THE INFLUENCE OF PARTICIPATION IN STUDENT ORGANIZATIONS ON UNIVERSITY STUDENTS’ ENTREPRENEURIAL INTENSIONS

By

Gosaitse Ezekiel Solomon

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

Master of Science in Business and Marketing Education

At

The University of Wisconsin-Whitewater

December, 2015
# TABLE OF CONTENTS

List of Tables ................................................................................................................... iii
List of Figures ................................................................................................................... iv

Abstract ......................................................................................................................... v

Chapter 1: Introduction ................................................................................................. 1

Chapter 2: Literature Review ......................................................................................... 4
  Overview ..................................................................................................................... 4
  Objectives of Entrepreneurship Education ................................................................. 4
  Entrepreneurial pedagogies ......................................................................................... 5
  Student organizations ................................................................................................. 7
  Intentions .................................................................................................................... 10
  Theory of planned behavior ....................................................................................... 10
  Research findings on TPB and Student Organizations ............................................... 14
  Synthesis .................................................................................................................... 14
  Hypotheses ............................................................................................................... 16

Chapter 3: Methods Section ......................................................................................... 17
  Study Design ............................................................................................................. 17
  Participants ............................................................................................................... 17
  Procedure .................................................................................................................. 17
  Instrumentation and Analysis .................................................................................... 18

Chapter 4: Results ....................................................................................................... 20
  Results ....................................................................................................................... 20

Chapter 5: Discussion and Conclusion ....................................................................... 29
  Discussions .............................................................................................................. 29
  Limitations .............................................................................................................. 32
  Recommendations ................................................................................................. 32
  Future Research Directions ..................................................................................... 33
  Conclusion ............................................................................................................... 33

References .................................................................................................................... 35

Appendix A: Theory of Planned Behavior Questionnaire ......................................... 40
LIST OF TABLES

Table 1 Gender and Year at School ........................................................................................................... 20
Table 2 Gender and Length of Involvement with the Student Organization .............................. 20
Table 3 Personal Attitude as a Predictor of Entrepreneurial Intention .................................................. 22
Table 4 Personal Attitude as a Predictor of Entrepreneurial Intention .................................................. 22
Table 5 PBC and Entrepreneurial Intention .............................................................................................. 25
Table 6 PBC and Entrepreneurial Intentions (Coefficients) ................................................................. 25
Table 7 Difference in Means ..................................................................................................................... 26
Table 8 Independent Samples t-Test Findings ........................................................................................ 27
LIST OF FIGURES

Figure 1 Social Norms as a Predictor of Entrepreneurial Intentions ............................................. 23
The Influence of Participation in Student Organizations on University Students’ Entrepreneurial Intensions

By

Gosaitse Ezekiel Solomon

The University of Wisconsin-Whitewater, 2015

Under the Supervision of Dr. Choton S. Basu

Abstract

This research study examined the influence of entrepreneurship related student organizations on university students’ entrepreneurial intentions, using the Theory of Planned Behavior model. Fifty students who are members of CEO, DECA and ENACTUS in the state of Wisconsin participated in the study though an anonymous online survey. Of these students, 27 were male and 23 female. The study employed a quantitative research design; hence statistical methods were used to analyze the data. Findings indicated that participation in student organizations correlates with entrepreneurial intentions. The motivational antecedents (personal attitudes, subjective norms, and perceived behavioral control) were found to be significantly related to intentions. However, the relationship between subjective norms and entrepreneurial intentions was found to be indirect, operating through the other two predictors. Entrepreneurial intentions of students who took an entrepreneurship class in addition to involvement with student organizations were found to have a statistical significant difference from those who participated in student organizations only. There is also indication of contextualized learning and transfer of learning for students who took an entrepreneurship class, a possible explanation for higher entrepreneurial intentions. The major limitation of this study is a small sample size.
CHAPTER ONE: INTRODUCTION

Since the introduction of the first course in entrepreneurship in 1947, in the United States of America (Katz, 2003) entrepreneurship has grown tremendously. Different factors have influenced this growth. Among the plethora of potential causal factors are its potential to stimulate innovation and productivity growth, job creation, and socio-economic success at personal and national level; and the paradigm shift in understanding that entrepreneurs are taught and not born (Kuratko, 2005; Roxas, Cayoca-Panizales, & de Jesus, 2008). According to Heuer and Kolvereid (2014), this great potential has led governments to invest heavily in entrepreneurship activity and entrepreneurship education. The result has been the recognition of entrepreneurship as a discipline. That gave rise to the development of many entrepreneurship programs in the last three to four decades both at secondary and post-secondary education level, in the United States of America (Nelson, 1981; Bell et al., 2004, cited in Scuotto & Morellato, 2013). In the U.S.A. alone, 16 universities and colleges offered entrepreneurship courses in 1970, and this figure reached 400 universities by the year 1995 (Vesper & Gartner, 1997). Today entrepreneurship education has courses exceeding 2,200 taught at 1600 schools, and accumulated wealth above $440 million, 75% of which was raised after 1987 (Katz, 2003, cited in Kuratko, 2005).

Despite the increase in courses, entrepreneurship, programs and resources, the question of effectiveness of the entrepreneurship education and how they should be designed to optimize their effectiveness remains unresolved for both funders and academics (Fayolle, Gailly & Lassas-Clerc, 2006; Oosterbeek, Praag & Ijsselstein, 2010; Heuer & Kolvereid, 2014). At the heart of this issue is whether the entrepreneurial education programs can influence students' entrepreneurial intentions. Several studies have focused on university entrepreneurship
programs, content and classroom teaching methods that can impart entrepreneurial knowledge, skills and competencies (Vesper & Garner, 1997; Kuratko, 2005; Mwasalwiba, 2010; Maritz & Brown, 2013). To the contrary, there is a dearth of studies that investigate student organizations as a complement to classroom instruction in entrepreneurship to influence entrepreneurial intentions.

Even the few studies that have endeavored to examine the influence of entrepreneurship related student organizations have conflicting findings. Oosterbeek, Praag, and Ijsselstein, (2010) investigated the impact of Junior Achievement-Young Enterprise on college students in Spain. In Europe alone, over two million students found in 40 countries have taken part in Young Enterprise programs in the 2005/2006, with a growth rate of 25% in that year. The program involves students raising funds to set up companies at the beginning of the year, operate them throughout the year, and liquidating them at year end. Their study found that the program had a significant negative effect on entrepreneurial intentions. Plumly, Marshall, Iyer, Stanley and Boatwright (2008), conducted another study that involved university students who were members of an organization called Students in Free Enterprise (SIFE now known as ENACTUS). The study investigated whether giving students hands-on experience in starting a business; writing a business and marketing plan; writing operational policies; and the running of the business would improve their knowledge, skills and competencies. The authors found that the "entrepreneurial experience" successfully developed students' entrepreneurial competencies.

