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NATURE VERSUS NURTURE: CAMPUS INVOLVEMENT’S EFFECT ON STUDENT LEADERSHIP DEVELOPMENT

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NATURE VERSUS NURTURE: CAMPUS INVOLVEMENT’S EFFECT ON
STUDENT LEADERSHIP DEVELOPMENT

Presented to
The Faculty of the Graduate Division of
Educational Leadership
College of Education
DePaul University

In Partial Fulfillment of the Requirements for the Degree of
Masters of Arts

By
Stephanie Souvenir

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Abstract

Nature versus Nurture: Campus Involvement’s Effect on Student Leadership Development

The purpose of this research was to find if leadership skills are developed from co-curricular involvement. Research would determine whether natural-born leaders were drawn to student involvement opportunities, or whether involvement develops the average students’ leadership skills. To arrive at a conclusion, research asked the question “Does involvement on a college campus develop leadership skills?” Research was answered by quantitative research. Fifty undergraduate students from a Private Midwestern university were surveyed. Each participant was given two assessments. One was a leadership self-assessment and another was a campus involvement assessment. The campus involvement assessment was created for the purpose of this research. The Leadership Practice Inventory’s self-assessment was used for the leadership assessment. Researcher hypothesized that over seventy percent of involved students were natural born leaders. Overall, data neither supported nor denied the hypothesis. However, research did confirm that leadership is developed for co-curricular involvement.
NATURE VS. NURTURE: CAMPUS INVOLVEMENT'S EFFECT ON STUDENT LEADERSHIP DEVELOPMENT

Throughout a college student’s educational career, getting involved on campus is continuously advertised. From the moment freshmen move into the residence halls, they are overwhelmed with events and information on how to be an active participant in their college years. While the academic programs and distinctions attract the students to a particular college or university, it is the variety of co-curricular activities that bring the campus to life. Campuses will hold welcome weeks, orientations, family weekends, and homecomings as some of the many ways to engage students. Those activities have now become an important aspect of students’ development; equivalent to the education received in the classroom, and thus worthy of assessment as co-curricular activities.

Classroom education is still relevant; it is associated with career success. According the United States Census Bureau, annual salary increases on average, with each level of degree attained. Of United States citizens 25 years and older that participated in the 2010 United States’ census, those with a high school diploma made, on average, $34,956/year; associates degree - $44,027; bachelors and higher - $61,860 (DeNavas-Walt, Proctor, & Smith, 2011).

College degrees are a reflection of the accumulation of the credits and grades earned in the classroom. They do not encompass the additional learning occurring in co-curricular activities. Since there has been an increased emphasis on getting involved in co-curricular activities, the time has come to assess the impact that co-curricular activities have on career success. Thus, the importance of this study is to combat the scarcity of research done on the relationship of co-curricular involvement to career success.
As previously stated, a college degree is linked to career success in terms of annual salary. If co-curricular activities have become an important attribute of a college education, then it is assumed that there is a relationship between co-curricular activities and career success. However, not every student takes advantage of co-curricular offerings. One of this research’s aims is to find out what types of students are attracted to being involved. The end goal will be to determine whether leadership skills are innate or learned during participation in co-curricular activities. To arrive at a conclusion, research will answer this question “Does involvement on a college campus develop leadership skills?”

Discovering whether or not students involved in co-curricular activities develop new leadership skills would be a helping tool in predicting the relationship between post-graduate success and campus involvement. To do so, research will determine whether natural-born leaders are drawn to student involvement opportunities, or whether involvement develops the average students’ leadership skills. This research will assume that co-curricular activities attract the natural born leaders; these students would have career success regardless of their involvement. Their leadership skills would more likely have been proficient prior to their involvement. Therefore, the correlation between career success and campus involvement would be insignificant for the natural-born leader. Conversely, co-curricular activities will also attract the average student. These students would enter into campus involvement, receive the developmental growth that involvement provides, and exit with proficient leadership skills. In that scenario, career success would have a positive significant correlation with campus involvement for the average student.
For the purpose of this research, a natural born leader is defined as any student who has a high rank in the leadership self-assessment and shows minor growth from campus involvement. An average student, in turn, will be defined as any student who has a moderate or low rank in the leadership self-assessment and shows growth from campus involvement. This research hypothesizes that, while co-curricular activities will have a combination of both types of students, seventy percent or more will be natural-born leaders. Data will be collected by survey research. Surveys will be distributed to 50-75 undergraduate college students. Research will be limited to one private Midwestern university.

**Literature Review**

While society realizes the impact education has on a student, research is lacking on the impact of co-curricular activities on a student’s post graduation success. In the current economic state of the United States, students and job seekers alike are trying to find ways to distinguish themselves from the competition. Since 2008, the unemployment rate has almost doubled (Bureau of Labor Statistics, 2011). Unfortunately, the price of higher education has also increased (Trombley, 2003). In order to combat this dearth of career opportunities, these new job seekers need to show what sets them apart from the competition. One of the ways they are differentiating themselves is by listing their co-curricular experiences along with their academic accomplishments. Student affairs departments and co-curricular activities have given students the outlet to expand their resumes.

A look at the origins of student affairs and an assessment of the benefits of co-curricular involvement are tools that will allow higher education to better understand the
type of students attracted to co-curricular involvements. Knowing the skills level of the involved students, educational institutions can better cater to their needs, while at the same time come up with new ways to attract those who do not take advantage of the existing resources. A review of the following areas of literature will help in formulating the correlation between students’ involvement and career success. The areas considered are: evolution of student affairs, Chickering’s vectors, athletic and degree attainment, post-graduate success, skill and character development, and innate skills.

**Evolution of Student Affairs**

While the importance of student affairs may still be a relatively novel idea, the history behind it is as old as the colleges they to which they belong. Though specialized departments and professional organizations did not come in existence until much later, student affairs and co-curricular activities have also been part of the environment of higher education (Komives, Woodard, & Associates, 2003). Students have been the driving force of the evolution of student affairs. It was students’ initiative that brought on each co-curricular activity development and change. Over the years, the expectation of students to be leaders of their own success has grown. A better understanding of the current and future impact student affairs departments and co-curricular activities have on student success comes from looking at the progression it has made thus far.

