

2015

The impact of student organizations on the development of core competencies

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THE IMPACT OF STUDENT ORGANIZATIONS
ON THE DEVELOPMENT OF
CORE COMPETENCIES

An Abstract of a Thesis
Submitted
In Partial Fulfillment
of the Requirements for the Degree
Master of Arts

Stanley Somtochukwu Ebede

University of Northern Iowa

July, 2015

ABSTRACT

Higher education has a significant impact on the development of critical skills that improve students' academic outcomes. However, academic institutions have not adequately focused more on the role of student organizations in supporting and improving student outcomes. The primary purpose of this study is to investigate students' perception of the development of core competencies during their experiences at a comprehensive Midwestern university, specifically examining the differences of those involved in student organizations to those not involved.

The impact of student organizations on the development of core competencies was assessed using a survey that was designed around the core competencies outlined by Derek Bok. Bok's framework accentuates the major competency areas including learning to communicate effectively; the ability to think critically; building character; preparing for citizenship; living with diversity; preparing for a global society; acquiring broader interests; preparing for a career and vocational development.

Regarding the development of Bok's core competencies, the present research study found that there is no statistically significant difference comparing students who are involved in student organizations to those who are not involved. Although there were statistically significant difference when comparing males vs. females, and leaders vs. members in student organizations

The findings of this study have implications regarding the broad application of Bok's framework of core competencies across all student organizations in the university. The result suggests that a general set of competencies cannot serve as a model for all

student organizations in assessing how students grow and develop through participation in student organizations. Therefore, each student organization should either adopt Bok's framework of core competencies and align their activities to it or develop their own set of competencies that parallels with the activities and programs offered. In addition, colleges and universities should rethink how the outcomes of being involved in student organizations are being measured.

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Entitled: THE IMPACT OF STUDENT ORGANIZATIONS ON THE DEVELOPMENT
OF CORE COMPETENCIES

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DEDICATION

This research study is dedicated to Almighty God, the Author and Finisher of my faith.

ACKNOWLEDGEMENT

I would like to express the deepest appreciation to my committee chair, Dr. Julianne Gassman for her encouragement and innovative advice which fired my zeal and enthusiasm. Without her guidance and persistent help, this thesis would not have been possible.

In addition, I would like to thank my committee members, Dr. Christopher Edginton for his encouragement, positive criticisms and invaluable suggestions; to Dr. Robin Lund who introduced me to statistics, and for being my source of motivation and Professor Angela Widner for her care and consideration.

My sincere appreciation goes to my brother, Kingsley Ebede who helped me get started on the path of this degree, to my sister, Adaeze Ebede for your love and support. Most importantly, I would like to give my profound appreciation to my mother, Mrs. Charity Ebede who has made a great impact on my life. Their unflinching help and support was a source of inspiration to me.

Finally, I would like to give my thanks to my friends, Butch Zelinsky and Dr. Dwight Watson for their tremendous help and support in pursuit of my advanced degree. I would like to acknowledge Kenneth Reid for his friendship that encouraged me and his distractions that challenged me. Without their care, support and understanding, I could not have gone farther than I expected.

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CHAPTER I

INTRODUCTION

One of the goals of higher education is to prepare students for their profession or occupation. In addition to the traditional classroom environment, there are other opportunities that can help students in promoting their professional interests and developing professional skills (Patterson, 2012). Involvement in student organizations is considered as one of those opportunities for skill development. Foubert and Grainger (2006) have reported that more involved students have greater skill development compared to uninvolved students that have lower developmental scores.

Literature has revealed that student organizations provide individuals opportunities to acquire or develop valued communication skills, enable them to learn from others who have different ethnic backgrounds, and foster care and support for underprivileged populations among them (Harper & Quaye, 2007). Participation and membership in university-sponsored organizations seem to provide students with different opportunities to get acquainted with campus life and also enhances intellectual development (Montelongo, 2002).

Student organizations function as social opportunities for students to network on college campuses and also serve as a significant link for students to colleges or universities experiences (Kuk & Banning, 2010). Although, the concepts of campus involvement provide a valuable context to examine and analyze the connection between college experiences and student outcomes, and this reveals several inquiries (Huang & Chang, 2004).

According to Hall (2012), student organizations offer approaches to stimulate learning experience beyond the classroom curriculum. They create networking opportunities among students with similar personal and professional interests and provide the probability of building networks to bigger communities beyond an organization (Hall, 2012). Through participation in student organizations, students can maintain relationships with other individuals that have the same professional interests; develop stronger mentoring relationships with their teachers; gain ability to think critically, plan appropriately and make decisions (Hall, 2012)

Students who participated in student organizations viewed involvement as a significant element of their socialization and academic persistence that provide participants with resources to excel in their academic environments (Flowers, 2004). Flowers further suggested that participants are likely to continue towards achieving or completing their degree as long as they remain committed to the organization. The more students participate in student organizations, the more they are likely to improve essential abilities that will be useful in the real world setting (Patterson, 2012).

Researchers have not given adequate attention to the role of student organizations in supporting and improving the development of knowledge, skills and competencies in students. Therefore, further research is required on student participation in organizations and clubs (Cooper, Healy & Simpson, 1994). Constant examination of the impact of student organizations on the development of skills in students will inform students academic outcomes and provide understanding on how students are being prepared for the workforce.

In this chapter, topics of discussion include (1) Bok's framework of core competencies, (2) statement of the problem, (3) the purpose of the study, (4) the hypotheses that was used in the study, (5) significance of the study, (6) delimitations, (7) limitations, (8) possible assumptions, (9) definitions of relevant terms used in the study.

Bok's Framework

The theoretical framework of core competencies that was used to identify core competencies for this current study is Derek Bok's (2006) framework of core competencies. Bok's framework has embraced components of knowledge, skills, and competencies that can help students accomplish a greater or broader based education (Bok, 2006). Bok writes about the several objectives of higher education and maintains focus on the question to each of these factors and ways in which they contribute to measurable increases in student learning.

Bok (2006) suggested that in addition to the career skills students develop within their major, higher education institution should also focus on these competencies. The core competencies include (1) learning to communicate effectively; (2) the ability to think critically; (3) building character; (4) preparing for citizenship; (5) living with diversity; (6) preparing for a global society; (7) acquiring broader interests; (8) preparing for a career and vocational development.

Bok's framework of core competencies is thorough and comprehensive as noted by Ruan (2013). Ruan suggested that the framework "attempts to identify crucial knowledge and skills that most undergraduate college and university students should possess in order to be competitive in the global workplace" (p.7). She further

recommended Bok's (2006) framework of higher core competencies as the most comprehensive after reviewing them with other institutional core competencies frameworks as shown in Table 1.

Table 1

Domains of Core Competencies

Domains of Core Competencies	Derek Bok (2006)	UNESCO (Delors et al., 1996)	OECD/DeSeCo (Rychen & Salganik, 2013)	OECD (European Communities, 2007)
1. Communication	✓	✓	✓	✓
2. Critical Thinking	✓	✓	✓	✓
3. Character Development	✓	✓		✓
4. Citizenship	✓	✓	✓	✓
5. Diversity	✓			
6. Global Understanding	✓	✓	✓	✓
7. Widening of Interest	✓			
8. Career and Vocational Development	✓	✓		

Source: Ruan, B. (2013). *Integrative and Holistic Global Higher Education: An Investigation of Camp Adventure Child and Youth Services as a Model Service Learning Program* (Doctoral dissertation, University of Northern Iowa), p. 9.

Statement of the Problem

Researchers suggest that involvement in student organizations contributes to the development of skills (Kuk & Banning, 2010; Harper & Quaye, 2007; Huang & Chang, 2004). At many colleges and universities, it is not a requirement to participate in a student organization. However, college and university students are well-served and gain

leadership experience as well as other skills through opportunities beyond the formal college classroom (Patterson, 2012).

Students can enhance their education well-being by developing knowledge, skills and competencies through engagement in some of the extra-curricular activities on campus such as participation in student organizations. Involvement has long been studied as a major contributor to the development of college students. However, there is more to learn about student organizations and their impact on student development. Previous studies on student involvement and/or participation suggested that involvement in out-of-class activities has been shown to be an important factor in the development of students (Cox, Krueger, & Murphy, 1998). Employers are looking for students who have knowledge, skills and competencies to work in organizations (Bok, 2006).

Colleges and universities should continually study outcomes of being involved in student organizations because these types of organizations serve as social opportunities for students to engage in campus life at colleges or universities (Kuk & Banning, 2010). Student involvement promotes degree attainment. Continual participation and networking can stimulate students to negotiate their college experiences successfully (Simmons, 2013).

Interaction between students are beneficial and student organizations provide an opportunity for students to meet one another, form close relationships and gain a better understanding of the type of relationships they develop (Bryant, 2007). Student organizations serving as a gateway can enable students to grow more competent,

interdependent, purposeful, and congruent. Chickering and Reisser (1993) suggested the following:

Student communities should (1) encourage regular interactions between students and support ongoing relationships; (2) provide opportunities for collaboration; (3) be small enough to make every member feel significant; (4) include people from diverse backgrounds; (5) serve every reference point for students by maintaining certain boundaries and norms through creation of manuals such that members have a standard by which to evaluate their behavior (p.277).

Purpose of the Study

The primary purpose of this study is to investigate students' perception of the development of core competencies during their experiences at a comprehensive Midwestern university, specifically examining the differences of those involved in student organizations to those not involved. The research questions that was addressed in this study are:

1. Is there a difference in students' perception of the development of core competencies comparing those that participate in student organizations to those that did not participate?
2. Is there a difference in students' perception of the development of core competencies comparing participation as male vs. a female in student organizations?
3. Is there a difference in students' perception of the development of core competencies comparing participation in academic vs. non-academic student organizations?
4. Is there a difference in students' perception of the development of core competencies comparing participation as a leader vs. a member in student organizations?

5. Is there a difference in students' perception of the development of core competencies comparing the number of semesters based on long term, moderate and short term students are involved in student organizations?

Hypotheses

The two forms of hypotheses that is stated in this study are the null and alternative hypotheses.

Null Hypotheses:

1. There is no significant difference in students' perception of the development of core competencies comparing those that participate in student organizations to those that did not participate in student organizations.
2. There is no significant difference in students' perception of the development of core competencies comparing participation as a male vs. a female in organizations.
3. There is no significant difference in students' perception of the development of core competencies comparing participation in academic vs. non-academic student organizations.
4. There is no significant difference in students' perception of the development of core competencies comparing participation as a leader vs. a member in student organizations.
5. There is no significant difference in students' perception of the development of core competencies comparing the number of semesters based on long term, moderate and short term students are involved in student organizations.

Alternative Hypotheses:

1. There is a significant difference in students' perception of the development of core competencies comparing those that participate in student organizations to those that did not participate in student organizations.
2. There is a significant difference in students' perception of the development of core competencies comparing participation as a male vs. a female in organizations.
3. There is a significant difference in the students' perception of the development of core competencies comparing participation in academic vs. non-academic student organizations.
4. There is a significant difference in students' perception of the development of core competencies comparing participation as a leader vs. a member of student organizations.
5. There is a significant difference in students' perception of the development of core competencies comparing the number of semesters based on long term, moderate and short term students are involved in student organizations

Significance of the Study

Incorporating Bok's framework in this study provides an opportunity to assess student development in eight (8) areas. Bok's framework accentuates the major competency areas including learning to communicate effectively; the ability to think critically; building character; preparing for citizenship; living with diversity; preparing for a global society; acquiring broader interests; preparing for a career and vocational development (Bok, 2006). Although there are other competencies that are essential for

students to develop, the core competencies generated by Bok's competencies has been reviewed and validated (Ruan, 2013). As a result, the analysis provides a conclusive response to the question "Does the participation in any student organizations impact on the development of core competencies?"