Scholars submit that entrepreneurship is practical and should employ experiential and project-based approaches, which entail risk, ambiguity, uncertainty and real-world problems (Kuratko, 2005; Maritz & Brown 2013). Student organizations fit this description and are therefore worthy of examining if they play a role in influencing entrepreneurial intentions. This
study uses the theory of planned behavior to fulfill this purpose, with the hope of increasing knowledge and understanding about the impact of student organizations on entrepreneurial intentions.
CHAPTER TWO: LITERATURE REVIEW

Overview

In this literature, I reviewed over 30 research studies that provide some insights on the role of entrepreneurship education programs on students’ entrepreneurial intentions. These included studies that used a quantitative research design; mixed-methods design; and qualitative design. Also, studies that were essentially a review of literature on entrepreneurship were also reviewed to get a more comprehensive appreciation of the entrepreneurial evolution education over the years. Emerging themes include objectives of entrepreneurship education, entrepreneurial pedagogies, intentions, and predictors of intentions, and models of measuring entrepreneurial intentions. I carefully examine these themes in this review of the literature.

Objectives of Entrepreneurship Education

The need for entrepreneurs has led to concerted efforts aimed at developing entrepreneurship education programs, courses, and methods of teaching entrepreneurs. Fayolle et al., (2006) define entrepreneurship education as an educational process geared towards teaching attitudes, skills and developing qualities necessary for entrepreneurship. They submit that entrepreneurship education (EE) has broader aims that are not exclusively limited to venture creation. Thus, its impact could be direct, equipping students to start their businesses or indirect by creating an entrepreneurship awareness and mindset that allows one to function in an economy.

Other researchers agree with this notion, arguing that the broader goals of EE include teaching “about” entrepreneurship (raising awareness and understanding of entrepreneurship), “for” entrepreneurship (become entrepreneurial), and “through” entrepreneurship, which aims to develop entrepreneurs (Heinonen &Poikkijoki, 2006; Mwasalwiba, 2010; Sirelkhatim & Gangi,
The distinction between the three goals of entrepreneurship education is important because some students want to start their ventures, others want skills to function within the entrepreneurial organizations. Although they do not start organizations, they need to contribute to innovation and creativity to ensure their organization stays afloat above the competition. Some students may just want general knowledge about entrepreneurship.

**Entrepreneurial Pedagogies**

There is a close relationship between the objectives of entrepreneurship education programs and teaching methods. The goals or objectives influence the choice content and teaching methods to be employed for meeting the intended learning outcomes (Mwasalwiba, 2010; Kassean, Vanevenhoven, Ligouri & Winkel, 2015). The teaching methods will be different depending on the intended outcome or objective. No one method fits all the goal/objectives of entrepreneurship education. Teaching “about” entrepreneurship is fewer skills focused and uses teacher-centered teaching methods. On the other hand teaching “for” and “through enterprise” require a greater depth of content and skill sets, thus requiring more student-centered teaching methods (Mwasalwiba, 2010; Sirelkhatim & Gangi, 2015).

Entrepreneurship education of recent years has placed emphasis on learning “for” entrepreneurship (Turker & Selcuk, 2009). It is reasonable that this shift would also influence discussion about teaching methods able to impart entrepreneurial attitudes, skills and competencies. Volkman (2004, quoted in Fayolle et al., 2006) posits that the success of entrepreneurship education will highly depend on content and teaching methods. The debate about how to teach entrepreneurship still ensues, with some scholars advocating for more
experiential and realistic approaches and others emphasizing class-based approaches (Chang & Rieple, 2013).

Teaching “for” entrepreneurship recognizes that entrepreneurship is inherently practical (Maritz & Brown, 2013). While not discounting the value of traditional teaching methods such as lectures, case studies, seminars and others, more experiential methods are increasingly encouraged as they align well with the practical nature of entrepreneurship (Fayolle et al., 2006; Maritz & Brown, 2013). According to Heinonen & Poikkijoki, (2006) entrepreneurial behavior requires a diverse set of skills and attitudes. These include entrepreneurial skills, ability to deal with present and future unexpected challenges, problem-solving, creativity and being able to deal with uncertainty. Accordingly project based and action oriented pedagogies that allow students to deal with ambiguity, risk and real world problem such as live projects are encouraged to help students excel in the real world entrepreneurs function (Kuratko, 2005). A caveat with project-based learning is its weak connection with entrepreneurship approach where the entrepreneurial intention is not a deliberate goal. Notwithstanding, there is no evidence that traditional teaching methods are conceptually better than experiential approaches.

Experiential learning approaches are not without their fair share of criticisms. Chang and Rieple, (2013) have criticized EE for lacking in concrete experiences even where experiential learning is often invoked. This is because pedagogies such as simulations, although somewhat experiential, they do not entail actual risks and business relationships that entrepreneurs deal with in real life. Student operated enterprises or entrepreneurial projects can deal with products and services thus providing the opportunity to fill this gap. Furthermore, some may argue that “in a practical sense most of the advocated active/action based teaching methods are costly and somehow may not align with the conventional university system of teaching and awarding”
(Mwasalwiba, 2010, p. 37). They may also point out that student-run businesses under student organizations historically operate without a direct link to the classroom curriculum (Daly, 2001). This argument does not discount the value of clubs. It rather speaks to the need for finding innovative ways of tapping into the good they could potentially offer to entrepreneurship students. They can be explored for usefulness in complementing classroom teaching. Gibb, (2002) has argued that although project-based approach may sometimes lack and entrepreneurial link, there is nonetheless no evidence that traditional pedagogies are better than experiential learning.

**Student Organizations**

The evolution of entrepreneurship is historically tied to student organizations (Nelson 1981; Daly 2001). Nelson (1981), observes that all vocational student organizations (now known as Career and Technical Student Organizations), both business related and none business related, have played an important role in teaching students about entrepreneurship as a career option and goal. These CTSOs include Future Farmers of America (FFA), Distributive Education Clubs of America (DECA), Future Business Leaders of America (FBLA), Office Education Association, Industrial Clubs of America among others (Nelson, 1981).

Today Career and Technical Education (CTE) programs combine classroom learning, cooperative learning/industry experience and career and technical education student organizations (CTSOs) at secondary education level (Kosloski & Ritz, 2014). Even at college or university level, student organizations still form an important part of entrepreneurship education. In fact, student organizations or clubs were found to be third-placed (76 %) among the most popular activities of all entrepreneurship centers across the USA, after business plan competitions and internships, both tied at 77% (Finkle, Kuratko, & Goldsby, 2006). With this
much popularity, it is reasonable to examine their influence on students’ entrepreneurial intentions.

