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Contributors to an enterprising sex: examining the influence of creativity on entrepreneurial intentions and the moderating role of political skill controlling for gender

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CONTRIBUTORS TO AN ENTERPRISING SEX: EXAMINING THE INFLUENCE OF CREATIVITY ON ENTREPRENEURIAL INTENTIONS AND THE MODERATING ROLE OF POLITICAL SKILL CONTROLLING FOR GENDER

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DEDICATION

I can do all things through Christ who strengthens me!

This dissertation is dedicated to my grandparents, Carlton Rawle Aimey and Olive Louise Colthrust-Aimey, and to my parents, Anthony Phipps and Alicia Aimey-Phipps. They provided me with a sound educational foundation, and their support and encouragement throughout my academic career is greatly appreciated and valued.

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ABSTRACT

Previous research indicates a positive relationship between creativity and entrepreneurship. Research also indicates a tendency for successful entrepreneurs to possess certain skills and abilities and to engage in activities that reflect their political astuteness. In addition, numerous studies have supported the importance of behavioral intentions as they relate to actions. Thus, this research endeavor focused on intentions, as it investigated the relationship between creativity and entrepreneurial intentions among female and male students, and attempted to determine whether political skill moderated the relationship.

The results revealed that there was a statistically significant positive relationship between creativity and entrepreneurial intentions among both female and male undergraduate students. These results supported the findings of Olawale (2010), Hamidi et al. (2008), Zampetakis and Moustakis (2006), and other researchers in the literature, who concluded that creative students were more likely to have intentions of becoming entrepreneurs in the future. The results also revealed that although political skill did have a positive correlation with entrepreneurial intentions, it did not moderate the relationship between creativity and entrepreneurial intentions. It may be that a sample of undergraduate students does not possess sufficient diversity in terms of age and experience, for political skill to be fully understood, developed, and used, in order to affect the relationship between creativity and entrepreneurial intentions.

The researcher concluded that the study should be replicated using older men and women at various stages of their lives, and women in "Women in Business" programs that are especially tailored to address the challenges and opportunities encountered by female entrepreneurs. Future research should also examine the political skill dimensions separately, to determine whether moderating effects exist for each dimension.

CHAPTER 1: INTRODUCTION

In this study, the researcher will examine the relationship between creativity and entrepreneurial intentions among female undergraduate students, and explore political skill as a possible moderator of this relationship. The field of entrepreneurship has garnered significant research interest, and the volume of entrepreneurship research continues to grow (Chandler & Lyon, 2001). One of the reasons for continued interest in entrepreneurship is the realization that entrepreneurial activity plays a role in economic progress. According to Zacharakis, Bygrave and Shepherd (2000), entrepreneurship is strongly associated with economic growth, and entrepreneurial companies account for between one-third and one-half of the variance in Gross Domestic Product (GDP) between countries. The authors also report that among countries with similar economic structures, the correlation between entrepreneurship and economic growth exceeds 0.7. In addition, Low (2001) explains that in the "new economy," there is an increased need for "entrepreneurial" thinking that is fast, flexible, opportunity-driven, and creative with respect to the acquisition of resources and the management of risk. This kind of thinking is useful, not only for the acquisition of resources, but also for their re-allocation to create new goods and services, introduce new businesses, and in turn, create jobs.

Another reason for the continued interest in entrepreneurship is its social impact, as many entrepreneurs go beyond the quest for commerce and economic gain, and contribute to "worthy causes," using their resources as a vehicle for social change. Steyaert and Katz (2004) mention entrepreneurship becoming a visible process in multiple sites and spaces, and diverse areas including the health sector, ecology (e.g., ecopreneurs), non-governmental development organizations, education, and art and culture. Social entrepreneurship, or entrepreneurial activity with an embedded social purpose, has been on the rise in recent decades (Austin, Stevenson, &

Wei-Skillern, 2006). The authors define the phenomenon as innovative, social value-creating activity that can occur within or across the nonprofit, business, or government sectors. The concept is still poorly defined (Mair & Marti, 2006), as it means different things to different people and researchers (Dees, 1998; Mair & Marti, 2006). However, social entrepreneurship embraces the idea of pursuing an opportunity that is appealing, not solely due to its fiscal potential, but as a result of its capacity for positive social impact.

There are many approaches to studying entrepreneurship, and several scholars have contributed to increasing our understanding about the phenomenon on different levels of analysis, ranging from the individual to the economy at large (Davidsson & Wiklund, 2001). Support for analysis at the individual level can be found in Gorman, Hanlon, and King's (1997) assertion that propensity or inclination towards entrepreneurship and small business is commonly associated with several personal characteristics, including creativity. Political skills, including people skills, are also considered essential resources for entrepreneurs (Thompson, 1999).

Despite the "glass ceiling" barrier being a mechanism to persuade women to leave larger businesses and start their own operations (Orhan & Scott, 2001), and although there is widespread agreement concerning the economic and social benefits of entrepreneurship, statistics show that women are less likely to engage in entrepreneurial activity than their male counterparts. The Center for Women's Business Research (2009) reports that only 28.2% of all businesses in the United States are owned by women, and only 4.2% of all revenues are generated by women-owned businesses in the United States. Kim, Aldrich, and Keister (2006) focused on nascent entrepreneurs (i.e., people still in the process of organizing and assembling the resources they need for a new business) to include the small (and sometimes unsuccessful) start-ups, and avoid the common misperception that entrepreneurship is concerned only with

large, successful firms. They found that women were less likely than men to be a nascent entrepreneur, as men were 1.8 times as likely as women to pursue a new venture. Reynolds and White (1997) found that women were 60% less likely than men to be nascent entrepreneurs.

This seeming under-representation of women in entrepreneurship underlies the decision of this researcher to focus on women in this study. Differences in entrepreneurial behavior between men and women are important because they relate to gender equality and gender equity. In addition, when one gender receives (or accepts) less opportunities to contribute entrepreneurially, the impact is "felt" not only at an individual level, but at a community, regional, and national level. On the subject of gender equality, Gilson (1940) stated that democracy rests on equality of opportunity, and asserted that until the sky is the limit (for women) as it is for men, men as well as women will suffer because all society is affected when half of it is denied equal opportunity for full development. This researcher advocates that until all possible efforts are directed toward determining the reasons for the dearth of entrepreneurial activity among women (compared to men), and until every effort is expended to discover and implement ways to address these reasons, and to increase the number of women in entrepreneurship so that they are on par with the men, the women are indeed being denied equal opportunity for full development.

Finally, it should be noted that in entrepreneurship research, personal characteristics are often investigated to aid in the explanation of phenomena pertaining to entrepreneurial activity. Support from the literature regarding the relevance of personal characteristics, particularly creativity and political skill, when studying entrepreneurship constructs, leads this researcher to examine these variables' influence on entrepreneurial intentions, which precede entrepreneurial behavior (Bird, 1988; Katz & Gartner, 1988; Krueger & Carsrud, 1993).

Rationale

Entrepreneurship plays a key role in economic growth and development. Baumol (1993) advocated that innovative entrepreneurship transforms inventions and ideas into economically viable entities. Acs and Szerb (2007) explain that entrepreneurship revolves around the recognition of opportunities along with the cognitive decision to commercialize those opportunities by starting a new firm. Therefore, it can serve as a mechanism that permeates the knowledge filter that prevents ideas and opportunities from being pursued by organizations, and thus it can provide the missing link to economic growth. Entrepreneurship is also crucial in times of recession. World-changing new ventures (e.g., Boeing, IBM, and Hyatt) and mainstay products (e.g., Miracle Whip and Kraft Macaroni and Cheese) are often born at the depth of economic upheavals (Bygrave & Zacharakis, 2010).

Since entrepreneurship is important both for economic sustenance and economic resurgence, entrepreneurial activity should be encouraged. Unfortunately, however, it has been acknowledged that there are fewer female entrepreneurs than male entrepreneurs. Kalleberg and Leicht (1991) state that although the self-employment growth rate has been greater among women than men, men are still more likely than women to be self-employed. Brush, Carter, Gatewood, Greene, and Hart (2006) also highlight the disparity between men and women in self-employment, providing statistical evidence that men are almost twice as likely to be involved with a new business start-up as women.

With this in mind, one question that arises is “Why do women continue to lag behind men in entrepreneurial activities?” Is it possible that women also have less entrepreneurial intentions than men? It has been noted that behavioral intentions do influence actions. The Theory of Reasoned Action (TRA) and the Theory of Planned Behavior (TPB) both embrace

behavioral intentions as the immediate antecedent to behavior. The only difference is that TPB also takes into account perceived behavioral control, which encompasses beliefs regarding the possession of requisite resources and opportunities to perform the behavior (Madden, Ellen, & Ajzen, 1992).

Specifically, entrepreneurial intentions form the initial strategic template for new organizations and are important underpinnings of new venture development (Bird, 1988). Therefore, if women do indeed have less entrepreneurial intentions, it is necessary to motivate more women to get involved entrepreneurially so that both their entrepreneurial intentions and entrepreneurial actions may increase, if society is to experience equity between men and women in entrepreneurship. Therefore, it is logical to investigate entrepreneurial intentions, and to discover the influencing factors that affect entrepreneurial intentions among women.

Studies have shown that one factor that affects entrepreneurial intentions is creativity. For example, Zampetakis and Moustakis (2006) found that students' self-perceptions of creativity and a family environment that promotes creative thinking can predict increased levels of entrepreneurial intentions. Research also suggests that political skill impacts entrepreneurial intentions. For example, Douglas and Shepherd (2000) mention the tendency for individuals with greater entrepreneurial abilities such as persuasive skills to have greater entrepreneurial intentions and to self-select as entrepreneurs. Additionally, a model by Witt (2004) proposes networking abilities as a precursor to entrepreneurial intentions. Hollingsworth et al. (2002) suggests that networking facilitates creativity and the development of new products. It is quite possible that this phenomenon may lead to entrepreneurial intentions, as individuals may see entrepreneurship as a means to express and benefit from their creativity, and commercialize the

new products. It is therefore, rational to investigate political skill as a potential moderator of the relationship between creativity and entrepreneurial intentions.

Theoretically, the relationships among creativity, political skill, and entrepreneurial intentions are also reasonable. The Theory of Planned Behavior has already been mentioned. Both creativity and political skill are embraced by perceived behavioral control, as individuals may perceive entrepreneurship behavior as less difficult if they are creative and/or politically skilled, and thus possess greater entrepreneurial intentions. In addition, according to the Knowledge Spillover Theory of Entrepreneurship, entrepreneurship facilitates the spread and commercialization of new ideas that may otherwise remain dormant within organizations. These spillovers may not exist without entrepreneurship serving as their conduit (Acs & Szerb, 2007). It is logical that creativity would enable these spillovers not only by playing a role in the development of novelties, but also by embracing inventive ways to share these novelties with the public. Furthermore, political skill would facilitate spillovers through the use of networking ability, interpersonal influence, social astuteness, and apparent sincerity to make strategic connections/ties and enter the market. Consequently, entrepreneurial intentions, followed by entrepreneurial activity, should result from both creativity and political skill.

In consideration of the information in the literature that suggests that both creativity and political skill impact entrepreneurial intentions, and entrepreneurial intentions are antecedent to entrepreneurial actions, the researcher envisions a clear value in focusing on entrepreneurial intentions, and studying the influence of creativity and political skill on entrepreneurial intentions. Additionally, the knowledge, that although women constitute almost half of today's workforce (Campbell, Denes, & Morrison, 2000; National Research Council, 1991), they remain

substantially behind men in entrepreneurial actions, leads the researcher to examine these relationships among women.

Purpose of Study

The primary purpose of the study is to examine the influence of creativity on entrepreneurial intentions among female undergraduate students, as well as to investigate the moderating effect of political skill on the creativity-entrepreneurial intentions relationship among these students.

Objectives of Study

The objectives of the study are:

1. To describe the full-time undergraduate students at a research extensive university on the following selected demographic characteristics: Gender, Ethnicity, Age, and School Classification.
2. To describe the full-time undergraduate students at a research extensive university on the following selected psycho-social characteristics: Creativity, Political Skill, and Entrepreneurial Intentions.
3. To compare the full-time undergraduate students at a research extensive university by gender, on the following selected demographic characteristics: Ethnicity, Age, and School Classification.
4. To compare the full-time undergraduate students at a research extensive university by gender, on the following selected psycho-social characteristics: Creativity, Political Skill, and Entrepreneurial Intentions.
5. To determine whether a positive relationship exists between creativity and entrepreneurial intentions among women.

6. To determine whether political skill will moderate the relationship between creativity and entrepreneurial intentions among women, such that the relationship will be stronger when women are more politically skilled than when they are less politically skilled.
7. To determine whether a positive relationship exists between creativity and entrepreneurial intentions among men.
8. To determine whether political skill will moderate the relationship between creativity and entrepreneurial intentions among men, such that the relationship will be stronger when men are more politically skilled than when they are less politically skilled.

Definition of Terms

- **Entrepreneurship** – In this study, based on the writings of George and Zahra (2002) as well as Sagie and Elizur (1999), entrepreneurship is defined as the act and process by which individuals identify or create business opportunities, and pursue and/or seize them to achieve reward(s).
- **Entrepreneurial Intentions** – In this study, based on the writings of Krueger (1993) as well as Llewellyn and Wilson (2003), entrepreneurial intentions are defined as an individual's desire and commitment to start and run his/her own business.
- **Creativity** – Although most researchers and theorists agree that creativity involves the development of a novel product, idea, or problem solution that is of value to the individual and/or the larger social group, psychologists have had great difficulty finding consensus as to definitional components that reach beyond the two criteria of novelty and appropriateness (value) (Hennessey & Amabile, 2010). For purposes of this study, creativity is defined as the production of novel (i.e., different from what has been done before) ideas, in any realm of

human activity, from science, to the arts, to education, to business, to everyday life, that are appropriate to the problem or opportunity presented (Amabile, 1997). This definition is especially relevant to entrepreneurship as entrepreneurs emerge from and contribute to many diverse fields.

- **Political Skill** – Ferris et al. (2005) define political skill as the ability to effectively understand others at work and to use such knowledge to influence others to act in ways that enhance one's personal and/or organizational objectives. As such, politically skilled individuals combine social astuteness with the capacity to adjust their behavior to different and changing situational demands in a manner that appears to be sincere, inspires support and trust, and effectively influences and controls the responses of others (Ferris et al., 2007). Politically skilled individuals are socially astute, possess strong networking ability, have the knack of influencing others interpersonally, and exhibit apparent sincerity (Ferris et al., 2005).

Significance of Study

Entrepreneurship is important because it leads to increased economic efficiencies, brings innovation to market, creates new jobs, and sustains employment levels (Shane & Venkataraman, 2000; Zhao, Seibert, & Hills, 2005). Consequently, it is essential that entrepreneurial intentions be cultivated at the undergraduate level, to increase the probability of entrepreneurial activity at some point in time, either during matriculation or after graduation. Research has revealed that women are less likely than men to intend to become entrepreneurs (i.e., women report lower entrepreneurial intentions than men) (Zhao, Seibert, & Hills, 2005). Additionally, findings show that women who perceive themselves as more similar to males (i.e., high on male gender identification) have higher entrepreneurial intentions than those who

perceive themselves as less similar to males (i.e., low on male gender identification) (Gupta, Turban, Wasti, & Sikdar, 2009).

Therefore, this research is significant because results obtained from the study can be used as universities and other academic institutions strive to foster an environment that promotes entrepreneurship, and that promotes it among women, whether or not they are high on male gender identification. These institutions can use the findings to develop and nurture female students specifically, and the student body in general, with high entrepreneurial intentions, as these intentions are the precursors to actual entrepreneurial action.

If the results of the study show that creativity does indeed influence entrepreneurial intentions, programs could be specially implemented to facilitate the use of creativity, and an institutional environment that encourages creative thought/thinking and behavior could be embraced. These programs, however, must be well thought out and properly designed. For example, Sternberg and Lubart (1991) affirm that schooling can create creative minds, but cautioned that many creativity training programs use trivial problems. The authors asserted that the use of realistic problems would be beneficial as they would increase the likelihood of transfer of the learned problem-solving skills. Fasko (2001) mention that since motivation is important for creative thinking, students should choose their own tasks as the latter would be more meaningful to students, and thus, they would be more motivated. It was also suggested that problem-finding skills be emphasized just as much as problem-solving skills. This last recommendation is extremely relevant to entrepreneurship as entrepreneurs must first be able to perceive problems before they can pursue the opportunity to solve them.

Also, if political skill is found to be a moderator, efforts could be made to equip students with social perspicacity, influential abilities, and other skills that would serve them in good stead

politically. Political skill can be developed and shaped (Perrewé & Nelson, 2004). Ferris et al. (2003) view the development/training of political skill as a potentially new area of interest and activity in human resource development programs and management development programs. The researcher in this study sees the potential for implementing such programs in educational institutions so that students can enhance their political skills in preparation for future entrepreneurial activity.

Limitations of the Study

There were some potential limitations associated with the validity and generalizability of this study that should be documented. First, self-reported data, which can be a source of bias, was collected. Future research should utilize more objective (rather than subjective) measures, especially for creativity and political skill in an attempt to reduce the possible occurrence of inflated relationships. In addition, the fact that all the data was collected from the same sources/raters predisposes the results to inflation owing to common-method variance [i.e., variance attributable to the measurement method rather than to the constructs the measures represent (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003)]. Future research can address measurement error due to method biases by obtaining measures of the predictor and criterion variables from different sources, and temporally or psychologically separating the measurement of the predictor and criterion variables (Podsakoff et al., 2003).

Second, the Theory of Planned Behavior was not investigated in its entirety, but used as a foundational explanation providing support for the relationships explored. For this study, creativity and political skill are subsumed under perceived behavioral control, as they affect the perceived ease or difficulty of engaging in entrepreneurial behavior. However, future inquiry should examine a model whereby creativity and political skill are subsumed under control

beliefs, which in turn influence perceived behavioral control, which in turn influences entrepreneurial intentions, which in turn influences entrepreneurial behavior. This particular framework may strengthen the explanatory power of the model.

Third, since the study is neither longitudinal nor experimental, there is no allowance for causal inferences based on the findings (Cook & Campbell, 1979). However, since correlation is a necessary condition for causation, further investigation should be geared toward determining whether causal relationships exist among the variables examined in the study.

Fourth, a potential limitation concerns the extent to which this study's findings can be generalized to other populations. The study sample was comprised of full-time, undergraduate students attending one research extensive university in the southern part of the United States of America. Future research should examine the phenomenon using part-time students and graduate students. The study should also be replicated in a teaching extensive liberal arts institution and in other regions of the United States of America to facilitate comparison.

Fifth, data analysis for this study revealed high levels of multicollinearity after adding the interaction/moderator term. The interaction term is likely to covary to some degree with both the predictor and moderating variables, and collinearity makes it difficult to distinguish the separate effects of the linear and interaction terms involving the predictor and moderating variables (Echambadi & Hess, 2007). The authors cautioned, however, that false alarms may be raised about the presence of collinearity if high variance inflation factors (VIFs) are the only tools used to diagnose multicollinearity. Thus, multiple diagnostic tools should be used. The authors also cautioned that if multicollinearity is indeed a problem, in most cases, it cannot be remedied after the data has been collected. Therefore, collinearity issues should be taken into account before data collection. For future inquiry, a study design that isolates the interaction effect (e.g., a

factorial design) should be used (Echambadi & Hess, 2007). The authors also suggest increasing the sample size to address the loss of power associated with multicollinearity.

CHAPTER 2: REVIEW OF LITERATURE

This chapter begins by reviewing the literature on the theory of planned behavior and the knowledge spillover theory of entrepreneurship, which are the two theories that provide the theoretical foundation for this study. Subsequently, the chapter continues with a review of literature on entrepreneurship, entrepreneurial intentions, creativity, and political skill.

Theory of Planned Behavior

The theory of planned behavior (TPB) is an extension of the theory of reasoned action (TRA), which deals with volitional behavior, attempting to explain intentions and behavior under conditions where individuals have sufficient control (Ajzen, 1988; Ajzen, 1991). According to the theory of planned behavior, intentions also predict behavior, and these intentions are determined by attitude(s) toward the behavior and subjective norms (as in the TRA). However, the TPB clarifies that intentions are also preceded by perceived behavioral control. Figure 1 demonstrates the distinguishing features between the two theories.