The first sign of student affairs were the dormitories and dining halls found in colonial colleges (Komives, Woodard, & Associates, 2003). Students were viewed as adolescents that required supervision. The doctrine of loco parentis, meaning ‘in place of a parent’ (Merriam-Webster’s Collegiate Dictionary, 1993), allowed faculty to have the authority to discipline and enforce rules and regulations. To escape the strict workload,
students responded with co-curricular activities (Komives, Woodard, & Associates, 2003). The age of loco parentis guided the founding principles of student affairs. Faculty members doubled as educators and student affairs staff. Around the 1800’s, debate teams, literary societies, and fraternities began to emerge. As African-Americans and women began to attend college, specialized organizations and activities surfaced to accommodate the change in student demographics (Komives, Woodard, & Associates, 2003).

By the turn of the century, students were becoming more independent from the standard model of structure and discipline of higher education. The need of co-curricular activities continued to grow. The philosophy behind students merely being empty vessels that only faculty could fill with knowledge, was aging. By the mid 1900’s students were expected to take part in their own learning and development. They were no longer expected to remain a passive recipient of education (The Student Personnel Point of View, 1949). Universities and colleges were recognizing that students were entering with almost two decades worth of learning and life experiences behind them and started treating them as such. Faculty members focus remained in the classroom and the emergence of specialized departments and personnel spouted forth to accommodate student needs (The Student personnel, 1937).

The Civil Rights Movement brought on one of the last major changes to higher education. The age of student activism in the 1960’s brought the fall of loco parentis (Komives, Woodard, & Associates, 2003). Since the sixties, college students have been expected to be leaders in their own learning. For the students who enter college without the natural ability to facilitate their own success, schools created vast student affairs
departments and co-curricular activities specifically designed around their needs. The pressure is on the student to seek out these resources. For those who are naturally skilled, the co-curricular activities can act as a showcase of their talents.

**Chickering’s Vectors**

College years are an important time for developmental growth for an individual. Arthur Chickering (1969) has been a major contributor in the world of student development research. His major contribution is the theory of Seven Vectors of Student Development, which he identifies as: developing competence, managing emotions, developing autonomy, establishing identity, freeing interpersonal relationships, developing purpose and developing integrity (Chickering, 1969). He developed this theory after years of longitudinal research with college students. He describes them as vectors because each has their own direction and magnitude. Developing autonomy and developing purpose are the two vectors appropriated for discussion in this research.

There are three components to developing autonomy: the development of emotional independence, development of instrumental independence and recognition of interdependence (Chickering, 1969). Emotional independence begins with the detachment of dependency to parents and ending with self-sufficiency. This happens concurrently with instrumental independence. Instrumental independence includes doing things on one’s own and the ability to be adventurous enough to move from one’s home. The combination of these leads to interdependence. The interdependent student understands their responsibilities. They have to become their own representative and pave the pathway required for their own personal development (Chickering, 1969).
The vector of developing purpose adds meaning to the activities that students get involved in. As students get closer to graduation, they begin to rationalize the purpose of their activities and relationships. They slowly begin to weed out things that will not benefit them in the future. Also, while developing purpose, the student begins to make connections between their activities and their goals in life (Chickering, 1969). A purposeful student is a hard-working one. “He continues in spite of mistakes or difficulties. He can sustain effort in the face of distractions and seeks out, in addition to academic work, extra activities that relate to his goal.” (Chickering, 1969 p. 117). Once a student has determined a career path, it’s up to him to do what is needed to reach that goal.

**Athletics and Degree Attainment**

From student demand, co-curricular activities were created to help facilitate their transition into careers. There have been arguments that co-curricular involvements deter students from focusing on their academics (Black, 2002). However, research done by Huang and Chang (2004) contradicts that. Through research of Taiwanese college students, they found that co-curricular activities positively affected academic involvement. They also found out that there was not a glass ceiling of involvement. There isn’t an optimal ratio of involvement and academics that provide the best results. Congruently, there is not a peak where involvement worsens academic achievement (Huang and Chang, 2004).

The effectiveness of co-curricular activities on career success has been researched. When comparing education and co-curricular activities, a common connection has been made between athletics and academics. However, the amount of
time spent in each area is drastically different. At a university level, a typical class meets between 3-5 hours a week. Even with a full class load, most students do not exceed eighteen in-class hours. According to National Collegiate Athletic Association guidelines (National Collegiate Athletic Association, 2011), a Division I student-athlete may be able to practice up to 20-hours per week with the limitation of no more than four hours in a single day. In addition to practice, there are often weekly competitions that could add 2-6 hours to their schedule, not including travel time. Therefore, an athlete participating at the college level could participate in a sport for about 25+ hours a week. Considering the amount of time dedicated, it would seem that athletic commitment could have an impact on a student on academic/professional skill development.

Troutman and Dufur (2007) examined the linked between females participating in high school athletics and college graduation. They drew from the data collected in National Educational Longitudinal Study (NELS) which examines the high school graduating class of 1992. They found that there was a positive correlation between high school sports and post secondary educational attainment. “The odds of college completion among females who participated in high school sports are still 42% higher than the odds of college completion among nonparticipating females when influential individual-level variables, such as SES, are controlled.”(Troutman & Dufur, 2007, p 457). The research has not defined the reasoning between athletic participation and degree attainment. As stated before, degree attainment is a proven result of career success (DeNavas-Walt, Proctor, & Smith, 2011). If athletics help a student acquire a degree, then student-athletes will more likely be successful than non-athletes.
An unspecified argument is that sport participation may develop characteristics, like time management and dedication, which are useful to acquiring a college degree and prospering after college. Another argument may be, in order to handle the commitment level that athletics participation demands, a student-athlete must already be considerably developed in these skills. Regardless, if employers assume that student have these skills at the completion of their athletic obligation, those that compete in athletics come out with an advantage.