There are large numbers of college and university students participating in different campus student organizations across the United States. The study is significant in that it will investigate and provide a comprehensive analysis of the development of core competencies in students. Specifically, it will investigate the development of core competencies during a students' experiences at a university located in the Midwest, examining the difference of those involved in the student organizations to those that are not involved. This provides an understanding if student organizations and clubs are important for development in students in the eight (8) areas identified by Bok.

Researchers have studied the impact of student organizations at University of Northern Iowa, specifically outlining the skills developed by participation in Camp Adventure™ Child and Youth Services (CACYS) and the Nonprofit Leadership Alliance (NLA) develop students (Gassman, Reed, & Widner, 2014; Ruan, Edginton, Chin, & Mok, 2011a; Ruan, 2013). This study expands the research of Gassman et al. and Ruan in that it investigates all the student clubs and organizations at a comprehensive Midwestern university. This study will provide more information of how involvement in student organizations or clubs impact student outcomes and development. It further expresses its ability to compare experiences of students participating in different student organizations at a university located in the Midwest.

Examining what students learn from participation in student organizations will help in evaluating and informing future best practices of programs and services offered. The results from this research study will indicate if students benefit from being involved in student organizations and if students' participation in the student organization benefits their development and complements classroom curriculum.

This research study can serve as a model for assessment and evaluation of competencies students develop in colleges and universities. It will provide us with results that will determine if students improve less or more in such important areas. In addition, the significance of this study might show itself as a reliable model research design that is used for future research.

Delimitations

The following delimitations of this study are noted:

1. Participants that were selected for this study were college and university students above 18 years who graduated from a comprehensive Midwestern University in May 2013 (spring semester) and December 2013 (fall semester).
2. The development of competencies is based on Bok's competencies. Therefore, care must be taken in generalizing findings from this study to other contexts.

Limitations

The following limitations are noted:

1. Respondents might honestly and accurately complete the questionnaire, and indecision, fatigue, and other health factors might have an impact on participants' responses.

2. The survey could be distributed to all May and December 2013 but not all students graduating in that period will respond. Therefore, some of the findings might not be generalized to the general population.
3. The length of the questionnaire might discourage participants from completing the survey.

Assumptions

The assumptions of this study were:

1. All the participants in this study completed the questionnaire honestly and accurately.
2. The instrument used in the study was considered reliable and valid (Ruan et al., 2011a; Ruan, Edginton, Chin, & Mok, 2011b).
3. The instrument was designed for Camp Adventure TM Child and Youth Services (CACYS) studies. However, it was assumed that it can be used with modifications for applications to other similar studies (Ruan, 2013).
4. The participants were selected from the population at a comprehensive Midwestern university.
5. The questionnaires were clear, readable and understandable to the participants selected for this study.
6. The participants did not take the survey twice.

Definition of Terms

The following terms were defined in these study:

1. Academic Student Organizations: These are organizations that have an objective of providing opportunity for students to discuss and share information related to a specific academic discipline or interest (Holzweiss & Wickline, 2007). Some of the academic organizations offer class credits to students for participation. Examples of academic student organizations at a comprehensive Midwestern university that offer credit for being a member are the Nonprofit Leadership Alliance Student Association (NLA) and Camp Adventure TM Child and Youth Services (CACYS).
2. Bok's Framework of Competencies: This is a conceptual framework that was initiated by Derek Bok in one of his publications in 2006 that comprises of eight core competencies: learning to communicate effectively; the ability to think critically; building character; preparing for citizenship; living with diversity; preparing for a global society; acquiring broader interests; preparing for a career and vocational development (Bok, 2006).
3. University Students: University students are defined as students who were enrolled in a comprehensive Midwestern university and graduated between May and December 2013.
4. Core Competencies: They are essential attributes, knowledge, skills and behaviors that students need to meet future challenges. This also provides ethical standards and knowledge about what is needed and expected from students (Bok, 2006; Prahalad & Hamel, 1990).

5. Non-Academic Student Organizations: These organizations are created for the purpose of providing opportunities for students to discuss and share relevant issues and subjects and as well serve as a support system for students that are interested in advancing social issues that are related to the college, university or the community (Holzweiss & Wickline, 2007). One of the examples of non-academic organization at a comprehensive Midwestern university is African Union (AU).
6. Student Organizations: These are organizations that have successfully completed the necessary steps required for eligibility and to be registered annually through the comprehensive Midwestern university student government (Student Handbook, 2014).

CHAPTER II

REVIEW OF RELATED LITERATURE

In colleges and universities, participation in student organizations and clubs is a useful tool for personal development in students (McCluskey-Titus, 2003). Many college and university students participate in student organizations not only for entertainment. Student also wants to develop skills, knowledge and competencies that are relevant to their career. Researchers suggested that participation in activities that supplement classroom learning is certainly associated to the development of skills, knowledge and advanced interpersonal connections (Hood, 1984; Martin, 2000).

It is important to understand that student organizations help in preparing students for their profession and to examine how these organizations assist in this preparation. Studies have also discovered and reported the impact of participation in student clubs and organizations on the development of students (McCluskey-Titus, 2003). Assessing what students learn from participation in student organizations helps in evaluating and justifying the effectiveness of programs and services offered. This contributes to demonstrating what is gained from a particular program or services provided by student organizations. However, such results or outcomes may be used to make improvements to programs and services (McCluskey-Titus, 2003).

Table 2 presents the five (5) major study areas and the sources found in the literature review. The first area is focused on participation in student organizations and includes 16 citations. The second area is focused on core competencies and includes 29 citations. This is followed by males vs. females with seven citations. Academic vs. non-

academic student organizations has three citations. The next section leader vs. member with seven citations. Finally, participation based on the number of semesters with four citations was presented.

Table 2

Literature Review Sources

Study Areas	Sources
Participation in Student Organizations	Gassman, Reed & Widner (2014); Hall (2012); Montelongo (2012); Andrews (2007); Dungan & Komives (2007); Bok (2006); Fourbert & Grainger (2006); Huang & Chang (2004); Montelongo (2002); Abrahamowicz (1988); Williams & Winston (1985); Cooper et al. (1994); Smith & Griffin (1993); Dunkel et al. (1989); Hood (1984); Astin (1984).
Core Competencies	Gassman (2015); Gassman, Reed & Widner (2014); Ruan et al. (2011a); Bush & Miller (2011); Suter et al. (2009); Dungan & Komives (2007); Harper & Quayle (2007); Ware et al. (2007); Bok (2006); Hart (2006); Pascarella & Terenzini (2005); Astin & Antonio (2004); Huitt (2004); Sax (2004); Hu & Kuh (2003); Sedlak et al. (2003); Terry et al. (2002); Jones & Voorhees (2002); Hurtado (2001); Rasmussen (2001); Solomon (1997); Wilson (1993); Dimpleby, & Burton (1992); Pascarella & Terenzini (1991); Solomom et al. (1990); Morse (1989); McMillian (1987).
Males versus Females	Kickul, Wilson, Marlino, & Barbosa (2008); Wilson, Kickul, Marlino (2007); Ng & Pine (2003); Jones, Howe & Rua (2000); Barak, Cherin & Berkman (1998); Powell & Ansic (1997); Feingold (1994)
Academic versus Non-Academic Student Organizations	Student Organizations Handbook (2014); Holzweiss & Wickline (2007); Astin (1977).
Leaders versus Members	Gassman, Reed & Widner (2014); Peterson & Peterson (2012); Dungan & Komives (2007); Fourbert & Grainger (2006); Cooper et al (1994); Friedmann et al. (1988); Stogdill (1950).
Participation based on the number of semesters	Gassman (2015); Gassman, Reed & Widner (2014); Fourbert & Grainger (2006); Astin (1984).

The primary purpose of this study was to investigate students' perception of the development of core competencies during their experiences at a comprehensive Midwestern university, specifically examining the differences of those involved in student organizations to those not involved. The benefits of participation in student organizations of being involved in student organizations was clarified through some of the peer-reviewed literature. The literature review determines the level of what is already known about the topics and works under study, as well as dissolves some areas of imbalances and missing links in knowledge.

The literature review is categorized into five (5) sections as shown in Table 2. The first section discusses participation in student organizations as it is crucial in determining student's development of skills. The second section provides definitions and concepts of the eight (8) core competencies developed by Derek Bok. The third section explores how leaders and members in student organizations develop skills differently. The fourth section explains specifically how academic student organizations versus non-academic student organizations and how these two forms of student organizations impact students differently. Next, the number of semesters that students participate in student organizations is reviewed. This provides information on how the different stages of involvement in student organizations impact the development of skills in students. Finally, the theoretical framework shows how Bok's framework of core competencies is used to assess the development of students through their involvement in student organizations.

Participation in Student Organizations

Participation in student organizations provides skills and professional knowledge which are the basic tools needed to enhance their employability throughout their career. Student participation means the amount of energy and the time spent by a student in activities and programs in colleges and universities (Astin, 1984). Students through formal and informal interaction between their experiences may gain a greater understanding of the conceptual theme that compliments to their learning experience.

Participation in student organizations provides participants with the opportunity of interacting with their peers both in formal and informal settings. Dunkel, Bray, and Wofford (1989) argued that when students leave a university and enter a job market, involvement in student organizations is often considered as an indication of one's interpersonal skills and leadership ability, and increases one's marketability as much, if not more, than grade point average in many fields in the United States (as cited in Huang, & Chang, 2004, p.404).

Student organizations should be acknowledged as a practical and valuable method of learning because it brings students with similar mind-sets together to engage in relevant career activities. This represents a powerful source of personal development for students because it provides them with valued leadership, management and knowledge (Hall, 2012). A specific example, noted by Gassman et al. (2014) found the following:

Participation in the Nonprofit Leadership Alliance Student Association and subsequently the activities that occur within the program, according to the results of this study, are helpful in the leadership development of participating students. Through the student association, Nonprofit Leadership Alliance is preparing students with the skills and abilities needed for working in the nonprofit sector through the activities of the student association (p.107).

Participation in clubs and organizations positively relates to the development of competencies, mature interpersonal relationship, cultural participation, career planning, life management and educational involvement (Foubert, & Grainger, 2006).

Abrahamowicz (1988) argued “student organizations and related activities provide educational and developmental benefits unattainable in the classroom” (as cited in Andrews, 2007, p. 34).

Comparing members of student organization against students who work instead of participating in student organizations revealed that working did not produce the same benefits as student activities which includes development of appropriate educational plans, mature career plans and matured lifestyle plans (Williams & Winston, 1985). Participating in student organizations gives students more experience and understanding of a discipline than working alone. However, the student can obtain a “best of both worlds” scenarios by working and participating in student organizations (Andrews, 2007).