Behavioral attitude refers to how favorable the person's appraisal is of the behavior, and depends on expectations and (behavioral) beliefs about the personal impact of outcomes resulting from the behavior (Ajzen, 1991; Gird & Bagraim, 2008). Subjective norms refer to perceived social pressure to perform the behavior, stemming from normative beliefs based on what important or influential people in the person's life think about the particular behavior (Ajzen, 1991; Gird & Bagraim, 2008). Perceived behavioral control refers to the perceived ease or difficulty of performing the behavior and is underpinned by control beliefs based on actual and perceived personal inadequacies and external obstacles (Ajzen, 1991; Gird & Bagraim, 2008). Thus, perceived behavioral control encompasses the individual's ability to perform a particular

behavior, and includes factors like the availability of opportunities and resources (e.g., skills) (Ajzen, 1991). Perceived behavioral control is viewed as compatible with Bandura's (1977) concept of perceived self-efficacy, which is concerned with judgments of how well an individual can execute courses of action (Ajzen, 1991; Bandura, 1982).

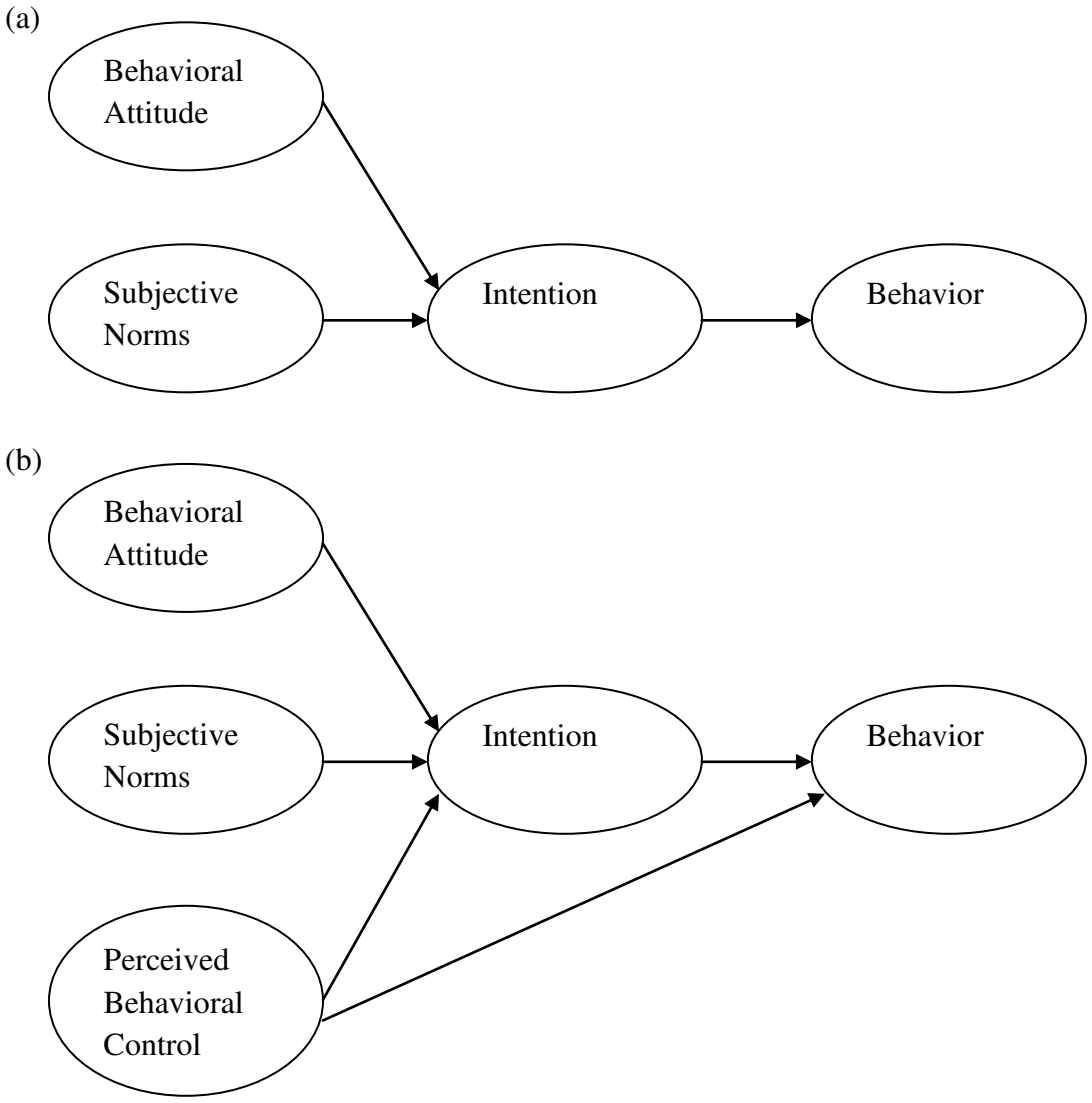


Figure 1: The distinction between (a) The Theory of Reasoned Action (TRA) and (b) The Theory of Planned Behavior (TPB).
Note: Adapted from Madden, Scholder Ellen, and Ajzen, 1992.

The model of thinking upheld by the TPB can be applied to entrepreneurship. Ajzen (1991) affirms that intentions to perform a given behavior capture motivational factors that influence a behavior, and that they are indicators of how hard people are willing to try, and how much effort they are planning to exert, in order to perform the behavior. According to the author, the stronger the intention to engage in a behavior, the more likely should be its performance, but only under volitional control (i.e., the individual can choose at will whether or not to perform the behavior).

Likewise, it is logical to assert that entrepreneurial intentions embrace motivational factors that influence entrepreneurial actions, and that these intentions are preceded by (1) the individual's attitude toward entrepreneurial activity/behavior, (2) the individual's subjective norms which are guided by his/her referents' beliefs about entrepreneurial activity/behavior, and (3) the individual's perceived behavioral control based on his/her perception of the resources and opportunities that are available to him/her. This assertion is confirmed by results of Gird and Bagraim's (2008) study, which indicate that the theory of planned behavior significantly explains 27% of the variance in university students' entrepreneurial intentions, suggesting that the theory is a valuable tool for predicting entrepreneurial intentions. It is the researcher's view that creativity and political skill fall in the realm of perceived behavioral control as they both enable the performance of entrepreneurial behavior, facilitating processes that contribute to successful entrepreneurship.

Knowledge Spillover Theory of Entrepreneurship

Opportunities can be created when incumbent firms invest in, but do not commercialize, new knowledge, and entrepreneurship can be a response to these opportunities, contributing to economic growth by acting as a conduit through which knowledge created by these incumbent

firms spills over to agents who create new firms (Acs, Braunerhjelm, Audretsch, & Carlsson, 2009). The authors explain that the knowledge that induces the decision to start new firms is generated by investments made by the incumbent firm, and thus, the start-up serves as the mechanism through which knowledge spills over from sources that produced it (e.g., a university or research and development department or laboratory in an incumbent firm), to a new organizational form where it is actually commercialized. Therefore, according to the theory of knowledge spillover entrepreneurship, ideas and knowledge created in one organizational context such as a firm or university, but left uncommercialized, serve as a source of knowledge, generating entrepreneurial opportunities (Audretsch & Keilbach, 2007). Thus, the agent (i.e., the employee in the incumbent firm, or the employee or student at the university) sees an opportunity and capitalizes on it through entrepreneurship.

It is the researcher's apperception/understanding that the idea(s) upon which the new firm is built/based can be, but are not necessarily identical to those of the incumbent firm or university. The knowledge gained from the latter can be assimilated and adapted or transformed through different combinations before being commercialized. Regardless of the route taken, it is the researcher's view that both creativity and political skill would be assets. Capello (2009) revealed that the capabilities of agents to exploit spillovers highly depend on creativity, and not solely a skilled labor force, to combine existing know-how with interpretations of market needs, and develop new products, and attain new niches and new markets. As regards political skill, Baron and Markman (2000) provide a list of what they call social skills that are relevant to entrepreneurs' tasks and also, to their success. These skills, however, possess similarities to the dimensions of the political skill construct used in this study. Baron and Markman (2000) assert that these skills influence the quality of interactions between entrepreneurs and their (business or

customer) alliances. Thus, in the context of the knowledge spillover theory of entrepreneurship, the creative agent, who has perceived an opportunity based on knowledge within the incumbent firm, and after careful evaluation, has decided to exploit it, can use these skills to develop and expand their social networks, to gain valuable information, and to facilitate access to financial capital and markets. The social skills listed by the authors are presented in Table 1, and their prospective relevance to the performance of important tasks faced by entrepreneurs is described.

There is a proclivity for large firms to strategically choose specialization, and to focus on their "core competencies" (Carlsson, 1989). However, consumers like variety (Heijdra, Ligthart, & van der Ploeg, 1998), and trade takes place because consumers like variety (Epifani, & Gancia, 2009). Variety matters both because different people have different preferences and because consumers enjoy having a wide selection from which to choose (Motta & Polo, 1997). Since consumers like variety, they will transfer some of their spending to the good(s) offered by the new firm (Gunning, 2001). Therefore, to provide consumers with the variety which they desire, and to introduce it successfully to the market, agents need creativity as well as political skill.

Table 1

Social Skills Potentially Relevant to Entrepreneurs' Success

Social Skill	**Description**	**Examples of Potential Relevance to Entrepreneurial Success**

(Table 1 continued)

Social perception	Ability to perceive accurately the emotions, traits, motives, and intentions of others	Making presentations to investors and customers, attracting and selecting partners and employees, conducting negotiations
Impression management	Ability to use tactics designed to induce liking and a favorable impression by others	Obtaining financing, attracting key employees, dealing with customers and suppliers
Persuasion and social influence	Ability to change others' attitudes and/or their behavior in desired directions	Obtaining financing, recruiting key employees, dealing with customers and suppliers, conducting negotiations
Social adaptability	Ability to adapt to, or feel comfortable in, a wide range of social situations	Establishing business relationships with strangers (i.e., cold calls), and working with people from diverse backgrounds

Note. Adapted from "Beyond Social Capital: How Social Skills can Enhance Entrepreneurs' Success," by R. A. Baron and G. D. Markman, 2000, *Academy of Management Executive, 14,* p. 106.

Entrepreneurship

Discussions of the evolution process of the entrepreneurship concept are often started from Schumpeter's works (Krišč iūnas & Greblikaitė, 2007). Thus, the researcher finds it appropriate to present Schumpeter's ideas of entrepreneurs and entrepreneurship first. Schumpeter (1934) describes the entrepreneur as a change agent and a "man of vision" and of daring, carrying out new combinations, and willing to take chances, to strike out, largely on the basis of intuition, on courses of action in direct opposition to the established, settled patterns. Thus, the entrepreneur sees an opportunity, and even though it may be drastically different from the norm, and/or challenge the status quo, he (or she) pursues it.

Schumpeter (1934) refers to entrepreneurship as the fundamental phenomenon of economic development and Schumpeter (1942) advocates entrepreneurship as the key to market success through the creative destruction process. This process involves the displacement of old products, processes, combinations, and technologies by new ones, as they are developed and introduced in the market.

Entrepreneurship is a broad concept that encompasses a wide range of activities, from the Schumpertian (or Schumpeterian) ideal associated with innovation to simply creating a job for oneself (Harbi & Anderson, 2010). It does not require, but can include, the creation of new organizations (Shane & Venkataraman, 2000). The authors define entrepreneurship as the discovery, evaluation, and exploitation of opportunities. According to Cromie (2000), enterprising individuals develop new ideas, spot market opportunities, or combine existing ideas and resources in different ways to create additional value. These conceptualizations also embrace the notion of corporate entrepreneurship (Sathe, 1988; Sathe, 1989) or intrapreneurship (Pinchot,

1985), where within organizations, individuals lead the innovative process and exhibit behaviors similar to those of entrepreneurs in order to maintain a fresh and rejuvenated organization.

Social entrepreneurship is another area of entrepreneurship that has become well established in business (Peredo & McLean, 2006). Social entrepreneurship can be emphasized as 1) combining commercial enterprises with social impacts (i.e., using business skills and knowledge to create enterprises that accomplish social purposes in addition to being commercially viable), 2) innovating for social impact (i.e., focusing on innovations and social arrangements that have consequences for social problems, often with relatively little attention to economic viability), or 3) catalyzing social transformations beyond solutions to initial problems (i.e., producing small changes in the short term that reverberate through existing systems to catalyze large changes in the longer term) (Alvord, Brown, & Letts, 2004).

The concept combines the passion of a social mission with an image of business-like discipline, innovation, and determination, thus applying an entrepreneurial approach to social problems (Dees, 1998). According to the author, social entrepreneurs play the role of change agents in the social sector by 1) adopting a mission to create and sustain social value (not just private value), 2) recognizing and relentlessly pursuing new opportunities that to serve that mission, 3) engaging in a process of continuous innovation, adaptation, and learning, 4) acting boldly without being limited by resources currently at hand, and 5) exhibiting a heightened sense of accountability to the constituencies served and for the outcomes created. They are people who realize where there is an opportunity to satisfy some unmet need that the state welfare system will not or cannot meet, and who gather together the necessary resources (generally people, often volunteers, money and premises) and use these to “make a difference” (Thompson, Alvy, & Lees, 2000).

In this study, however, the scope is such that entrepreneurship is relegated to the identification and creation of business opportunities and the starting of new firms, and the researcher has chosen to examine creativity and political skill, because relevant literature has indicated their importance in successful entrepreneurship. Cromie (2000) asserts that in order to realize the entrepreneurial accomplishments of developing new ideas, spotting market opportunities, or combining existing ideas and resources in different ways to create additional value, experimentation, trial and error, lateral thinking, and creativity are required. Amabile and Khaire (2008) assert that creativity, which they define as the ability to create something novel and appropriate, is essential to the entrepreneurship that gets new businesses started and that sustains the best companies after they have reached global scale.

As regards political skill and entrepreneurship, Baron (2010) and Baron and Markman (2000) pointed out that political skills are important in entrepreneurship, as human and social capital (e.g., favorable reputation, high status, personal referrals) get entrepreneurs in the door to gain access to venture capitalists, potential customers, and others, but once inside, making a deal involves social and political processes including interacting effectively with others, persuading them, and making them enthusiastic. Baron (2000) also states that successful entrepreneurs appear to be higher in social competence (i.e., the ability to interact effectively with others), and explains that they should be better at social perception, impression management, persuasiveness, and adapting to new social situations.

Women and Entrepreneurship

Overall, males have a higher preference for entrepreneurship than women (Scherer, Brodzinski, & Wiebe, 1990) and men continue to be more active in entrepreneurship than women worldwide (Wilson, Kickul, & Marlino, 2007). Even in advanced market economies,

women only own 25% of all businesses (Jalbert, 2000). The disparity between men and women as regards entrepreneurial behaviors results from several factors. One of these factors is entrepreneurial self-efficacy, which is the self-confidence that one has the necessary skills to succeed in creating a business (Wilson, Kickul, & Marlino, 2007). The authors found significant gender differences vis-à-vis entrepreneurial self-efficacy, with adolescent girls and adult women having lower self-efficacy than adolescent boys and adult men. It has also been speculated that women possess less self-efficacy for male-dominated careers in which they are underrepresented (Betz & Hackett, 1981; Clement, 1987) although generally, males and females have about equal self-efficacy for careers dominated by their gender (Scherer, Brodzinski, & Wiebe, 1990). Apart from mere gender, gender orientation also plays a role. Bandura (1997) states that it is women with highly stereotypic feminine orientations who harbor self-doubts about their capabilities for nontraditional pursuits, and that those who take a more egalitarian view toward the roles of women display a higher sense of efficacy for traditionally male occupations and enter into them more frequently.

Another factor contributing to the disparate number of male and female entrepreneurs is entrepreneurial intentions. Wilson, Kickul, and Marlino (2007) found significant gender differences as regards entrepreneurial intentions, with teen girls having lower intentions than their male counterparts. The authors' findings also revealed a significant main effect of self-efficacy on entrepreneurial intentions. Considering the fact that women also had lower perceptions of self-efficacy, these results suggest negative implications for the plight of women being "led" by men in entrepreneurship.

It should also be noted that the likelihood is greater for women than men to restrict their career ambitions and pursuits because they consider themselves to be lacking in the necessary

capabilities (Bandura, 1992). Although gender did not moderate the relationship between entrepreneurial self-efficacy and entrepreneurial intentions such that the relationship was stronger for women than men (Wilson, Kickul, & Marlino, 2007), the authors assert that their findings suggest that even if women believe they have some of the skills needed to be an entrepreneur, they are likely to choose another career path if they believe they have stronger skills in that area. Therefore, for females more than males, competence is a major determining factor which influences their intention to engage in entrepreneurial behavior, and as a likely result, their actual entrepreneurial behavior. This finding suggests that men are more likely than women to intend to engage in entrepreneurial activity although they perceive themselves as ill-prepared or deficient in needed knowledge, skills, or abilities, and thus, it provides one of the possible explanations for the vast majority of entrepreneurs being men.

Entrepreneurial Intentions

There is a growing body of literature arguing that intentions play a very relevant role in the decision to start a new firm (Liñán & Chen, 2009). Thus, the study of entrepreneurial intentions, or the intention of carrying out entrepreneurial behaviors (Liñán & Chen, 2009), is a worthwhile approach to gaining further understanding of the field of entrepreneurship. According to Bird (1988), intentionality is a state of mind directing a person's attention (and therefore experience and action) toward a specific object (goal) or a path in order to achieve something (means). Krueger (1993) asserts that intentions represent the degree of commitment toward some future target behavior, and that entrepreneurial intentions refer to the specific target behavior of starting a business. Therefore, for the purpose of this study, entrepreneurial intentions represent the degree of commitment to starting a business in the future.

Entrepreneurial intentions embrace the dimension of rationality versus intuition (intuitive thinking) (Bird, 1988). The author explains that an individual's rational, analytic, and cause-and-effect oriented processes structure intention as well as action. In addition, intuitive, holistic, and contextual thinking frames and structures the individual's intention and action, with visions, hunches, expanded views of untapped resources, and feelings of the enterprise's potential inspiring him/her, and motivating him/her to persevere (Bird, 1988). According to the author, personal contexts (e.g., history factors like experience, personality traits like need for achievement, and abilities like promoting ideas) and social contexts (e.g., environmental, political and economic variables such as displacement, changes in markets, and government regulations) interact with rational and intuitive thinking during the formation of entrepreneurial intentions. Both of these contexts embrace dynamics that influence what Ajzen (1991) refers to as perceived behavioral control, which signals the viability of entrepreneurial behavior to the individual, and thus affects his/her entrepreneurial intentions.

Creativity

Entrepreneurs are different from other persons with respect to certain traits, and it is these differences that lead them to recognize opportunities and to pursue them (Baron, 1998). One of the differences that the author emphasizes is that of the cognitive (mental) factors and processes used by entrepreneurs, such as counterfactual thinking (imagining), which can be used to develop improved task strategies. These mental processes through which information is acquired, stored, transformed, and used, can help explain why some people but not others choose to become entrepreneurs, recognize opportunities for new products or services that can be profitably exploited, and are so successful as entrepreneurs (Baron, 2004).

Creativity has been identified by many as a cognitive process. There is, however, a long history of disagreement over its definition, as creativity has been defined in terms of the four Ps, namely (1) the creative process, (2) the creative person, (3) the creative product, and (4) the creative press (Amabile, 1983; Rhodes, 1961; Runco & Pritzker, 1999). The creative process includes ways in which individuals think, feel, experience, motivate and direct themselves, and behave related to the generation of original and meaningful (i.e., creative) outcomes. The creative person includes both trait and state characteristics, and may involve observable evidence as well as more inferred capabilities and personal traits. The creative product is the result or outcome of creative efforts and can be a concrete product, behavioral result, or set of ideas. The creative press refers to the press of the environment favoring creativity and involves discerning the pattern of circumstances around the individual that release creative production (Runco & Pritzker, 1999).