**Post-graduate Success**

Barron, Ewing, and Waddell, (2000), found a relationship between high school athletics and likelihood of post-graduate career success. After pulling data from the National Longitudinal Survey of Youth (NLSY), and National Longitudinal Study (NLS) of the High School Class of 1972, researchers found that men who participated in high school athletics had higher annual wages than those who did not. Data retrieved from the NLSY gained 12% higher wages, and 32% from NLS data (Barron, & Ewing, & Waddell, 2000). The research goes to conclude that athletics provides real-world job training. As previously noted, athletes spend about 25 hours a week with their sport. The amount of time is similar to a part-time job or internship. Within those 25 hours, they are goal oriented, collaborating with others, and engaging in other transferable skills that employers regularly seek in applicants. Participation in athletics may act as one of many factors that determines an individual’s work ethic and productivity. While non-athletes may have equal or greater skills, athletic participation provides tangible evidence of development. Once again, the involved student expands their resumes with proof of additional educational opportunities.
Achieving post-graduate success is not limited to students involved in athletic involvement. The combination of academics and any co-curricular involvement in college also contributes to positive outcomes for post-graduate success. Vermeulen and Schmidt (2008) looked at how the learning environment, learning process, and academic outcomes affected career success of university graduates. They predicted that the academic learning environment would motivate a student’s desire to learn. This, in turn, would motivate a student to get involved in co-curricular activities. Through involvement and academic learning, a student would gain the knowledge they need to get a job and be sufficient at learning job skills needed for career success. Vermeulen and Schmidt (2008) surveyed alumni of a Dutch University. They found that while student academic motivation does not increase co-curricular involvement, co-curricular involvement increases career success with short and long term increases in salary and satisfaction with career. Research has proven that there is a positive relationship between on campus involvement and post-graduate success. Students who get involved have more success financially and emotionally in their careers.

**Skill and Character Development**

While Vermeulen and Schmidt do not research reasoning behind this connection, research by Holt et al (2008) provides insight on the skill development during athletic involvement. Holt et al (2008) researched a Canadian high school boys’ soccer team and found three life skills that were displayed by the boys: initiative, respect and teamwork. Through observation hours and interviews, the researchers concluded that initiative and respect were not learned from sport. Instead, sports served as a way to express these natural skills (Holt & et al, 2008). The final life skill, teamwork, was in fact, learned by
playing soccer. The study concluded that soccer presented the players with the opportunity to work together as a team, thus learning a skill that they could not have developed on their own.

Though athletics participation consumes a great deal of time, it also provides hands-on experience that may not be found in the classroom. While one-third of the life skills assessed in the study were learned through participation, the soccer players were already proficient in the skills of initiative and respect. Soccer was mainly an outlet for them to showcase their natural skills. Regardless, compared to non-athletes, athletes are getting this extra skill training in addition to academics. The combination of all those skills would make an athlete more marketable than a non-athlete and improves the chances of a more successful post-graduate career.

Astin & Antonio (2000) researched the character building that happens in colleges and universities from freshman through senior year. They sought to find what type of universities and what specific experiences contribute to the building of human character. Human character was determined by six outcomes; civic responsibility, cultural awareness and sensitivity, volunteerism, importance of raising a family, religious beliefs and convictions, and understanding of others. Through survey data, they found the more a student was involved with volunteerism and co-curricular activities the more character development they had. In the parameters of their study, Astin and Antonio (2000) discovered that character building came from the student being self-involved in his/her own success. All college institutions provide outlets for students to grow and develop. It rests on the student to find opportunities to set themselves apart from other students. The crucial aspect for college students to build human character is to gain leverage over their
competition when applying for jobs. Today’s economy has made that a challenge for all graduates.

**Innate Skills**

While most skills can be nurtured through co-curricular involvement, the degree of impact is associated with the level of innate talent one has. Guided by Crant’s model of the proactive behavior process, researchers Seibert, Kraimer and Crant (Seibert, Kraimer & Crant, 2001) sought to relate proactive personality to career success through four dominant constructs: voice, innovation, political knowledge and career initiative. Career success was broken into extrinsic, i.e. salary and promotions, and intrinsic, i.e. individualized feelings of success. Proactive personality was described as “taking initiative in improving current circumstances or creating new ones” (Seibert, Kraimer and Crant, 2001, p. 846). They tested this with longitudinal surveys of alumni of a Midwestern university. They found that proactive personality had a significant relationship with innovation, political knowledge and career initiative but not with voice. In their analysis of the relationship between the four constructs and career success, their research supported positive relationships for innovation, political knowledge and career initiative. Voice had a negative relationship with career success.

Research provides evidences of an indirect correlation between proactive personality and salary progression and the number of promotions. They found that proactive employees tend to be more engaged in behaviors that would lead to positive effects on their career. To clarify the lack of connection between voice and career success, they concluded voice focused people tend to direct their attentions to the problems and test others to rectify the situation. People who are innovation focused seek
out solutions and initiate changes. The researchers rationalized for one to constantly challenge but not create solutions may have negative results on their career success.

In his book, *Outliers*, Gladwell (Gladwell, 2008) illuminates specific reasons successful people are successful. Taking from the research of Ericsson and Krampe (Ericsson & Krampe, 1993), he discovered that regardless of the fields professional were in, the common trait of success was logging 10,000 practice hours. “The striking thing about Ericsson’s study is that he and his colleagues couldn’t find any ‘naturals,’ musicians who floated effortlessly to the top while practicing a fraction of the time their peers did. Nor could they find any ‘grinds,’ people who worked harder than anyone else, yet just didn’t have what it takes to break the top ranks. Their research suggests that once a musician has enough ability to get into a top music school, the thing that distinguishes one performer from another is how hard he or she works.” (Gladwell, 2008, p.39).