Dungan and Komives (2007) explained in their research on students that any stage of involvement in student organizations and clubs proved significant. Involvement in student organizations had an adequate impact on collaboration, determination, and citizenship. Hall (2012) asserted that student organizations characteristically expedite theoretical and societal engagement while pursuing a range of activities. Student organizations regularly facilitate community service activities enabling the development of student leadership skills and providing valued experience to profession that possibly

boost students' development of career and vocation. It is argued that student organizations provide great tools to improve student knowledge within a field or discipline (Hall, 2012).

Astin (1984) posited that the theory of involvement inspires educationalists to focus less on things they do but should have more focus on what the student does i.e. the level of motivation in student and the commitment towards learning. The theory's assumption is that the development of student and acquisition of knowledge will not be remarkable if the educationalists focus on more on course content, teaching practices, laboratories and educational resources and less on the student. This puts the students in front and center of the learning experience (Astin, 1984)

Student involvement has become the subject of study rather than the assets or methods typically used by educators (Abrahamowicz, 1998). Students who actively participate in student organizations frequently interact with their peers, and this interaction seem to heighten the changes usually resulting from college experience. However, it was reported that the changes in attitude and behavior that often compliment college attendance are relevant to students (Astin, 1984).

Cooper et al. (1994) explained that students who participate in student organizations have more tendency of gaining more skills and knowledge than those who do not participate. In addition, previous study also suggested that involvement in student organizations and clubs has been shown to relate positively with psychosocial development. Specifically, participants of student organizations ranked higher than non-participants (Fourbert & Grainger, 2006).

Abrahamwoicz (1988) revealed the outcomes of participation in student organizations on student perceptions, satisfaction, and college involvement by using the College Student Experiences Questionnaire (CSEQ) to compare students that participated in student organizations with non-participants. The results indicated that there was a significant difference between the students who were members of student organizations compared to non-members (Abrahamwoicz, 1988). The participation in extracurricular activities such as student organizations and clubs promoted college satisfaction for students in colleges and university (Smith & Griffin, 1993). Gaining autonomy was described as the “enhancement of student development of the ability to attain their educational goal with minimal help from others” (as cited in Montelongo, 2002, p.81).

Students who participated in some relevant service and activities during their college years show positive outcomes than their peers that did not participate (Astin, Vogelgesang, Ikeda, & Yee, 2000). Participation in student organizations heightens leadership skills which enable students to discover their goals and objectives and to distinguish phases for the achievement of these goals (Montelongo, 2002). College and university students also have the ability to think for themselves, expose their thoughts to criticism of others and test their reasoning against new information and unexpected ideas through arguments, dialogue and discussion (Bok, 2006).

In examining students’ learning experience in student organizations, Hood (1984) noted that students develop high level of recognition and acceptance of differences among people. He further explained that they also increase their ability to develop a mature and intimate relationships. They become more able to embrace others, listen to

them, and to have a better understanding of different views without the necessity to be domineering or judgmental. Participation in student organizations provides students with crucial competencies and skills that will develop them both personally and professionally.

Core Competencies

Competencies refer to an individual's ability to possess a required knowledge or skill. Often, competencies are demonstrated in a student's ability to express their ideas in a clearly and concise manner both orally and in writing. Students should be effective readers and listeners and be able to develop and interpret graphical imageries of objects (Terry, Harb, Hecker, & Wilding, 2002). Some institutions and locations are presently supporting framework of skills and competencies and the determinations to describe these skills have been an on going process (Jones & Voorhees, 2002).

Bok's (2006) framework of core competencies has been useful in identifying crucial competencies that are developed among college and university students as a crucial tool for personal development and to participate actively and effectively in workplaces. Overall, Jones and Voorhees (2002) asserted that "the competency-based initiatives seek to ensure that students attain specific skills, knowledge, and abilities important with respect to whatever they are studying or the transitions for which they are preparing" (p.9).

Ruan et al. (2011a) used Bok's framework to examine the changes in college and/or university students in core competencies from entry to exit in the Camp Adventure™ Child and Youth Services (CACYS). She specifically tied this framework in her study comparing and contrasting participants' responses at ten (10) staff development sites

operated by CACYS. Gassman et al. (2014) used nonprofit core competencies to examine how student association activities contribute to leadership development of students in nonprofit management and leadership.

Bok's framework was found to be one of the most comprehensive because it includes the following competencies: communication, critical thinking, character development, citizenship, diversity, global understanding, widening of interest and career and vocational development (Bok, 2006). These eight competencies will be further reviewed in the following paragraphs including definitions and relevant supporting literature.

Communication

Communication is a process of conveying messages, sharing ideas and thoughts and having conversation on issues that involves two or more persons (Bok, 2006). Communication comprises of an amount of settings and a standard. The settings involve at least two individuals and also the communication must convey a message. The medium is usually language though there are other possibilities by which communication can be effective and based on skills and knowledge; communication can probably be arranged in a way that there is an expectation of true understanding (Rasmussen, 2001).

Communication is an activity that involves speaking and listening. It is something that we do, make and work on when we receive it from others because when communicating with someone, we are actively engaged in making a better understanding what the other person is saying (Dimpleby & Burton, 1992). Such skills may be the most difficult to teach in a traditional classroom. However, student organizations may provide

assistance with the curriculum around communication (Bush & Miller, 2011). Better communication skills are ranked top of the list of necessary skills most organization would like to see among their employees (Bok, 2006).

Effective communication is the ability to adjust the language to the target audience by communicating with terminology that helps in enhancing everyone's understanding of the issue (Suter et al., 2009). College and university students who participated in the Nonprofit Leadership Alliance program are anticipated to progressively gain the ability to convey ideas as well as to exchange information, thoughts and feelings (Gassman et al., 2014).

Critical Thinking

For several years, one of the major objectives of education specifically at college level is to foster students' ability to think critically and being able to judge effectively in decision-making. Bok (2006) noted that "the ability to think critically- to ask pertinent questions, recognize and define problems, and arrive at the end at carefully reasoned judgments – is the means of making effective use of information for any purposes" (p.109).

Critical thinking is a procedure reflecting on students' thoughts, actions, and choices through their service learning experiences. Service learning experiences serves as a means by which students can improve their communication skills and as well enhance their ability to think critically (Sedlak, Doheny, Panthofer, & Anaya, 2003). However, for college students to successfully adapt to a changing world, they require the ability to

think critically, and to produce a large quantity of relevant information (McMillian, 1987).

Students with low critical thinking skills do not make thoughtful solutions to loosely structured problems (Bok, 2006). “Critical thinking has been defined in different ways but it involves the individual’s ability to identify central issues and assumptions in an argument, recognize important relationships and make correct inferences from data” (Pascarella & Terenzini, 1991). Overall, critical thinking is necessary for making judgment that can be evaluated whether it is more persuasive or better reasoned than others (Bok, 2006).

Character Development

Character development can be considered as a component of moral development whereby “students demonstrate mature moral development by showing a willingness and capacity to strive for a balance between needs of the self and other’s need” (Solomon, Watson, Battistich, Schaps & Delucchi, 1990; Solomon, 1997, p.38). A definition of good character should include development of , cethical behavior and moral responsibilities, huge volume for discipline, and goals and standards of personal character and ideas (Huitt, 2004).

Bok (2006) noted that the relevance of strengthening the will to act morally is by avoiding violation of one’s standards of behavior and also disapproval of people whose good opinion matter. Moreover, Astin and Antonio (2004) reported that the university experiences that were discovered to be crucial and important for character development include being acquainted with interdisciplinary courses and ethnic studies, being involved

in religious activities and services, mingling with students from diverse backgrounds and participating in leadership programs and services.

Citizenship

The history and objective of higher education in America has a custom of preparing students for civic roles and responsibilities. Students need to be adequately prepared for citizenship because they will have a greater influence on the outcome since they are better informed than those with less education (Bok, 2006). Citizenship development involves socializing with students or peers from different race or ethnicity which impact both students' involvement and empowerment in their college. (Sax, 2004). In addition, the development of citizenship can also be improved by attending race or cultural awareness seminars (Sax, 2004).

Bok (2006) opined that citizens are developed not because it is one of the oldest educational goals but it is one of great importance for educators. Dungan and Komives (2007) explained the following:

Citizenship is believing in a process whereby an individual and/or a group become responsibly connected to the community and society through some activity. Recognizing that members of communities are not independent, but interdependent. Recognizing individuals and groups have the responsibilities for the welfare of others (p.10).

Colleges and universities are considered one of the many institutions that impact on the development, encouragement, and practice of civic skills because they provide several opportunity for younger individuals to have a better understanding of citizenship (Morse, 1989). Citizenship refers to the rights, opportunities and privileges that an individual of a country enjoys and to the duties these rights generate (Ware, Hopper,

Tugenberg, Dickey, & Fisher, 2007). In addition, Bok (2006) asserted “civic responsibilities must be learned, for it is neither natural nor effortless” (p.172).

Diversity

Many colleges and universities have come to the realization that diversity is an educational policy that has general objectives of equipping graduates with the necessary skills, knowledge and competencies that are relevant in complex and diverse settings (Hurtado, 2001). College and university authorities have seen the need to encourage students to develop a sense of acceptance and understanding of the differences between their fellow students (Bok, 2006).

Bok (2006) explained that society has a lot to gain from having students from diverse backgrounds learn to live, work and learn how to get along with one another in colleges and university. Diversity or cross-racial interaction helps in improving students learning, personal development and educational experience. In addition, employers are more interested in college graduates who can work together with a diverse group of employees and client in complex setting.

A report showed that experiences with diversity based on interaction have a positive impact on r students in all types of academic institutions with an extensive array of desirable college outcomes (Hu & Kuh, 2003). Membership in student organizations has provided participants the opportunities to interact with people with different ethnic background and because of this, they acquired the skill of working cooperatively in a diverse setting (Harper & Quaye, 2007).

Global Understanding

Participation in programs such as study abroad and student teach overseas are considered as vital components to the development of global understanding in college students. Furthermore, students gain substantive knowledge and understand the dimensions of a global perspective and development of interpersonal relationships through conversation with one another (Wilson, 1993).

It is the responsibility of colleges and university to remove ignorance in students and adequately prepare students for lives increasingly affected by actions beyond our borders. College and university students should be fully prepared for the worldwide challenges that lie ahead. This could be done by educating students about other nation and cultures to give them a better knowledge of their country and the complexity of customs and values they do not acknowledge (Bok, 2006).

Employers are looking for individuals who have awareness of global issues and implications accompanied by such awareness is highly prioritized (Bok, 2006). For this reason, studies highlight the relevance of equipping students with essential skills, knowledge and competencies, but also to gain experience of applying those knowledge and skills in real-world setting (Hart, 2006).

Widening of Interests

Bok (2006) noted that colleges and universities have created opportunities for students to choose electives in their program of study so as to explore interests in intriguing subjects. He further explained that broadening of knowledge and awakening of

interests are part of student education's principled aspirations. However, all these are not impossible to achieve but it requires outstanding teaching and determined efforts.

Students enhance their knowledge; become more advanced in learning; and stay more focused during college in thinking about their career. Students have perspective about labor market than their colleagues with no or less exposure to postsecondary education (Pascarella & Terenzini, 2005). Student organizations in colleges create opportunity for students to share their similar or different professional interests thereby creating a greater chance for students to make accurate decisions.