Creativity has also been defined in terms of a trait (i.e., the trait of originality or the production of unusual solutions or associations) or unique achievement (i.e., the creativity of finished products) (Amabile, 1993; Eysenck, 1995). Amabile (1983) provides a framework to aid in the conceptualization of creativity. The framework consists of three components, namely domain-relevant skills (which include knowledge of the domain and are partly dependent on cognitive abilities), creativity-relevant skills (which include knowledge of heuristics for generating novel ideas and are partly dependent on training and personality characteristics), and task motivation (which includes attitudes toward the task and is partly dependent on social factors like constraints in the environment). The author later referred to the components as expertise (i.e., technical, procedural, and intellectual knowledge), creative thinking skills (i.e., how flexibly and imaginatively people approach problems), and intrinsic motivation (i.e., an

inner passion to solve the problem at hand which leads to solutions that are far more creative than external rewards, such as money) (Amabile, 1997; Amabile, 1998).

Regardless of the component with which creativity is identified, the theory of planned behavior fits well as an explanatory model for entrepreneurial intentions. For example, domain-relevant skills and creativity-relevant skills can be associated with perceived behavioral control as cognitive abilities can be viewed as available resources and training can be classified as available opportunities. Task motivation can be associated with behavioral attitude as well as subjective norms. Thus, in an entrepreneurship context, all three components can be viewed as antecedents to entrepreneurial intentions. This study, however, will focus on the cognitive aspect of creativity.

Simon (1985) describes creativity as an intellectual thought process requiring a great deal of cognitive effort. Kirton (1976) indicates that creative people tend to think tangentially (i.e., imaginatively or divergently), challenge rules or past custom, and discover problems and avenues of solution. Eisenberger, Armeli, and Pretz (1998) pronounce divergent thinking an important component of creative performance, connoting that creativity involves both mental activity and perspicacity. According to Nemeth and Kwan (1987), divergent thinking involves the consideration of a problem from varying viewpoints. Guilford (1956) distinguishes it from convergent thinking where there is usually one conclusion, and explains that divergent thinking involves much searching or "going off" in various directions. Therefore, divergent thinking encompasses the ability to generate *many* possible solutions (number of ideas) and the ability to generate *different* or *unique* possible solutions (flexibility of ideas) (Gilhooly et al., 2007; Silvia et al., 2008).This can be compared to Kirton's (1976) "innovator" cognitive style. Kirton (1992) describes the latter as a style of decision-making, problem-solving, and, by implication,

creativity. The author states that innovators, in contrast with adaptors, have a taste for producing a proliferation of ideas, and that they are more likely to re-construct the problem (separating it from its enveloping accepted thought, paradigms, and customary viewpoints), and to emerge with less expected, and probably less acceptable solutions.

According to Cromie (2000), creativity is a process encompassing stages such as the accumulation of knowledge, reflection, developing, and evaluating an idea. Runco (1991) states that a comprehensive definition of creativity should incorporate the identification and definition of a problem or worthwhile task, as well as the generation, evaluation, application, and modification of solutions and ideas. Amabile (1996) and Sternberg and Lubart (1999) agree that creativity involves the production of ideas and solutions, but they also emphasize that these ideas and solutions should be novel (i.e., original, unexpected) as well as appropriate (i.e., useful, adaptive concerning task constraints). Therefore, creativity can be described as a cognitive ability to engender unique ideas or unique associations of existing ideas that are applicable to a particular situation or appropriate to solve a certain problem.

These abilities should serve the entrepreneur in good stead as he/she encounters problems and seeks ways to solve them. These abilities should also be a valuable resource, positively influencing an individual's perceived behavioral control over entrepreneurial behavior, and thus guiding them to increase their entrepreneurial intentions.

Creativity and Entrepreneurial Intentions

Torrance (1993) describes creative thinking as the process of sensing difficulties, problems, gaps in information, missing elements, something askew; making guesses and formulating hypotheses about these deficiencies; evaluating and testing these guesses and hypotheses; possibly revising and retesting them; and last, communicating the results. Nassif and

Quevillon (2008) mention the importance of original or associative thought and/or the potential of generating useful combinations of previously disparate or unlikely elements.

Entrepreneurs must come up with ideas for new goods or services that can be brought to a market, and having identified such, they must figure out how to effectively execute the entrepreneurial process (Hamidi, Wennberg, & Berglund, 2008). Therefore, entrepreneurial behavior involves the detection of opportunities based on unavailable or deficient products or services in the market, the speculation and then discovery of how to make them accessible to customers, and their actual provision to customers via the most effective and efficient means. Consistent with the theory of planned behavior, perceived behavioral control corresponds to perceived feasibility, one of the key factors of self-efficacy (Hamidi, Wennberg, & Berglund, 2008), and self-efficacy is seen as a tool to enhance entrepreneurial intentions (Boyd & Vozikis, 1994; Fayolle, 2005). If individuals perceive that they have the creative *ability* to exhibit the aforementioned entrepreneurial behavior, they are more likely to perceive it as feasible, and thus, they should be more likely to possess entrepreneurial intentions, and as a result, more inclined to actually *pursue* entrepreneurial behavior.

Nassif and Quevillon (2008) state that apart from skill (procedural and declarative), trait (personality and pathology), cognitive styles and processes, contextual barriers, and environmental facilitators, creativity research also embodies the study of motive and intention. Olawale (2010) found creativity to be one of five motivators of entrepreneurial intentions among university students in their final year of study. A study by Hamidi, Wennberg, and Berglund (2008) also revealed that creativity among university students is an important antecedent of their entrepreneurial intentions. In their study, high creativity scores had a strong and positive effect on entrepreneurial intentions. According to Ahmed et al. (2010), innovativeness is considered to

be one of the primary traits of entrepreneurs, and their findings strengthen the view that the more innovative person is more likely to be willing to take the risk to start a new business. Their study revealed a strong relation between innovativeness of students and their intentions to become entrepreneurs in the future. These findings provide support that creative individuals are more likely to consider, and commit to starting their own businesses.

Results of another study by Zampetakis and Moustakis (2006) indicated that students' self-perception of creativity predicted increased levels of entrepreneurial intention, suggesting that creative individuals are more inclined to feel the urge to pursue an avenue that leads to self-employment. As Zampetakis and Moustakis (2006) put it, "creativity is an essential element of the enterprising 'personality'."

Hypothesis 1: There will be a positive relationship between creativity and entrepreneurial intentions among women.

Hypothesis 2: There will be a positive relationship between creativity and entrepreneurial intentions among men.

Political Skill

Other factors relevant to entrepreneurs and their success include their motives, skills, and abilities (Baron, 2004). One important skill that has been identified is political skill. Lux (2005) proposes that political skill provides the most theoretically complete and valid measure of social competence/skill, which describes an individual's ability to effectively interact with others (i.e., to effectively develop, maintain, and utilize social capital and networks) (Baron & Markman, 2003; Lux, 2005). Social capital, according to Lux (2005), is a source of competitive advantage to the entrepreneur, aiding him/her in identifying and evaluating opportunities, obtaining

resources, and establishing customer relationships. Therefore, political skill enables the entrepreneur to capitalize on social capital in order to succeed entrepreneurially.

Ferris et al. (2003) conceptualize political skill as a distinct type of social skill. They describe political skill as an interpersonal style that combines social awareness with the ability to communicate well. Ahearn et al. (2004) define political skill as the ability to effectively understand others at work, and to use such knowledge to influence others to act in ways that enhance one's personal and/or organizational objectives. Therefore, political skill enables the individual to be cognizant of his/her environment and to act appropriately, while relating well with others. Ferris et al. (2003) recognize its value as an adaptability-enhancing ability that contributes to the behavioral flexibility that is so important in today's dynamic organizational environments. Thus, it can be argued that individuals, being aware of the competitive nature of business and the importance of being able to adapt to situations and to influence others in order to be successful in business, would have a greater tendency to possess entrepreneurial intentions if they knew they were politically skilled.

Political skill comprises of four key dimensions, namely social astuteness, interpersonal influence, networking ability, and apparent sincerity (Ferris et al., 2005). Social astuteness encompasses ingenuity and cleverness in dealing with others (Ferris et al., 2005). According to the authors, politically skilled individuals are highly self-aware, have strong powers of discernment, are astute observers of others, and are keenly attuned to diverse social situations. They comprehend social interactions and accurately interpret their behavior as well as that of others in social settings (Ferris et al., 2005). According to Lux (2005), social astuteness likely increases entrepreneur's ability to sell products and services, effectively negotiate, perceive opportunities through social connections, and foresee problems with business relationships.

Interpersonal influence involves the capability to appropriately adapt and calibrate behavior to each situation to elicit particular responses from others (Ferris et al., 2005). According to the authors, politically skilled individuals have a subtle and convincing personal style that exerts a powerful influence on those around them. They are flexible enough to adjust to different targets of influence, according to the contextual conditions, to achieve their goals (Ferris et al., 2005). According to Lux (2005), entrepreneurs high in interpersonal influence are likely to be able to close sales with customers, and convince key resource holders to invest in their ventures.

Networking ability embraces the individual's ease of developing friendships and building strong, beneficial alliances and coalitions (Ferris et al., 2005). According to the authors, politically skilled individuals are adept at developing and using diverse networks of people, who hold valuable assets for successful personal and organizational functioning. They ensure that they are well positioned to create and take advantage of opportunities, and are often highly skilled negotiators and deal makers, and adept at conflict management (Ferris et al., 2005). According to Lux (2005), entrepreneurs high in networking ability are likely to obtain information on opportunities and access to resources that others lower in networking ability may not be able to obtain.

Apparent sincerity reflects the appearance of integrity, authenticity, sincerity, and genuineness (Ferris et al., 2005). According to the authors, politically skilled individuals appear to be honest, open, forthright, and devoid of ulterior motives, thus inspiring trust and confidence. They are perceived to have pure intentions/motives, and thus, their actions are not interpreted as manipulative or coercive (Ferris et al., 2005). The authors explain that this dimension strikes at the very heart of whether influence attempts will be successful, because these attempts are

interpreted, and favorable interpretations are likely to benefit the actor in terms of the responses he/she obtains from others. According to Lux (2005), people will be more likely to share information on potential opportunities with entrepreneurs high in apparent sincerity, and to trust them with valuable resources. The author also asserts that apparent sincerity, like other political skill dimensions, is likely to be very useful in obtaining and maintaining customers.

Apart from political skill's relevance to entrepreneurship, the researcher is also interested in the construct because it holds promise as regards revealing important findings concerning women in general, and women in entrepreneurship in particular. Like entrepreneurship, politics is dominated by men, and many reasons have been suggested for the tendency of women to be underrepresented in the political arena, including their inclination to lack or underplay certain traits and skills that are favored among men. Lawless and Fox (2005) state that women, in essence, tend not to be socialized to possess the qualities the modern political arena demands, and whereas men are taught to be confident, assertive, and self-promoting, cultural attitudes, expectations of women's roles, and overarching male exclusiveness suggest to women that it is often inappropriate to possess these characteristics.

These aforementioned characteristics (i.e., confidence, assertiveness, and self-promotion) are embraced by the political skill components (i.e., apparent sincerity, social astuteness, networking ability and interpersonal influence). Perrewé and Nelson (2004) state that assertiveness and self-promotion are tactics used to control impressions and exercise influence. They explain that assertiveness involves open, honest, direct communication, and that it allows self-confidence and gains respect, increasing chances for honest relationships. They also explain that self-promotion must be done with political savvy, or it may be perceived as bragging, and thus, it is important to "know your audience" in order to promote one-self effectively.

According to Perrewé and Nelson (2004), women's reluctance to use politics stems from lack of competence, lack of confidence, failure to see the relevance of politics, and sometimes, pure distaste. The authors assert that women have a "political skill deficiency." When examining the gender gap in political ambition, Fox and Lawless (2004) found that women are significantly less likely than men to deem themselves qualified to run for office. The authors noted that more than 20% of Americans agreed that men are better suited emotionally for politics than are most women, and that regardless of their actual qualifications and credentials, women have likely been socialized to perceive themselves as less qualified to enter politics. It is the researcher's view that this self-perception of qualification reflects women's perception of their political skill, and that further examination of political skill among women holds promise for better understanding of entrepreneurial intentions and entrepreneurial activity among women.

As with creativity, the theory of planned behavior is also applicable to explain the role of political skill in increasing entrepreneurial intentions. Political skill can be associated with perceived behavioral control because it is a valuable resource that can affect the ease or difficulty of performing entrepreneurial behavior. Social astuteness, interpersonal influence, networking ability, and apparent sincerity would be assets to the entrepreneur, aiding him/her in building and maintaining important relational ties, increasing sales, persuading venture capitalists and other financers to invest, and pursuing other opportunities as they arise. Therefore, an individual's possession of political skill should help convince him/her of the feasibility of entrepreneurial behavior, and serve as a positive influence as regards motivating him/her to start his/her own business, thus increasing his/her entrepreneurial intentions.

Political Skill and Entrepreneurial Intentions

Political skill and its indicators have been associated with entrepreneurial intentions in the literature. Brice and Spencer (2007) found that individuals with strong entrepreneurial intentions did value political savvy, although these individuals perceived (1) strong leadership and organizational skills, (2) knowledge of customer wants and needs, (3) work-related technical/functional expertise, and (4) willingness to make sacrifices to avoid failure, as human competencies that were more important to successfully initiate a new business venture.

Liñán and Santos (2007) found that social capital influenced entrepreneurial intentions through the effects of perceived desirability (i.e., the degree of attraction an individual perceives toward a specific behavior, such as becoming an entrepreneur) and perceived feasibility (i.e., the perception regarding the individual's own capacity to carry out a specific behavior, such as becoming an entrepreneur). With this in mind, it has been noted that the possession of political skill is a vital aid in building and leveraging social capital. Ferris et al. (2003) state that people high in political skill are quite shrewd and calculating about the personal investments they make and the social connections they form, inspiring trust and confidence in others that allows them to effectively leverage social and reputational capital to maximize job and career success. Therefore, politically skilled individuals should be more confident in their ability to build, maintain, and use social capital effectively in an entrepreneurship context, and this confidence should be reflected in increased entrepreneurial intentions.

Research has explicitly or implicitly shown that both creativity and political skill positively influence entrepreneurial intentions. Apart from political skill having a direct impact on entrepreneurial intentions, it is reasonable to posit that political skill should also moderate the creativity-entrepreneurial intentions relationship. Politically skilled individuals should feel more

confident to use their creativity to pursue entrepreneurial endeavors, and thus, their entrepreneurial intentions should be higher than individuals who are less politically skilled.

There is evidence of social skills, including political skills, playing a positive role in high creativity scientists (Amabile & Gryskiewicz, 1987), with the authors suggesting that such skills allowed the scientists access to the ideas and insights of other people. Like scientists, entrepreneurs need to be able to develop and utilize the right connections to get the most out of their creative ideas and solutions.

Referencing political entrepreneurs, Moravcsik (1999) mentions that officials wield power (or influence) by proposing more creative, imaginative, or ingenious solutions to political problems. The author also mentions Cox and Jacobson's (1973) assertion that negotiating ability plays a role in officials commanding recognition, which allows them the initiative in proposing action. In the same way, creative business entrepreneurs have an advantage over less creative entrepreneurs, and are better able to position themselves for entrepreneurial success. Additionally, politically skilled entrepreneurs should be able to positively shape their profiles so that they are better recognized, respected, and trusted, facilitating a greater capacity for them to recommend and gain support for their creative ideas and solutions. Taking these factors into consideration, the implications for entrepreneurial intentions among creative, politically skilled individuals should be quite favorable.

Hypothesis 3: Political skill will moderate the relationship between creativity and entrepreneurial intentions among women, such that the relationship will be stronger when women are more politically skilled than when they are less politically skilled.

Hypothesis 4: Political skill will moderate the relationship between creativity and entrepreneurial intentions among men, such that the relationship will be stronger when men are more politically skilled than when they are less politically skilled.

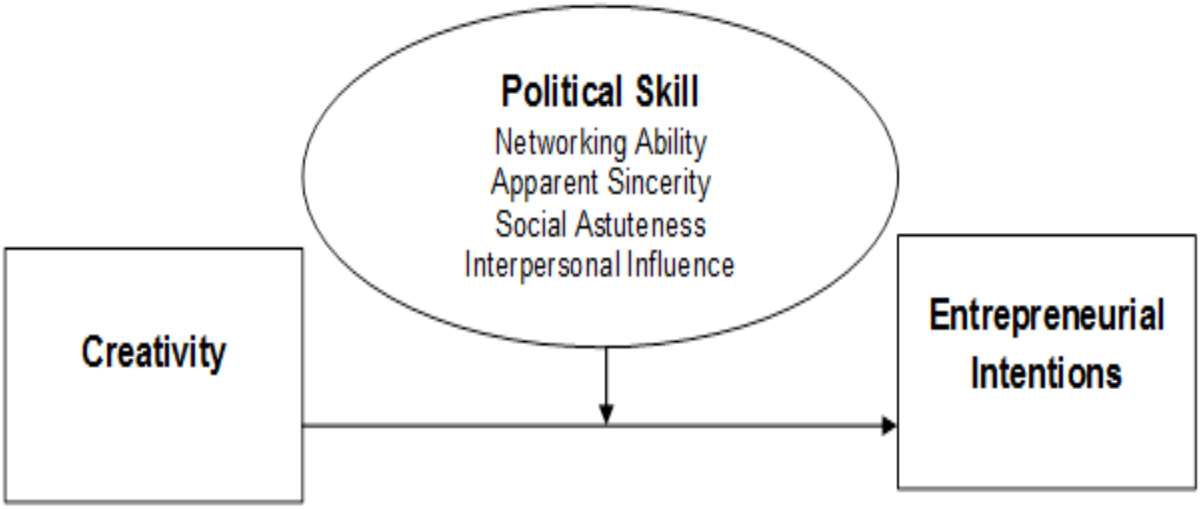


Figure 2: Research Model

CHAPTER 3: METHODOLOGY

In this chapter, the researcher describes the population and sample, as well as the survey instruments, the data collection procedures, and the data analysis techniques used in the study.

Purpose of Study

The primary purpose of the study was to examine the influence of creativity on entrepreneurial intentions among female undergraduate students, as well as to investigate the moderating effect of political skill on the creativity-entrepreneurial intentions relationship among these students.

Objectives of Study

The objectives of the study were:

1. To describe the full-time undergraduate students at a research extensive university on the following selected demographic characteristics: Gender, Ethnicity, Age, and School Classification.
2. To describe the full-time undergraduate students at a research extensive university on the following selected psycho-social characteristics: Creativity, Political Skill, and Entrepreneurial Intentions.
3. To compare the full-time undergraduate students at a research extensive university by gender, on the following selected demographic characteristics: Ethnicity, Age, and School Classification.
4. To compare the full-time undergraduate students at a research extensive university by gender, on the following selected psycho-social characteristics: Creativity, Political Skill, and Entrepreneurial Intentions.

5. To determine whether a positive relationship exists between creativity and entrepreneurial intentions among women.
6. To determine whether political skill would moderate the relationship between creativity and entrepreneurial intentions among women, such that the relationship would be stronger when women are more politically skilled than when they are less politically skilled.
7. To determine whether a positive relationship exists between creativity and entrepreneurial intentions among men.
8. To determine whether political skill would moderate the relationship between creativity and entrepreneurial intentions among men, such that the relationship would be stronger when men are more politically skilled than when they are less politically skilled.

Population and Sample

The target population for the study was defined as full-time students enrolled in research extensive universities in the southern part of the United States of America. The accessible population was defined as full-time, degree-seeking, undergraduate students attending one research extensive university in the southern part of the United States of America during the Spring 2011 semester. The (accessible) population frame was acquired via the institution's registrar, and a stratified random sample by gender (male vs. female) was drawn. Cochran's sample size determination formula for continuous data (Cochran, 1977) was used to determine the required minimum sample size.

For the purpose of this study, the researcher set the alpha level a priori at 0.05, and used the seven-point Entrepreneurial Intention Questionnaire (EIQ) scale to estimate the standard deviation in the population. The researcher also set the level/margin of acceptable error at 2%.