While student leaders may have a natural edge over their average counterparts, the biggest stride comes when they take initiative and get involved in their own success. By logging a significant number of “practice hours” through co-curricular activities, student leaders improve skills and begin the process of becoming experts in their fields. For example, playing intercollegiate basketball may not seem relevant to the success of someone’s career goals. However, the transferable skills, such as communication and teamwork, one works on while involved in basketball, translate into training for their desired profession. Therefore, it prepares involved students to be successful post-graduation. Regardless of the activity they are involved with, most co-curricular activities will incorporate some skills applicable to a career. The time spent in co-curricular activities widens the gap between involved students and their non-involved
counterparts. Not from the learning of new skills but merely by the practice time these student get to harvest their own inherent skills.

**Research Question**

Student affairs departments were created to provide students with an environment that develops the whole individual in addition to their academic side. Literature has shown that getting involved on campus supports degree attainment, builds character, provides job training, and has a significant relationship on career outcomes. Being an active participant in the environment around you is how modern day college students grow, develop and stand out among other students. The goal of this research is to discover if the success that comes from student involvement is due to the caliber of students that get involved or if the environment harvests student leadership development. The following research question guided this study:

Does involvement in co-curricular activities on a college campus develop leadership skills?

**Methods**

**Participants**

This research gathered participants by distributing surveys to three general education course offered at University A. Participants were selected by convenience sampling. “A convenience sample is simply one where the units that are selected for inclusion in the sample are the easiest to access.” (Laerd Research, 2010). This sampling was chosen to hopefully allow for a mixture of involvement levels. General education classes were picked at random using the university’s course catalog. The classes that fit within a general education requirement and accommodate the researcher’s schedule were
chosen. This sampling did not limit research to a specific academic college, major, or year in school.

Participants were eighteen years or older. Desired sample size was 50 to 75 undergraduate students attending a Midwestern private urban university (University A). Sixty surveys were handed out to willing participants and fifty-one were returned completed. Of the 51 participants, one was a graduate student, therefore not useful to the research. Of the qualified participants, 6% were freshmen, 24% sophomores, 32% juniors and 38% seniors. The female to male ratio was 60:40. 26% of participants identified themselves as commuter students and 98% are full time. 70% of the participants were involved in one or more co-curricular activities. The demographics of the study slightly resemble University A with 18% freshman, 21% sophomores, 23% juniors, and 37% seniors. University A has a 55:45 female to male ratio. 84% of students are commuters and 82% are full time (DePaul University, 2012). There was no campus-wide information about percentage of students that are involved. Campus involvement was defined as: on-campus job (non-work study), intercollegiate athletics, and student organizations.

Procedure

After receiving approval from the IRB, the researcher searched the university’s online campus catalog for general education courses and contacted professors of general education courses at University A via email (Appendix 1). The researcher requested access to distribute the surveys to their students either before or after a class session, whichever was most convenient for the professor. The conducting of the survey distribution lasted about 10-15 minutes. Two professors allow access into their classes.
Surveys were conducted in three classes in order to get the sample size targeted for research. Participation of students was voluntary. Prior to the start of the survey, an informed consent form (see Appendix 2) was explained and distributed to all participants to read. Students were made aware that their participation would in no way affect their academic standing but only contribute to data for the study. Furthermore, all surveys were anonymous and will be destroyed upon completion of the study.

To answer the research question, descriptive quantitative research was done. Researcher will attempt to find a correlation between co-curricular involvement and leadership self-assessment. Participants were given a set of surveys: one being a leadership assessment and the other a campus involvement assessment to determine their leadership skills in relation to their campus involvement. The Leadership Practice Inventory (Kouzes, & Posner, 2006) was used as the leadership self-assessment. The rubric for the Leadership Practice Inventory (LPI) was used to analyze the results of that data. The LPI consists of a thirty-question survey about leadership styles. Participants were asked to rank each statement as it pertains to them on a scale from 1-10; 1- Almost Never, 2 – Rarely, 3 – Seldom, 4- Once in a while, 5- Occasionally, 6- Sometimes, 7 – Fairly Often, 8 – Usually, 9- Very Frequently, 10 – Almost Always.

After participants ranked each statement, the answers were analyzed using the Leadership Practice Inventory Rubric. Answers were grouped together showcasing the Five Practices of Exemplary Leadership according to the Leadership Practice Inventory: Model the Way, Inspire a Shared Vision, Challenge the Process, Enable Others to Act, Encourage the Heart (Kouzes, & Posner, 2006). For the purpose of this research, the average of the Five Practices of Exemplary Leadership was calculated to measure the
total leadership score of an individual. Participants who landed in the 70 percentile or higher were considered to have high leadership self-assessment. Those who fell below 70% but above 30% were considered moderate; and below 30% were considered to have a low leadership self-assessment.

The campus involvement assessment and rubric were created for the purpose of this research. Low campus involvement defines the Non-involved Students who logged zero hours of organized campus activities. Moderate campus involvement comprises as any students logging on average more than 1 and less than 10 total hours per week in campus involvement. High campus involvement includes any students logging over 10 hours per week. Pearson’s Correlation test was used to correlated the connections between leadership self-assessment and the campus involvement self-assessment.

To determine the different levels of students, a natural born leader will be defined as any student who has a high rank in the leadership self-assessment and shows minor growth from campus involvement. An average student will be defined as any student who has a moderate or low rank in the leadership self-assessment and shows growth from campus involvement.

Data Analysis

Using the averages from the LPI self-assessment, 0% (n=0) of the participants scored in the LLSA range, 26% participants (n=13) scored in the MLSA range and 74% (n=37) in the HLSA range. Based on their responses to the campus involvement survey, 30% of participants (n=15) fell into the LCI category, 44% (n=22) in MCI and 26% (n=13) HCI.

Table 1
Descriptive statistics of Involvement and Total Leadership
<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Range</th>
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<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Variance</th>
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<tr>
<td>Total Leadership</td>
<td>50</td>
<td>31.80</td>
<td>25.80</td>
<td>57.60</td>
<td>45.0000</td>
<td>7.27680</td>
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<td>Non-involved Student</td>
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<td>25.80</td>
<td>55.80</td>
<td>43.4533</td>
<td>7.01202</td>
<td>49.168</td>
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<tr>
<td>Total Leadership</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Involved Students</td>
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<td>28.80</td>
<td>28.80</td>
<td>57.60</td>
<td>45.6629</td>
<td>7.38644</td>
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<td></td>
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<tr>
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<td>5.00</td>
<td>.00</td>
<td>5.00</td>
<td>1.5400</td>
<td>1.54140</td>
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</table>

*There is no additional data from Non-involved Students or Involved Students for Involvement. The data for all participant Involvement is the same as Involved Students participation. There is no involvement data for Non-involved Students because they are not involved.