Career and Vocational Development

Evidence have proved that career development courses can significantly heighten the dimensions of student maturity. In addition, today's college and university students tend to have high levels of workplace enthusiasm compared to those with less exposure to college (Pascarella & Terenzini, 2005). Through participation, students will have the abilities to identify the required skills needed for their desired job that will also serve as a platform for career development.

Vocational training tends to help students to think about their career broadly because in workplaces, employers expect individuals they have sense of responsibilities in managing their careers and developing the skills they need for progression (Bok, 2006). In addition, field experiences is a major contributor to the development of vocational competencies in students. This will enable students to take responsibilities in their learning process and widen their interests in the development of knowledge, skills and competencies.

An example of an organization that uses core competencies is the Nonprofit Leadership Alliance. The organization proposed ten (10) core competencies for youth professionals and nonprofit organizations. Gassman et al. (2014) studied how the Nonprofit Leadership Alliance Student Association contribute to the learning and leadership development of students specifically analyzing the number of semesters students participated in the student association, their level of involvement, and how frequency of meetings contributed to their leadership development.

Students can acquire skills and develop core competencies through coursework, workshops related hands-on experiences such as service learning and internship (Gassman et al., 2014). The Nonprofit Leadership Alliance ensures the enhancement of knowledge and development of skills and talents by putting forth a specific set of competencies that must be met by students prior to obtaining certification. Participation in the Nonprofit Leadership Alliance program in various campuses was helpful in the leadership development of students and their preparation for working in nonprofit sector (Gassman et al., 2014).

Conclusively, Derek Bok's competencies are also designated for college and university students to assist students in building skills for future life choices and to attain high standards in order to be an eligible leader. Each of the competencies that were put forth by Bok's framework can be developed in students through participation in any student organization whether it's academic or a non-academic student organization.

Males vs. Females

Existence of gender differences in organizations has long been studied by several researchers. Gender differences have continued to remain constant across generations from the late 1950s to the early 1990s. Ng and Pine (2003) argued that “males always have perception that females are less efficient at work and other settings than females” (p. 97). In addition, research has shown that males rated themselves higher in some areas than females (Feingold, 1994). For example, Powell and Ansic (1997) suggested that “females were less confident than males for a similar level of prior experience and education” (p. 623). Another study suggested that females feel less confident than their male counterparts in self-perceptions of skills (Wilson, Kickul & Marlino, 2007).

Just like several studies have shown that females are less likely to see themselves as competent, some part of literature also showed that females see themselves as more competent than males. For example, previous studies showed that females showed high confidence in the development of skill compared to males (Barak, Cherin & Berkman, 1998). Kickul et al. (2008) opined that females possess significant talents and ideas more than males. In addition, Jones, Howe and Rua (2000) explored the impact and implications of gender differences on achievement and careers. These authors suggested that females show high interest in achievement and careers compared to males.

Academic versus Non-Academic Student Organizations

Academic student organizations are recognized as those sponsored by academic colleges or departments such as Nonprofit Leadership Alliance, Camp Adventure TM Child and Youth Services, and the Society of Professional Engineers. Non-academic

student organizations are identified as those not patronized by academic colleges or departments such as Alpha Delta Pi, Bender Hall Senate, and African Union (Student Organizations Handbook, 2014).

Students who are in academic student organizations have inspirations for participation in terms of focusing on their future and being career-driven. Other categories for participation include development of character, networking and academic opportunities, building resumes, and personal development. Students who are involved in academic student organizations seem to have a different positioning than those who are involved in non-academic organizations (Holzweiss & Wickline, 2007). Students' participation in academic student organizations focus on gaining more knowledge about advanced degrees, chosen vocational field, and developing themselves professionally (Holzweiss & Wickline, 2007). In addition to the aforementioned, academic student organizations attract students who want to expertise in specific discipline areas.

Holzweiss and Wickline (2007) opined that students that participated in non-academic student organization pursued experiences that would add to their overall college experience such as relating with other people and maintaining friendships, satisfying their personal interests and hobbies, and discovering opportunities outside of academic pursuits.

Non-academic student organizations focus on the contemporary situation and immediate needs (Holzweiss & Wickline, 2007). Students who participate in non-academic student organizations tend to have specific intentions like building social connections, enhancing overall talents such as leadership and communication. Astin's

(1977) study found that college students who are involved in non-academic organizations show smaller than average changes in personalities and behaviors. The following paragraph reviews how participation as a leader or member in academic or non-academic student organization impact learning experience and the development of skills in students.

Leaders versus Members

Leaders can be distinguished from other members in student organizations in terms of their extent of contribution to the activities of the organization in its attempts in the achievement of goals (Gassman et al., 2014). Stogdill (1950) explained that the definition of leadership does not specify how many leaders an organization shall have whether the influence of the leader shall be for the welfare or detriment of the organization and its members.

Foubert and Grainger (2006) explained that students who have high level of participation in student organizations would show a high level of development. In other words, students who is in a leadership position would show much improvement than those who were members that only attend meetings but did take a lead.

Leaders of student organizations have greater efficacy and an advanced level of perceived participation skills than members. Cooper et al. (1994) argued that “being a leader of student organization has been shown to be related to higher levels of developing purposes, educational involvement, life management as well as cultural participation” (as cited in Foubert & Grainger, 2006, p.170). Peterson and Peterson (2012) explained the following:

Students who hold official positions i.e. student leaders within the organization, have a cross-cultural authority over resources, and are held accountable for the organization's objectives. Leaders must function as managers but still attempt to influence the behaviors of the members by establishing a compelling reasons, showing high level of credibility, having an expertise knowledge and holding members and themselves accountable to the values and guiding principles of the organization (p.104).

Dungan and Komives (2007) asserted that leadership is a purposeful, collective process that leads to positive social transformation. Friedmann, Florin, Wandersman, and Meier (1988) observed that leaders seem to perceive more need for action than members by examining the difference between the two levels of voluntary activism; leaders and members which is done in a cross-cultural context with activists on behalf of neighborhood and/or block associations.

Stogdill (1950) explained that there should be a group with a common objective, and at least one member in the organization must have duties that distinguish itself from those of other members. If all members perform exactly the same duties at the same time, there will not be one individual who distinguish themselves as the leader of the group. Participation as leader or member in student organizations cannot stand as the only determinant for the development of skills in students. Level of participation based on the number semesters of both leaders and members in student organizations can also impact on the development of students.

Participation Based on Number of Semesters

Students with a greater levels of participation in student organizations recounted more heights of development in the parts of creating and expounding purpose, academic involvement, planning of career, and life management (Foubert & Grainger, 2006). The

degree to which students can attain particular developmental goals is a direct purpose of dedicating to activities intended to provide educational benefits. The more students spend time in these activities, the more knowledge they gain and the more skills they develop (Astin, 1984).

According to Gassman et al. (2014) on how student association activities contribute to leadership development of students, it was observed that number of semesters a student participate impacts the development of core competencies. Therefore, participation in student organizations for more than one semester might enhance the development of competencies. Participation in the student organization is helpful in developing employability skill each semester a student participates and students need to be aware of this finding. However, this finding can also be used as a recruitment tool for student organization (Gassman, 2015).

Astin (1984) opined that different students show different notches of involvement for different reasons in a given setting. Students who choose to participate in the student organizations for several semesters can consider a taking leadership role or be a member seeking to acquire the skills needed to reach their goals successfully. In addition, Gassman et al. (2014) asserted that “students involved for five or more semesters are likely to continue to move into higher leadership positions, therefore the position they hold and subsequently the skills and abilities they are gaining from that position may contribute to their overall development” (p.109).

Summary

Researchers have demonstrated that involvement in student organizations impact greatly on the development of skills in students (Andrews, 2007; Fourbert & Grainger, 2006; Hall, 2012; Smith & Griffin, 1993). The literature outlines the various dimensions of the impact of student organizations on students including participation in student organizations, development of core competencies, males vs. females, academic versus non-academic student organizations, leader versus member, and participation based on the number of semesters. Participation in student organizations was discussed by exploring several literatures that provides information on how participation impact on the development of skills in students. As Hall (2012) noted that participation in student organizations provides students with essential learning skills within a professional career.

The comprehensive core competencies that are essential for the development of students was presented. The core competencies that was explored are the framework of core competencies developed by Derek Bok (2006). He suggested that goals of higher education should focus on educating students in important areas including the ability to communicate effectively, think critically, develop good character, prepare for civic roles, diversity education, global understanding, widening of interests, and career development (Bok, 2006).

Involvement in student organizations was first explored by discussing the difference in the development of skills between males and females. Literature showed how these two variables develop skills differently. Furthermore, academic student organizations vs. non-academic student organizations was explored. Studies explored

how these forms of student organization impact differently on the development of skills in students (Astin 1977; Holzweiss & Wickline, 2007). Participation as a leader and member was further reviewed, viewing how students in leadership position and those that are members develop skills differently (Stogdill, 1950; Dungan & Komives, 2007).

Finally, participation based on the number semesters was reviewed looking at how levels of involvement in student organizations impact on the development of skills in students. Studies suggested that different levels of involvement serves as indicators on the development of essential skills in students (Astin, 1984; Gassman et al., 2014).

CHAPTER III

METHODOLOGY

The primary purpose of this study was to investigate students' perception of the development of core competencies during their experiences at a comprehensive Midwestern university, specifically examining the differences of those involved in student organizations to those not involved. The study analyzes students that graduated from a university located in the Midwest in May and December 2013. Demographic differences including gender, age, race/ethnicity, current educational level were all outlined. The study was designed to answer the following question: Does involvement in student organizations impact the development of core competencies?

This chapter will discuss the research methods for the study and how it can be used in response to the statement of the problem. It will define the research participants; describe the instrumentation employed in the study; outline the procedures used in the collection of data, and describe the data analysis used.

Research Design

This study involves a secondary data set that was collected by Gassman in 2013. The study uses a descriptive and non-parametric research design. Research participants completed a self-reported instrument designed around the core competencies outlined by Derek Bok (2006). This will measure the development of core competencies among participants. Demographic information was collected for each participant through a researcher designed questionnaire.

Instrumentation

The impact of student organizations on the development of core competencies was assessed using a survey administered through Survey Monkey. The core competencies used in the survey are Bok (2006) framework of core competencies. In addition, Ruan et al. (2011b) employed the “Core Competencies Scale (CCS)” in the study on the Development and Validations of the Core competencies Scale (CCS) for students who participated in Camp Adventure™ Child and Youth Services (CACYS). The authors have proven a concrete evidence to support the validity, interpretation, and generalizability of the core competencies scale (Ruan et al., 2011b). The first section of the questionnaire includes demographic information and previous job experience.

The second section of the questionnaire allows participants to choose the answer for each question that best represents their level of competence in the skill described, based on overall experience as a student at a comprehensive Midwestern university. Responses are coded in a way that the stronger competence are ranked high and weaker competence are ranked low (7=Extremely High; 6=Very High; 5=High; 4=Middle; 3=Low; 2=Very Low; 1=Low). The core competencies of communication, critical thinking, character development, citizenship, diversity, global understanding, widening of interests and career and vocational development each has about 5 to 8 items.