This resulted in the researcher being confident that the true mean of a seven-point scale was within ±0.14 (0.02 times seven points on the scale) of the mean calculated from the research sample (Bartlett, Kotrlik, & Higgins, 2001). Unlike categorical data, for which 5% margin of error is acceptable (Krejcie & Morgan, 1970), for continuous data, 3% margin of error is acceptable (Bartlett, Kotrlik, & Higgins, 2001). However, researchers may decrease this value when a higher degree of precision is needed or desired (Bartlett, Kotrlik, & Higgins, 2001). Therefore, this researcher intended to use a 2% margin of error.

The sample size was calculated as follows:

Sample size = $[(t^2)*(s^2)] / (d^2)$, where

t = critical value for alpha level of 0.05 (i.e., 0.025 in each tail) = 1.96

s = estimate of variance deviation for seven-point scale = 7/6 = 1.167

d = acceptable margin of error = points on scale * margin of error = 7*0.02 = 0.14

Sample size = [(3.84)*(1.36)] / (0.0196) = 266.45

Therefore, bearing in mind that a stratified random sample by gender was used, according to the sample size formula for continuous data, the required sample size was 267 men and 267 women (i.e., 534 students in total), after rounding up to the nearest whole number. Since this sample size did not exceed 5% of the population, Cochran's (1977) correction formula was not used to calculate the final sample size. Therefore, the minimum delivered/returned sample size was 534 students (267 men and 267 women).

Nevertheless, oversampling was used to account for the possibility of non-response by uncooperative subjects. Research findings have been mixed regarding response rates to web-based surveys among students. For example, Sax, Gilmartin, and Bryant (2003) only obtained a 18.5% response rate for their web-based survey. However, in a study conducted by Kaplowitz,

Hadlock, and Levine (2004), a response rate of 20.7% was obtained from university students when surveys were distributed via e-mail, and Sills and Song (2002) obtained a response rate of 22% from their sample of international students. The overall response rate for Couper, Traugott, and Lamias' (2001) study was just over 41%.

It has been found that response rates to surveys have been dramatically declining over time due to a number of suggested reasons including the proliferation of junk mail and students' bombardment with questionnaires despite the growing demands on their time, which may simply make undergraduates less willing to commit to a voluntary activity such as completing a survey (Sax, Gilmartin, & Bryant, 2003). The authors also suggested that length of surveys, limited access to a computer, and irregularity of checking campus e-mail addresses may contribute to low response rates.

One means of boosting response rates is the use of incentives. However, there are also mixed findings regarding the use of incentives. Sax, Gilmartin, and Bryant (2003), as well as Porter and Whitcomb (2003) found minimal effect of postpaid incentives on response rate. However, Porter and Whitcomb's (2003) sample was comprised of high school students who were prospective college applicants, and the low response rate could have been due to lack of computer access compared to actual college students. By contrast, Deutskens, De Ruyter, Wetzels, and Oosterveld (2004) found that lotteries did make a significant difference in response rate and that the value of the lottery mattered, with the higher offer having a significantly higher response rate than the lower offer. The authors also concluded that lotteries were the most effective reward (i.e., better than vouchers and donations) in an online environment, as they led to the highest response rate in the short version of the questionnaire, and still a respectable response in the long version, while being much more cost-efficient than vouchers. They also

noted that the response time in lottery groups was faster, probably because respondents inferred that an early response would garner benefits for them in terms of a higher chance of winning a prize.

It is also noteworthy that female students often have higher response rates than their male counterparts. Sax, Gilmartin, & Bryant (2003) obtained a response rate of 22.6% from female undergraduate students in their study, compared with a response rate of 11.8% from the male students. Upon consideration of all the aforementioned details, the researcher of this study anticipated a response rate of at least 25%. However, to be certain that the returned sample size was adequate, the researcher prepared for a lower response rate of 10%. Consequently, since a minimum delivered/returned sample size of 534 students was required (i.e., 267 men and 267 women), the drawn sample size was computed as follows:

Drawn sample size = 534 / 0.10 = 534 * 10 = 5340.

Therefore, the final drawn sample size was 5340 students (i.e., 2670 men and 2670 women).

Instrumentation

The independent variable, creativity, was measured using the ten-item Problem Solving/Creativity Subscale (PSCS) from the Self Description Questionnaire III (SDQ III), which was developed by Marsh and O'Neill (1984). A sample item is "I am an imaginative person." Respondents indicated how true or false each item was as a description of them, and the items were rated on an eight-point scale, ranging from definitely false (1) to definitely true (8). The coefficient alpha estimate of reliability for this scale was 0.84 (Marsh, 1990). The researcher for this study also used Cronbach's alpha to estimate the internal consistency of the creativity scale, and the alpha was 0.813.

The moderating variable, political skill, was measured using the eighteen-item Political Skill Inventory (PSI) developed by Ferris et al. (2005). The networking ability subscale of the PSI has 6 items. A sample item is "I am good at building relationships with influential people at work." The apparent sincerity subscale has 3 items. A sample item is "I try to show a genuine interest in other people." The social astuteness subscale has 5 items. A sample item is "I have good intuition or "savvy" about how to present myself to others." The interpersonal influence subscale has 4 items. A sample item is "I am good at getting people to like me." All items were rated on a seven-point scale, ranging from strongly disagree (1) to strongly agree (7). The internal consistency reliability estimate for the entire 18-item scale was 0.90, while the subscales, networking ability, apparent sincerity, social astuteness, and interpersonal influence, yielded reliability estimates of 0.87, 0.81, 0.79, and 0.78 respectively (Ferris et al., 2005). After this researcher's analysis, the internal consistency reliability estimate for the entire 18-item scale was 0.943, while the subscales, networking ability, apparent sincerity, social astuteness, and interpersonal influence, yielded reliability estimates of 0.898, 0.857, 0.856, and 0.898 respectively.

The dependent variable, entrepreneurial intentions, was measured using the six-item Entrepreneurial Intention Questionnaire (EIQ) developed by Liñán and Chen (2009). A sample item is "I am determined to create a firm in the future." All items were rated on a seven-point scale, ranging from total disagreement (1) to total agreement (7). This scale has been found to have a high reliability coefficient, with a Cronbach's alpha of 0.94 (Liñán & Chen, 2009). This researcher's analysis revealed an alpha of 0.956.

Data Collection

Data was collected from participants in the study via a web-based survey, which was accessible by means of their email accounts, as an internet link was provided for students via email. Students received an email from the researcher that described the research and requested their participation. The email also informed them about a drawing in which participants would be entered for the chance to win $100, $50, or $25 if they completely responded to the survey before its closing date (which was fifteen days from the opening date). A follow-up email was sent to non-respondents five days later to remind them to respond to the survey. This email also contained information about the drawing and the date of the drawing. Again, five days thereafter, a third email was sent to non-respondents as a reminder to respond to the survey. This final email also conveyed information about the drawing, and informed participants that it was their last reminder before the survey closed five days later.

Throughout the data collection process, no personal identification information (i.e., name, social security number, school identification number) was collected from survey participants. Instead, each participant was assigned a study identification number which was allocated and utilized only for the purposes of data entry and non-respondent follow-up associated with this research endeavor. Participants were also assured that their responses would be kept confidential.

Data Analysis

The collected data was analyzed to meet the study's objectives using the Statistical Packages for Social Sciences (SPSS) software program. The objectives of the study and the analysis technique(s) that were used for each objective are as follows:

1. To describe the full-time undergraduate students at a research extensive university on the following selected demographic characteristics: Gender, Ethnicity, Age, and School Classification.
2. To describe the full-time undergraduate students at a research extensive university on the following selected psycho-social characteristics: Creativity, Political Skill, and Entrepreneurial Intentions.
3. To compare the full-time undergraduate students at a research extensive university by gender, on the following selected demographic characteristics: Ethnicity, Age, and School Classification.
4. To compare the full-time undergraduate students at a research extensive university by gender, on the following selected psycho-social characteristics: Creativity, Political Skill, and Entrepreneurial Intentions.

Descriptive statistical calculations such as frequencies, percentages, measures of central tendency, and measures of variability were performed to address objectives one, two, three, and four. These descriptive measures enabled the researcher to concisely but effectively characterize the participants in the study according to the data collected, as well as to make comparisons across participants based on the different measures. In addition, for objective three and objective four, chi-square tests for independence and independent t- tests respectively were used to analyze the data.

5. To determine whether a positive relationship exists between creativity and entrepreneurial intentions among women.

6. To determine whether political skill would moderate the relationship between creativity and entrepreneurial intentions among women, such that the relationship would be stronger when women are more politically skilled than when they are less politically skilled.

Correlation analysis was used to address objective five, with the Pearson Product Moment Correlation Coefficient being the measure of choice. In addition, moderated multiple regression analysis, an inferential statistical procedure, was used to address both objectives five and six. The latter analysis tested the model that entrepreneurial intentions (a continuous dependent variable) are a linear function of creativity (a continuous predictor variable), and that the slope for the regression varies across levels of political skill (a continuous moderator variable). In step one of the analysis, creativity and political skill were entered to determine whether there was a positive relationship between these variables and entrepreneurial intentions, and to determine if they explained any of the variation in entrepreneurial intentions. In step two, the interaction term (creativity * political skill) was entered. A statistically significant increase in the model R^2 after addition of the interaction term would have supported political skill as a moderator of the relationship between creativity and entrepreneurial intentions.

7. To determine whether a positive relationship exists between creativity and entrepreneurial intentions among men.

8. To determine whether political skill will moderate the relationship between creativity and entrepreneurial intentions among men, such that the relationship will be stronger when men are more politically skilled than when they are less politically skilled.

The same statistical techniques used to address objectives five and six, were used to address objectives seven and eight. This parallel analysis allowed the researcher to better

compare the effects, and determine if the same effects (and the same degree of effects) were present among women and men.

CHAPTER 4: RESULTS AND DISCUSSION

The primary purpose of this study was to examine the influence of creativity on entrepreneurial intentions among female undergraduate students, as well as to investigate the moderating effect of political skill on the creativity-entrepreneurial intentions relationship among these students. Of the 5340 students to which the survey was sent during the Spring 2011 semester, a total of 1057 students responded to the survey, resulting in a response rate of 19.8%. Findings and analysis of the data are presented in this chapter. Results are arranged and presented by research objectives and hypotheses.

Objective One

Objective one of the study was to describe the full-time undergraduate students at a research extensive university on the following selected demographic characteristics:

- Gender
- Ethnicity
- Age
- School Classification

Gender

The first variable on which respondents were described was gender. The majority of the participants (n=614, 61.6%) reported that they were female. The remaining subjects who specified their gender (n=383, 38.4%) indicated that they were male. Sixty individuals failed to indicate their gender.

Ethnicity

The respondents were further described on the ethnicity variable. The majority of the respondents identified themselves as Caucasian (n= 782, 78.5%). The second largest group identified themselves as African American (n=92, 9.2%). The data regarding the ethnicity of respondents is illustrated in Table 2.

Table 2

Ethnicity of Undergraduate Students at a Research Extensive University in the Southern United States

Ethnicity	Frequency	Percentage
Caucasian	782	78.5
African American	92	9.2
Asian	56	5.6
Hispanic	35	3.5
Other	31	3.1
Total	996[a]	100

[a] Sixty one respondents failed to indicate their ethnicity.

Age

Participants were asked to indicate their age group according to the following categories: 1) Under 18, 2) 18-25, 3) 26-35, 4) 36-45, 5) 46-55, 6) 56-65, and 7) 66 and older. The largest number of respondents indicated that they were between 18 and 25 years of age (n= 962, 96.6%). The second largest group indicated that their ages fell between 26 and 35 years (n= 24, 2.4%). The respondents' age distribution is provided in Table 3.

Table 3

Age Distribution of Undergraduate Students at a Research Extensive University in the Southern United States

Age in Years	Frequency	Percentage
Under 18	4	.4
18-25	962	96.6
26-35	24	2.4
36-45	4	.4
46-55	1	.1
56-65	1	.1
66 and Older	0	0
Total	996[a]	100

[a] Sixty one respondents failed to indicate their age.

School Classification

Regarding school (year) classification, the largest group of respondents indicated that they were juniors (n= 263, 26.5%). The second largest group of respondents was freshmen (n=262, 26.4%). The least number of respondents indicated that they were sophomores (n=211, 21.2%). The data pertaining to school (year) classification of students can be found in Table 4.

Table 4

School (Year) Classification Distribution of Undergraduate Students at a Research Extensive University in the Southern United States

School Classification	Frequency	Percentage
Freshman	262	26.4
Sophomore	211	21.2

(Table 4 continued)

Junior	263	26.5
Senior	257	25.9
Total	993[a]	100

[a] Sixty four respondents failed to indicate their school (year) classification.

Objective Two

Objective two of the study was to describe the full-time undergraduate students at a research extensive university on the following selected psycho-social characteristics:

- Creativity
- Political Skill
- Entrepreneurial Intentions

For each of the three characteristics measured, the researcher divided the scale into quartiles in order to classify scores as low, moderate or high, based on the study sample. This procedure was selected since no provisions were made by the instrument developers for describing respondents on their level of each attribute. Individuals with scores in the lowest quartile ($\leq 25^{th}$ percentile) were described as having low scores. Those with scores in the middle quartiles ($26^{th} - 74^{th}$ percentile) were described as having moderate scores. Finally, respondents with scores in the highest quartile ($\geq 75^{th}$ percentile) were described as having high scores.

Factor Analysis for Creativity Scale

The research participants' creativity score was measured using the ten-item Problem Solving/Creativity Subscale (PSCS) from the Self Description Questionnaire III (SDQ III). The scale was factor analyzed to determine if underlying factors could be identified. Extraction to retain factors was based on eigenvalues greater than one. Results of the exploratory factor

analysis procedure revealed three components, which cumulatively explained 61.674% of the variance (37.73%, 13.81%, and 10.134% respectively), and produced eigenvalues of 3.773, 1.381, and 1.013 respectively. The items included in the creativity scale, and their loadings, based on this method of extraction, are presented in Table 5. The scale was factor analyzed again, with extraction based on a fixed number of factors. One component was extracted, which explained 37.73% of the variance, and produced an eigenvalue of 3.773. The items included in the creativity scale, and their loadings, based on this method of extraction are presented in Table 6.

Table 5

Component Matrix for Creativity Scores of Undergraduate Students at a Research Extensive University in the Southern United States Based on Eigenvalues Greater than One

Creativity	**Component 1**	**Component 2**	**Component 3**
1. I am never able to think up answers to problems that haven't already been figured out.		.724	
2. I am good at combining ideas in ways that others have not tried.	.736		
3. I wish I had more imagination and originality.			.819
4. I enjoy working out new ways of solving problems.	.782		
5. I am not much good at problem solving.		.814	

(Table 5 continued)

6. I have a lot of intellectual curiosity.	.734		
7. I am not very original in my ideas thoughts and actions.			.613
8. I am an imaginative person.			.683
9. I would have no interest in being an inventor.		.567	
10. I can often see better ways of doing routine tasks.	.715		

Note. Extraction method was Principal Component Analysis and rotation method was Varimax.

Table 6

Component Matrix for Creativity Scores of Undergraduate Students at a Research Extensive University in the Southern United States Based on a Fixed Number of Factors

Creativity	**Component**
1. I am never able to think up answers to problems that haven't already been figured out.	.596
2. I am good at combining ideas in ways that others have not tried.	.704
3. I wish I had more imagination and originality.	.453
4. I enjoy working out new ways of solving problems.	.657
5. I am not much good at problem solving.	.626
6. I have a lot of intellectual curiosity.	.648
7. I am not very original in my ideas thoughts and actions.	.623
8. I am an imaginative person.	.650

(Table 6 continued)

9. I would have no interest in being an inventor.	.486
10. I can often see better ways of doing routine tasks.	.653

Note. The extraction method was Principal Component Analysis.

Creativity

As aforementioned, the research participants' creativity score was measured using the ten-item Problem Solving/Creativity Subscale (PSCS) from the Self Description Questionnaire III (SDQ III). The score was obtained by summing the scores for each of the ten items in the subscale. The scale used an eight point response, ranging from "definitely false" to "definitely true" for each creativity item. Therefore, the lowest possible raw creativity score was 10 and the highest possible raw creativity score was 80. Larger scores indicated a perception of higher creativity and smaller scores indicated a perception of lower creativity.

The mean creativity score for the respondents was 58.19 (SD = 9.81), and the scores ranged from a minimum of 29 to a maximum of 80. Based on the quartiles established using the sample data, a low score ($\leq 25^{th}$ percentile) was 52 or below, a moderate score ($26^{th} – 74^{th}$ percentile) was between 52 and 65 exclusive, and a high score ($\geq 75^{th}$ percentile) was 65 or above. The percentage of respondents that had a low creativity score was 27.6% (n= 268). The percentage of students with moderate creativity scores was 46% (n= 446). The percentage of students with high scores was 26.4% (n= 256). The data pertaining to the students' creativity scores can be found in Table 7. The latter lists the items (as worded in the survey) in descending order by mean. However, to compute the overall total creativity score (Creative Sum), the five negatively worded items were reverse-coded.

Table 7

Creativity Distribution of Undergraduate Students at a Research Extensive University in the Southern United States

Item	**Frequency**	**Mean**	**SD**	**Min**	**Max**
I have a lot of intellectual curiosity	1019	6.39	1.49	1	8
I am an imaginative person	1014	6.12	1.53	1	8
I enjoy working out new ways of solving problems	1014	5.82	1.58	1	8
I can often see better ways of doing routine tasks	1022	5.81	1.48	1	8
I am good at combining ideas in ways that others have not tried	1020	5.72	1.40	1	8
I wish I had more imagination and originality	1024	4.44	2.07	1	8
I would have no interest in being an inventor	1020	3.62	1.96	1	8
I am not very original in my ideas thoughts and actions	1017	3.11	1.66	1	8
I am never able to think up answers to problems that haven't already been figured out	1025	2.83	1.58	1	8
I am not much good at problem solving	1021	2.80	1.54	1	8
Creative Sum	970	58.19	9.81	29	80

Factor Analysis for Political Skill Scale

The students' political skill score was measured using the eighteen-item Political Skill Inventory (PSI). The scale was factor analyzed to determine if underlying factors could be identified. Extraction to retain factors was based on eigenvalues greater than one. Results of the exploratory factor analysis procedure revealed three factors, which cumulatively explained

67.438% of the variance (51.352%, 10.038%, and 6.048% respectively), and produced eigenvalues of 9.243, 1.807, and 1.089 respectively. The items included in the political skill scale, and their loadings, based on this method of extraction, are presented in Table 8. The scale was factor analyzed again, with extraction based on a fixed number of factors. Four components were extracted, which cumulatively explained 72.343% of the variance (51.352%, 10.038%, 6.048%, and 4.905% respectively), and produced eigenvalues of 9.243, 1.807, 1.089, and .883 respectively. The items included in the political skill scale, and their loadings, based on this method of extraction are presented in Table 9.

Table 8

Component Matrix for Political Skill Scores of Undergraduate Students at a Research Extensive University in the Southern United States Based on Eigenvalues Greater than One

Political Skill	**Component 1**	**Component 2**	**Component 3**
1. I spend a lot of time and effort at work networking with others.		.687	
2. I am able to make most people feel comfortable and at ease around me.	.730		
3. I am able to communicate easily and effectively with others.	.776		
4. It is easy for me to develop good rapport with most people.	.706		
5. I understand people very well.	.703		
6. I am good at building relationships with influential people at work.	.635		

(Table 8 continued)

7. I am particularly good at sensing the motivations and hidden agendas of others.	.619		
8. When communicating with others, I try to be genuine in what I say and do.			.779
9. I have developed a large network of colleagues and associates at work who I can call on for support when I really need to get things done.		.791	
10. At work, I know a lot of important people and am well connected.		.825	
11. I spend a lot of time and effort at work developing connections with others.		.834	
12. I am good at getting people to like me.	.586		
13. It is important that people believe I am sincere in what I say and do.			.865
14. I try to show a genuine interest in other people.			.827
15. I am good at using my connections and network to make things happen at work.		.730	
16. I have good intuition or "savvy" about how to present myself to others.	.683		

(Table 8 continued)

17. I always seem to instinctively know the right things to say or do to influence others.	.705		
18. I pay close attention to peoples' facial expressions.	.574		

Note. Extraction method was Principal Component Analysis and rotation method was Varimax.