Table 1 shows the means, standard deviations, ranges and variances for Total Leadership and campus involvement level. Involvement was determined by the sum of involvements that a student participated in. The higher the grade level, the more likely a student was not only involved in one co-curricular activity but in three or more activities. Data showed that 84% of senior undergraduate students were involved with 59% were involved in three or more activities; 62% of junior involvement and 44% in three or more activities; 58% of sophomore involvement with 16% in three or more activities; and 33% of the freshmen involvement with 0% in three or more activities. However, there was no relationship between Total Leadership and year in school. Participants were asked “Do you hold any leadership positions in your involvement” to gauge the level of leadership student undertook. Pearson’s Correlation 2-tailed tests were used to determine correlations between Total Leadership and campus involvement survey questions. Though 69% (n=24) of participants partook in some level of leadership in one or all of
their involvement, there was a weak relationship \((r=.151, p=.387)\). This suggests that holding a leadership position is not associated with the student’s leadership skills.

The average Involved Student has a higher Total Leadership score \((n=45.6629)\) than a Non-involved Student \((n=42.4533)\). When compared, the majority of Involved Students \((n=77\%)\) were HLSA while only 66\% of Non-involved Students ranked in the high level. This supports part of the researcher’s hypothesis that over seventy percent of students that are involved are natural born leaders. Neither Involved Students nor Non-involved Students ranked themselves in the low level of Total Leadership. The highest LPI self-assessment average was 96\% belonging to an Involved Student and the lowest at 43\% belonged to a Non-involved Student. Graph 1 represents a side-by-side comparison between Non-involved Student’s Total Leadership scores and Involved Student’s Total Leadership scores.

**Graph 1**

Side by Side Comparisons
There is a significant positive correlation between Total Leadership and Involvement ($r = .434, p < .05$) of all the participants. To determine the specifics of the correlation, participant results were then grouped from the results of Involvement and Total Leadership. Six groups emerged from the pairing:

- HLSA/HCI (n=10)
- HLSA/MCI (n=17)
- HLSA/LCI (n=10)
- MLSA/HCI (n=3)
- MLSA/MCI (n=5).
- MLSA/MCI (n=5)

There was no significant relationship between the involvement and Total Leadership of an HLSA/HCI ($r = -.353, p = .303$), HLSA/MCI ($r = .378, p = .135$), MLSA/HCI ($r = .977, p = .136$), or MLSA/MCI ($r = -.020, p = .975$). This also supports the theory that campus involvement is not associated with leadership development. No correlations were analyzed for HLSA/LCI and MLSA/MCI; see limitations.

**Table 2**

Correlations between Total Leadership self-assessment and degree of learning happening in campus involvements

<table>
<thead>
<tr>
<th></th>
<th>Total Leadership</th>
<th>Networking skills</th>
<th>Leadership skills</th>
<th>Teamwork</th>
<th>Time Management</th>
<th>Dealing with difficult situations and people</th>
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</thead>
<tbody>
<tr>
<td>Total Leadership</td>
<td>Pearson Correlation</td>
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<td>-0.041</td>
<td>0.105</td>
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<td>0.348</td>
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<tr>
<td>Sig. (2-tailed)</td>
<td>0.844</td>
<td>0.616</td>
<td>0.656</td>
<td>0.088</td>
<td>0.492</td>
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<tr>
<td>N</td>
<td>37</td>
<td>26</td>
<td>25</td>
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<td>24</td>
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</tbody>
</table>
To understand whether leadership was learned during campus involvement, participants who were Involved Students were asked the following question “On a scale of 1-5 (1-no progress, 5—very significant progress), compare how much your involvement assisted with your development from who you were prior to your campus involvement to who you are now in the following areas.” The five skills were networking, leadership, teamwork, time management and dealing with difficult situations and people. 37% (n=13) of all Involved Students experienced a significant growth in their skills. 28% of participants answered the question in an incorrect format; 17% (n=6) of participants did not fully complete this question and 11% (n=4) had incorrect rankings.

From the completed responses, the research shows that most involved students improved the most in dealing with difficult situations and people (3.5 out of 5). Leadership skills
had the second highest ranking mean of 3.7 in progress, followed by team work and time (3.6); then networking (3.3).

Correlations between these answers and HLSA and MLSA were analyzed. In both cases, there is no relationship between Total Leadership and any of the development of skills. The only significant correlation in the MLSA correlation was leadership skills and dealing with difficult situations and people \( r = .731, p = .039 \). Table 2 represents the correlation between HLSA participants’ responses and Total Leadership. Significant correlations were made within the responses of developmental growth. Amongst the six significant correlations, there was a significant relationship between leadership skills and networking skills, teamwork, and dealing with difficult situations and people; \( p = .001 \), \( p = .001 \), and \( p = .047 \), respectively.

For the Non-involved student, after marking they were not involved, they were asked, “If you have not gotten involved on campus, please state why? (Check all that apply)”. Sixty percent chose “Have off campus commitments” as the most common reason for not getting involved. The second common reason was not having enough time (46.67%). Participants had the options to state other reasons. Three separate answers were produced: “unsure of the actual value of joining”, “Work takes up most of my free time”, and “Takes too long to get to school. 1.5 hours on train one way.”

**Discussion**

The core contribution of this research is the Leadership Practice Inventory (Kouzes, & Posner, 2006). Having an established tool such as the LPI provided validity to the research. Previous researchers (e.g., Barron, & Ewing, & Waddell, 2000, Chickering, 1969, Holt & et al, 2008, Astin & Antonio, 2000) noted the developmental
growth that occurs from being involved in co-curricular activities. This researcher believes that is true with a minority of the students that get involved.