The third section of the questionnaire has a set of 18 questions that have a few dichotomized questions, with responses of either yes or no. Also included are few nominal questions that will identify the names of the student organizations that they were involved with the most. Some questions in this section are also considered filter or

contingency questions that identify how many semesters they have participated in the student organizations. Two questions in this section were also dichotomous, one of the questions identifies the position held in the student organization with responses of leadership position and member. The survey took participants on average about 12-20 minutes to complete.

Participants

The participants in this study are students above 18 years old who have graduated from a comprehensive Midwestern university. Prior approval from the internal review board at the university was obtained prior to the data collection. All participants were informed of any risks associated with participation in this study and signed an informed consent document. The total number of participants (May/December graduates) were 540 students from the comprehensive Midwestern university.

Procedures

Students that graduated from a comprehensive Midwestern university in May and December 2013 were invited to participate in the study. The survey and the informed consent were distributed by the primary investigator who is a faculty member at a comprehensive Midwestern university. Participants read the consent script and voluntarily decided whether or not to complete the electronic survey. Ethical standard was strictly followed to obtain electronic informed consents from the participants. A number of reminders were sent to encourage students to participate in the study.

Data Analysis

The IBM Statistical Package for SPSS 22 and existing data was used for the statistical analysis. Three statistical analyses were performed. The descriptive statistics such as frequencies, percentages, and means was used in the data analysis. The descriptive statistics outlines the gender and classification of respondents. In addition, frequencies of how many semesters students participated in their student organization (minimally involved, involved on an average level, or highly involved), the highest position they held within the student organization and the frequency of the student organization's meetings was reported.

The validity of the Core Competencies Scale used in this study was established using Factor Analysis. Factor Analysis is used to reduce the large set of related variables to a more efficient number of variables to measure the construct in order to avoid redundancy and also establish construct validity (Rattray & Jones, 2007). Construct validity provides the researcher that a survey has the capability to measure the variables that are intended to be measured (Burton & Mazerolle, 2011). Factor analysis has three main uses: "(a) to understand the structure of the variables; (b) to construct a questionnaire to measure an underlying variable; (c) to reduce data set to a more manageable size while retaining as much of the original information as possible" (Field, 2005, p. 619).

The Mann-Whitney U test was used to evaluate the differences in students, perception of development of core competencies by comparing those that participated in

student organizations to those that did not participate; male and females; academic and non-academic student organizations; and leaders and members of student organizations. In addition, the Midwestern university student organizations handbook was used to identify student organizations that falls under academic and non-academic student organizations. The calculations for this test require that the individual scores in the two samples are rank-ordered (Gravetter & Wallnau, 2004).

Kruskal-Wallis test (nonparametric procedure) was used to determine if the number of semesters students participate in the student organizations contributes to the development of core competencies. The Kruskal-Wallis statistical test was used to evaluate differences between three or more groups using data from an independent-measures design. However, this statistical procedure only provides the overall outcomes but does not allow for comparison between groups. The most commonly used follow-up test or can also be called after-fact test for the Kruskal-Wallis is the Mann-Whitney U post hoc test (Gravetter & Wallnau, 2004).

Performing the Kruskal-Wallis test, the number of semesters question options was recoded and combined to create three groupings in each of the following categories: short term (1-2 semesters), moderate (3-4 semesters.), and long term (5+ semesters). This type of combination will allow comparison of differences by first year, second year, and third/fourth-year participants or more years. The significance level (alpha) that was used in the data analysis is 0.05.

In conclusion, this chapter articulates specific methods for addressing the research problem. The participants of the study were students that graduated from a

comprehensive Midwestern university. The survey and Bok's framework was considered as reliable and valid instruments that was used for this study. This will help in measuring variables or items of interest in the process of data-collection. Procedures were further discussed in order to provide readers with an explicit understanding of the specific research actions undertaken by the investigator. This provides a basis for readers to evaluate the integrity, reliability and validity of the findings. The data analysis that was discussed serves as a filter in acquiring meaningful insights out of large data-set; keeps human bias away and helps the researcher reach a conclusion.

CHAPTER IV

RESULTS

The primary purpose of this study was to investigate students' perception of the development of core competencies during their experiences at a comprehensive Midwestern university, specifically examining the differences of those involved in student organizations to those not involved. The study analyzes responses of students that graduated from a comprehensive Midwestern university in May and December 2013. Demographic differences including gender, age, race/ethnicity, current educational level were all outlined. The study was designed to answer the following question: Does involvement in student organizations impact the development of core competencies?

This chapter presents the major results of this study as follows: (1) demographic information of the sample; (2) response rate; (3) core competencies scale; (4) analysis of research questions; and (5) summary of the findings.

Demographic Information of the Sample

The participants in this study are students above 18 years old who have graduated from a comprehensive Midwestern university. The total number of participants was five hundred and forty (540) university students from a comprehensive Midwestern university. The summaries of the demographic information of the sample used in this study were reported including: (1) gender, (2) age, (3) race and ethnicity, and (4) classification of respondent based on educational level. The descriptive statistics such as frequencies and percentages were calculated to provide a comprehensive summary of the demographic information.

Gender and Age

Table 3 shows the gender and age of the respondents. Exploring gender, the analysis indicates that 67% of the participants were female, and 33.0% were male. Participants' ages ranged from 20 years older. In reviewing the ages, 84.7% of the participants were 20 years old to 25 years old; 7.6 % participants were 26 years old to 30 years old, and 7.7% were 31 years old and above.

Table 3

Gender and Age of the Respondents

Variable		Respondent (N=540) n	%
Gender	Male	178	33.0
	<i>Female</i>	362	<i>67.0</i>
	<u>Total</u>	<u>540</u>	<u>100.0</u>
Age	<i>20-25 years old</i>	457	<i>84.7</i>
	26-30 years old	41	7.6
	31 and above	42	7.7
	<u>Total</u>	<u>540</u>	<u>100.0</u>

Note: The majority groups are presented in italic.

Race and Ethnicity

Table 4 presents the race and ethnicity of respondents in this study. The majority of the respondents were White/Caucasian (92.6%). The group that has the lowest number of respondents was the American Indian/Alaskan Native (.4%).

Table 4

Race and Ethnicity of the Respondents

Variable		Respondent (N=540)	
		n	%
Race/Ethnicity	Hispanic/Latino	5	.9
	<i>White/Caucasian</i>	<i>500</i>	<i>92.6</i>
	Asian/Pacific Islander	12	2.2
	Black/African American	7	1.3
	American Indian/Alaskan Native	2	.4
	Multiracial	6	1.1
	Total	<u>532</u>	<u>98.5</u>
	No response	8	1.5

Note: The majority group is presented in italic

Educational Level

Table 5 presents information regarding the educational level of the respondents in this study. The majority of the respondents were seniors which consisted of 83.9% while the percentage of respondents that were graduate students were 16.1%.

Table 5

Educational Level of the Respondents

Variable		Respondent (N=540)	
		n	%
Educational Level	<i>Senior</i>	453	83.9
	Graduate Student	87	16.1
	<u>Total</u>	<u>540</u>	<u>100.0</u>

Note: The majority group is presented in italic

Response Rate

The number of participants in this study was five hundred and forty university students. The response rates of student organization participants and non-participants are reported in Table 6. Out of the 540 students, three hundred and forty (340) participants of student organization and one hundred and fifty-five (155) non-participants responded to the questionnaire. The total number of participants that did not identify themselves as either student organization participants or non-participants were seventy-five (75) respondents.

Table 6

Response Rate

Variable	Respondent (N=540)	
	n	%
<i>Student Organization participants</i>	310	57.5
Non-participants	155	28,75
Total	<u>465</u>	<u>86.25</u>
No response	75	13.75

Note: The majority group is presented in italic

Validity of the Core Competencies Scale

The validity of Core Competencies Scale used in this study was established using a technique known as Factor Analysis. The scale also parallels with the validated Core Competencies Scale used by Ruan et al. (2011b). Factor Analysis is a technique used by researchers to assess construct validity which provides evidence that the items in the survey actually measure the construct that are proposed to represent (Burton & Mazerolle, 2011). In addition, this technique was used in this study to reduce the large set of related variables to more efficient number of variables and also establish construct validity.

Table 6 presents Core Competencies Scale (CCS), the values of the Factor Analysis were all greater than .90 which falls into the range of excellent. According to Kaiser (1974), a minimum of .5 and values between .5 and .7 are average, values between

.7 and .8 are good, values between .8 and .9 are great and values above .9 are excellent. In order to check the suitability of variable, the Bartlette's Test of Sphericity should be significant ($p < .05$) and Kaiser-Meyer-Olkin Measure of Sampling Adequacy should be above .60 or greater (Field, 2005). Table 7 indicates that Kaiser Meyer-Olkin is greater than .6 and Bartlette's Test of Sphericity is less than .05.

Table 7

Validity of the Core Competencies Scale

	<u>Factor Analysis</u>
Scale (number of items)	Measures of Sampling Adequacy (MSA)
Communication (8)	.952
Critical Thinking (8)	.941
Character Development (8)	.928
Citizenship (5)	.953
Diversity (5)	.942
Global Understanding (6)	.931
Widening of Interest (6)	.961
Career and Vocational Development (6)	.934

Note: The items were rated on a 7-point Likert-type scale (7= Extremely High; 6=Very High; 5=High; 4=Middle; 3=Low; 2=Very Low; 1=Extremely Low).

Table 8

Measure of Sampling Adequacy

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.943
Bartlett's Test of Sphericity	Approx. Chi-Square	3254.697
	Df	28
	Sig.	.000

Analysis of Research QuestionsResearch Question 1

The first research question looks at students' perception of the development of core competencies comparing those that participate in student organizations to those that do not participate. Mann-Whitney U test was used to evaluate students' perception of the development of core competencies comparing those that participate in student organizations to those that did not participate. Field (2005) suggested that Mann-Whitney U test is used when comparing two conditions in which different people participated. Table 9 illustrates that the null hypothesis was accepted. There is no significant difference in students' perception of the development of core competencies between those that participated in student organizations to those that did not participate ($p > .05$).

Mean scores were computed by summing up individual item scores. The result shows that students that participated in student organizations ranked high in character development (238.37) and ranked low in global understanding (233.80). Students that did not participate in student organizations ranked high in critical thinking (226.35) and ranked low in career and vocational development (212.44).

Table 9

Summary of Responses of Participants and Non-Participants

Scale (Core competencies)	<u>Participants</u>		<u>Nonparticipants</u>		<i>p</i>
	<i>N</i>	<i>Mean</i>	<i>Mean</i>	<i>df</i>	
Communication	465	238.21	221.95	464	.222
Critical Thinking	464	235.38	226.35	463	.498
Character Development	461	238.37	215.10	460	.080
Citizenship	462	236.26	221.30	461	.260
Diversity	461	236.44	219.37	460	.198
Global Understanding	458	233.80	220.31	457	.309
Widening of Interests	459	237.87	213.13	458	.062
Career and Vocational Development	461	238.19	212.44	460	.052

Notes: (a) Alpha level is set at .05; (b) Scale: 7= Extremely High; 6=Very High; 5=High; 4=Middle; 3=Low; 2=Very Low; 1= Extremely Low.

Research Question 2

The second research question focuses on the difference in students' perception of the development of core competencies comparing male vs. female. Mann-Whitney U test was used to evaluate students' perception of the development of core competencies comparing males and females in student organizations. The results of the Mann-Whitney U test are presented in Table 10. The analysis showed that there were statistically

significant differences in five (5) competencies comparing male and female. The core competencies that proved significant were communication, character development, diversity, widening of interests and, career and vocational development.