Table 9

Component Matrix for Political Skill Scores of Undergraduate Students at a Research Extensive University in the Southern United States Based on a Fixed Number of Factors

Political Skill	**Component 1 Networking Ability**	**Component 2 Interpersonal Influence**	**Component 3 Social Astuteness**	**Component 4 Apparent Sincerity**
1. I spend a lot of time and effort at work networking with others.	.688			
2. I am able to make most people feel comfortable and at ease around me.		.790		
3. I am able to communicate easily and effectively with others.		.815		

(Table 9 continued)

4. It is easy for me to develop good rapport with most people.		.725		
5. I understand people very well.			.531	
6. I am good at building relationships with influential people at work.		.518[a]		
7. I am particularly good at sensing the motivations and hidden agendas of others.			.742	
8. When communicating with others, I try to be genuine in what I say and do.				.775
9. I have developed a large network of colleagues and associates at work who I can call on for support when I really need to get things done.	.785			

(Table 9 continued)

10. At work, I know a lot of important people and am well connected.	.818			
11. I spend a lot of time and effort at work developing connections with others.	.831			
12. I am good at getting people to like me.		.534		
13. It is important that people believe I am sincere in what I say and do.				.862
14. I try to show a genuine interest in other people.				.823
15. I am good at using my connections and network to make things happen at work.	.721			
16. I have good intuition or "savvy" about how to present myself to others.			.549	

(Table 9 continued)

17. I always seem to instinctively know the right things to say or do to influence others.			.631	
18. I pay close attention to peoples' facial expressions.			.698	

Note. Extraction method was Principal Component Analysis, and rotation method was Varimax.
[a] The PSI includes item 6 under the Networking Ability dimension. In this study, the loading for item 6 on the Networking Ability dimension was 0.470.

Political Skill

As aforementioned, the students' political skill score was measured using the eighteen-item Political Skill Inventory (PSI). The score was computed by adding all the response scores together, and then dividing by 18, with greater scores signaling a perception of higher political skill and lesser scores signaling a perception of lower political skill. The lowest possible political skill score was 1 and the highest possible political skill score was 7.

The mean political skill score for the respondents was 5.5 (SD = .92), and the scores ranged from a minimum of 1 to a maximum of 7. Based on the quartiles established using the sample data, a low score ($\leq 25^{th}$ percentile) was 4.94 or below, a moderate score ($26^{th} – 74^{th}$ percentile) was between 4.94 and 6.17 exclusive, and a high score ($\geq 75^{th}$ percentile) was 6.17 or above. The percentage of respondents that had a low political skill score was 25.1% (n= 236). The percentage of students with moderate political skill scores was 48.8% (n= 460). The percentage of students with high scores was 26.1% (n= 246). The data pertaining to the students'

political skill scores can be found in Table 10. The latter lists the items in descending order by mean, followed by the overall political skill score.

Table 10

Political Skill Distribution of Undergraduate Students at a Research Extensive University in the Southern United States

Item	**Frequency**	**Mean**	**SD**	**Min**	**Max**
It is important that people believe I am sincere in what I say and do	990	6.22	1.09	1	7
When communicating with others, I try to be genuine in what I say and do	990	6.18	1.08	1	7
I try to show a genuine interest in other people	995	6.08	1.09	1	7
I pay close attention to peoples' facial expressions	995	5.85	1.21	1	7
It is easy for me to develop good rapport with most people	993	5.77	1.23	1	7
I am able to make most people feel comfortable and at ease around me	999	5.73	1.30	1	7
I understand people very well	992	5.71	1.18	1	7
I am able to communicate easily and effectively with others	994	5.66	1.31	1	7
I am good at getting people to like me	992	5.63	1.25	1	7
I am good at building relationships with influential people at work	993	5.58	1.27	1	7
I have good intuition or "savvy" about how to present myself to others	992	5.51	1.30	1	7
I am particularly good at sensing the motivations and hidden agendas of others	992	5.45	1.33	1	7
I always seem to instinctively know the right things to say or do to influence others	995	5.13	1.42	1	7
I am good at using my connections and network to make things happen at work	997	5.09	1.38	1	7
I have developed a large network of colleagues and associates at work who I can call on for support when I really need to get things done	995	4.94	1.45	1	7

(Table 10 continued)

At work, I know a lot of important people and am well connected	994	4.91	1.46	1	7
I spend a lot of time and effort at work developing connections with others	990	4.89	1.45	1	7
I spend a lot of time and effort at work networking with others	995	4.49	1.67	1	7
Political	942	5.50	.92	1	7

Factor Analysis for Entrepreneurial Intentions Scale

The respondents' entrepreneurial intentions score was measured using the six-item Entrepreneurial Intention Questionnaire (EIQ). The scale was factor analyzed to determine if underlying factors could be identified. Extraction to retain factors was based on eigenvalues greater than one. Results of the exploratory factor analysis procedure revealed one component, which explained 82.258% of the variance, and produced an eigenvalue of 4.935. The items included in the entrepreneurial intentions scale, and their loadings, are presented in Table 11.

Table 11

Component Matrix for Entrepreneurial Intentions Scores of Undergraduate Students at a Research Extensive University in South United States Based on Eigenvalues Greater than One

Entrepreneurial Intentions	**Component**
1. I am ready to do anything to be an entrepreneur.	.806
2. My professional goal is to become an entrepreneur.	.887
3. I will make every effort to start and run my own firm.	.941
4. I am determined to create a firm in the future.	.953
5. I have very seriously thought of starting a firm.	.898
6. I have the firm intention to start a firm some day.	.948

Note. The extraction method was Principal Component Analysis.

Entrepreneurial Intentions

As aforementioned, the respondents' entrepreneurial intentions score was measured using the six-item Entrepreneurial Intention Questionnaire (EIQ). The score was calculated by summing all the response scores together, and then dividing by 6. It was interpreted that greater scores indicated more entrepreneurial intentions and smaller scores indicated less entrepreneurial intentions. The lowest possible entrepreneurial intentions score was 1 and the highest possible entrepreneurial intentions score was 7.

The mean entrepreneurial intentions score for the respondents was 3.34 (SD = 1.77), and the scores ranged from a minimum of 1 to a maximum of 7. Based on the quartiles established using the sample data, a low score ($\leq 25^{th}$ percentile) was 1.83 or below, a moderate score (26^{th} – 74^{th} percentile) was between 1.83 and 4.67 exclusive, and a high score ($\geq 75^{th}$ percentile) was 4.67 or above. The percentage of respondents that had a low entrepreneurial intentions score was 25.4% (n= 264). The percentage of students with moderate entrepreneurial intentions scores was 48.7% (n= 507). The percentage of students with high scores was 25.9% (n= 270). The data pertaining to the students' entrepreneurial intentions scores can be found in Table 12. The latter lists the items in descending order by mean, followed by the overall entrepreneurial intentions score. A summary of the distribution of respondents' creativity, political skill, and entrepreneurial intentions scores is illustrated in Table 13.

Table 12

Entrepreneurial Intentions Distribution of Undergraduate Students at a Research Extensive University in the Southern United States

Item	Frequency	Mean	SD	Min	Max
I have very seriously thought of starting a firm	1052	3.52	2.11	1	7

(Table 12 continued)

I am ready to do anything to be an entrepreneur	1054	3.40	1.74	1	7
I will make every effort to start and run my own firm	1053	3.35	1.95	1	7
I am determined to create a firm in the future	1050	3.31	1.99	1	7
I have the firm intention to start a firm some day	1050	3.23	2.03	1	7
My professional goal is to become an entrepreneur	1053	3.22	1.87	1	7
Entrepreneur	1041	3.34	1.77	1	7

Table 13

Distribution of a Southern United States Research Extensive University's Undergraduate Students' Creativity, Political Skill (PS), and Entrepreneurial Intentions (EI) Scores

Construct	**Mean**	**SD**	**Min**	**Max**	**Percentile ($\leq 25^{th}$)**	**Percentile (26^{th}-74^{th})**	**Percentile ($\geq 75^{th}$)**
Creativity	58.19	9.81	29	80	52 (n= 268) (27.6%)	52 - 65* (n= 446) (46%)	65 (n= 256) (26.4%)
PS	5.5	.92	1	7	4.94 (n= 236) (25.1%)	4.94 - 6.17* (n= 460) (48.8%)	6.17 (n= 246) (26.1%)
EI	3.34	1.77	1	7	1.83 (n= 264) (25.4%)	1.83 - 4.67* (n= 507) (48.7%)	4.67 (n= 270) (25.9%)

Note. Of the 1057 survey respondents, 970 responded to the creativity scale, 942 responded to the political skill scale, and 1041 responded to the entrepreneurial intentions scale.
*Score range is exclusive of the lower and upper limits.

Objective Three

Objective three of the study was to compare the full-time undergraduate students at a research extensive university by gender, on the following selected demographic characteristics:

- Ethnicity
- Age
- School Classification

Chi-Square tests of independence were used to determine if the subjects distributed with respect to the following paired variables were independent of one another.

Gender and Ethnicity

First, the researcher conducted a chi-square test of independence to determine whether the variables of gender and ethnicity were independent. Inspection of the chi-square test revealed that 0% of the cells had expected counts of less than 5. Therefore, the sample size was adequate for the analysis as conducted. The Pearson chi-square value was not significant ($\chi^2 = 3.103$, $p = 0.541$) at the 0.05 alpha level, indicating independence of gender and ethnicity. Thus, there was no association between gender and ethnicity.

Gender and Age

Second, the researcher conducted a chi-square test of independence to determine whether the variables of gender and age were independent. Inspection of the chi-square test revealed that 66.7% of the cells had expected counts of less than 5. Therefore, the sample size or distribution was not adequate for the analysis as first conducted. Some of the cells were collapsed together to address the problem caused by too many cells with expected frequencies below 5. The subjects

were reclassified into two age groups (traditional students ages 25 and below, and non-traditional students ages 26 and above), and the chi-square test was re-run.

Results of the chi-square test then revealed that 0% of the cells had expected counts of less than 5. Therefore, the sample size was adequate for the analysis as conducted. The Pearson chi-square value was significant ($\chi^2 = 8.209$, $p = 0.004$) at the 0.05 alpha level, indicating that the distributions of gender and age were not independent. Thus, there was an association between gender and age. Findings showed that a higher proportion (than expected) of males tended to be non-traditional undergraduate students (26 years of age and older), whereas a higher proportion of females (than expected) tended to be traditional undergraduate students (25 years of age and younger). The distribution of respondents based on the variables gender and age is illustrated in Table 14 through a contingency table.

Table 14

Distribution of Age by Gender of Undergraduate Students at a Research Extensive University in the Southern United States

		Male	**Female**	**Total**
Traditional Age (≤ 25 years)	Count	362	603	965
	% within Gender	95%	98.2%	97%
Non-Traditional Age (≥ 26 years)	Count	19	11	30
	% within Gender	5%	1.8%	3%
Total	Count	381	614	995
	% within Gender	100%	100%	100%

Gender and School Classification

Third, the researcher conducted a chi-square test of independence to determine whether the variables of gender and school classification were independent. Inspection of the chi-square test revealed that 0% of the cells had expected counts of less than 5. Therefore, the sample size was adequate for the analysis as conducted. The Pearson chi-square value was not significant ($\chi^2 = 4.14$, $p = 0.247$) at the 0.05 alpha level, indicating independence of gender and school classification. Thus, there was no association between gender and school classification.

Objective Four

Objective four of the study was to compare the full-time undergraduate students at a research extensive university by gender, on the following selected psycho-social characteristics:

- Creativity
- Political Skill
- Entrepreneurial Intentions

Independent samples t-tests were used to separately compare measures of creativity, political skill, and entrepreneurial intentions on both the male and female subjects in the study.

Gender and Creativity

First, the researcher conducted an independent samples t-test to compare the creativity scores obtained by the male and female undergraduate students. The researcher then reviewed measures of central tendency. The mean creativity score for the 360 males who responded to the survey was 59.83 (SD = 9.384), and the mean creativity score for the 584 females who participated was 57.21 (SD = 9.932). The researcher then used the independent t-test statistic to determine if there was a difference between males and females with regard to creativity.

To determine the most appropriate t-value to be used in this comparison, the results of the Levene's test for equality of variances were inspected. The Levene's test was not significant ($F = 1.561$, $p = 0.212$), so the pooled variance estimate for the assumption of equal variance was used. According to the findings, the independent t-test was significant ($t(942) = 4.014$, $p < 0.001$) at the 0.05 alpha level, revealing that male undergraduate students had significantly higher levels of creativity than female undergraduate students. Table 15 illustrates this difference.

Table 15

Comparison of Creativity Scores of Undergraduate Students at a Southern United States Research Extensive University by Gender

Gender	**N**	**Mean**	**SD**	**SE**
Male	360	59.83	9.384	0.495
Female	584	57.21	9.932	0.411
Total	944			

Note. $t(942) = 4.014$, $p < 0.001$

Gender and Political Skill

Second, the researcher conducted an independent samples t-test to compare the political skill scores obtained by the male and female undergraduate students. The researcher then reviewed measures of central tendency. The mean political skill score for the 363 males who responded to the survey was 5.39 (SD = 0.96), and the mean political skill score for the 578 females who participated was 5.57 (SD = 0.89). The researcher then used the independent t-test statistic to determine if there was a difference between males and females with regard to political skill.

To determine the most appropriate t-value to be used in this comparison, the results of the Levene's test for equality of variances were inspected. The Levene's test was not significant ($F =$

1.605, p = 0.206), so the pooled variance estimate for the assumption of equal variance was used. According to the findings, the independent t-test was significant (t (939) = 2.964, p = 0.003) at the 0.05 alpha level, revealing that female undergraduate students had significantly higher levels of political skill than male undergraduate students. Table 16 illustrates this difference.

Table 16

Comparison of Political Skill Scores of Undergraduate Students at a Southern United States Research Extensive University by Gender

Gender	**N**	**Mean**	**SD**	**SE**
Male	363	5.39	0.958	0.050
Female	578	5.57	0.893	0.037
Total	941			

Note. t (939) = 2.964, p = 0.003

Gender and Entrepreneurial Intentions

Third, the researcher conducted an independent samples t-test to compare the entrepreneurial intentions scores obtained by the male and female undergraduate students. The researcher then reviewed measures of central tendency. The mean entrepreneurial intentions score for the 379 males who responded to the survey was 3.87 (SD = 1.81), and the mean entrepreneurial intentions score for the 604 females who participated was 3.06 (SD = 1.69). The researcher then used the independent t-test statistic to determine if there was a difference between males and females with regard to entrepreneurial intentions.

To determine the most appropriate t-value to be used in this comparison, the results of the Levene's test for equality of variances were inspected. The Levene's test was significant (F = 6.995, p = 0.008), so the separate variance estimate for not assuming equal variance was used. According to the findings, the independent t-test was significant (t (759.701) = 6.930, p < 0.001)

at the 0.05 alpha level, revealing that male undergraduate students and female undergraduate students were significantly different with regard to their entrepreneurial intentions, with the male undergraduate students having significantly higher levels of entrepreneurial intentions than the female undergraduate students. This difference is illustrated in Table 17.

Table 17

Comparison of Entrepreneurial Intentions Scores of Undergraduate Students at a Southern United States Research Extensive University by Gender

Gender	**N**	**Mean**	**SD**	**SE**
Male	379	3.87	1.811	0.093
Female	604	3.06	1.685	0.069
Total	983			

Note. $t(759.701) = 6.930$, $p < 0.001$

Objective Five

Objective five (hypothesis one) of the study was to determine whether a positive relationship exists between creativity and entrepreneurial intentions among women. The researcher used the Pearson Product Moment correlation coefficient to determine if creativity was positively correlated with entrepreneurial intentions among this group of undergraduate students. Results revealed that at the 0.01 level, there was a statistically significant positive relationship between creativity and entrepreneurial intentions ($r = 0.264$, $p < 0.001$) among the female undergraduate students. Thus, hypothesis one was supported.

The researcher also employed the Pearson Product Moment correlation coefficient to determine if political skill was positively correlated with entrepreneurial intentions among the women. Results revealed a statistically significant positive relationship between political skill

and entrepreneurial intentions as well ($r = 0.233$, $p < 0.001$). Again, this correlation was significant at the 0.01 level.

Objective Six

Objective six (hypothesis three) of the study was to determine whether political skill will moderate the relationship between creativity and entrepreneurial intentions among women, such that the relationship will be stronger when women are more politically skilled than when they are less politically skilled. Prior to conducting the regression analysis, the researcher inspected the collinearity statistics to ensure that there was no violation of the assumption underlying the use of regression analysis as regards the existence of multicollinearity among the independent variables. The Tolerance was high and the Variance Inflation Factor (VIF) was low for both creativity and political skill (Tolerance = 0.81, VIF = 1.234), indicating that there were no multicollinearity problems among the independent variables in the data. Therefore, the researcher proceeded to conduct the regression analysis. It should be noted, however, that the Tolerance was very low and the VIF was very high in model two, when the interaction term was added (Tolerance = 0.01, VIF = 99.2).

Creativity and political skill were entered in Step one of the regression analysis. The degree to which the two variables were related to entrepreneurial intentions (R) was 0.294. The cumulative measure revealed that 8.6% of the variability in entrepreneurial intentions was accounted for by creativity and political skill ($R^2 = 0.086$, $F_{Change} = 25.548$, $p < 0.001$). In Step two, the interaction term, computed as the product of the creativity and political skill variables (Creativity x Political Skill), was entered. The addition of the product term resulted in an R square change of 0.004 ($F_{Change} = 2.236$, $p = 0.135$). This finding suggests that political skill does not moderate the relationship between creativity and entrepreneurial intentions among

female undergraduate students. Therefore, hypothesis three was not supported. The results of the moderated multiple regression are provided in Table 18, Table 19, and Table 20.

Table 18

ANOVA Table Presenting the Significance of the Overall Regression Model of Political Skill Moderating the Relationship between Creativity and Entrepreneurial Intentions among Female Undergraduate Students at a Southern United States Research Extensive University

Model **(Source of Variation)**	**Df**	**MS**	**F**	**p**
Regression	3	46.527	17.816	< 0.001
Residual	541	2.611		
Total	544			

Table 19

Model Summary Explaining the Ability of Creativity, Political Skill, and the Interaction of Creativity & Political Skill to Account for Variation in Entrepreneurial Intentions among Female Undergraduate Students at a Southern United States Research Extensive University

Model	**R**	**R^2**	**R^2 Change**	**F Change**	**p**
1	0.294	0.086	0.086	25.548	< 0.001
2	0.3	0.090	0.004	2.236	0.135

Table 20

Coefficients Table Presenting Significance of model variables and Expected Changes in Entrepreneurial Intentions with Changes in Creativity and Political Skill among Female Undergraduate Students at a Southern United States Research Extensive University

Model	**Variables**	**Beta**	**t**	**p**
1	Creativity	0.191	4.176	< 0.001
	Political Skill	0.155	3.402	0.001

(Table 20 continued)

2	Creativity	-0.195	-0.744	0.457
	Political Skill	-0.176	-0.778	0.437
	Creativity x Political Skill	0.611	1.495	0.135

Objective Seven

Objective seven (hypothesis two) of the study was to determine whether a positive relationship exists between creativity and entrepreneurial intentions among men. The researcher used the Pearson Product Moment correlation coefficient to determine if creativity was positively correlated with entrepreneurial intentions among this group of undergraduate students. Results revealed that at the 0.01 level, there was a statistically significant positive relationship between creativity and entrepreneurial intentions ($r = 0.332$, $p < 0.001$) among the male undergraduate students. Thus, hypothesis two was supported.

The researcher also employed the Pearson Product Moment correlation coefficient to determine if political skill was positively correlated with entrepreneurial intentions among the men. Results revealed a statistically significant positive relationship between political skill and entrepreneurial intentions as well ($r = 0.282$, $p < 0.001$). Again, this correlation was significant at the 0.01 level.