The participants at University A have high regard for themselves with 74% ranking in the high category for the leadership assessment. Allowing for some bias in self-evaluation, the high self-assessment can be attributed to the many positive factors pertaining to the demographics of University A. University A is a private institution nestled in an upper-class neighborhood. It holds multiple prestigious accolades and admits from the top percentages of high school seniors (DePaul University, 2012). The average GPA of the 2011 incoming freshman class was 3.55 with 25% of freshman graduating in the top 10% of their class (DePaul University, 2012). Considering that these students were academic leaders in high schools, the high self-assessment is almost expected. The caliber of students attending University A is above average prior to any college influence.

According to the data analysis, involvement increases with each year. This could be due to several reasons. With each year, students become more invested in the school and their education as they get closer to graduation. As this relationship builds, they gain a stronger connection with the school and they are more proactive into involving themselves into activities that will propel them into their future paths. Also, upperclassmen could be using co-curricular involvement as a last attempt to get connected and build their network. These self-fulfilling actions relate to students being active participants in their own learning (Komives, Woodard, & Associates, 2003). Knowing co-curricular involvement aids in getting a job is the catalyst that most students need to take action (Barron, Ewing, and Waddell, 2000).
In regard to the hypothesis, data did not provide enough information to either confirm or deny researchers' claim. The researcher hypothesized that campus involvement would be filled with a majority of natural born leaders. With the parameters set by this research, that would require for a student to have a HLSA as well as have little to no significant development in skills. Due to survey error, this could not be determined.

Data showed no significant correlations between leadership self-assessment and leadership positions or the amount of time spent in co-curricular activities. Similar to Huang and Chang's (2004) argument, the research shows no magic ratio of co-curricular activities and academics for leadership development. The fact that leadership self-assessment is correlated to campus involvement but not to any specific amount of involvement lends support to Huang and Chang's (2004) claims as well to the researchers' hypothesis. On average, the Involved Students scored higher on the self-assessment than the Non-involved Student. This assumes that most student leaders take the opportunity to get involved on campus.

According to the parameters, while 77% of Involved Students had a HLSA, only 17% of those participants also had little to no significant development in skills. This would in turn mean that the data does not support the hypothesis. However, there were multiple incorrect entries in the survey. In the question “On a scale of 1-5 (1-no progress, 5—very significant progress), compare how much your involvement assisted with your development from who you were prior to your campus involvement to who you are now in the following areas?”, 28% (n=10) of participants did not answer properly. 17% of the participants did not answer the question fully, left one or more skills blank, or put check marks instead of actual number rankings. An additional 11% did not seem to understand
the ranking systems; instead of ranking each of their individual skills from 1-5, they ranked the skills against each other from 1-5. This particular question was used in order to separate the natural born leaders in HLSA and the average student who have grown to into a HLSA.

Due to the misinterpretation of the survey by one fourth of the participants, the researcher could not fully quantify the skill development of natural born leaders involved in co-curricular activities. In addition, the design of the survey was fashioned in a way that did not ask a Non-involved Student to answer a skill development question. Thus, it does not allow for a comparison between the two groups. While the focus was on the Involved Students, the Non-involved Students provided a control group. Knowing the skill growth of Non-involved Students would have allowed a back door inference as to whether leadership is innate or acquired through co-curricular activities. That missed opportunity in the survey makes it hard to determine the developmental growth of skills in the participants. The survey errors may have also contributed to the lack of significant correlation between the leadership self-assessment and any transferable skills.

In regard to the research question, “Does involvement in co-curricular activities on a college campus develop leadership skills?”, if research excludes survey errors, the answer is yes. With the exclusion of survey errors, only 5% of Involved Students rated their skills development as very little to none. Of the skills that were rated “1=no progress”, leadership was not one of them. Five participants marked “no progress” for networking skills and two marked “no progress” in time management. However, overall, participants had moderate to significant progress in development in all skills, particularly leadership.
Leadership skills, as well as other transferable skills, are developed through campus involvement. While it’s still the belief of the researcher that co-curricular activities is dominated by natural born leaders, there is belief that there is development in all students. The researcher believes that students may attribute their skill to co-curricular involvement due to the fact it’s a means to display their talents. Knowing that development is, to some degree, purposely due to involvement, researchers can adequately predict career success.

The lack of data generated by the Non-involved Students raises more questions than answers. While the Involved Students had higher leadership assessment and more in the HLSA, the Non-involved Students were not that far behind. Two-thirds of Non-involved Students ranked themselves as HLSA. A portion of the high scores is most likely related to the fact they are part of the select population that has gotten into University A. Since no skill development question was asked of them, research can’t determine the innateness of their leadership assessment. Though Non-involved Students may not be involved on campus, there are plenty of opportunities to be involved on the outside of campus. Previous research never specified that involvement must be contained in the walls of a university in order to count towards skill development. Involvement in general brings upon positive relations to degree and job attainment. Sixty percent of those student said that they were not involved on campus because they had off campus involvement.

One student commented “Unsure of the actual value of joining.” The researcher believes that this sentiment speak volumes and is relevant to both involved and non-involved students. Students who have other responsibilities may question the worth of
Nature versus Nurture 29

getting involved on campus. While researchers and student development practitioners are able to connect the dots between co-curricular activities and post-graduation success, it may not be as clear to students. For a student who is a criminal justice major, getting involved in an activities board may not seem like a good use of his/her time. Returning to Gladwell’s (2008) discussion on 10,000 practice hours, innate skills will only take you so far. A previous example was used to associate basketball to career success. By equating the transferable skills, i.e. communication and teamwork, learned on the court are the same as the one learned in the workplace, students are adding to their 10,000 hours through co-curricular involvement. However, most students may only see it as playing basketball. It falls on student affairs professionals to show students that there is more to co-curricular activities than playing sports or planning events. Regardless of the activity in which they are involved, most co-curricular activities will incorporate skills applicable to a career.