Females proved to develop five core competencies differently than males in student organizations. The p – values of the five core competencies were less than .05 and demonstrated that the null hypothesis is rejected. However, there were no statistically significant differences in critical thinking, citizenship, and global understanding. The result of no differences suggests that male and females have similar development of the remaining three core competencies.

Overall, the results of the Mann-Whitney U test indicated that there was a significant development of five competencies by females in student organizations. The findings suggest that females have stronger development of core competencies than males in student organizations.

Table 10

Summary of Responses of Males and Females in Student Organizations

Scale (Core competencies)	<u>Male</u>		<u>Female</u>	<i>df</i>	<i>p</i>
	<i>N</i>	<i>Mean</i>	<i>Mean</i>		
Communication	540	241.69	284.67	539	.003*
Critical Thinking	521	251.76	265.48	520	.329
Character Development	494	226.42	257.79	493	.022*
Citizenship	490	234.57	250.75	489	.234
Diversity	485	216.53	255.67	484	.004*
Global Understanding	470	250.75	234.28	469	.774
Widening of Interests	465	214.66	241.48	464	.045*
Career and Vocational Development	462	204.23	243.97	461	.003*

Notes: (a) $p < .05$ is indicated with *; (b) Scale: 7= Extremely High; 6=Very High; 5=High; 4=Middle; 3=Low; 2=Very Low; 1=Extremely Low.

Research Question 3

The third research question to be addressed is students' perception of the development of core competencies comparing participation in academic vs. non-academic student organizations. Mann-Whitney U test was used to compare the differences between the two groups. In addition, the Midwestern university student organization's handbook was used to identify student organizations that falls in each category. In the questionnaire, participants were asked to indicate the student

organizations that they were most involved, second most involved and third most involved. The responses from student organizations that was most involved were analyzed because majority of the respondents were involved in one student organization, only few of the respondents were involved in more than one student organization. Therefore, the student organizations that the respondents were most involved were analyzed. The analysis showed that the null hypothesis was accepted because there is no statistically significant difference in students' perception of the development of core competencies comparing participation in academic vs. non-academic student organizations ($p > .05$).

The results of the Mann-Whitney U test are presented in Table 11. Mean scores were computed by summing individual item score to get a composite score for each competency. The rank order by mean scores from high to low for participation in academic student organization was critical thinking, career and vocational development, character development, citizenship, diversity, global understanding, communication, widening of interests. For participation in non-academic student organizations, the rank order by mean scores from high to low was widening of interest, communication, diversity, global understanding, citizenship, character development, critical thinking, and career and vocational development.

In conclusion, Mann-Whitney U test did not result in any statistical difference between the two groups and demonstrated that the null hypothesis was accepted. The results indicate that students who participated in academic student organizations and

those that participated in non-academic student organizations have similar development of core competencies.

Table 11

Summary of Responses of Academic and Non-Academic Student Organizations

Scale (Core competencies)	<u>Academic</u>		<u>Non-academic</u>	<i>df</i>	<i>p</i>
	<i>n</i>	<i>Mean</i>	<i>Mean</i>		
Communication	284	137.35	143.51	283	.222
Critical Thinking	284	148.30	139.20	283	.369
Character Development	283	144.48	140.58	282	.700
Citizenship	283	142.18	141.89	282	.977
Diversity	283	139.35	143.51	282	.679
Global Understanding	282	138.89	143.00	281	.683
Widening of Interests	283	136.14	145.35	282	.360
Career and Vocational Development	283	147.63	138.78	282	.380

Notes: (a) Alpha level is set at .05; (b) Scale: 7= Extremely High; 6=Very High; 5=High; 4=Middle; 3=Low; 2=Very Low; 1= Extremely Low.

Research Question 4

Mann-Whitney U test was used to determine if there is a statistically significant difference in students' perception of the development of core competencies comparing participation as a leader and a member of student organizations. Table 12 indicates that

there was a statistically significant difference in students' perception of the development of one core competency (Widening of Interests) between leader and member of student organization ($p < .05$). There was no statistically significant difference in students' perception of the development of the remaining seven (7) core competencies.

The rank order by mean scores from high to low in participation as a leader of student organization was widening of interests, communication, diversity, citizenship, critical thinking, global understanding, career and vocational development and character development. Reviewing the mean scores of participation as a member of student organization showed that the highest mean score was character development and the lowest mean score was widening of interest.

Table 12

Summary of Responses of Leaders and Members in Student Organizations

Scale (Core competencies)	<u>Leader</u>		<u>Member</u>		<i>p</i>
	<i>N</i>	<i>Mean</i>	<i>Mean</i>	<i>df</i>	
Communication	302	159.80	142.87	301	.092
Critical Thinking	302	156.62	146.17	301	.298
Character Development	301	154.40	147.44	300	.487
Citizenship	301	157.38	144.31	300	.191
Diversity	301	158.72	142.91	300	.113
Global Understanding	300	155.71	145.08	299	.288
Widening of Interests	301	161.12	140.40	300	.038*
Career and Vocational Development	301	155.43	146.36	300	.487

Notes: (a) $p < .05$ is indicated with *; (b) Scale: 7= Extremely High; 6=Very High; 5=High; 4=Middle; 3=Low; 2=Very Low; 1=Extremely Low.

Research Question 5

The fifth research question looks at the difference in students' perception of the development of core competencies comparing the number of semesters based on short term, moderate and long term participation in student organizations. Kruskal-Wallis test (nonparametric procedure) was used to determine if the number of semesters students participate in the student organizations contributes to the development of core competencies. According to Gravetter and Wallnau (2004), the Kruskal-Wallis statistical

test is used to evaluate differences between three or more groups using data from an independent-measures design (Field, 2005). However, this statistical procedure only provides the overall outcomes but does not allow for comparison between groups.

In the analysis, the question options were first recoded to form three groupings in each of the following categories. Next, the number of semester were regrouped combining 1 -2 semesters (short term), 3-4 semesters (moderate), 5 or more semesters (long term). Mean scores were computed by summing individual item score to get a composite score for each competency. The rank order by mean scores from high to low for short term participation ranged from 158.63 (critical thinking) to 130.04 (career and vocational development). Next, the mean scores for moderate participation ranged from 161.67 (career and vocational development) to 149.77 (widening of interests). Finally, widening of interest has the highest mean score (153.20) while citizenship has the lowest mean score (145.29) for long term participation.

Table 13 indicates that there is no significance difference between short term, moderate and long term ($p > .05$). This result shows that short term participation in student organizations had the strongest impact on the development of critical thinking and weakest impact on career and vocational development. Moderate participation in student organizations had strongest impact on career and vocational development and weakest impact on widening of interests. Next, long term participation had strongest impact on widening of interest and weakest impact on citizenship.

Table 13

Summary of Responses of Participation Based on the Number of Semesters

Scale (Core competencies)	<u>Short term</u>		<u>Moderate</u>	<u>Long term</u>	<i>df</i>	<i>p</i>
	<i>n</i>	<i>Mean</i>	<i>Mean</i>	<i>Mean</i>		
Communication	299	146.63	158.80	145.60	2	.479
Critical Thinking	299	158.63	150.10	147.34	2	.734
Character Development	298	148.51	156.37	145.62	2	.628
Citizenship	298	154.96	153.71	145.29	2	.673
Diversity	298	150.70	160.32	142.55	2	.280
Global Understanding	297	144.83	158.30	144.57	2	.440
Widening of Interests	298	136.66	149.77	153.20	2	.511
Career and Vocational Development	298	130.04	161.67	147.95	2	.113

Notes: (a) Alpha level is set at .05; (b) Scale: 7= Extremely High; 6=Very High; 5=High; 4=Middle; 3=Low; 2=Very Low; 1=Extremely Low.

Summary of the Findings

This chapter presents the findings to answer the research questions in this study.

First, descriptive statistics such as frequencies, percentages, and means was used to analyze demographic and background information of the respondents. The majority of the respondents were females, age 20 – 25 years old, White/Caucasian and seniors.

In response to the research question 1, 2, 3 and 4, Mann-Whitney U tests were applied to determine the differences in students' perception of the development of core competencies comparing those that participate in student organizations to those that did

not participate; males and females; participation in academic vs. non-academic student organizations; and participation as a leader vs. member. The result showed that there were no statistically significant differences among the groups except males vs. females. Females proved to be significantly more developed than males in student organizations. They showed significant development in six out of the eight core competencies. In addition, comparing participation as a leader vs. member in student organizations showed that there was a statistically significant difference in students' perception of the development of one core competency (widening of interests) between leader and member of student organization (.038). There was no statistically significant difference in the development of the remaining seven (7) core competencies.

Kruskal- Wallis test was applied on question 5 to determine the difference in students' perception of the development of core competencies comparing the number of semesters students participated in student organizations. The number of semesters were first recoded to form three groupings i.e. 1-2 semesters (short term), 3-4 semesters (moderate) and 5 semesters or more (long term). The result showed that there is no statistically significant difference between these three groups.

Finally, Table 14 presents the comparison of mean scores specifically looking at the highest and lowest mean scores between participants and non-participants of student organizations; and participation in academic vs. non-academic student organizations. The highest and lowest mean scores of participation as leader vs. member; and number of semesters will also be compared to determine the differences of mean scores of core competencies among all the groups.

Table 14

Comparison of Highest and Lowest Mean Scores of Core Competencies

Group	Highest Mean Score	Lowest Mean Score
Participants	238.37 <i>(Character Development)</i>	233.80 <i>(Global Understanding)</i>
Non-participants	226.35 <i>(Critical Thinking)</i>	212.44 <i>(Career and Vocational Development)</i>
Academic Student Organization	148.30 <i>(Critical Thinking)</i>	136.14 <i>(Widening of Interests)</i>
Non-academic Student Organization	145.35 <i>(Widening of Interests)</i>	138.78 <i>(Career and Vocational Development)</i>
Leader	161.12 <i>(Widening of Interests)</i>	154.40 <i>(Character Development)</i>
Member	147.44 <i>(Character Development)</i>	140.40 <i>(Widening of Interests)</i>
Short Term	158.63 <i>(Critical Thinking)</i>	130.04 <i>(Career and Vocational Development)</i>
Moderate	161.67 <i>(Career and Vocational Development)</i>	149.77 <i>(Widening of Interests)</i>
Long Term	153.20 <i>(Widening of Interests)</i>	142.55 <i>(Diversity)</i>

Note: Core Competencies Scale: 7= Extremely High; 6=Very High; 5=High; 4=Middle; 3=Low; 2=Very Low; 1=Extremely Low.

CHAPTER V

DISCUSSION AND RECOMMENDATIONS

The primary purpose of this study was to investigate students' perception of the development of core competencies during their experiences at a comprehensive Midwestern university, specifically examining the differences of those involved in student organizations to those not involved. The study analyzes responses of students that graduated from a comprehensive Midwestern university in May and December 2013. Demographic differences including gender, age, race/ethnicity, current educational level were all outlined. The study was designed to answer the following question: Does involvement in student organizations impact the development of core competencies? Chapter V provides a comprehensive discussion regarding the finding of this study and recommendations for future studies.