Student organizations need to be examined because of their potential to impart to students the attitudes, skills and competencies needed to be successful in their careers. They (CTSOs) are associated with leadership, high academic achievement, higher academic motivation and engagement, career self-efficacy, and employability skills among member students (Alfeld et al., 2007; Kosloski & Ritz, 2014). Employability skills include skills that could also be beneficial to an entrepreneur such as problem-solving, teamwork, communication skills, decision-making, interpersonal skills, negotiation skills, time management, and goal setting skills (Hynes & Richardson, 2007; Mwasalwiba, 2010).

The involvement of local entrepreneurs in education is important to aspiring entrepreneurs. This interaction or collaboration allows transfer of skills, access to role models, networking, and funding (Hynes & Richardson, 2007). Student organizations or clubs help foster such collaboration with local entrepreneurs and community (Mwasalwiba, 2010). They help in raising funds for entrepreneurship education programs because they provide funders with more specific, measurable and tangible feedback for the causes they sponsor (Finkle, Kuratko, & Goldsby, 2006).

Other benefits of participating in organizations of this nature include high social entrepreneurship mindset (Othman & Wahid, 2014), and sharing of opportunities and resources through networking opportunities (Quan, 2012). From these studies, it is plausible to conclude that student organization activities that are more project-based and entrepreneurial carry many benefits for students. However, the resultant attitudes and confidence in one's skills and
competencies about entrepreneurship (entrepreneurial self-efficacy), which are antecedents to entrepreneurial intention still need to be examined closely.

**Entrepreneurial Intentions**

Entrepreneurial intentions are instrumental to the understanding and development of behavior. For this reason, they have been a focus of research in entrepreneurship education. Several intentions models have been developed to measure intentions. The leading intentions tested models are to a greater extent homologous. They incorporate attitude-behavior theory (Ajzen, 1991); self-efficacy, social learning theory (Bandura, 1986); desirability, feasibility and propensity to start a business (Shapero 1975; Shapero & Sokol, 1982); and also entail a pre-entrepreneurial event (Peterman & Kennedy, 2003). Krueger et al., (2000) have argued that intentions are a major predictor of behavior while attitudes and self-efficacy directly impact intentions, establishing a linear relationship as it were. In their perspective, entrepreneurial activity is an intentionally planned behavior. Furthermore, exogenous factors such as entrepreneurial activities or experiences indirectly influence intentions and behaviors. They do this by acting as either (a) drivers of attitudes (b) or moderators of the relationship between intentions and behavior (Kruger & Carusd, 1993). Intentions, therefore, act as an invaluable link between the act of starting a business and other possible exogenous factors, and also highly important in understanding other influential factors.

**Theory of Planned Behavior**

A common model used to study entrepreneurial intentions is the Theory of Planned Behavior (Ajzen, 1991). Ajzen postulates that where as intentions a major predictor of entrepreneurial behavior, three major antecedents influence the intentions. These include attitudes towards a behavior, social/subjective norms, and self-efficacy or perceived behavioral
control. The underlying assumption is that entrepreneurial activity is an intentionally planned behavior. It needs outside factors to influence intentions, and these may include entrepreneurial learning activities that influence antecedents of entrepreneurial intentions. Theory of Planned Behavior (TPB) is more useful for assessing the development of the entrepreneurial intentions and not the actual behavior of setting up a business venture (Fayolle et al., 2003; do Paco et al., 2011). The actual formation of a business may be in the distant future for students, as such focus on formation may not be so much helpful. Accordingly, the lack of formation of a business does not necessarily imply impotence on the entrepreneurial tool/program (McMullan & Gillin, 1998, cited in Heuer & Kolvereid, 2014). The goal of this study is to examine the influence of student organizations on entrepreneurial intentions. To this end, Theory Planned Behavior is employed. It is a good approach because students are more likely to start their businesses in the medium term to long term.

**Research Findings on Predictors of Intentions**

*Attitudes towards behavior* involve the extent to which an individual has a favorable or unfavorable assessment of the entrepreneurial behavior (Zhang et al., 2015). Scholars of entrepreneurship have consequently focused on the attitudinal characteristics of entrepreneurs and have concluded them a more reliable way to measure entrepreneurial behavior through their impact on intentions (Krueger, et al., 2000). Entrepreneurial attitudes are highly dependent on "the need for autonomy, internal locus of control, creativity, risk taking and self-belief" (Robinson, 2009, p. 130). An environment that supports these ideals is most likely possible in projects students undertake at student organizations. Others may argue that there is inconsistency in findings of the influence attitudes on entrepreneurial intentions. Case in point, Siu, and Lo,
(2013 cited in Zhang et al., 2015), found that attitudes are not a strong predictor of entrepreneurial intentions.

To the contrary, in another study about behaviors and entrepreneurial intention on students between the ages of 14 – 15 years old, do Paco et al., (2011) observed that personal attitudes are useful in explaining intentions for entrepreneurship. Peterman and Kennedy, (2003) studied the influence of Young Achievement Australia, a more entrepreneurship oriented student organization on secondary school students’ entrepreneurship perceptions. The duo found that student who participated in the program developed more desirability and feasibility of entrepreneurship.

Another study of 216 undergraduate students involved in Small Business Institute program at several universities in the USA, by Harris and Gibson, (2008), found that the majority of students in the program had high entrepreneurial attitudes. This is especially true if there are involvement entrepreneurial activities and the presence of role models (Shapero 1985 quoted in Peterman & Kennedy, 2003). It is, therefore, plausible to deduce that experiential approaches such entrepreneurship projects in student clubs would influence students’ entrepreneurial attitudes. This would be manifested by a strong correlation between attitudes and entrepreneurial intentions.

**Subjective Norms** – This refers to perceived social pressures to perform or not perform a behavior, that is, how one thinks other people view a behavior. This may include people such peers, friends, parents, mentors and role models. According to Auken, Fry, and Stephens, (2006) 62.2% of students perceive their fathers as their most significant role models likely to influence their desire to own a business. Social norms and values may differ according to different cultures as they differing impact on different people. For example, someone from a collectivist society
culture is more likely to have their career decisions influenced by their close relations (Turker and Selcuk, 2009). Interestingly, some studies have found that have found a weak to no direct influence of subjective norms on entrepreneurial intentions (Turker & Selcuk, 2009; Linan & Chen, 2009).