This research was not created to negate the student development theories of the past (i.e. Astin and Antonio, 2000, and Chickering, 1969). In fact, the goal of this research was to contribute to such theories. While each student is unique, universities need to be proactive in researching in what degree students develop through involvement. By knowing their target audiences, student affairs professionals can adequately prepare themselves to help their students. College degrees have become synonymous with career success (DeNavas-Walt, Proctor, & Smith, 2011). The objective of this research is beginning the exploration to providing reasoning that makes co-curricular activities synonymous as well.

**Limitations**
Research was limited to one Private Midwestern university as a result of time and limit of access. The study did not involve any non-college students. The researcher’s bias to not include non-college students was influence by the success associated with pursuing advance degrees. The United States 2010 census provides proof of career success in terms of annual salary (DeNavas-Walt, Proctor, & Smith, 2011). Since there has been clear research proving the benefit of a college degree, the researcher did not find it pertinent to add the non-college group to the sample size. Access to participants relied on professors’ cooperation. Due to the fact that surveys were distributed either before or after a class, time was limited. Going over the allotted time meant that students were either rushing through so they would not be late to their next class or just settling down for the start of class. Also, the time limitations may have caused students to rush through the survey and not answer the questions properly. Researcher’s time was also limited. Data collection was put on hold for six-weeks because of winter break for the students. Because the survey distribution was done in person, the researcher could only meet with classes that were accommodating to her schedule. With a population of 50 participants from one school, generalizations could only be made about the students from University A.

Another limitation brought on the research is the uniqueness of the school being in an urban environment. University A prides itself the notion of not knowing where University A ends and where city begins. On a daily basis, students are using public transit to travel between two downtown locations. During these travels, they are amongst business professionals. With the city as a backyard, University A’s students blend in
with their surroundings. Eventually, this type of exposure brings a level of maturity that may not occur with college students in a rural area.

Delimitations for research removed graduate students from the study. Graduate programs vary per university and departments. Graduate students were removed because of the chances of including more non-traditional students. Also, most co-curricular activities are marketed to undergraduate students. Since it is more likely for graduate students to have full time jobs, the chances of them getting involved on campus outside of academics decrease. Another delimitation was the lack of correlation data for HLSA/LCI and MLSA/LCI. Due to the arrangement of the survey, correlations between Total Leadership and campus involvement for Non-involved students do not exist. Since they did not have any involvements, they did not have to answer the questions of “How many hours/week do you spend in total in all of your campus involvement?” Without an answer to that question, no correlation could be run. The overall format of the campus involvement assessment lacked validity. The campus involvement assessment was created to provide a demographic look at the students’ campus involvement. However, some of the questions were subjective rather than objective. Because of this, the campus recreation assessment would require a test of its content validity.

**Future Research**

Research can very likely be further developed on this topic. To improve on the current research, it is recommended to find another process for survey distribution. Distributing under a time constraint is not conducive for optimal data results. Survey distributions outside of class time or online would have provided a better outcome in answers. Online surveys would have allowed for a greater and faster distribution. The
convenience of online distribution would benefit the participants, the researcher and the professors. Regardless of distribution, the creation of the campus involvement assessment would need to remain as a demographic measurement. Another improvement would be to run correlations of specific co-curricular activities to determine if certain involvements develop students greater than others.

In order to properly improve on the current research an elaboration of the Non-involve Students activity would be needed. This type of survey would benefit from an appropriate control group. It would require the information on the type of activities in which Non-involved students participate in outside of campus. Also, discovering the learning development of transferable skill would be required.

To expand on this research, it is suggested that a variety of universities are used. Involving students from state schools of all sizes will add validity to the study. Limiting the range of participants to one university, especially when the university is unique in size, location and affiliation, restricts the research. This topic would be better suited for a longitudinal research. It would help to begin survey distribution in freshman year and redistribute again before graduation and then again after several years in a career. The end result would be to find tangible evidence of skill development in co-curricular activities and their relationship to career success.

**Conclusion**

College is supposed to prepare student for the “real world”. If freshman are overwhelmed with all the opportunities of involvement on campus, they will be just as overwhelmed with job options on graduation day. How student affairs departments prepare their students is crucial to the student’s development. How students take
advantage of the department’s resources is crucial to their career success. There is
evidence of the relationship between co-curricular activities and leadership development.
Whether students are natural born leaders or average, they benefit from both the
educational and the co-curricular activities of a campus. Innate skills can only take a
student so far. There will be natural born leaders that flock to the opportunity to be
involved. They might become be the students that become the face of campus, involved
in every aspect. However, the growth that can be experience by an average student is
irreplaceable.

Just merely being involved is valuable to a student. While research still needs to
be develop on why co-curricular activities help students, enough is out there to prove a
positive correlation between that and career success. The focus on the average
development should be a major interest for colleges and universities. If future research
shows that student involvement is over crowded with natural born leaders, then student
affair departments are failing at connecting with the common students. While all students
can benefit from involvement, it’s the average students that may require the extra help.
The natural born leaders set the bar for excellent. However, a community is only as
strong as its weakest link. When student affairs departments provide the development
needed for the average students it raises the standard for the entire institution. College
campuses have evolved into communities that addressed the needs of student as a whole.
As out-of-the-classroom learning grows, so will the caliber of students. With a higher
level of leadership development, students will be able to handle life after college more
easily.
References


Appendix 1

Hello Professor XXX,

My name is Stephanie Souvenir and I am currently getting my masters in Educational Leadership at DePaul. As part of the final stages of my masters program, I have chosen to write a thesis. My research is about the correlation of on-campus involvement and leadership development. I was emailing you in hopes of reaching my goal of finding 50-75 undergraduate participants for my research. If possible, I would like to administer surveys to your XXX 000-000 class that meets on X/X at XX:XX. The survey should take about 10-20 minutes to complete in class. This will be a one time occurrence and there will be no additional efforts on your part. If you would be willing to help me in my research, you can contact me at slsouveni@depaul.edu or 608-239-0894. If you have any questions about the surveys or research, please let me know. Thank you for your help and I hope to hear from you soon.