Objective Eight

Objective eight (hypothesis four) of the study was to determine whether political skill will moderate the relationship between creativity and entrepreneurial intentions among men, such that the relationship will be stronger when men are more politically skilled than when they are less politically skilled. Prior to conducting the regression analysis, the researcher inspected

the collinearity statistics to ensure that there was no violation of the assumption underlying the use of regression analysis as regards the existence of multicollinearity among the independent variables. The Tolerance was high and the Variance Inflation Factor (VIF) was low for both creativity and political skill (Tolerance = 0.774, VIF = 1.292), indicating that there were no multicollinearity problems among the independent variables in the data. Therefore, the researcher proceeded to conduct the regression analysis. It should be noted, however, that the Tolerance was very low and the VIF was very high in model two, when the interaction term was added (Tolerance = 0.013, VIF = 77.7).

Creativity and political skill were entered in Step one of the regression analysis. The degree to which the two variables were related to entrepreneurial intentions (R) was 0.377. The cumulative measure revealed that 14.2% of the variability in entrepreneurial intentions was accounted for by creativity and political skill ($R^2 = 0.142$, $F_{Change} = 27.957$, $p < 0.001$). In Step two, the interaction term, computed as the product of the creativity and political skill variables (Creativity x Political Skill), was entered. The addition of the product term resulted in an R square change of 0.000 ($F_{Change} = 0.071$, $p = 0.790$). This finding suggests that political skill does not moderate the relationship between creativity and entrepreneurial intentions among male undergraduate students. Therefore, hypothesis four was not supported. The results of the moderated multiple regression are provided in Table 21, Table 22, and Table 23.

Table 21

ANOVA Table Presenting the Significance of the Overall Regression Model of Political Skill Moderating the Relationship between Creativity and Entrepreneurial Intentions among Male Undergraduate Students at a Southern United States Research Extensive University

Model **(Source of Variation)**	**Df**	**MS**	**F**	**p**
Regression	3	53.427	18.611	< 0.001
Residual	337	2.871		
Total	340			

Table 22

Model Summary Explaining the Ability of Creativity, Political Skill, and the Interaction of Creativity & Political Skill to Account for Variation in Entrepreneurial Intentions among Male Undergraduate Students at a Southern United States Research Extensive University

Model	**R**	**R^2**	**R^2 Change**	**F Change**	**p**
1	0.377	0.142	0.142	27.957	< 0.001
2	0.377	0.142	0.000	0.071	0.790

Table 23

Coefficients Table Presenting Significance of model variables and Expected Changes in Entrepreneurial Intentions with Changes in Creativity and Political Skill among Male Undergraduate Students at a Southern United States Research Extensive University

Model	**Variables**	**Beta**	**t**	**p**
1	Creativity	0.279	4.868	< 0.001
	Political Skill	0.153	2.679	0.008
2	Creativity	0.212	0.827	0.409
	Political Skill	0.083	0.307	0.759
	Creativity x Political Skill	0.118	0.266	0.790

CHAPTER 5: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Purpose and Objectives

The primary purpose of this study was to examine the influence of creativity on entrepreneurial intentions among female undergraduate students, as well as to investigate the moderating effect of political skill on the creativity-entrepreneurial intentions relationship among these students.

The specific objectives addressed in the study were:

1. To describe the full-time undergraduate students at a research extensive university on the following selected demographic characteristics: Gender, Ethnicity, Age, and School Classification.
2. To describe the full-time undergraduate students at a research extensive university on the following selected psycho-social characteristics: Creativity, Political Skill, and Entrepreneurial Intentions.
3. To compare the full-time undergraduate students at a research extensive university by gender, on the following selected demographic characteristics: Ethnicity, Age, and School Classification.
4. To compare the full-time undergraduate students at a research extensive university by gender, on the following selected psycho-social characteristics: Creativity, Political Skill, and Entrepreneurial Intentions.
5. To determine whether a positive relationship exists between creativity and entrepreneurial intentions among women.

6. To determine whether political skill will moderate the relationship between creativity and entrepreneurial intentions among women, such that the relationship will be stronger when women are more politically skilled than when they are less politically skilled.

7. To determine whether a positive relationship exists between creativity and entrepreneurial intentions among men.

8. To determine whether political skill will moderate the relationship between creativity and entrepreneurial intentions among men, such that the relationship will be stronger when men are more politically skilled than when they are less politically skilled.

Procedures

The target population for this study was full-time students enrolled in research extensive universities in the southern part of the United States of America. The accessible population was defined as full-time, degree-seeking, undergraduate students attending one research extensive university in the southern part of the United States of America during the Spring 2011 semester. The frame was acquired via the institution's registrar, and a stratified random sample by gender (male vs. female) was drawn. The final drawn sample size was 5340 students (i.e., 2670 men and 2670 women). The delivered sample size was 1057, representing a 19.8% response rate.

The data collection method was a web-based/online survey (SurveyMonkey). Students received an email from the researcher describing the study and requesting their participation. No personal identification information (e.g., name, social security number, school identification number) was collected from survey participants. Two follow-up emails were sent as reminder notices to non-respondents. The first was sent five days after the initial email, and the second was sent five days after the first follow-up. As an incentive, a lottery was employed, with 3 cash

prizes of $100, $50, and $25 being offered, and randomly given to three winners who had completed the survey in its entirety.

Data collected for this study was analyzed to meet the objectives of this study using the Statistical Packages for Social Sciences (SPSS) software program. Descriptive measures were calculated. Additionally, chi-square tests for independence, independent t-tests, correlation analyses, and moderated regression analyses were appropriately conducted according to the requirements of the objectives.

Summary of Major Findings

Objective One

Objective one was to describe the full-time undergraduate students at a research extensive university on the demographic characteristics of gender, ethnicity, age, and school classification. The majority of the participants (n=614, 61.6%) reported that they were female. The majority of the respondents identified themselves as Caucasian (n= 782, 78.5%). The second largest group identified themselves as African American (n=92, 9.2%). The largest number of respondents indicated that they were between 18 and 25 years of age (n= 962, 96.6%). The second largest group indicated that their ages fell between 26 and 35 years (n= 24, 2.4%). Most respondents indicated that they were juniors (n= 263, 26.5%). The second largest group of respondents was freshmen (n=262, 26.4%). The least number of respondents indicated that they were sophomores (n=211, 21.2%).

Objective Two

Objective two was to describe the full-time undergraduate students at a research extensive university on the psycho-social characteristics of creativity, political skill, and entrepreneurial intentions. The mean creativity score for the respondents, as measured by the

Problem Solving/Creativity Subscale (PSCS) from the Self Description Questionnaire III (SDQ III), was 58.19 (SD = 9.81), and the scores ranged from a minimum of 29 to a maximum of 80. The mean political skill score for the respondents, as measured by the Political Skill Inventory (PSI), was 5.5 (SD = .92), and the scores ranged from a minimum of 1 to a maximum of 7. The mean entrepreneurial intentions score for the respondents, as measured by the Entrepreneurial Intention Questionnaire (EIQ), was 3.34 (SD = 1.77), and the scores ranged from a minimum of 1 to a maximum of 7.

Objective Three

Objective three was to compare the full-time undergraduate students at a research extensive university by gender, on the demographic characteristics of ethnicity, age, and school classification. Gender and ethnicity were independent ($\chi^2 = 3.103$, $p = 0.541$), gender and age were not independent ($\chi^2 = 8.209$, $p = 0.004$), and gender and school classification were independent ($\chi^2 = 4.14$, $p = 0.247$).

Objective Four

Objective four was to compare the full-time undergraduate students at a research extensive university by gender, on the psycho-social characteristics of creativity, political skill, and entrepreneurial intentions. Male undergraduate students and female undergraduate students were significantly different with regard to their own creativity perceptions ($t(942) = 4.014$, $p < 0.001$). Male undergraduate students and female undergraduate students were also significantly different with regard to their own political skill perceptions ($t(939) = -2.964$, $p = 0.003$), and their entrepreneurial intentions ($t(759.701) = 6.930$, $p < 0.001$).

Objective Five

Objective five (hypothesis one) was to determine whether a positive relationship exists between creativity and entrepreneurial intentions among women. The Pearson Product Moment correlation coefficient indicated that among this group of female undergraduate students, at the 0.01 level, there was a statistically significant positive relationship between creativity and entrepreneurial intentions ($r = 0.264$, $p < 0.001$). Thus, hypothesis one was supported.

Objective Six

Objective six (hypothesis three) of the study was to determine whether political skill will moderate the relationship between creativity and entrepreneurial intentions among women, such that the relationship will be stronger when women are more politically skilled than when they are less politically skilled. Creativity and political skill were entered in Step one of the regression analysis. The degree to which the two variables were related to entrepreneurial intentions (R) was 0.294. The cumulative measure revealed that 8.6% of the variability in entrepreneurial intentions was accounted for by creativity and political skill ($R^2 = 0.086$, F Change = 25.548, $p < 0.001$).

In Step two, the interaction term, computed as the product of the creativity and political skill variables (Creativity x Political Skill), was entered. The addition of the product term resulted in an R square change of 0.004 (F Change = 2.236, $p = 0.135$). This finding suggested that political skill did not moderate the relationship between creativity and entrepreneurial intentions among female undergraduate students. Therefore, hypothesis three was not supported.

Objective Seven

Objective seven (hypothesis two) was to determine whether a positive relationship exists between creativity and entrepreneurial intentions among men. The Pearson Product Moment

correlation coefficient indicated that among this group of male undergraduate students, at the 0.01 level, there was a statistically significant positive relationship between creativity and entrepreneurial intentions ($r = 0.332$, $p < 0.001$). Thus, hypothesis two was supported.

Objective Eight

Objective eight (hypothesis four) was to determine whether political skill will moderate the relationship between creativity and entrepreneurial intentions among men, such that the relationship will be stronger when men are more politically skilled than when they are less politically skilled. Creativity and political skill were entered in Step one of the regression analysis. The degree to which the two variables were related to entrepreneurial intentions (R) was 0.377. The cumulative measure revealed that 14.2% of the variability in entrepreneurial intentions was accounted for by creativity and political skill ($R^2 = 0.142$, F Change = 27.957, $p < 0.001$).

In Step two, the interaction term, computed as the product of the creativity and political skill variables (Creativity x Political Skill), was entered. The addition of the product term resulted in an R square change of 0.000 (F Change = 0.071, $p = 0.790$). This finding suggested that political skill did not moderate the relationship between creativity and entrepreneurial intentions among male undergraduate students. Therefore, hypothesis four was not supported.

Conclusions, Implications and Recommendations

Conclusion One

Male undergraduate students and female undergraduate students were significantly different with regard to their entrepreneurial intentions, with the male students having greater/higher intentions than the female students to be entrepreneurs in the future. These results are consistent with other studies in which women reported lower entrepreneurial career

intentions (Wilson, Kickul, & Marlino, 2007; Zhao, Seibert, & Hills, 2005), and since intentions are the precursors to actual behavior, the results suggest compatibility with the ongoing tendency of fewer women than men pursuing entrepreneurial endeavors and engaging in entrepreneurial behavior.

If this trend is not addressed, women will continue to lag behind the men from generation to generation as regards entrepreneurship. Universities and other institutions need to be active advocates of entrepreneurship in general, and they also need to specifically target their female students, and to groom them for participation in entrepreneurial pursuits. Business/entrepreneurship incubators can be introduced on campuses, where women can have access to resources to develop entrepreneurial ventures, or simply gain the knowledge, skills, and abilities (KSAs) they will need for the future development of entrepreneurial ventures. Acquisition of these KSAs will inspire confidence in their ability to be successful entrepreneurs, and as a result, their entrepreneurial intentions will increase. Entrepreneurial self-efficacy has been found to have a direct effect on entrepreneurial intentions, and entrepreneurship education has been found to significantly increase the self-efficacy of females in comparison to males (Wilson, Kickul, & Marlino, 2007). Therefore, business/entrepreneurship incubators should play a pivotal role in heightening women's entrepreneurial self-efficacy, and as a result, increasing their entrepreneurial intentions and activities.

Future inquiry should also be directed toward finding other factors that influence entrepreneurial intentions among women so that any inadequacies pertaining to those factors may be addressed as well. For example, attitudinal constructs and perceived subjective/social norms (including the impact of role models) underlie intentions (Ajzen, 1988; Ajzen, 1991;

Krueger, Reilly, & Carsrud, 2000), and should be studied further, along with other relevant KSAs, to determine their effects on the entrepreneurial intentions of women.

Conclusion Two

There was an association between gender and age among the full-time undergraduate students in the study. Findings showed that a higher proportion (than expected) of males tended to be non-traditional undergraduate students (26 years of age and older), whereas a higher proportion of females (than expected) tended to be traditional undergraduate students (25 years of age and younger). Since there are fewer non-traditional undergraduate students who are women, possibly due to family and other responsibilities, there may be fewer women over a certain age that are gaining the knowledge, skills, and abilities necessary for successful entrepreneurial activity, and thus, their entrepreneurial intentions are lower than their male counterparts due to their mere "ignorance."

Although most men and women report that they value their family more than their work, traditional gender roles prescribe different emphases for men and women: work is for men; family responsibility and home maintenance is for women (Gutek, Searle, & Klepa, 1991; Gutek, Nakamura, & Nieva, 1981). Despite the many changes in gender roles over the years, this tradition, which has biosocial and cultural origins, persists (Gutek, Searle, & Klepa, 1991). Since some form of education (whether formal or informal) is necessary for employment (whether by a company or by self), the men are "expected" to acquire the relevant instruction so that they can fulfill their roles as the working, financial providers. Therefore, it is not surprising that the majority of non-traditional (older) students are men and not women. This gender role socialization may dictate to these women that they are supposed to be tending to family and home responsibilities/obligations, at the expense of their education. However, women should not

have to choose between the two. Instead, they should be empowered to do both. Thus, in educational institutions, more flexible programs should be designed and implemented to target the older, non-traditional female students, providing them with the tools they need to be more entrepreneurially aware and entrepreneurially prepared. As a result, they should more easily envision the feasibility of engaging in entrepreneurial behavior, and thus, their entrepreneurial intentions should increase.

Conclusion Three

Male undergraduate students and female undergraduate students were significantly different with regard to their own creativity perceptions, with the male students perceiving themselves as more creative than the female students perceived themselves. This is unfortunate news concerning women because novel and useful ideas are the lifeblood of entrepreneurship (Ward, 2004). If they do not possess (or recognize) their own creativity, how will they be able to mobilize it toward entrepreneurial intentions and entrepreneurial activity? Educational institutions must embrace creativity and innovation among their core values and consistently provide opportunities for their students, especially their women, to think creatively and use their creative skills. A culture and climate of creativity and innovation must be established and maintained on campuses.

It may be that the male students in this study perceived themselves as more creative because the creativity measure was more cognitive in nature, and focused more on problem solving and thinking about new ideas and ways to accomplish tasks. However, creativity also encompasses a "softer" side. Lubart and Getz (1997) discussed how emotion influences creativity, and explained how emotions can elicit specific memories, contexts and concepts (endocepts) that may modulate thought and contribute to creative thinking.

The authors also discussed the importance of metaphors as regards creativity, explaining that metaphors are a medium for expressing and developing associations between concepts, and providing comparisons that can offer new perspectives, highlight similarities to other domains, and yield insights for problem redefinition. In addition, they proposed that individualized, experientially acquired emotion is a key for finding a metaphorically relevant link between concepts or images, which can then play a role in creative thinking, serving as a way to express and develop novel associations between distant concepts. Women are stereotypically known for their "softer" side, and may assess themselves as more creative if the "softer" side is included in the instrument used to measure creativity. Therefore, it is recommended that future inquiry incorporate a creativity measure that also reflects the emotional component.

Conclusion Four

Male undergraduate students and female undergraduate students were significantly different with regard to their own political skill perceptions, with the female students perceiving themselves as more politically skilled than the male students perceived themselves. This was surprising to the researcher, who believed that men would be more secure in their political abilities. Perrewe and Nelson (2004) stated that one of the most formidable barriers to women's advancement is exclusion from informal networks, where matters of power and influence often take place, and networking is an important dimension of political skill. The authors also state that women are not as likely to use politics and influence to get ahead, but instead, they tend to play by the "stated or traditional" rules.

Findings for this study may be due to the sample (full-time undergraduate students). Undergraduate males may not yet have had the work experience that necessitated their discovery and use of their political skill, and allowed them to take advantage of the "political avenues"

more available to them. It would be interesting to compare the male and female undergraduates on each dimension of political skill (social astuteness, networking ability, apparent sincerity, and interpersonal influence) separately, to determine in which dimensions they perceive themselves as more skilled. Students can then be coached in these areas. Research pertaining to these issues should be conducted.

The results of this study, however, do paint an encouraging picture as regards women's perceptions of their political skill. They now need to recognize it as an asset and use it as a motivator to harbor entrepreneurial intentions and as a result, to engage in entrepreneurial behavior. Educational institutions need to provide opportunities for students to cultivate, and learn how to capitalize on their political skill in the context of entrepreneurship.

Conclusion Five

Creativity and entrepreneurial intentions were correlated. Findings revealed that for both male and female undergraduate students, there was a statistically significant positive relationship between creativity and entrepreneurial intentions. This finding is also relevant to that of women having both lower creativity scores and lower entrepreneurial intentions scores than their male counterparts. Since the women perceive themselves as less creative, their perception may have a great deal to do with their lower entrepreneurial intentions scores, compared to the men, because they may not consider themselves sufficiently creative to generate ideas that will be entrepreneurially successful. In general, the concept of self –fulfilling prophecy refers to situations in which one person's expectations about a second person lead the second person to act in ways that confirm the first person's original expectation (Jussim, 1986). This study's researcher views the women in this study as enacting their own self-fulfilling prophecy, where they are both the perceiver of the belief and the target, and they influence themselves to behave

in an expectation-consistent manner. These female undergraduate students perceive themselves as less creative, so they do not have intentions to engage in entrepreneurial activity, which requires creativity.

Educational institutions, in conjunction with interested corporate partners, should strive to introduce programs whereby women can allow the flow of their "creative juices" and also hone other entrepreneurial skills as they work on entrepreneurial projects/initiatives. In this way, women would be more confident in their own creative abilities, and their perceptions of their creativity would improve. Krueger, Reilly, and Carsrud (2000) state that gender differences in career choice are largely explained by self-efficacy differences, and that raising entrepreneurial efficacies will raise perceptions of venture feasibility, thus increasing the perception of opportunity. It is this researcher's contention that one of the reasons that women do not intend to become entrepreneurs or choose entrepreneurship as a career route is that they lack self-efficacy in terms of creativity. Since creativity is an important entrepreneurial efficacy, women need to have more opportunities that will allow them to raise their own creativity perceptions, and as a result, elevate their entrepreneurial efficacy, so that their perceptions of entrepreneurial feasibility can be increased, and also their entrepreneurial intentions.

Conclusion Six

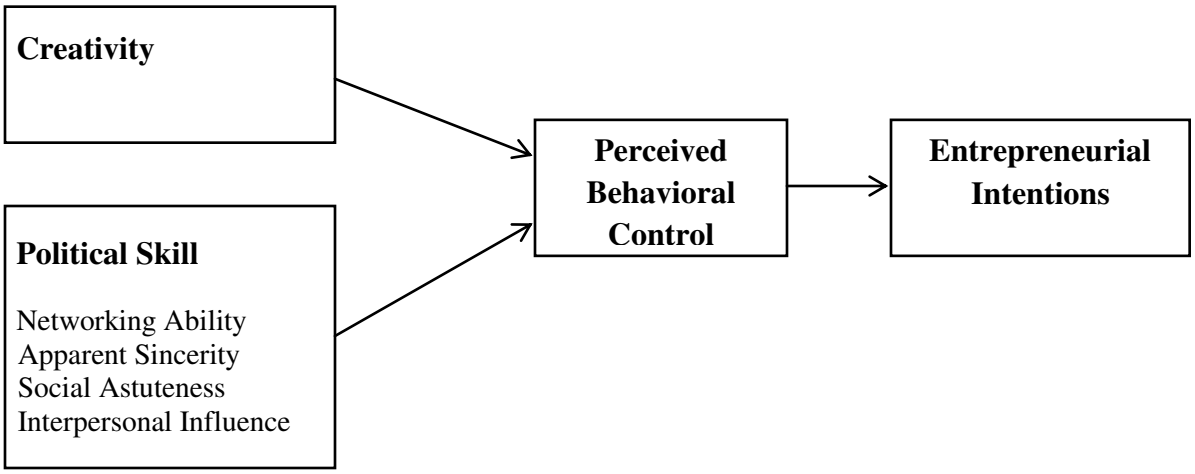
Political skill did not moderate the relationship between creativity and entrepreneurial intentions. For both male and female undergraduate students in this study, no significant effects resulted from the addition of the interaction term to the model. It could be that the sample of undergraduate students did not consist of sufficient diversity in terms of age groups. Younger individuals may not understand the full value of political skill and may not use it as frequently as older individuals. Thus, the study should be replicated with older men and women at different

stages of their lives. The study should also be replicated using women in "Women in Business" programs that are especially tailored to address the challenges and opportunities encountered by female entrepreneurs, to determine if results would differ.