However, instead of a direct relationship between social norms and intentions, some have postulated the possibility of an indirect relationship (Linan & Chen, 2009). The mediating process would imply that subjective norms could be acting directly on attitudes and self-efficacy, and indirectly on intentions, consequently. In this suggestion, Linan and Chen, (2009) invoke social capital perspective in an effort to explain the mediating process. They argue that “values transmitted by “reference people” would cause more favorable perception regarding PA (personal attitudes) and PBC (perceived behavioral control)” (Linan & Chen, 2009, p. 596). They also suggest that in-depth knowledge may lead individuals to consider entrepreneurship as a possible career option, especially through influence of role models. This postulation agrees with other researchers who have argued that there is a strong correlation between entrepreneurial attitudes and intentions for new venture creation where there is involvement entrepreneurial activities and the presence of role models (Harris & Gibson, 2008; Shapero 1985 quoted in Peterman & Kennedy, 2003). Subjective norms are important to understanding intentions. However, findings of their role are inconclusive and contradictory. The difference in findings of the impact of social norms provides a reason for further examination. There is need to establish whether they directly predict intentions or indirectly through other antecedents.

Perceived behavioral control – This component refers to how one perceives the easiness or difficulty of performing a behavior. It entails perceptions about feasibility that is an essential ingredient in predicting the behavior, hence akin to self-efficacy (Fayolle et al., 2006). According
to Bandura (1997), self-efficacy is determined by one's belief that they have the requisite skills or abilities for performance and the conviction that they can employ those skills to bring about the desired outcome. According to Chen, Greene, and Crick (1998), there exists a "cycle of mutual reinforcement" between performance and performance accomplishment on one side and self-efficacy on the other. That is to say, success at the execution of given a task molds and strengthens one’s self-efficacy, which in turn, emboldens them to take on new tasks with greater confidence. It is noteworthy to understand that self-efficacy is a major predictor of performance and performance accomplishment, and not vice versa, they contend.

In a study involving 272 children, Bandura et al., (2001) found that children’s self-efficacy shaped their career paths. This finding applied to entrepreneurship contexts indicates that entrepreneurial experiences gained from participating in entrepreneurship related student organizations can only choose to pursue entrepreneurship as a life career if they have the confidence that they have the requisite competencies to run a business and also believe they can turn those skills into successful ventures. Chen, et al. (1998) conducted a study comparing students taking entrepreneurship, psychologists, and managers, and found that entrepreneurial self-efficacy was a major feature that distinguished entrepreneurs from people in other vocations. They observed that people with low self-efficacy were more risk averse and those with high self-efficacy when considering a business opportunity considered risky. People with high entrepreneurial efficacy will focus more on the benefits and consider taking up the challenge as something that proves their worth.

In a recent study, based on gender and self-efficacy among girls in secondary school and university students, Wilson, Kickul, and Marlino, (2007), found that students with high entrepreneurial self-efficacy had aspirations in pursuing entrepreneurship. Also, among
university students, Plumly et al., (2008), conducted another study that involved university students who were members of an organization called Students in Free Enterprise (SIFE now known as ENACTUS). The study investigated whether giving students hands-on experience in starting a business; writing a business and marketing plan; writing operational policies; and the running of the business would improve their knowledge, skills and competencies. The authors found that the “entrepreneurial experience” successfully developed students’ entrepreneurial competencies. In their investigation of a hybrid method that combines classroom teaching with live projects, (Chang & Rieple, 2013) found that students became more self-conscious about their competencies. This approach works because it allows students opportunity to interact with practicing entrepreneurs, realistic, challenging problems, exchange of information in settings that are less formal, conditions that are necessary for developing self-efficacy (Boyd & Vozikis, 1994). They can assess more realistically how they would fare in the real business world. The benefit of this approach is that it marries theory with practice and students become more self-aware and skills and competencies they need to focus to be a success. Their assessment of personal skills is more reflective of reality. These environments can be easily replicated in student organizations projects.

Synthesis

The review of the literature shows that experiential teaching approaches are increasingly advocated for teaching entrepreneurship, especially where the objective is to produce successful entrepreneurs. These must be more project based replicating as close as possible the real life. They should present to students “ill-structured”, ambiguous and challenging problems and realistic risks. They should focus on influencing desirability of entrepreneurship, and impart skills and competencies in a way that seamlessly integrate theory with practice. Student
organizations have already shown success in improving students’ academic achievement, motivation, networking, and other employability skills. Other studies have shown their ability to influence antecedents of entrepreneurship.

Of interest to this study are specifically three student organizations, CEO, DECA, and ENACTUS. CEO is more focused on helping students to be entrepreneurial by creating their businesses. ENACTUS, on the other hand, is leaning more towards social entrepreneurship. Students identify problems in different communities and come up with innovative ideas to solve them in a profitable and sustainable manner. DECA is the broadest of the three, regarding scope. It encompasses skills in management, marketing, and entrepreneurship (Kosloski & Ritz, 2014).

Even though research realizes the value of entrepreneurship exposing students to real life experiences, there seems to be less focus on the potential entrepreneurship related student organizations to complement classroom teaching.

Based on the findings of past studies, this research study examined the impact of the influence of entrepreneurship related student organizations on students' entrepreneurial attitudes, self-efficacy, and entrepreneurial intentions. This research, therefore, seeks to answer the following research questions: 1) What is the relationship between predictors of entrepreneurial behavior (attitudes, subjective norms, and self-efficacy) and participation in entrepreneurship related student organizations?; 2) What is the relationship between predictors of entrepreneurial behavior (attitudes, subjective norms, and self-efficacy) and entrepreneurial intentions among students who participate in entrepreneurship related student organizations?; 3) Is there a difference in entrepreneurial intentions between students who are members of student organizations taking an entrepreneurship class and students who only participate in
entrepreneurship related student organizations but are not taking an entrepreneurship class at the present or in the past?

**Hypotheses**

**H1**: There is a correspondence between entrepreneurial attitudes and entrepreneurial intentions among students who participate in entrepreneurship related student organizations’ activities.

**H2**: There is a positive relationship between subjective norms and entrepreneurial intentions among students who participate in entrepreneurship related student organizations.

**H20**: There is no positive relationship between subjective norms and entrepreneurial intentions among students who participate in entrepreneurship related student organizations.

**H3**: There is a positive relationship between subjective norms and perceived behavioral among students who participate in entrepreneurship related student organizations.

**H4**: There is a positive relationship between perceived behavioral control and entrepreneurial intentions among students who participate in entrepreneurship related student organizations.

**H5**: There is a difference in entrepreneurial intentions between student take an entrepreneurship class and those who have not taken an entrepreneurship class among members of entrepreneurship related student organizations.
CHAPTER THREE: METHODS SECTION

Study Design

This study employed a quantitative study research design, specifically correlational design. I used a correlational design because it can measure the strength of the relationship between the variables understudy and also inform the probability of predicting the effect of student participation in student organizations on entrepreneurial intention. The student involvement in student organizations, entrepreneurial attitudes, subjective norms, self-efficacy/personal behavioral control, and intentions represented dependent variables.