Stephanie Souvenir
Appendix 2

INFORMATION SHEET FOR PARTICIPATION IN RESEARCH STUDY

Nature vs. Nurture: Campus involvement’s affect on student leadership development

You are being asked to participate in a research study being conducted by Stephanie Souvenir at DePaul University as a requirement to obtain her Masters degree. This study is supervised by her thesis advisor Barbara Rieckhoff. We are asking you because we are trying to learn more about leadership development and student involvement. This study will take about 20 minutes of your time. If you agree to be in this study, you will be asked to fill out a survey. The survey will include questions about your self-assessment of your leadership skills and your co-curricular activities. You can choose not to participate. There will be no negative consequences if you decide not to participate or change your mind later.

If you have questions about this study, please contact Stephanie Souvenir at 608-239-0894 or ssouveni@depaul.edu. If you have questions about your rights as a research subject, you may contact Susan Loess-Perez, DePaul University’s Director of Research Protections at 312-362-7593 or by email at sloesspe@depaul.edu.

You may keep this information for your records.
**Campus Involvement Assessment**
**Unless otherwise noted, pick one best answer**

1) **Year in School**
   a. Freshman  
   b. Sophomore  
   c. Junior  
   d. Senior  
   e. Grad student

2) **School status**
   a. Full time  
   b. Part time

3) **Gender**
   a. Male  
   b. Female

4) **Residence**
   a. On-campus  
   b. Within walking distance  
   b. Commuter

5) **Are you involved on campus in any of these types of organizations (circle all that applies)**
   Activist/Political  
   Club Sports  
   Cultural  
   Departmental  
   Graduate Professional/Academic  
   Fraternity/ Sorority  
   Honor Societies  
   Intercollegiate Athletics  
   Media/Publications  
   On-Campus Job (Does not include work study)  
   Pre-Professional/Academic  
   Performance/Entertainment  
   Religious/Spiritual  
   Service  
   I am not involved on campus (skip to #15)

6) **How many hours/week do you spend at your most time consuming involvement?**
   a. 0-2 hours  
   b. 2-5 hours  
   c. 5-8 hours  
   d. 8-10 hours  
   e. 10-15 hours  
   f. 15+hours

7) **How many hours/week do you spend in total in all of your campus involvement?**
   a. 0-2 hours  
   b. 2-5 hours  
   c. 5-8 hours  
   d. 8-10 hours  
   e. 10-15 hours  
   f. 15+hours

8) **How long have you been involved on campus during your college years?**
   a. >1 year  
   b. 1 year  
   c. 2 years  
   d. 3+ years

9) **Do you hold any leadership positions in any of your involvements?**
   a. Yes, in all of them  
   b. Yes, in most of them  
   c. Yes, in some of them  
   d. No, I do not (skip to #11)

10) **How long have you held a leadership role in your involvements?**
    a. > 1 year  
    b. 1 year
c. 2 years  
d. 3+ years

11) If you don’t hold any leadership positions, what describes your level of involvement?
   a. I go to meetings
   b. I go to meetings and events
   c. I go to meetings and help plan/promote events

12) How did you initially find out how to get involved in your current commitments?
   a. You sought out most of the information on your own (internet, flyers, etc.)
   b. University faculty and/or staff provided you with most of the information (RA’s, teachers, advisors, etc)
   c. Friends provided you with most of the information

13) What were the main reasons of why you got involved? (Check all that apply)
   ___Wanted to build your resume
   ___To meet new people
   ___Belong to similar organizations in high school and wanted to continue on in college
   ___To help you progress professionally
   ___Recommended by university faculty or staff
   ___Recommended by friends
   ___It looked like a fun organizations to get involved with

14) On a scale of 1-5 (1-no progress, 5 –very significant progress), compare how much your involvement assisted with your development from who you were prior to your campus involvement to who you are now in the following areas.
   ___Networking skills
   ___Leadership skills
   ___Teamwork
   ___Time Management
   ___Dealing with difficult situations and people
   ___I have not learned anything. I just do it for fun.

For those who answered “I am not involved on campus” in question #5

15) If you have not gotten involved on campus, please state why? (Check all that apply)
   ___Nothing peaks your interest
   ___Have off campus commitments
   ___Not aware of available on campus opportunities
   ___Not enough time
   ___Other _________________________________________________________

Thank you taking the time to fill out these surveys
Stephanie Souvenir
Leadership Practice Inventory
Leadership Self-assessment

For each statement, decide the extent to which you really engage in the behavior and then choose the number that best applies to each statement:

1- Almost Never
2- Rarely
3- Seldom
4- Once in a While
5- Occasionally
6- Sometimes
7- Fairly Often
8- Usually
9- Very Frequently
10- Almost Always

1. ____ I set a personal example of what is expected
2. ____ I talk about future trends influencing our work
3. ____ I seek challenging opportunities to test skills
4. ____ I develop cooperative relationships
5. ____ I praise people for a job well done
6. ____ I make certain that people adhere to agreed-on standards
7. ____ I describe a compelling image of the future
8. ____ I challenge people to try new approaches
9. ____ I actively listen to diverse points of view
10. ____ I express confidence in people’s abilities
11. ____ I follow through on promises and commitments
12. ____ I appeal to others to share dreams of the future
13. ____ I search outside organizations for innovative ways to improve
14. ____ I treat people with dignity and respect
15. ____ I creatively rewards people for their contributions
16. ____ I ask for feedback on how my actions affect people’s performance
17. ____ I show others how their can be realized
18. ____ I ask “What can we learn?”
19. ____ I support decisions other people make
20. ____ I recognize people for commitment to shared values
21. ____ I build consensus around organization’s values
22. ____ I paint “big picture” of group aspirations
23. ____ I make certain that goals, plans and milestones are set
24. ____ I give people choice about how to do their work
25. ____ I find ways to celebrate accomplishments
26. ____ I am clear about my philosophy on leadership
27. ____ I speak with conviction about meaning of work
28. ____ I experiment and take risk
29. ____ I ensure that people grow in their jobs
30. ____ I give team members appreciation and support