In addition, future research should examine the political skill dimensions separately, to determine whether there is the existence of moderating effects of each dimension on the creativity-entrepreneurial intentions relationship. Another recommendation is to incorporate the Ajzen (1988; 1991) model more fully, whereby creativity and political skill are subsumed under control beliefs, which in turn influence perceived behavioral control, which in turn influences entrepreneurial intentions. Yet another conceptual scheme would be to explore the moderating effect of political skill on the creativity- perceived behavioral control relationship, with the latter influencing entrepreneurial intentions. These recommended schemes can be viewed in Figure 3.

Although no moderating effects were observed, it must be mentioned that political skill, nevertheless, is an important construct, as findings revealed it as having a direct correlation with entrepreneurial intentions. For both male and female undergraduate students, there was a statistically significant positive relationship between political skill and entrepreneurial intentions. Therefore, its possession can only aid in an individual's "journey" toward entrepreneurial behavior, and thus, attention should be directed toward the cultivation of political skill among students in educational institutions.

(a)



(b)

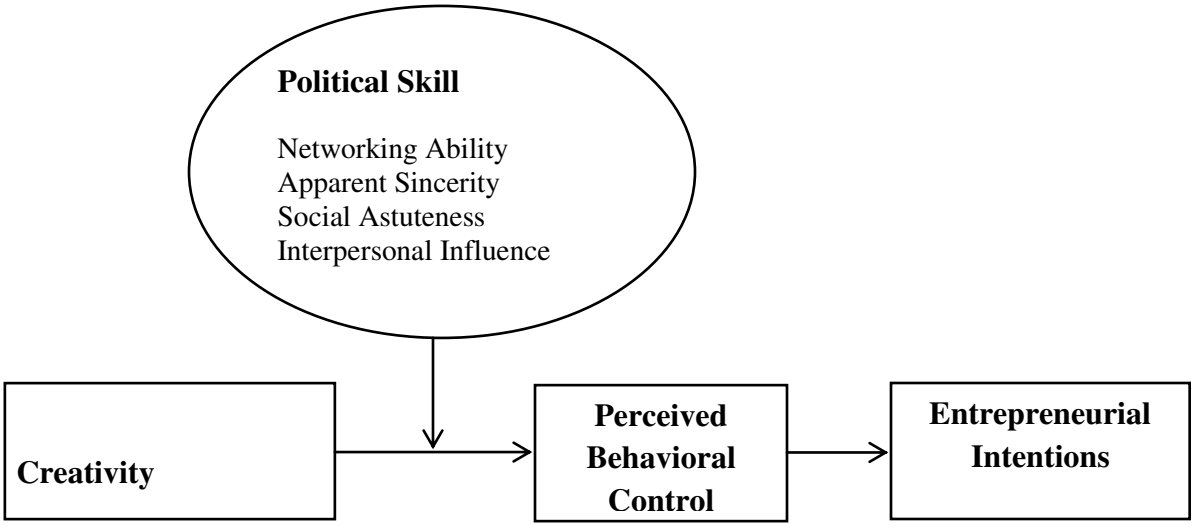


Figure 3: Recommended Entrepreneurial Intentions Conceptual Schemes

REFERENCES

Acs, Z., Braunerhjelm, P., Audretsch, D., & Carlsson, B. (2009). The knowledge spillover theory of entrepreneurship. *Small Business Economics*, *32*(1), 15-30.

Acs, Z., & Szerb, L. (2007). Entrepreneurship, economic growth and public policy. *Small Business Economics*, *28*(2/3), 109-122.

Ahearn, K. K., Ferris, G. R., Hochwarter, W. A., Douglas, C., & Ammeter, A. P. (2004). Leader political skill and team performance. *Journal of Management, 30*(3), 309-327.

Ahmed, I., Nawaz, M. M., Ahmad, Z., Shaukat, M. Z., Usman, A., Wasim-ul-Rehman, & Ahmed, N. (2010). Determinants of students' entrepreneurial career intentions: Evidence from business graduates. *European Journal of Social Science*, *15*(2), 14-22.

Ajzen, I. (1988). *Attitudes, personality, and behavior.* Chicago: Dorsey Press.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior & Human Decision Processes, 50*(2), 179-211.

Alvord, S. H., Brown, L. D., & Letts, C. W. (2004). Social entrepreneurship and societal transformation: An exploratory study. *The Journal of Applied Behavioral Science, 40*(3), 260-282.

Amabile, T. M. (1983). The social psychology of creativity: A componential conceptualization. *Journal of Personality and Social Psychology, 45*(2), 357-376.

Amabile, T. M. (1993). What does a theory of creativity require? *Psychological Inquiry, 4*(2), 179-181.

Amabile, T. M. (1996). *Creativity in context*. Boulder, CO: Westview Press.

Amabile, T. M. (1997). Motivating creativity in organizations: On doing what you love and loving what you do. *California Management Review*, *40*(1), 39-58.

Amabile, T. M. (1998). How to kill creativity. *Harvard Business Review*, *76*(5), 76-87.

Amabile, T. M., & Gryskiewicz, S. S. (1987). *Creativity in the R&D Laboratory.* Greensboro, NC: Center for Creative Leadership.

Amabile, T. M., & Khaire, M. (2008). Creativity and the role of the leader. *Harvard Business Review, 86*(10), 100-109.

Audretsch, D. B., & Keilbach, M. (2007). The theory of knowledge spillover entrepreneurship. *Journal of Management Studies, 44*(7), 1242-1254.

Austin, J., Stevenson, H., & Wei-Skillern, J. (2006). Social and commercial entrepreneurship: Same, different, or both? *Entrepreneurship Theory and Practice, 30*(1), 1-22.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*(2), 191-215.

Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, *37*(2), 122-147.

Bandura, A. (1992). Exercise of personal agency through the self-efficacy mechanism. In R. Schwarzer (Ed.). *Self-efficacy: Thought control of action.* Washington, DC: Hemisphere Publishing Corporation.

Bandura, A. (1997). *Self-efficacy:The exercise of control.* New York, NY: W. H. Freeman and Company.

Baron, R. (1998). Cognitive mechanisms in entrepreneurship: Why and when entrepreneurs think differently than other people. *Journal of Business Venturing, 13*(4), 275-294.

Baron, R. A. (2000). Psychological perspectives on entrepreneurship: Cognitive and social factors in entrepreneurs' success. *Current Directions in Psychological Science, 9*(1), 15-18.

Baron, R. (2004). The cognitive perspective: a valuable tool for answering entrepreneurship's basic "why" questions. *Journal of Business Venturing, 19*(2), 221-239.

Baron, R. A. (2010). *Mind matters: The future of research on the psychology of entrepreneurship. Broader horizons = better (and more valuable) research* [PowerPoint slides]. Presentation at the annual conference of the Academy of Management, Montréal, Canada.

Baron, R. A., & Markman, G. D. (2000). Beyond social capital: How social skills can enhance entrepreneurs' success. *Academy of Management Executive, 14*(1), 106-116.

Baron, R. & Markman, G. (2003). Beyond social capital: The role of entrepreneur's social competence in their financial success. *Journal of Business Venturing, 18*(1), 41-60.

Bartlett, J. E., Kotrlik, J. W., & Higgins, C. C. (2001). Organizational research: Determining appropriate sample size in survey research. *Information Technology, Learning, and Performance Journal, 19*(1), 43-50.

Baumol, W. J. (1993). Formal entrepreneurship theory in economics: Existence and Bounds. *Journal of Business Venturing, 8*(3), 197-210.

Betz, N. E., & Hackett, G. (1981). The relationship of career-related self-efficacy expectations to perceived career options in college women and men. *Journal of Counseling Psychology*, *28*(5), 399-410.

Bird, B. (1988). Implementing entrepreneurial ideas: The case for intention. *Academy of Management Review, 13*(3), 442-453.

Boyd, N. G., & Vozikis, G. S. (1994). The influence of self-efficacy on the development of entrepreneurial intentions and actions. *Entrepreneurship: Theory and Practice, 18*(4) 63-77.

Brice Jr., J., & Spencer, B. (2007). Entrepreneurial profiling: A decision policy analysis of the influence of entrepreneurial self-efficacy on entrepreneurial intent. *Academy of Entrepreneurship Journal, 13*(2), 47-67.

Brush, C. G., Carter, N. M., Gatewood, E. J., Greene, P. G., & Hart, M. M. (2006). *Growth-oriented women entrepreneurs and their businesses: A global research perspective.* Northampton, MA: Edward Elgar Publishing, Inc.

Bygrave, W. D., & Zacharakis, A. (2010). *The portable MBA in Entrepreneurship.* Hoboken, NJ: John Wiley & Sons, Inc.

Campbell, G., Denes, R., & Morrison, C. (2000). *Access denied: Race, ethnicity, and the scientific enterprise.* New York, NY: Oxford University Press, Inc.

Capello, R. (2009). Spatial spillovers and regional growth: A cognitive approach. *European Planning Studies*, *17*(5), 639-658.

Carlsson, B. (1989). The Evolution of Manufacturing Technology and Its Impact on Industrial Structure: An International Study. *Small Business Economics*, *1*(1), 21-37.

Center for Women's Business Research (2009). *The economic impact of women-owned businesses in the United States.* Retrieved October 13, 2010, from http://www.womensbusinessresearchcenter.org/Data/research/economicimpactstud/econimpactreport-final.pdf.

Chandler, G. N., & Lyon, D. W. (2001). Issues of Research Design and Construct Measurement in Entrepreneurship Research: The Past Decade. *Entrepreneurship: Theory & Practice*, *25*(4), 101-113.

Clement, S. (1987). The self-efficacy expectations and occupational preference of females and males. *Journal of Occupational Psychology*, *60*(3), 257-265.

Cochran, W. G. (1977). *Sampling techniques* (3rd ed.). New York: John Wiley & Sons, Inc.

Cook, T. D., & Campbell, D. T. (1979). *Quasi-experimentation: Design & analysis issues for field settings*. Boston: Houghton Mifflin.

Couper, M. P., Traugott, M. W., & Lamias M. J. (2001). Web survey design and administration. *Public Opinion Quarterly, 65*(2), 230-253.

Cox, R. W., & Jacobson, H. K. (1973). *The anatomy of influence: Decision-making in international organizations.* New Haven, CT: Yale University Press.

Cromie, S. (2000). Assessing entrepreneurial inclinations: Some approaches and empirical evidence. *European Journal of Work and Organizational Psychology, 9*(1), 7-30.

Davidsson, P., & Wiklund, J. (2001). Levels of Analysis in Entrepreneurship Research: Current Research Practice and Suggestions for the Future. *Entrepreneurship: Theory & Practice*, *25*(4), 81-99.

Dees, G. (1998). *The meaning of social entrepreneurship.* Retrieved October 12, 2010, from http://www.redalmarza.com/ing/pdf/TheMeaningofSocialEntrepreneurship.pdf.

Deutskens, E., De Ruyter, K., Wetzels, M., & Oosterveld, P. (2004). Response rate and response quality of internet-based surveys: An experimental study. *Marketing Letters, 15*(1), 21-36.

Douglas, E. J., & Shepherd, D. A. (2000). Entrepreneurship as a utility maximizing response. *Journal of Business Venturing,15*(3), 231-251.

Echambadi, R., & Hess, J. D. (2007). Mean-centering does not alleviate collinearity problems in moderated multiple regression models. *Marketing Science, 26*(3), 438-445.

Eisenberger, R., Armeli, S., & Pretz, J. (1998). Can the promise of reward increase creativity? *Journal of Personality and Social Psychology*, *74*(3), 704-714.

Epifani, P., & Gancia, G. (2009). Openness, government size, and the terms of trade. *The Review of Economic Studies, 76*(2), 629-668.

Eysenck, H. (1995). *Genius: The natural history of creativity*. Cambridge, UK: Cambridge University Press.

Fasko, D. (2001). Education and Creativity. *Creativity Research Journal*, *13*(3/4), 317-327.

Fayolle, A. (2005). Evaluation of entrepreneurship education: Behavior performing or intention increasing. *International Journal of Entrepreneurship and Small Business, 2*(1), 89-98.

Ferris, G. R., Treadway, D. C., Kolodinsky, R. W., Hochwarter, W. A., Kacmar, C. J.,

Douglas, C., & Frink, D. D. (2005). Development and validation of the political skill inventory. *Journal of Management, 31*(1), 126-152.

Ferris, G. R., Treadway, D. C., Perrewé, P. L., Brouer, R. L., Douglas, C., & Lux, S. (2007). Political skill in organizations. *Journal of Management, 33*(3)*,* 290–320.

Ferris, G. R., Perrewé, P. L., Anthony, W. P., & Gilmore, D. C. (2003). Political skill at work. In L. W. Porter, H. L. Angle, & R. W. Allen (Eds.). *Organizational influence processes* (pp. 395-407). Armonk, NY: M. E. Sharpe, Inc.

Fox, R. L., & Lawless, J. L. (2004). Entering the Arena? Gender and the Decision to Run for Office. *American Journal of Political Science*, *48*(2), 264-280.

George, G., & Zahra, S. (2002). Culture and its consequences for entrepreneurship. *Entrepreneurship: Theory & Practice*, *26*(4), 5-8.

Gilhooly, K., Fioratou, E., Anthony, S., & Wynn, V. (2007). Divergent thinking: Strategies and executive involvement in generating novel uses for familiar objects. *British Journal of Psychology, 98*(4), 611-625.

Gilson, M. B. (1940). *What's past is prologue.* New York: Harper.

Gird, A., & Bagraim, J. (2008). The theory of planned behavior as predictor of entrepreneurial intent amongst final-year university students. *South African Journal of Psychology, 38*(4), 711-724.

Gorman, G., Hanlon, D., & King, W. (1997). Some research perspectives on entrepreneurship education. *International Small Business Journal*, *15*(3), 56-77.

Guilford, J. P. (1956). The structure of intellect. *Psychological Bulletin, 53*(4), 267-293.

Gunning, J. W. (2001). Trade blocs: Relevant for Africa? *Journal of African Economies, 10*(3), 311-335.

Gupta, V., Turban, D., Wasti, S., & Sikdar, A. (2009). The role of gender stereotypes in perceptions of entrepreneurs and intentions to become an entrepreneur. *Entrepreneurship: Theory & Practice*, *33*(2), 397-417.

Gutek, B. A., Nakamura, C. Y., & Nieva, V. F. (1981). The interdependence of work and family roles. *Journal of occupational behavior, 2*(1), 1-16.

Gutek, B. A., Searle, S., & Klepa, L. (1991). Rational versus gender role explanations for work-family conflict. *Journal of Applied Psychology, 76*(4), 560-568.

Hamidi, D. Y., Wennberg, K., & Berglund, H. (2008). Creativity in entrepreneurship education.

Journal of Small Business and Enterprise Development, 15(2), 304-320.

Harbi, S., & Anderson, A. (2010). Institutions and the shaping of different forms of entrepreneurship. *Journal of Socio-Economics*, *39*(3), 436-444.

Heijdra, B. J., Ligthart, J. E., & van der Ploeg, F. (1998). Fiscal policy, distortionary taxation, and direct crowding out under monopolistic competition. *Oxford Economic Papers, 50*(1), 79-88.

Hennessey, B. A., & Amabile, T. M. (2010). Creativity. *Annual Review of Psychology, 61*(1), 569-598.

Hollingsworth, J. R., Muller, K. H., & Hollingsworth, E. J. (2002). *Advancing socio-economics: An institutionalist perspective.* Lanham, MD: Rowman & Littlefield Publishers, Inc.

Jalbert, S. E. (2000). *Women entrepreneurs in the global economy.* Washington, DC: Center for International Private Enterprise.

Jussim, L. (1986). Self-fulfilling prophecies: A theoretical and integrative review. *Psychological Review, 93*(4), 429-445.

Kalleberg, A., & Leicht, K. (1991). Gender and organizational performance: Determinants of small business survival and success. *Academy of Management Journal*, *34*(1), 136-161.

Kaplowitz, M. D., Hadlock, T. D., & Levine, R. (2004). A comparison of web and mail survey response rates. *Public Opinion Quarterly, 68*(1), 94-101.

Katz, J., & Gartner, W. (1988). Properties of emerging organizations. *Academy of Management Review*, *13*(3), 429-441.

Kim, P. H., Aldrich, H. E., & Keister, L. A. (2006). Access (not) denied: The impact of financial, human, and cultural capital on entrepreneurial entry in the United States. *Small Business Economics, 27*(1), 5-22.

Kirton, M. (1976). Adaptors and Innovators: A Description and Measure. *Journal of Applied Psychology*, *61*(5), 622-629.

Kirton, M. (1992). Adaptors and Innovators: Problem-solvers in Organizations. *Readings in Innovation*, 45-67.

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement, 30*(3), 607-610.

Krišč iūnas, K., & Greblikaitė, J. (2007). Entrepreneurship in sustainable development: SMEs innovativeness in Lithuania. *Engineering Economics*, *54*(4), 20-26.

Krueger, N. F. (1993). The impact of prior entrepreneurial exposure on perceptions of new venture feasibility and desirability. *Entrepreneurship: Theory & Practice, 18*(1), 5-21.

Krueger, N. F., & Carsrud, A. L. (1993). Entrepreneurial intentions: Applying the theory of planned behavior. *Entrepreneurship and Regional Development, 5*(4), 315-330.

Krueger, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing, 15*(5-6), 411-432.

Lawless, J. L., & Fox, R. L. (2005). *It takes a candidate: Why women don't run for office.* New York, NY: Cambridge University Press.

Liñán, F., & Chen, Y. W. (2009). Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship Theory and Practice, 33*(3), 593-617.

Liñán, F., & Javier Santos, F. (2007). Does social capital affect entrepreneurial intentions? *International Advances in Economic Research, 13*(4), 443-453.

Llewellyn, D. J., & Wilson, K. M. (2003). The controversial role of personality traits in entrepreneurial psychology. *Education and Training, 45*(6), 341-345.

Low, M. (2001). The Adolescence of Entrepreneurship Research: Specification of Purpose. *Entrepreneurship: Theory & Practice*, *25*(4), 17-25.

Lubart, T. I., & Getz, I. (1997). Emotion, metaphor, and the creative process. *Creativity Research Journal, 10(4), 285-301.*

Lux, S. (2005). Entrepreneur social competence and capital: The social networks of politically skilled entrepreneurs. *Academy of Management Proceedings*, Q1-Q6.

Madden, T. J., Ellen, P. S., & Ajzen, I. (1992). A comparison of the theory of planned behavior and the theory of reasoned action. *Personality and Social Psychology Bulletin, 18*(1), 3-9.

Mair, J., & Marti, I. (2006). Social entrepreneurship research: A source of explanation, prediction, and delight. *Journal of World Business, 41*(1), 36-44.

Marsh, H. W. (1990). *Self description questionnaire – III manual*. Retrieved June 25, 2010, from University of Oxford, SELF Research Center Web site: http://www.self.ox.ac.uk/Instruments/SDQIII/SDQIIIManual.htm.

Marsh, H. W., & O'Neill, R. (1984). Self description questionnaire III: The construct validity of multidimensional self-concept ratings by late adolescents. *Journal of Educational Measurement, 21*(2), 153-174.

Moravcsik, A. (1999). A new statecraft? Supranational entrepreneurs and international cooperation. *International Organization, 53*(2), 267-306.