Participants

This study had targetedsample size of 350 university students from both urban areas and rural areas, who are involved with Collegiate Entrepreneurs’ Organization (CEO) and DECA and ENACTUS in the state of Wisconsin. A larger sample size was chosen to ensure validity and reliability of findings. However, only 68 students participated in the study. Out of that number, only 50 responses were usable after filtering. Responses were filtered according to the number of questions answered. That is, responses with many gaps or unanswered questions were eliminated. Students completed an anonymous online survey/questionnaire that will collect data on their demographics, length of involvement with their student organization, entrepreneurial antecedents, and intentions. Also, the study used convenience sampling because of the difficulty to assign respondents randomly; and also because data collection highly depended on chapters that were willing to participate in the study at different schools.
Procedure

An application was submitted to the University of Wisconsin-Whitewater Institutional Review Board protocol on Human Species for approval to undertake the study. Following which, I wrote an email and had a face to face meeting with advisors of different chapters to ask for permission to collect data from their students using an anonymous online survey. The email was a generic communication, explaining the purposes of the study, directions for completing the survey, and privacy concerns. Advisors were also requested to share the anonymous link with their members through. An anonymous survey was used because it ensured the protection of confidentiality for respondents. To encourage participation in the study, three Best Buy vouchers, each worth $25, were offered to participants after a draw at the end of the study.

Instrumentation & Data Analysis

I used a Theory of Planned Behavior Questionnaire adapted from Linan and Chen (2009) because of its breadth and ability to capture key factors and to avoid reinventing the wheel. The instrument is validated as it passed reliability and validity on two international samples, one from Taiwan and the other Spain, and had Cronbach’s alphas that ranged from .776 to .953 (Linan & Chen, 2009). This range is within the acceptable Cronbach’s alpha .7 to 1.0 for high-level internal consistency (Clark & Creswell, 2015). The survey was tweaked to include questions on demographics and experiences with student organizations. For questions relating to antecedents and intentions, plucked from the original instrument, respondents chose an option that measures their self-perceptions on a Likert scale ranging from 1 (Total Disagreement) to 7 (Total Agreement). The questionnaire will be tweaked to suit the needs of the current study. The survey was developed on the Qualtrics Software because it is secure and it allows the survey to be
distributed to an unlimited number of people and collect responses. Data shall be analyzed using statistical software called SPSS.
CHAPTER FOUR: RESULTS AND FINDINGS

Demographics

The first part of data analysis focused on demographics, year of study and length of involvement with student organizations. Table 1 represents the gender and education level at university. Table 2 on the other hand shows the gender and length of involvement for each of the respondents. The data on these two tables was analyzed for its influence on motivational factors and entrepreneurial intentions. The findings of the analysis are provided below. Furthermore, the findings are referred to in the next chapter to help understand and explain the findings related to the last hypothesis (H5).

Table 1 Gender and Year at School

<table>
<thead>
<tr>
<th>Gender</th>
<th>Freshman</th>
<th>Sophomore</th>
<th>Junior</th>
<th>Senior</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>7</td>
<td>5</td>
<td>2</td>
<td>13</td>
<td>27</td>
</tr>
<tr>
<td>Female</td>
<td>10</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>23</td>
</tr>
<tr>
<td>Total</td>
<td>17</td>
<td>10</td>
<td>7</td>
<td>16</td>
<td>50</td>
</tr>
</tbody>
</table>

Table 2 Gender and Length of Involvement with the Student Organization

<table>
<thead>
<tr>
<th>Gender</th>
<th>Less than 3 Months</th>
<th>3 to 6 Months</th>
<th>Six months to 1 year</th>
<th>1 to 2 years</th>
<th>More than two years</th>
<th>Not Applicable</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>10</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>10</td>
<td>1</td>
<td>27</td>
</tr>
<tr>
<td>Female</td>
<td>13</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>0</td>
<td>23</td>
</tr>
<tr>
<td>Total</td>
<td>23</td>
<td>2</td>
<td>2</td>
<td>9</td>
<td>13</td>
<td>1</td>
<td>50</td>
</tr>
</tbody>
</table>
Different descriptive statistics were performed to analyze the demographics of the sample that participated in the study. This analysis is important in making sense and interpretation of the whole data. The ages of respondents ranged from 18 to 30 and above, with the mean age 21 years old. The influence of age on entrepreneurial intentions was found to be insignificant. However, the focus on students of this age group (below 25) is important because people are more likely to start businesses between the ages of 25 and 44 (Liles, 1974, quoted in Turker and Selcuk, 2009). This helps researchers to know the factors that impact these groups’ entrepreneurial intentions.

The respondents were 68, but after filtering the data only 50 responses could be used. Of this 50, 27 were male and 23 female. Although the number of men is greater, the difference between the number of males and females is not so pronounced. All genders were evenly and fairly represented. Forty-four (44) of the respondents were Caucasian, three were African-American, 2 were Asian, and 1 Hispanic. This was not a surprise as the state of Wisconsin is prevalently Caucasian.

As shown above, 34% of respondents were freshman, 20% sophomore, 14% junior and 32% senior, respectively. Year at school was found to be related to entrepreneurial intentions. This is demonstrated by a statistical significance of, $p = 0.025$. This result corroborates findings of earlier research (Quan, 2012). Advancement in education level may increase the ability to identify opportunities and positively influence intentions for entrepreneurship (Quan, 2012).

Regarding the length of involvement with the student organization, 46% of respondents had been members for less than three months, 4% for three to six months, 4% for six months to one year, and 18% one to two years. Despite the larger percentage of respondents being less than three months in their student organizations, a regression analysis found the length of involvement in the clubs to be strongly related to behavioral control ($p = 0.007$) and entrepreneurial intentions
This makes sense because it is plausible to assume that the longer students are involved with entrepreneurial activities at their clubs, the more they are likely to develop skills and competencies, and consequently self-efficacy and intentions.

**Personal Attitudes**

The data analysis in this section sought to test the hypothesis that related students’ personal attitudes to entrepreneurial intentions. The hypothesis, based on review of previous research, proposed that there is correspondence between personal attitudes and entrepreneurial intentions among students who are members of student organizations. The findings are presented in Table 3 below, and further interpreted in the paragraph following the table.