Discussions and Implications

A discussion of the findings of this study addressing the five research questions is presented in this section. The demographic characteristics of the respondents were analyzed. The majority of the respondents were females, age 20 – 25 years old, White/Caucasian and seniors. The response rate was explored, and the majority of respondents were participants of student organizations. Before the research questions were analyzed, the validity of Core Competencies Scale (CCS) was established. Factor analysis was used for the reduction of the large set of variables to a more efficient number of variables. This technique was also used for the establishment of construct validity of the CCS.

Research Question 1

The first research question addressed students' perception of the development of core competencies comparing those that participate in student organizations to those that did not participate. The Mann – Whitney U test revealed no statistically significance difference in students' perception of their development of core competencies through their involvement in student organizations as compared to those that did not participate in student organizations ($p > .05$). This suggests that participation in student organizations and typical classroom learning have a similar impact on the development of Boks' core competencies.

There is a lot of compelling evidence that participation in student organizations is beneficial (Astin, 1984; Dunkel et al., 1989; Abrahamwoicz, 1988; Cooper et al., 1994; Montelongo, 2002; Fourbert & Grainger, 2006; Hall, 2012). These authors suggest that there is a strong difference between those who participate in student organizations and those who do not. The findings of this study contradict the literature suggesting that participation in student organizations does not impact the development of students in the eight areas outlined by Bok.

A possible explanation for the non-significant difference between the two groups is that Bok's competencies cannot be broadly applied to all student organizations. Bok's competencies may not reflect all student organizations' goals and objectives. The result suggests that this general set of competencies cannot serve as a model for all student organizations in assessing how students grow and develop through participation in student organizations. Evaluating students' perception of their development of skills in

student organizations may require a specific set of competencies structured around the purpose of the student organization in order to identify and measure students' success. Therefore, Bok's competencies cannot be broadly applied to all student organizations across the university because it may not most accurately reflect the purpose the organization.

Previous studies that used a set of competencies have suggested why it is important to use specific competencies that align with the student organizations for assessment (Ruan, 2013; Gassman, 2015; Gassman et al., 2014). Ruan (2013) used Bok's core competencies for the assessment of the impact of Camp Adventure TM Child and Youth Services on students and the result proved significant. This might indicate that Bok's competencies align well with the goals of Camp Adventure TM Child and Youth Services. In addition, Gassman (2015) analyzed a set of competencies that were specific and unique to the purpose and goal of the Nonprofit Leadership Alliance Student Association. The student organization's goal is for students to develop skills in nonprofit management, and the author's findings were significant. This suggests that one set of competencies may not be appropriately applied broadly across all student organizations expecting that students will develop the same skills in different organizations.

Faculty advisors of student organizations should consider whether Bok's framework of core competencies align with the goal and objectives of the student organizations. If the purposes of the student organizations do not align with Bok's competencies, developing a set of competencies to bring focus to activities in the student organization is recommended.

Research Question 2

The second research question addressed the difference in students' perception of the development of core competencies comparing males and females in student organizations. The Mann-Whitney test showed that there were statistically significant differences based on gender in the development of five core competencies ($p < .05$). It appears that females demonstrate the following more in comparison to males: (1) communication (2) character development, (3) diversity, (4) widening of interests, (5) career and vocational development. No significant gender differences appeared in critical thinking, citizenship, and global understanding.

There is no consistency in the literature that males perceived themselves to be developing skills differently than females and vice versa. In viewing those variables which were significant in this study, (1) communication (2) character development, (3) diversity, (4) widening of interests, (5) career and vocational development, these findings support previous studies conducted by Barak et al. (1998), Kickul et al. (2008), Jones et al. (2000). On the other hand, the finding contradicts previous studies conducted by Ng and Pine (2003), Feingold (1994), Powell and Ansic (1997), and Wilson et al. (2007).

The statistically significant difference between males and females in student organizations suggests that gender has an influence on how students perceive their development of skills, knowledge and competencies. This indicates that males in student organizations are less likely to perceive themselves as competent in some areas. Females in student organizations perceived themselves to be confident in the development of skills, knowledge and competencies than males.

A possible explanation of the significant development of five competencies is that the number of females may have a sample size effect and may have resulted in a more perceived positive development of core competencies than males. Demographic information reported that the majority of the respondents in this study and the majority of the students that graduated in May and December 2013 from the comprehensive Midwestern university were females. The difference in participation in student organizations between males and females suggests that there is a need to raise males' participation.

Furthermore, the analysis showed that majority of leaders of student organizations were females. The percentage of females that held leadership positions in student organizations was 69.9% while that of males was 30.1%. This might suggest that females, due to their leadership roles in student organizations, were perceiving their development of skills differently than males. The difference between these two variables might also suggest the leadership positions in student organizations might impact females' perception of their development of skills. In summary, recruitment of more diverse participants in future studies is suggested to address gender differences and its implications. In addition, faculty advisors should be mindful of gender differences in student organizations.

Research Question 3

The third research question focused on the difference in students' perception of the development of core competencies comparing participation in academic vs. non-academic student organizations. In order to compare the two groups, Mann – Whitney U

test was applied to produce a result. The result showed that there is no statistically significant difference in students' perception of the development of core competencies comparing participation in academic vs. non-academic student organizations.

Although there has been less research that looked at participation in academic and non-academic student organizations, this finding contradicts a previous study by Holzweiss and Wickline (2007). These authors suggest that students who participate in academic student organizations perform differently from those that participate in non-academic student organizations.

As previously stated, Bok's framework of competencies was applied broadly to all student organizations across the university. This broad application might have an impact on the non-significant difference between the two groups. Each student organizations offer different programs and services. These programs and services should align with the mission or purpose of the student organization. It was previously mentioned that Bok's competencies seem to align well with goals of Camp AdventureTM Child and Youth Services, and this student organization is categorized as an academic student organization (Ruan, 2013). Applying such set of skills to non-academic student organizations might not produce a significant result. It is crucial for each student organization to develop or adopt a set of competencies that aligns with the activities, assignments and programs offered by the student organization. Establishing a set of competencies that aligned the mission of an organization will present more significant results just like previous studies.

As a result, it is recommended that both academic and non-academic student organizations should be clear with the skills they want to develop inside the student organization. Again, it is recommended that each student organization should either adopt Bok's competencies and align what they do to Bok's framework of competencies or develop their own set of competencies that parallels with the activities and programs offered.

Research Question 4

The difference in students' perception of the development of core competencies comparing participation as a leader vs. a member of student organizations was analyzed. The result of Mann – Whitney U test indicates that there was a statistically significant difference in students' perception of the development of one core competency (widening of interests) between leader and member of student organization ($p < .05$). There was no statistically significant difference in students' perception of the development of the remaining seven (7) core competencies.

These findings both contradict and support the previous studies. For example: leaders in student organizations showed strong development of one competency (widening of interests) than members and this finding is supported by previous studies conducted by Fourbert and Grainger (2006), Cooper et al. (1994), and Peterson and Peterson, (2012). On the other hand, the remaining seven competencies did not prove significant which contradicts the previous studies.

The statistically significant difference between leaders and members in the development of widening of interests suggests that leaders in student organizations are

widening their interest because they are more engaged in all parts of the organizations. A possible explanation for the non-significant difference in seven (7) out of the eight (8) core competencies is that Bok's framework was broadly applied across all student organizations in the university. This further suggests that a general set of competencies cannot be used as a model for all student organizations. Rather, student organizations should develop or adopt a specific set of competencies that aligns the organizational' purpose and activities.

Research Question 5

This research question looks at the difference in students' perception of the development of core competencies comparing the number of semesters based on short term, moderate and long term participation in student organizations. The analysis indicated that there were no statistically significant differences among the three groups i.e. short term, moderate and long term participation. Reviewing the mean scores, it is interesting to note that there are transitions of the mean scores rank among the three groups. As shown in Table 14, career and vocational development ranked lowest in short term participation but ranked highest in the next level of participation i.e. moderate participation. In moderate participation, widening of interests ranked lowest but ranked highest in long term participation. This finding contradicts studies conducted by Gassman (2015) and Gassman et al. (2014) suggesting that the number of semesters within which students participate does have an impact on the development of skills.

The difference in the mean scores indicates that students tend to have strong development of competencies when they participate for 3-4 semesters (moderate) but as

they stay longer, they are less likely to think they are improving more on these competencies. This study suggests that after three to four semesters of participation, complacency and boredom may set in. At that point, students might perceive they are improving their skills. It is recommended that faculty advisors should present new challenges for students who have been involved for a long period of time. Faculty advisors also need to consider that students' participation remains interesting, refined and challenging in order to lessen complacency.

In summary, a general explanation for the non-significant differences between participants and non-participants of student organizations; academic student organizations and non-academic student organizations; leader and members (partly); number of semesters is that the broad application of Bok's framework of core competencies might have an impact on the non-significant result. Therefore, a set of competencies that aligns with each student organization is needed to examine the difference between these groups.

Recommendations

The following recommendations may be considered for future studies:

1. The Core Competencies Scale (CCS) used in this study can be considered valid (Factor Analysis) and reliable with strong evidence (Ruan et al., 2011a, 2011b). In future studies, this scale may be used with modification and can be applied to other similar studies.
2. It is recommended that there should be a development of competencies per student organization for assessment. The core competencies should align with the purpose of

- the student organizations, and this might provide significant results just like previous studies (Ruan, 2013; Gassman, 2015; & Gassman et al., 2014).
3. Future studies that apply a broad and /or specific set of competencies to lots of student organizations are needed.
 4. There were statistically significant gender differences. Gender influences self-perceived core competencies. Males are less likely to perceive themselves as competent. The females in the sample perceived themselves to be more competent in five of the eight core competencies than males given that the number of females may have a sample size effect and may have resulted in more positive development of core competencies than male. The recruitment of more diverse participants is suggested to address gender differences and its implication. In addition, faculty advisors should be mindful of gender differences.
 5. More studies that analyze participants vs. non-participants, academic vs. non-academic student organizations, leaders vs. members, number of semesters are needed to address the non-significant differences between these groups.

Conclusion

Regarding Boks' core competencies, involvement in student organizations has no significant impact on the development of skills, knowledge and competencies. For the most part, the findings of this study contradict the literature because several researchers proved that student organizations can be considered a powerful source of student development. The findings of this study have implications regarding the broad application of Bok's framework of core competencies across all student organizations.

The non-significant differences suggest that student organizations should either adopt Bok's competencies and align it to the purpose of the organization or develop their own set of competencies that align with the purpose of the organization.

The statistically significant differences between males and females provided further evidence that females perceived themselves to be developing skills differently than males. This can help to inform faculty advisors to this issue and encourage males to improve their perception of their development of skills in order to be competitive in the global workplace. Generally, the findings are supportive and help to evaluate and justify the programs and services offered. Colleges and university should rethink how the outcomes of being involved is being measured.

One of the key strengths of this study is that it expands the research of Ruan et al. (2011a) on the development of skills in students by participation in Camp Adventure™ Child and Youth Services (CACYS). This study also expresses its ability to examine all the student organizations at the Midwestern university. Future studies are recommended to investigate the reasons for the non-significant differences through interviews, case studies.

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APPENDIX
INFORMED CONSENT AND QUESTIONNAIRE

**UNIVERSITY OF NORTHERN IOWA
HUMAN PARTICIPANTS REVIEW
INFORMED CONSENT**

Project Title: The impact of student organizations on the development of core competencies.

