages to determine whether the constructs of innovation, risk-taking, and proactivity actually manifested themselves in powerful individuals according to our operational definitions of EO. While past research has tangentially provided support for the idea that these constructs would arise, it would have been better to directly measure them according to EO operational definitions. After we are certain that these constructs of EO would manifest themselves in powerful individuals, we could then discern whether they would seek out environments in concordance with this internal state brought on by power in accordance with Person-Environment Fit Theory.

Future research would benefit from trying to understand the types of environments powerful individuals seek. My research attempted to delve into the specific environment of entrepreneurship, without more seminal research on the environmental characteristics sought by the powerful. Specifically, do powerful
individuals seek different employers based on differing organizational factors, such as industry, size, or location? Before we can understand the drivers of power and entrepreneurship, we need to better understand the drivers of power and business environments sought by the powerful. My research attempted to understand the very niche business environment of entrepreneurship without understanding the wider scope of power and business environments as a whole.

Although I was only able to find one relationship between power and inclinations toward entrepreneurship, I believe that power has many plausible avenues of research in the field of business, especially given the fundamental relationship between organizational hierarchies and power. Perhaps in the future we will be able to better understand how power manifests within business.
Chapter V

References


Pinchot III, G. (1985). Intrapreneuring: Why you don't have to leave the corporation to become an entrepreneur. *University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship*.


Chapter VI

Appendix A

For the following questions, please indicate the characteristics you would like to see in a company you would work for in the future.

I would like to work for a company that focuses on:

<table>
<thead>
<tr>
<th>A strong emphasis on the marketing of tried and trued services and products</th>
<th>A strong emphasis on R&amp;D, technological leadership, and innovations</th>
</tr>
</thead>
<tbody>
<tr>
<td>A few specific lines of services or products</td>
<td>Many lines of new products and services</td>
</tr>
<tr>
<td>Enacting a few minor changes to the services or product lines</td>
<td>Enacting dramatic changes in the services and product lines</td>
</tr>
</tbody>
</table>

In regards to its competition, I would like to work for a company that focuses on:

<table>
<thead>
<tr>
<th>Reacting to the actions of competition</th>
<th>Initiating actions which competition responds to</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rarely being the first to introduce new services/products, administrative techniques, operation technologies, etc</td>
<td>Often being the first to introduce new services/products, administrative techniques, operating technologies, etc.</td>
</tr>
<tr>
<td>Avoiding competitive clashes, preferring a &quot;live-and-let-live&quot; posture</td>
<td>Seeking competitive clashes, preferring an &quot;undo-the-competitors&quot; posture</td>
</tr>
</tbody>
</table>

I would like to work for a company that focuses on:

<table>
<thead>
<tr>
<th>Low risk projects (with normal and certain rates of return)</th>
<th>High risk projects (with chances of very high returns)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exploring new environments via timid, incremental behavior</td>
<td>Exploring new environments via bold, wide-ranging acts</td>
</tr>
<tr>
<td>Adopting a &quot;wait and see&quot; posture in order to minimize the probability of making costly decisions</td>
<td></td>
</tr>
</tbody>
</table>