<p>| Table 3 | Personal Attitude as a Predictor of Entrepreneurial Intention |</p>
<table>
<thead>
<tr>
<th>Model</th>
<th>SS</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>109.437</td>
<td>1</td>
<td>109.437</td>
<td>64.745</td>
<td>.000^b</td>
</tr>
<tr>
<td>Residual</td>
<td>81.133</td>
<td>48</td>
<td>1.690</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>190.569</td>
<td>49</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<p>| Table 4 | Personal Attitude as a Predictor of Entrepreneurial Intention |
| Coefficients | |
|---|---|---|---|---|</p>
<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-1.041</td>
<td>.607</td>
<td>-1.713</td>
<td>.093</td>
</tr>
<tr>
<td>MeanAttitudes</td>
<td>.981</td>
<td>.122</td>
<td>.758</td>
<td>8.046</td>
</tr>
</tbody>
</table>

A regression analysis was conducted to determine if attitudes are a predictor of entrepreneurial intentions. Results indicated that attitudes among students who are members of entrepreneurship related student organizations for the sample, F (1, 48) =0.758, p = .000 (see table 3 and table 4 above. The hypothesis (H1) is supported. This finding affirms literature on
entrepreneurial intentions that have found personal attributes to be a correlated with entrepreneurial intentions (Peterman and Kennedy, 2003; Harrison and Gibson, 2008; Linan and Chen, 2009; do Paco et al, 2011). Student organizations could be playing a meaning role influencing students’ personal attitudes of members to be favorable to starting new business ventures in the future.

**Social Norms**

![Diagram of Social Norms as a Predictor of Entrepreneurial Intentions](image)

Figure 1 *Social Norms as a Predictor of Entrepreneurial Intentions*
There were three hypotheses related to social norms that were tested. The first hypothesis said there is a relationship between social norms and entrepreneurial intentions. The other two tested whether the subjective norms were related to personal attitudes, and perceived behavioral control, respectively. A regression test was conducted to determine if social norms are a predictor of entrepreneurial intentions. As depicted in Figure 1 above, the bottom relationship, the results indicated that social norms among students who are members of entrepreneurship related clubs correspond with entrepreneurial intentions, \( F(1, 48) = 0.68, p = .003 \). Therefore, we reject the null hypothesis that holds that there is no correspondence between subjective norms and entrepreneurial intentions.

Subjective norms were further tested for mediation using a regression analysis. This analysis tested whether they might influence entrepreneurial intentions indirectly through other predictors. For influence of norms on attitudes, \( F(1, 48) = 0.783, p = 0.005 \) and a strong relationship between attitudes and entrepreneurial intentions, 0.496. The hypothesis in this case was supported. Also, included in the model is the mediation behavioral control among members of student organizations between subjective norms and entrepreneurial intentions. The relationship is significant between norms and behavioral control \( F(1, 48) = 0.548, p =.001 \), and also between behavioral control and entrepreneurial intentions.

The mediation analysis of the relationship between subjective norms (independent variable) and entrepreneurial intentions (the ultimate dependent) resulted in a reduction in the \textit{Beta} coefficient (-.145), signifying an indirect effect between the variables. Consequently, \( H3 \) and \( H4 \) are supported. In both cases, subjective norms have been found to have a significant influence on personal attitudes (0.783) and behavioral control (0.548). It is, therefore, plausible
to suggest that social norms may indirectly influence entrepreneurial intentions through other antecedents of entrepreneurial intentions.

**Perceived Behavioral Control**

This section presents the findings that relate to the relationship between perceived behavioral control and entrepreneurial intentions. The results represent the outcome of whether there is correspondence between perceived behavioral control and entrepreneurial intentions \((H4)\) among students who are members of entrepreneurship related students organizations. The findings are presented in the Table 5 and Table 6 below. The interpretation of the data is presented in the paragraph that follows the tables below.

Table 5 *PBC and Entrepreneurial Intention*  

(ANOVA)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>128.678</td>
<td>1</td>
<td>128.678</td>
<td>99.797</td>
<td>.000&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Residual</td>
<td>61.891</td>
<td>48</td>
<td>1.289</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>190.569</td>
<td>49</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: MeanEI  
b. Predictors: (Constant), MeanBehavioralControl

Table 6 *PBC and Entrepreneurial Intentions (Coefficients)*

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-.727</td>
<td>.463</td>
<td>-1.568</td>
<td>.124</td>
</tr>
<tr>
<td>MeanBehavioralControl</td>
<td>1.135</td>
<td>.114</td>
<td>.822</td>
<td>9.990</td>
</tr>
</tbody>
</table>

Dependent Variable: MeanEI
A linear regression analysis was conducted to determine if behavioral control is a predictor of entrepreneurial intentions. Results indicated that behavioral control among university students who are members of entrepreneurship related clubs, $F (1, 48) = .822, p = .000$. The significant correlation suggests that behavioral control could indeed be contributing to entrepreneurial intentions. This finding confirms earlier research findings (Wilson, Kickul, and Marlino, 2007; Linan and Chen, 2009).

**Entrepreneurship Course and Club Membership**

This section presents the findings that tested the difference between student members who took an entrepreneurship class and those who did not an entrepreneurship class. The latter group was only members of student organizations ($H5$). This attempted to isolate the hybrid of entrepreneurship class or course and club membership. Consequently additional analysis was performed to better understand the difference between the two groups.

Table 7*Difference in Means*

<table>
<thead>
<tr>
<th>Taken OR not taken at Entrepreneurship course</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>MeanEI Yes</td>
<td>15</td>
<td>4.5667</td>
<td>2.03521</td>
<td>.52549</td>
</tr>
<tr>
<td>MeanEI No</td>
<td>35</td>
<td>3.2095</td>
<td>1.82500</td>
<td>.30848</td>
</tr>
</tbody>
</table>
Table 8 Independent Samples t-Test Findings

<table>
<thead>
<tr>
<th>Levene’s Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>Sig.</td>
<td>T</td>
</tr>
<tr>
<td>.266</td>
<td>.609</td>
<td>2.328</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.227</td>
<td>24.132</td>
<td>.036</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

An entrepreneurial-directed approach to teaching entrepreneurship at the university level that is founded on theoretical and practical knowledge is encouraged in the literature (Heinonen & Poikkikijoki, 2006). Participants were asked whether they took an entrepreneurship course, and the relationship they found between the class and experiences at their student organizations.

An independent samples test was performed for the data on student members of clubs who have taken an entrepreneurship class and those who have not. The findings indicate a significant statistical difference ($t(48) = 2.328, p = 0.024$) between student members in the sample (See Table 8 above). Members of student organizations who have taken an entrepreneurship class in the sample indicate higher entrepreneurial intentions than their counterparts who have not taken an entrepreneurship class (see Table 7).

Furthermore, 72% students who took an entrepreneurship class indicated that they were able to apply concepts they learned in class at the student organizations. Seventy-nine percent of students who took an entrepreneurship class asserted that they learned new skills and competencies they had not learned in class, and 72% said participation at the club helped them to understand class material better. These findings seem to explain why people who have taken an
entrepreneurship-related course may have strong entrepreneurial intentions. Research has found a strong relationship between entrepreneurship courses and entrepreneurial intention (Quan, 2012; Heuer & Kolvereid, 2014). This influence of the course could be the reason for the difference between the two groups. However, a larger sample of students taking an entrepreneurship course will be needed to confirm these findings.