Motta, M., & Polo, M. (1997). Concentration and public policies in the broadcasting industry: The future of television. *Economic Policy*, *12*(25), 295-334.

Nassif, C., & Quevillon, R. (2008). The development of a preliminary creativity scale for the MMPI-2: The C scale. *Creativity Research Journal, 20*(1), 13-20.

National Research Council. (1991). *Work and family: Policies for a changing workforce.* Washington, DC: National Academy Press.

Nemeth, C. J., & Kwan, J. L. (1987). Minority influence, divergent thinking, and detection of correct solutions. *Journal of Applied Social Psychology, 17*(9), 788-799.

Olawale, F. (2010). Graduate entrepreneurial intention in South Africa: Motivations and obstacles. *International Journal of Business and Management, 5*(9), 87-98.

Orhan, M., & Scott, D. (2001). Why women enter into entrepreneurship: An explanatory model. *Women in Management Review, 16*(5), 232-247.

Peredo, A. M., & McLean, M. (2006). Social entrepreneurship: A critical review of the concept. *Journal of World Business, 41*(1), 56-65.

Perrewé, P. L., & Nelson, D. L. (2004). Gender and career success: The facilitative role of political skill. *Organizational Dynamics, 33*(4), 366-378.

Pinchot, G. (1985). *Intrapreneuring: Why you don't have to leave the organization to become an entrepreneur.* New York, NY: Harper and Row, Inc.

Podsakoff, P. M., MacKenzie, S. B., Lee, J-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879-903.

Porter, S. R., & Whitcomb, M. E. (2003). The impact of lottery incentives on student survey response rates. *Research in Higher Education, 44*(4), 389-407.

Reynolds, P. D., & White, S. B. (1997). *The entrepreneurial process: Economic growth, men, women, and minorities.* Westport, CT: Quorum Books.

Rhodes, M. (1961). An analysis of creativity. *Phi Delta Kappan, 42*(7), 305-310.

Runco, M. A. (1991). *Divergent thinking*. Norwood, NJ: Ablex Publishing.

Runco, M. A., & Pritzker, S. R. (1999). *Encyclopedia of creativity.* San Diego, CA: Academic Press.

Sagie, A., & Elizur, D. (1999). Achievement motive and entrepreneurial orientation: A structural analysis. *Journal of Organizational Behavior, 20*(3), 375-387.

Sathe, V. (1988). From surface to deep corporate entrepreneurship. *Human Resource Management*, *27*(4), 389-411.

Sathe, V. (1989). Fostering entrepreneurship in the large diversified firm. *Organizational Dynamics, 18*(2), 20-32.

Sax, L. J., Gilmartin, S. K., & Bryant, A. N. (2003). Assessing response rates and nonresponse bias in web and paper surveys. *Research in Higher Education, 44*(4), 409-432.

Scherer, R., Brodzinski, J., & Wiebe, F. (1990). Entrepreneur career selection and gender: A socialization approach. *Journal of Small Business Management*, *28*(2), 37-44.

Schumpeter, J. A. (1934). *The theory of economic development.* Cambridge, MA: Harvard University Press.

Schumpeter, J. A. (1942). *Capitalism, socialism, and democracy.* New York, NY: Harper.

Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review, 25*(1)*,* 217–226.

Sills, S. J., & Song, C. (2002). Innovations in survey research: An application of web-based surveys. *Social Science Computer Review, 20*(1), 22-30.

Silvia, P. J., Winterstein, B. P., Willse, J. T., Barona, C. M., Cram, J. T., Hess, K. I., Martinez, J. L., & Richard, C. A. (2008). Assessing creativity with divergent thinking tasks: Exploring the reliability and validity of new subjective scoring methods. *Psychology of Aesthetics, Creativity, and the Arts, 2*(2), 68-85.

Simon, H. A. (1985). What we know about the creative process. In R. L. Kuhn (Ed.), *Frontiers in creative and innovative management* (pp. 3-20). Cambridge, MA: Ballinger.

Sternberg, R. J., & Lubart, T. I. (1991). Creating creative minds. *Phi Delta Kappan, 72*(8), 608–614.

Sternberg, R. J., & Lubart, T. I. (1999). The concept of creativity: Prospect and paradigms. In R. J. Sternberg (Ed.), *Handbook of creativity* (pp. 3-15). Cambridge, UK: Cambridge University Press.

Steyaert, C., & Katz, J. (2004). Reclaiming the space of entrepreneurship in society: Geographical, discursive, and social dimensions. *Entrepreneurship and Regional Development, 16*(3), 179-196.

Thompson, J. L. (1999). The world of the entrepreneur: A new perspective. *Journal of Workplace Learning, 11*(6), 209-224.

Thompson, J., Alvy, G., & Lees, A. (2000). Social entrepreneurship: A new look at the people and the potential. *Management Decision, 38*(5), 328-338.

Torrance, E. (1993). Understanding creativity: Where to start? *Psychological Inquiry, 4*(3), 229-232.

Ward, T. B. (2004). Cognition, creativity, and entrepreneurship. *Journal of Business Venturing, 19*(2), 173-188.

Wilson, F., Kickul, J., & Marlino, D. (2007). Gender, entrepreneurial self-efficacy, and entrepreneurial career intentions: Implications for entrepreneurship education. *Entrepreneurship: Theory & Practice*, *31*(3), 387-406.

Witt, P. (2004). Entrepreneurs' networks and the success of start-ups. *Entrepreneurship & Regional Development*, *16*(5), 391-412.

Zacharakis, A. L., Bygrave, W. D., & Shepherd, D. A. (2000). *Global Entrepreneurship Monitor: National Entrepreneurship Assessment, United States of America: 2000 Executive Report.* Kansas, MO: Kauffman Center for Entrepreneurial Leadership at the Ewing Marion Kauffman Foundation.

Zampetakis, L., & Moustakis, V. (2006). Linking creativity with entrepreneurial intentions: A structural approach. *International Entrepreneurship and Management Journal*, *2*(3), 413-428.

Zhao, H., Seibert, S. E., & Hills, G. E. (2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. *Journal of Applied Psychology, 90*(6), 1265-1272.

APPENDIX A

APPROVED INSTITUTIONAL REVIEW BOARD APPLICATION

Application for Exemption from Institutional Oversight

Institutional Review Board
Dr. Robert Mathews, Chair
131 David Boyd Hall
Baton Rouge, LA 70803
P: 225.578.8692
F: 225.578.6792
irb@lsu.edu
lsu.edu/irb

Unless qualified as meeting the specific criteria for exemption from Institutional Review Board (IRB) oversight, ALL LSU research/ projects using living humans as subjects, or samples, or data obtained from humans, directly or indirectly, with or without their consent, must be approved or exempted in advance by the LSU IRB. This Form helps the PI determine if a project may be exempted, and is used to request an exemption.

-- Applicant,Please fill out the application in its entirety and include the completed application as well as parts A-E, listed below, when submitting to the IRB. Once the application is completed, please submit two copies of the completed application to the IRB Office or to a member of the Human Subjects Screening Committee. Members of this committee can be found at http://www.lsu.edu/screeningmembers.shtml

-- A Complete Application Includes All of the Following:

(A) Two copies of this completed form and two copies of part B thru E.
(B) A brief project description (adequate to evaluate risks to subjects and to explain your responses to Parts 1&2)
(C) Copies of all instruments to be used.
*If this proposal is part of a grant proposal, include a copy of the proposal and all recruitment material.
(D) The consent form that you will use in the study (see part 3 for more information.)
(E) Certificate of Completion of Human Subjects Protection Training for all personnel involved in the project, including students who are involved with testing or handling data, unless already on file with the IRB. Training link: (http://phrp.nihtaining.com/users/login.php.)
(F) IRB Security of Data Agreement: (http://www.lsu.edu/irb/IRB%20Security%20of%20Data.pdf)

1) Principal Investigator: Simone T. A. Phipps **Rank:** Student

Dept: Human Resource Education **Ph:** (803)378-9443 **E-mail:** sphipp1@tigers.lsu.edu

2) Co Investigator(s): please include department, rank, phone and e-mail for each

1) Dr. Michael F. Burnett, Professor and Director, School of Human Resource Education and Workforce Development, vocbur@lsu.edu, (225)578-5750.
2) Dr. Satish Verma, HC Sanders Distinguished Emeritus Professor, School of Human Resource Education and Workforce Development, sverma@agcenter.lsu.edu, (225)578-5751.

IRB# E5324 LSU Proposal #

⊗ Complete Application

⊗ Human Subjects Training

3) Project Title: Contributors to an Enterprising Gender: Examining the Influence of Creativity on Entrepreneurial Intentions and the Moderating Role of Political Skill among Women.

Study Exempted By:
Dr. Robert C. Mathews, Chairman
Institutional Review Board
Louisiana State University
203 B-1 David Boyd Hall
225-578-8692 | www.lsu.edu/irb
Exemption Expires: 11-28-2013

4) Proposal? (yes or no) No **If Yes, LSU Proposal Number**

Also, if YES, either ◯ **This application completely matches the scope of work in the grant**

OR ◯ **More IRB Applications will be filed later**

5) Subject pool (e.g. Psychology students) Undergraduate Students at LSU

*Circle any **"vulnerable populations" to be used**: (children <18; the mentally impaired, pregnant women, the ages, other). Projects with incarcerated persons cannot be exempted.

6) PI Signature Simone T. A. Phipps **Date** 11/21/2010 (no per signatures)

**** I certify my responses are accurate and complete.** If the project scope or design is later changes, I will resubmit for review. I will obtain written approval from the Authorized Representative of all non-LSU institutions in which the study is conducted. I also understand that it is my responsibility to maintain copies of all consent forms at LSU for three years after completion of the study. If I leave LSU before that time the consent forms should be preserved in the Departmental Office.

Screening Committee Action: Exempted √ Not Exempted ____ Category/Paragraph 2

Reviewer Mathews **Signature** Robert C Mathews **Date** 11/29/10

APPENDIX B

CONSENT SCRIPT

Consent Script for Simone T. A. Phipps

Thank you very much for participating in this study. Your input is greatly valued, and it is essential to the success of the study. I am conducting research that examines the influence of creativity and political skill on entrepreneurial intentions, and I am requesting your participation by completing a web-based questionnaire, which only takes about 15 minutes. Findings of this study can be used by universities and other academic institutions to implement programs that increase creative thinking, political skill, and entrepreneurial intentions among students.

You have been selected to participate in this study from a database of undergraduate students enrolled at Louisiana State University. Upon completion of the survey, you will be entered in a drawing to win $100, $50, or $25. This drawing will take place in two weeks. Your participation is completely voluntary, so you may choose not to participate. Also, your responses will remain strictly confidential. By completing this survey, you are agreeing to participate in this study.

If you have any concerns, please contact Robert C. Matthews, Institutional Review Board Chairman, LSU, at (225)578-8692 or irb@lsu.edu. Also, please feel free to contact me at any time if you have questions about my research.

Again, thank you for your participation. I greatly appreciate it.

Sincerely,

Simone T. A. Phipps

Simone T. A. Phipps
Louisiana State University
School of Human Resource Education and Workforce Development
(803)378-9443
sphipp1@tigers.lsu.edu

Study Exempted By:
Dr. Robert C. Mathews, Chairman
Institutional Review Board
Louisiana State University
203 B-1 David Boyd Hall
225-578-8692 | www.lsu.edu/irb
Exemption Expires: 11-28-2013

APPENDIX C

ENTREPRENEURIAL INTENTIONS QUESTIONNAIRE

Liñán and Chen (2009) Entrepreneurial Intentions Questionnaire (EIQ)

Directions: Please indicate your level of agreement with each of the following statements from 1 (total disagreement) to 7 (total agreement).

1. I am ready to do anything to be an entrepreneur.
2. My professional goal is to become an entrepreneur.
3. I will make every effort to start and run my own firm.
4. I am determined to create a firm in the future.
5. I have very seriously thought of starting a firm.
6. I have the firm intention to start a firm someday.

APPENDIX D

PROBLEM SOLVING/CREATIVITY SUBSCALE

Marsh and O'Neill (1984) Problem Solving/Creativity Subscale (PSCS) from the Self Description Questionnaire III (SDQ III)

Directions: Please indicate how true or false each item is as a description of you. 1 = definitely false, 2 = false, 3 = mostly false, 4 = more false than true, 5 = more true than false, 6 = mostly true, 7 = true, 8 = definitely true.

1. I am never able to think up answers to problems that haven't already been figured out.
2. I am good at combining ideas in ways that others have not tried.
3. I wish I had more imagination and originality.
4. I enjoy working out new ways of solving problems.
5. I am not much good at problem solving.
6. I have a lot of intellectual curiosity.
7. I am not very original in my ideas thoughts and actions.
8. I am an imaginative person.
9. I would have no interest in being an inventor.
10. I can often see better ways of doing routine tasks.

APPENDIX E

POLITICAL SKILL INVENTORY

Ferris et al. (2005) Political Skill Inventory (PSI)

Directions: Please choose the option that best describes how much you agree with the statement. 1 = strongly disagree, 2 = moderately disagree, 3 = slightly disagree, 4 = neutral, 5 = slightly agree, 6 = moderately agree, 7 = strongly agree.

1. I spend a lot of time and effort at work networking with others.
2. I am able to make most people feel comfortable and at ease around me.
3. I am able to communicate easily and effectively with others.
4. It is easy for me to develop good rapport with most people.
5. I understand people very well.
6. I am good at building relationships with influential people at work.
7. I am particularly good at sensing the motivations and hidden agendas of others.
8. When communicating with others, I try to be genuine in what I say and do.
9. I have developed a large network of colleagues and associates at work who I can call on for support when I really need to get things done.
10. At work, I know a lot of important people and am well connected.
11. I spend a lot of time and effort at work developing connections with others.
12. I am good at getting people to like me.
13. It is important that people believe I am sincere in what I say and do.
14. I try to show a genuine interest in other people.
15. I am good at using my connections and network to make things happen at work.
16. I have good intuition or "savvy" about how to present myself to others.
17. I always seem to instinctively know the right things to say or do to influence others.
18. I pay close attention to peoples' facial expressions.

APPENDIX F

DEMOGRAPHIC INFORMATION

Demographic Information

1. What is your gender? (Please choose only one response)

   ____ Male

   ____ Female

2. What is your ethnicity? (Please choose only one response)

   ____ African American/Black

   ____ Asian

   ____ Caucasian/White

   ____ Hispanic

   ____ Other

3. What is your classification?

   ____ Freshman

   ____ Sophomore

   ____ Junior

   ____ Senior

4. What is your age group?

   ____ Under 18

   ____ 18-25

   ____ 26-35

   ____ 36-45

   ____ 46-55

   ____ 56-65

   ____ 66 and older

APPENDIX G

PERMISSION TO USE ENTREPRENEURIAL INTENTIONS QUESTIONNAIRE

Simone Phipps to flinan, bcc: me

show details 6/23/10 Reply

Dear Dr. Linan,

I am a PhD student at Louisiana State University, and the title of my dissertation is "Contributors to an Enterprising Sex: Examining the Influence of Creativity on Entrepreneurial Intentions, and the Moderating Role of Political Skill Among Women."

I am requesting that you please permit me to use your Entrepreneurial Intention scale, which you developed with Y. W. Chen.

Thank you for your consideration, and I look forward to your response.

Sincerely,

Simone T. A. Phipps

Reply Forward

Francisco Liñán to me

show details 6/24/10 Reply

Dear T.A. Phipps,

Thanks very much for you interest in our work, please find attached a message containing the EIQ and related papers.
Please feel free to use it as you think is best. We only ask two things:
1. To cite your references, and
2. To keep us informed of the results you obtain.

Best regards,

Prof. Francisco Liñán
Universidad de Sevilla // University of Seville
Av. Ramon y Cajal, 1
41018 - Sevilla (Spain)
Tel.: +34.954554487
Fax: +34.954551636
Skype: franciscolinanalcalde

De: Simone Phipps [mailto:simonephipps@gmail.com]
Enviado el: jueves, 24 de junio de 2010 0:44
Para: flinan@us.es
Asunto: Permission to use EIQ
- Show quoted text -

APPENDIX H

PERMISSION TO USE PROBLEM SOLVING/CREATIVITY SUBSCALE

Simone Phipps to herb.marsh, bcc: me

show details 6/23/10 Reply

Dear Dr. Marsh,

I am a PhD student at Louisiana State University, and the title of my dissertation is "Contributors to an Enterprising Sex: Examining the Influence of Creativity on Entrepreneurial Intentions, and the Moderating Role of Political Skill Among Women."

I am requesting that you please permit me to use your Problem-Solving/Creativity Subscale (PSCS) of the Self-Description Questionnaire (SDQ-III), which you developed with R. O'Neill.

Thank you for your consideration, and I look forward to your response.

Sincerely,

Simone T. A. Phipps

Reply Forward

herb marsh to me

show details 6/24/10 Reply

The SDQ instruments are in the public domain and so you do not need my permission to use it. I am happy for you to use it.

HERB

- Show quoted text -

****

* Professor Herb Marsh, Education, Oxford University
* 15 Norham Gardens Rd Oxford OX2 6PY UK
* PH:01865 274 041(or +44 1865 274041);FAX:01865 274027
* Email: herb.marsh@education.ox.ac.uk
* Also see: SELF Website at Oxford
* http://www.edstud.ox.ac.uk/research/resgroup/self/index.php
* and http://www.self.ox.ac.uk/

****

APPENDIX I

PERMISSION TO USE POLITICAL SKILL INVENTORY

Simone Phipps to gferris, bcc: me show details 6/24/10 Reply

Dear Dr. Ferris,

I am a PhD student at Louisiana State University, and the title of my dissertation is "Contributors to an Enterprising Sex: Examining the Influence of Creativity on Entrepreneurial Intentions, and the Moderating Role of Political Skill Among Women."

I am requesting that you please permit me to use your Political Skill Inventory, which you developed with Treadway, Kolodinsky, Hochwarter, Kacmar, Douglas, and Frink.

Thank you for your consideration, and I look forward to your response.

Sincerely,

Simone T. A. Phipps

Reply Forward

Ferris, Gerald to me show details 6/25/10 Reply

Simone,

Yes, you have my permission to use the Political Skill Inventory in your dissertation. Just make sure that you get the full 18-item measure – in the 2005 Journal of Management article, there was a typo and they only asterisked 17 of the 18 items, so I am attaching the scale and scoring of the dimensions for your convenience. Additionally, you may want to get a copy of our book (*Political Skill at Work* by Ferris, Davidson, & Perrewe, 2005, Davies-Black Publishing), which has a chapter (Chapter 2) devoted to the measurement of political skill, and its scoring and interpretation.

Good luck with your research.

GRF

Gerald R. Ferris
Francis Eppes Professor of Management
and Professor of Psychology
Department of Management
The College of Business
Florida State University
821 Academic Way
P.O. Box 3061110
Tallahassee, FL 32306-1110
Ph: (850) 644-3548
Fax: (850) 644-7843
E-mail: gferris@cob.fsu.edu

VITA

Simone Trixie Allison Phipps was born in San Fernando, Trinidad and Tobago, West Indies. She graduated from Naparima Girls' High School in Trinidad and Tobago, and holds a Bachelor of Science in management information science from Claflin University in Orangeburg, South Carolina, and a Master of Business Administration from Ohio University in Athens, Ohio. She was awarded the Huel Perkins Diversity Fellowship from Louisiana State University, where she pursued a Doctor of Philosophy in human resource and leadership development.

Her previous work experience is varied and includes working as a workforce and co-operative specialist for a university, and as a business consultant for small businesses in the United States and India.

Simone T. A. Phipps has presented at several conferences including the Annual Conference of the Academy of Management, the Annual International Conference of the Academy of Human Resource Development, and the Annual International Conference of the Academy of Strategic Management. She has also written and co-authored several manuscripts. These papers have been accepted and published in refereed journals such as the *Journal of Management History*, the *International Journal of Leadership Studies*, the *Academy of Strategic Management Journal*, the *International Journal of Management*, *Leadership and Organizational Management Journal*, the *Journal of International Diversity*, the *Journal of Diversity Management*, and the *Journal of Human Resource and Adult Learning*. Her current research interests include entrepreneurship, leadership, workforce development, individual/group creativity, personality, and political skill.