Name of Investigators: Julianne Gassman, Ph.D, Carley Johnston, Aaron Knaack, Emily Kriegel

Invitation to Participate: Students graduating from the University of Northern Iowa are invited to participate in a project conducted by Dr. Julianne Gassman and a team of undergraduate students at the University of Northern Iowa. The following information is provided to help you make an informed decision about whether or not to participate.

Nature and Purpose: The primary purpose of this research is to analyze the impact of student involvement in student organizations on students' development in core competencies during their experience at the University of Northern Iowa.

Explanation of Procedure: You will be asked to answer a number of questions related to your experience in core competencies through your experience at the University of Northern Iowa. You will be asked to provide basic information as well. The core competencies included in this study are communication, critical thinking, character development, citizenship, diversity, global understanding, widening of interests, and career and vocational development.

Discomfort and Risks: There are no sensitive or potentially embarrassing questions on this questionnaire. The study involves no more risks than those encountered in daily life.

Benefits and Compensation: No direct benefits or compensation are associated with participation in this study.

Confidentiality: Information obtained during this study which could identify the participants, while unlikely, will be kept confidential and only the researchers can have access to the questionnaire. The summarized findings will not have any personally identifying information. The findings may be published in an academic journal or presented at a scholarly conference. Your responses to the questionnaire will be submitted to a secure server, and all data collected will be kept confidential. However, because of the technology itself, it is impossible to guarantee the confidentiality of the data transmitted electronically.

Right to Refuse or Withdraw: Your participation is completely voluntary. You are free to withdraw from participation at any time or to choose not to participate at all, and by doing so, you will not be penalized or your grades will not be negatively affected if you choose not to participate.

Questions: If you have questions about the study or desire information in the future regarding your participation or the study in general, please contact Dr. Julianne Gassman at gassman@uni.edu, 319-273-2204, for answers to questions about rights of research participants and the participant review process.

1. Agreement:

I am fully aware of the nature and extent of my participation in this project as stated above and the possible risks arising from it. If I choose not to participate in this questionnaire I may withdraw now by clicking “NO” in response to the question, “Do you agree to the following terms?” By clicking “YES” below, I acknowledge that I am 18 years of age or older, and I hereby agree to participate in this project.

Do you agree to the terms of this study?

- Yes
 No

The purpose of this survey is to examine the development of core competencies during a student’s experience at the University of Northern Iowa. This survey is intended to be taken by students graduating from the University of Northern Iowa.

Please answer all the questions honestly; there are no right or wrong answers. In order to keep all your answers confidential, please do not include any personal identifying information on this questionnaire. Completing this survey will take approximately 10 – 15 minutes.

Section 1: Demographic Information

Instructions: Please choose the best answer or fill in the blank with the appropriate answer.

2. Gender:

- Male
 Female

3. Age:

4. Ethnicity/Race:

- Hispanic/Latino
 White/Caucasian
 Asian/Pacific Islander
 Black/African American
 American Indian/Alaskan Native
 Multiracial
Other (please specify)

5. Current Education Level:

- Senior
 Graduate Student

6. Major/Minor:

	Major		Minor
Major/Minor	<input type="text"/>		<input type="text"/>
Other (please specify)			

7. 2nd Major/Minor

	2nd Major		2nd Minor
2nd Major/Minor	<input type="text"/>		<input type="text"/>
Other (please specify)			

8. Have you ever had a job related to your major?

- Yes
 No

9. How long did you work at the job related to your major?

- 1-6 months
 6-12 months
 1-2 years
 3-4 years
 5+ years

Section 2: Assessment of Your Competence in Selected Skill Areas

Instructions: Please choose the answer for each question that BEST represents your level of competence in the skill described (based on your overall experience as a student at UNI).

Scales: 1=Extremely Low; 2=Very Low; 3=Low; 4=Middle; 5=High; 6=Very High; 7=Extremely High

10. Communication

	Extremely Low	1	2	3	4	5	6	7	Extremely High
1. My ability to express my views clearly to others.		1	2	3	4	5	6	7	
2. My ability to listen carefully in order to catch main points during conversation.		1	2	3	4	5	6	7	
3. My ability to adjust oral presentations according to subject, occasion, audience, and purpose		1	2	3	4	5	6	7	
4. My ability to write effectively with thoughtfulness, clarity, coherence, and persuasiveness.		1	2	3	4	5	6	7	
5. My ability to communicate effectively in group discussions.		1	2	3	4	5	6	7	
6. My ability to communicate effectively when engaged in problem solving.		1	2	3	4	5	6	7	
7. My ability to exhibit positive followership when appropriate (Note: Followership means the act or conditions of following a leader).		1	2	3	4	5	6	7	
8. My ability to use appropriate body language to interact positively with others		1	2	3	4	5	6	7	

11. Critical Thinking

	Extremely Low	→	Middle	→	Extremely High		
9. My ability to recognize new problems	1	2	3	4	5	6	7
10. My ability to receive constructive criticism from others.	1	2	3	4	5	6	7
11. My ability to establish a plan to solve problems by using previously learned knowledge.	1	2	3	4	5	6	7
12. My ability to evaluate solutions for their validity and appropriateness.	1	2	3	4	5	6	7
13. My ability to make wise decisions.	1	2	3	4	5	6	7
14. My ability to reflect and self-evaluate.	1	2	3	4	5	6	7
15. My ability to be innovative and think creatively.	1	2	3	4	5	6	7
16. My ability to think critically on integrated knowledge.	1	2	3	4	5	6	7

12. Character Development

	Extremely Low	→	Middle	→	Extremely High
17. My ability to approach problems with greater awareness of moral dimensions and ethical consequences.	1		2 3 4		5 6 7
18. My ability to cultivate personal physical health.	1		2 3 4		5 6 7
19. My ability to cultivate personal psychological health.	1		2 3 4		5 6 7
20. My ability to cultivate a sense of responsibility for one's own behavior.	1		2 3 4		5 6 7
21. My ability to act in a professional manner.	1		2 3 4		5 6 7
22. My ability to perform as a professional with confidence.	1		2 3 4		5 6 7
23. My ability to make ethical decisions in professional practice.	1		2 3 4		5 6 7
24. My ability to identify my own strengths and weaknesses.	1		2 3 4		5 6 7

13. Citizenship

	Extremely Low	1	2	3	4	5	6	7	Extremely High
25. My ability to demonstrate response for all others.		1	2	3	4	5	6	7	
26. My understanding of my own actions in the greater community.		1	2	3	4	5	6	7	
27. My ability to defend my rights and responsibilities of citizenship.		1	2	3	4	5	6	7	
28. My understanding of the rights of all others.		1	2	3	4	5	6	7	
29. My ability to actively participate in my greater community.		1	2	3	4	5	6	7	

14. Diversity

	Extremely Low	1	2	3	4	5	6	7	Extremely High
30. My ability to communicate with people with diverse backgrounds including age, race, sexual orientation, religion, ethnicity and nationality.		1	2	3	4	5	6	7	
31. My understanding of the importance of positively engaging with diverse groups.		1	2	3	4	5	6	7	
32. My ability to build positive relationships with diverse populations.		1	2	3	4	5	6	7	
33. My ability to serve the needs of diverse populations.		1	2	3	4	5	6	7	
34. My ability to work productively with others as members of diverse groups.		1	2	3	4	5	6	7	
35. My ability to demonstrate cultural competency.		1	2	3	4	5	6	7	

15. Global Understanding

	Extremely Low	→	Middle	→	Extremely High		
36. My ability to articulate the value and importance of cross cultural opportunities and experiences.	1	2	3	4	5	6	7
37. My awareness of cultural differences.	1	2	3	4	5	6	7
38. My ability to analyze global market opportunities.	1	2	3	4	5	6	7
39. My ability to develop intercultural competencies from multiple perspectives.	1	2	3	4	5	6	7
40. My ability to analyze global issues and events.	1	2	3	4	5	6	7
41. My ability to develop feelings of global citizenship.	1	2	3	4	5	6	7

16. Widening of Interests

	Extremely Low	→	Middle	→	Extremely High		
42. My development of a wider spectrum of personal and life skills.	1	2	3	4	5	6	7
43. My development of an open mind to new ideas.	1	2	3	4	5	6	7
44. My ability to share personal interests with others.	1	2	3	4	5	6	7
45. My development of learning experiences that will complement future career directions.	1	2	3	4	5	6	7
46. My development of a variety of hobbies that will enhance my quality of life.	1	2	3	4	5	6	7
47. My development of a wider spectrum of interests and perspectives supporting interests outside of work.	1	2	3	4	5	6	7

17. Career and Vocational Development

	Extremely Low	1	2	3	4	5	6	7	Middle	Extremely High
47. My ability to articulate a solid set of career and vocational values.		1	2	3	4	5	6	7		
48. My ability to demonstrate the skills required of me for my career choice.		1	2	3	4	5	6	7		
49. My ability to establish personal goals that will promote personal growth.		1	2	3	4	5	6	7		
50. My ability to establish professional goals that will promote professional growth.		1	2	3	4	5	6	7		
51. My ability to identify potential risks and liabilities in my career.		1	2	3	4	5	6	7		
52. My ability to manage time effectively.		1	2	3	4	5	6	7		

18. Did you participate in a UNI student organization during your time at UNI?

- Yes
- No

Section 3: Student Organization Participation

19. How many UNI student organizations were you involved in?**20. Name the student organization you were MOST INVOLVED. (Note: Some names begin with "UNI" others begin with "University of Northern Iowa").**

Name:

21. Is this student organization related to your major?

- Yes
- No

22. I would describe my involvement in this student organization as being:

- Minimally Involved
- Participated in most meetings/events
- Involved at the highest level

23. How often did this student organization meet?

- Once a week
- Every other week
- Once a month
- Once a semester

Other (please specify)

24. How many semesters did you participate in this student organization?

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8

25. What is the highest position you held in this student organization?

- Leadership Position
- Member

26. Did you participate in more than one organization?

- Yes
- No

27. Name the student organization you were SECOND MOST INVOLVED.

(Note: Some names begin with "UNI" others begin with "University of Northern Iowa").

Name

28. Was this student organization related to your major?

- Yes
- No

29. I would describe my involvement in this student organization as being:

- Minimally Involved
- Participated in most meetings/events
- Involved at the highest level

30. How often did this student organization meet?

- Once a week
- Every other week
- Once a month
- Once a semester
- Other (please specify)

31. How many semesters did you participate in this Student Organization?

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8

32. What is the highest position you held in this student organization?

- Leadership Position
- Member

33. Did you participate in more than two organizations?

- Yes
- No

34. Name the student organization you were THIRD MOST INVOLVED.

(Note: Some names begin with "UNI" others begin with "University of Northern Iowa").

Name:

35. Was this student organization related to your major

- Yes
- No

36. I would describe my involvement in this student organization as being:

- Minimally Involved
- Participated in most meetings/events
- Involved at the highest level

37. How often did this student organization meet?

- Once a week
 - Every other week
 - Once a month
 - Once a semester
- Other (please specify)

38. How many semesters did you participate in this Student Organization?

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8

39. What is the highest position you held in this student organization?

- Leadership Position
- Member

Thank you, we appreciate your participation in this survey