Some interesting findings related to the relationship between involvement and (a) motivational antecedents/predictors, (b) and entrepreneurial intentions. Length of involvement was found not to be personal attitudes, \((F (1, 48), 213, p = 0.75)\), and social norms \((F (1, 48), -0.001, p = 0.992)\). However, length of involvement was found to be related to perceived behavioral control, \((F (1, 48), 0.379, p = 0.007)\), and entrepreneurial intentions, \((F (1, 48) 0.322, p = 0.036)\). Taking entrepreneurship course was found to correspond with personal attitudes \((F (1, 12), 0.603, p = 0.023)\) and social norms \((F (1, 12), 0.74, p = 0.005)\), but not related to perceived control, \((F (1, 12), 0.408, p = 0.148)\). The direct relationship between a hybrid (combination of an entrepreneurial class and student organization) and entrepreneurial intentions was found not to be statistically significant, \((F (1, 12), .24, p = 0.395)\). These last results were quite intriguing and seemingly contradictory to the findings related to the hypotheses. However, they add an important perspective to the understanding to the overall model.
CHAPTER 5: DISCUSSIONS AND CONCLUSION

Discussion

There is a large body of literature discussing the entrepreneurial process. Much of this literature discusses entrepreneurship from the perspective of new venture creation stage or entrepreneurial intention more broadly. There is little focus on the contribution of student organizations to the development of an entrepreneurial mindset and a complement classroom teaching to supplement the limitations of a classroom-based approach. This research studied three student organizations that are entrepreneurship related, to determine their influence on entrepreneurial intentions.

Applying the Theory of Planned behavior model, this study hopes to bring to the fore confirmation that entrepreneurial activities in entrepreneurship related student organization have a positive influence on attitudes, subjective norms and behavioral control/self-efficacy. These antecedents consequently influence entrepreneurial intentions. Student organizations bring many experiences and opportunities that may help students to be more favorable to entrepreneurship as well as develop the skills and competencies necessary to be successful entrepreneurs.

Another important finding is that social norms may influence intentions directly or indirectly through personal attitudes and self-efficacy. This finding implies that students who are more favorable to entrepreneurship may be more easily influenced to develop entrepreneurship by those close to them. Another way could be from the social capital point of view, where people who are more knowledgeable may help create awareness about a career in entrepreneurship (Linan & Chen, 2009). This may occur easily in collective societies or where parents encourage their kids to consider this option (Daly, 2001; Linan & Chen, 2009).
Also, the presence of role models coupled experience with project-based entrepreneurial activities explains the correlation between subjective norms and perceived behavioral control (Harris & Gibson, 2008; Shapero 1985 quoted in Peterman & Kennedy, 2003). Behavioral control may also play a mediating role between norms and intentions. Role models may help students develop skills and competencies and inspire or encourage development entrepreneurial intentions. The finding that norms could have no influence in other studies may require a further study into the culture of the students, exposure to resources and skills. For example, students’ societies may be more easily influenced by family and others than those from individualistic societies (Linan & Chen, 2009). Also, there is a need to do further research on indirect effect of norms with a larger sample to test whether the effect could be inconsistent.

Student organizations were able to influence entrepreneurial intentions for both student members who have taken an entrepreneurship class and those who have not taken a class. Students who have taken a class (either presently or in the past) have an edge. However, this study found that there was a difference in entrepreneurial intentions between these two groups. This finding may be implying the better advantage of combining theory with practice for these students and more opportunities for deeper learning and transfer of learning. The higher intentions for a student who took an entrepreneurship course could be due to the transfer of learning as students apply what they learnt at the student organization. Quite possibly, these students benefited from contextualized learning.

As the findings indicated, students also learned new knowledge, skills and competencies at their student organizations. Students who are members of clubs also benefit technical skills and employability skills, which support entrepreneurship. These benefits are not so different from those gained from live projects. It is, therefore, plausible to suggest that entrepreneurship
students, who become members of student organizations, would enjoy in-depth knowledge and have higher entrepreneurial intentions. Length of involvement seems to be related to perceived behavioral control and intentions. This finding could be expected in line with the benefits and experiences students get from student organizations. The lack of correlation on the part of attitudes and norms may be from the fact that a substantial percentage (56%) of students had less than 3 months in their student organizations. Many of them responded with a neutral response on the impact of the clubs on their social norms and attitudes.

The combination of an entrepreneurship course and student organizations correlates with attitudes and social norms. While this may be expected, the intriguing finding is on the relation to perceived behavioral control and intentions. The first possible explanation could be that the combination has not influence on perceived behavioral control and entrepreneurial intentions. The second possible explanation is that students who participate in both assess themselves more realistically, on how they would fare in the real-world, and thus do not exaggerate what they have learnt (Chang & Rieple, 2013). They experience has made them more conscious of their knowledge, skills and competencies. This latter explanation is preferred and seems to be in agreement with the broader model. In addition, this self-awareness may be helpful to close the skill gap.

**Limitations**

There are some limitations to this study. The sample size is very small and this limits validity and reliability of the findings of the study. Due to data limitations, findings cannot also generalize to the larger population. However, there is empirical evidence that personal attitudes, social norms, and self-efficacy are significantly related to entrepreneurial intentions, which were supported by this study. A smaller sample size also makes it difficult to accurately test how
length of involvement relates to motivational antecedents and intentions. It would be good if the study had more students who are taking entrepreneurship classes and are members to explore more fully transfer of skills where there is a combination of theory with practical experience. The other limitation is that the data is based on self-perceptions, which means students could exaggerate their self-evaluation about experience with student organizations’ entrepreneurial activities. These limitations mean that the findings of this study may be taken with caution.

**Recommendations**

This research has found a relationship between students who participate in student organizations and entrepreneurial intentions. This suggests that student organizations may be used to develop students’ personal attitudes, social norms and self-efficacy. This would in turn, potentially, influence entrepreneurial intentions. I would recommend that students in the organizations be involved in entrepreneurship projects that are more realistic, entailing ambiguity and an element of risk. Literature pointed to the influence of role models in motivational antecedents, I would also recommend the involvement of local entrepreneurs in this projects. These can function as role models to learners and also share their expertise and experience of the real world. In addition to helping with funding, provision of guidance, they may help in technical skills such as evaluating business plans, and pitching business ideas.

Entrepreneurial intentions among students who combine student organization participation and entrepreneurship course were found to be significantly different from those who only participate in the organization without taking a class in entrepreneurship. It is plausible to conclude from the study that student organizations may be a good complement to classroom learning. The combination may give students opportunity to apply concepts they have learned in class to real-life situations; bring questions that engender deeper learning to class; interact with
practicing entrepreneurs or role models, and be risk takers. These experiences may better contribute to the development of entrepreneurial intentions among member students. This implies that students who aspire to be entrepreneurs may be encouraged to participate in student organizations. Student organizations may also be encouraged for students who are undecided about their careers. As their self-efficacy increases, they are more likely to consider entrepreneurship as a career.

**Future Research Directions**

Future studies could use a larger sample size to confirm the current findings. It should also focus more particularly on the links that exist between classroom learning and student experiences at student organizations. Other research designs could be employed, for example, pretest and post-test to measure the contribution of the student organizations to students’ entrepreneurial intentions or mixed methods designs for more robustness and triangulation purposes. The study focused on students in one state, and a single culture, it could be further explored across different states and cultures of different countries. The difference in entrepreneurial intentions of students affiliated to different student organizations may be another area of exploration in future research.

**Conclusion**

This research examined the relationship between university students’ participation in entrepreneurship related student organizations and entrepreneurial intentions. It used the Theory of Planned Behavior model, drawing on the understanding that entrepreneurial intentions can be best measured by the influence of entrepreneurial activities on it predictors (attitudes, social norms, and self-efficacy), and the correlation between those predictors with intentions. The relationship between these variables was measured by the strength of the relationship between
antecedents and intentions among students who are members of student organizations in the selected sample.

The study found that positive correlation between personal attitudes and intentions. Also social norms and behavioral control were found to be positively correlated with entrepreneurial intentions among students in the sample. To further understand the relationship between norms and intentions, the study found that norms may influence intentions indirectly through a mediation process. That is, social norms could be influencing intentions through personal attitudes and behavioral control. This finding corroborated the earlier findings by Linan and Chen, (2009).

This research also found entrepreneurial intentions among students who combine student organization participation and entrepreneurship course were to be significantly different from those who only participate in the organization without taking a class in entrepreneurship. The higher entrepreneurial intentions in the group taking a course seem to suggest that student organizations may be a good complement to classroom learning. The correlation in entrepreneurial intentions even among students without an entrepreneurship background seems to suggest that student organizations may also be encouraged for all students who may be different learning goals from the experience (entrepreneurship awareness or to become entrepreneurs). Future research should be developed to confirm these finding. In particular, the research should incorporate a larger sample size and study more carefully the link or relationship between the classroom and student organizations’ activities.
References:


APPENDIX

Theory of Planned Behavior Questionnaire

My name is Gosaitse Ezekiel Solomon, a candidate for Master of Science in Business and Marketing Education. I am doing a research thesis on the role of participation in entrepreneurship related student organizations such as CEO, DECA and ENACTUS have on influencing students' intentions to start their own businesses. I kindly request your cooperation in completing this questionnaire as honest and best as you can. You are free to choose to participate or not to participate, and withdraw your participation at any level of the study. Data collected will be used for this study and may not be shared with third parties. Every respondent is assured of the protection of personal information and confidentiality as they will be anonymous.

At the end of the survey, there will be a draw for a $25.00 prizes voucher. The vouchers will be for Star-bucks, Target, and Best-Buy. If you would like to be entered for the draw, please provide your name and email at the bottom of the survey.

Thank you for taking the time to complete this questionnaire.

Personal Information

Gender: _____  Age: _____
Race/Ethnicity: ______________  School: _______
Grade level: _______  Major: ___________

1. Which of the following student organizations are you a member?
   a. Collegiate Entrepreneurs Organization (CEO)
   b. Distributive Education Clubs of America (DECA)
   c. ENACTUS

2. If yes, how long have you been a member of the student organization?
   a) 0 – 3 months
   b) 3 – 6 Months
   c) 6 Months – 1 year
   d) 2 or More years

3. Have you taken (or are currently taking) at least one entrepreneurship course as part of your academic program?  OYes  ONo

4. I have been able to apply concepts I learned in my entrepreneurship class on entrepreneurial projects at my organization.
   O Strongly Disagree  ODisagree  ONeutral  OAgree  OStrongly Agree
5. I have learned new knowledge and skills on my entrepreneurship projects that I have not learned in class.

   O Strongly Disagree   O Disagree   O Neutral   O Agree   O Strongly Agree

6. Participating in entrepreneurial activities or projects at my student organization has helped me understand the class material much better.

   O Strongly Disagree   O Disagree   O Neutral   O Agree   O Strongly Agree

7. Have you participated in entrepreneurship related projects in your organization?
   O Yes   O No

8. Have you participated in entrepreneurial competitions on behalf of your organization?
   O Yes   O No

9. If yes, which of the following have you participated in?

   O Business Plan Competition   O Pitch Competition   O Other

Measures of Core Entrepreneurial Intention Model Elements

**Personal Attitude**

10. Indicate your level of agreement with the following sentences from 1 (total disagreement) to 7 (total agreement).

    a. Being an entrepreneur implies more advantages than disadvantages to me
    b. A career as entrepreneur is attractive for me
    c. If I had the opportunity and resources, I'd like to start a firm
    d. Being an entrepreneur would entail great satisfactions for me
    e. Among various options, I would rather be an entrepreneur

**Subjective Norm**

11. If you decided to create a firm, would people in your close environment approve of that decision? Indicate from 1 (total disapproval) to 7 (total approval).

    a. Your close family
    b. Your friends
    c. Your college peers
    d. Your teachers/professors

**Perceived Behavioral Control (Self-efficacy)**

12. To what extent do you agree with the following statements regarding your entrepreneurial capacity? Value them from 1 (total disagreement) to 7 (total agreement).
a. To start a firm and keep it working would be easy for me
b. I am prepared to start a viable firm
c. I can control the creation process of a new firm
d. I know the necessary practical details to start a firm
e. I know how to develop an entrepreneurial project
f. If I tried to start a firm, I would have a high probability of succeeding

**Entrepreneurial Intention**

13. Indicate your level of agreement with the following statements from 1 (total disagreement) to 7 (total agreement)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. I am ready to do anything to be an entrepreneur</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. My professional goal is to become an entrepreneur</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. I will make every effort to start and run my own firm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. I am determined to create a firm in the future</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. I have very seriously thought of starting a firm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. I have the firm intention to start a firm some day</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

14. Has participation in your student organization influenced your personal attitude towards entrepreneurship (i.e. have you become more favorable or less favorable to entrepreneurship in general)?

- ○ Strongly Disagree  ○ Disagree  ○ Neutral  ○ Agree  ○ Strongly Agree

15. What knowledge and skills are necessary for one to be successful in carrying out the initiatives of your organization?

16. What entrepreneurial skills do you think your student organization has helped you develop?

16. What activities/projects within your organization have contributed the most to your knowledge of setting up and running a business successfully?
17. Has involvement with your student organization influenced your intent to start your own business in the future?

☐ Strongly Disagree  ☐ Disagree  ☐ Neutral  ☐ Agree  ☐ Strongly Agree

18. How does your participation in the student organization relate to your future professional or career goals?