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Moving Through Autonomy Toward Interdependence: The Relationship Between Chickering

And Reisser's Third Vector and Stephen Covey's Seven Habits of Highly Effective People

(TITLE)

BY

Christopher M. Pahl

THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF

Master of Science in College Student Affairs

IN THE GRADUATE SCHOOL, EASTERN ILLINOIS UNIVERSITY
CHARLESTON, ILLINOIS

May 2011

YEAR

I HEREBY RECOMMEND THAT THIS THESIS BE ACCEPTED AS FULFILLING
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Dedication

I want to dedicate this thesis to my godson and nephew Brady Pahl. He is almost two years old saying “thesis” and “good luck”, his presence in my life has made me do my best and to lead by example so he knows he can achieve anything he puts his mind to accomplish.

Acknowledgements

I want to thank my advisor Dr. Charles Eberly. Without his continuous support and hours of office time, I could not have been able to complete this thesis. I would also like to thank my other committee members, Jody Stone and Dr. Stephen Lucas. They have put in many hours of their own time to ensure I complete this thesis and succeed in my graduate studies.

I would also like to thank my entire family including my mother Debbie, father Bruce, brother Ben and sister-in-law Nicole. They have taken the time to encourage and support me every step of the way while working on my thesis.

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Abstract

This study assessed college student levels of autonomy as measured by The Iowa Developing Autonomy Inventory (Hood & Jackson, 1986), and their perception of their mastery of the seven habits of highly effective people as measured by the Covey Seven Habits Self Profile (Covey, ND). The Iowa inventory consists of six subscales consisting of 15 items each; mobility, time management, money management, interdependence, emotional independence - Peers and emotional independence - Parents. The Seven Habits profile consists of nine three-item categories; emotional bank account, life balance, be proactive, begin with the end in mind, put first things first, think win-win, seek first to understand, synergize, and sharpen the saw.

Two-tailed t-tests were used to measure significant differences between male and female students, freshmen and senior students, and students living on or off-campus on the two measures. A series of Pearson Product Moment correlations were calculated to examine correlations between the Iowa Developing Autonomy Inventory scales and Covey's Seven Habits categories.

Significant differences were found between male and female students, freshmen and senior students and students living on or off-campus on The Iowa Developing Autonomy Scale. Few significant differences were found between male and female students, freshmen and senior students and living on or off-campus as measured by the Covey Seven Habits Self Profile. There were 33 significant correlations between the Seven Habits measure and the six Iowa Developing Autonomy subscales.

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Chapter I

Introduction

Student affairs professionals seek to understand what “knowledge, skills, and desires” (Covey, 1989, p. 44) influence individual student development. Numerous student development theories are related to Erickson’s (1964) work on adolescent identity development. Chickering (1972) expanded Erickson’s adolescent stage of “identity versus role confusion” (Erikson, 1964, p. 261) into seven vectors, each exploring steps a college student takes in their journey through college toward adulthood. Many studies have demonstrated the validity of these theories (Pascarella & Terenzini, 1991, 2005), showing that students do in fact develop along specific vectors over the course of their college years, but what habits of behavior they have learned from their experiences is not well understood. Are students leaving with the interpersonal skills needed to enter the workforce and be effective in their role as an employee?

Chickering and Reisser’s (1993) third vector, “moving through autonomy toward interdependence” (p. 115), may be a useful way to measure if students learn the developmental skills associated with being effective in their work roles. Moving through autonomy toward interdependence focuses on “freedom from continual and pressing needs for reassurance, affection, or approval from others” (p.117). As a high school student enters college, they are accustomed to having “reassurance, affection and approval from close friends and family” (p.117). Students moving through college learn to develop new coping skills to move into interdependence so they can be effective on

their own. Thus, the question becomes, what skills are learned to achieve this successful step into interdependence?

The Seven Habits of Highly Effective People (Covey, 1989) focus on the life changes associated with moving from dependence to interdependence. Covey's thesis pinpointed how mastering these seven habits allowed a person to move from being a dependent person to becoming self-confidently interdependent. Many people who have successfully implemented these habits into their own daily life attest to their value (Haimes, 2001; Lambert & Milner, 2008).

Purpose of Study

Both Chickering and Reisser's (1993) third vector and Covey's seven habits address the process of moving from dependence to interdependence. The purpose of the present study was to ascertain the relationship between a measure of Chickering's third vector, moving through autonomy toward interdependence, and a measure of Covey's seven habits of highly effective people. Chickering's third vector was measured using The Iowa Developing Autonomy Inventory (Hood & Jackson, 1986) and a measure of the seven habits was accessed via the Seven Habits Profile (Seven Habits Self Profile, <http://www.franklincovey.com/tc/resources>, retrieved March 22, 2010).

Research Question and Hypotheses

Four general research questions were developed for the purpose of the present study along with statistical hypotheses based on the review of literature related to the research questions. Research questions and associated hypotheses are stated below.

- 1) Are there differences between male and female college students in the subscales of mobility, time management, money management, interdependence, emotional independence - Peers and emotional independence – parents as measured by the Iowa Developing Autonomy Inventory (Hood & Jackson, 1986)?

H_{01} : There will be no statistically significant differences in mean scores on the subscales of the Iowa Developing Autonomy Inventory between male and female college students.

H_{a1} : There will be statistically significant differences in mean scores on the subscales of the Iowa Developing Autonomy Inventory between male and female college students.

- 2) Are there differences between male and female college students in the habits being proactive, beginning with the end in mind, putting first things first, thinking win-win, seeking first to understand, synergy, sharpening the saw as measured by Steven Covey's Seven Habit Self Scoring Profile (Covey, NA)?

H_{02} : There will be no statistically significant differences in mean scores on the Seven Habits of the Seven Habit Self Scoring Profile between male and female college students.

H_{a2} : There will be statistically significant differences in mean scores on the Seven Habits of the Seven Habit Self Scoring Profile between male and female college students.

- 3) Are there differences between freshmen and senior college students in the subscales of mobility, time management, money management, interdependence,

emotional independence - Peers and emotional independence – parents as measured by the Iowa Developing Autonomy Inventory (Hood & Jackson, 1986)?

H₀₃: There will be no statistically significant differences in mean scores on the subscales of the Iowa Developing Autonomy Inventory between freshmen and senior college students.

H_{a3}: There will be statistically significant differences in mean scores on the subscales of the Iowa Developing Autonomy Inventory between freshmen and senior college students.

- 4) Are there differences between freshmen and senior college students in the habits of being proactive, beginning with the end in mind, putting first things first, thinking win-win, seeking first to understand, synergy, sharpening the saw as measured by Steven Covey's Seven Habit Self Scoring Profile (Covey, NA)?

H₀₄: There will be no statistically significant differences in mean scores on the Seven Habits of the Seven Habit Self Scoring Profile between freshmen and senior college students.

H_{a4}: There will be statistically significant differences in mean scores on the Seven Habits of the Seven Habit Self Scoring Profile between freshmen and senior college students.

- 5) Are there differences between college students living on-campus and college students living off-campus in the subscales of mobility, time management, money management, interdependence, emotional independence - Peers and emotional independence – parents as measured by the Iowa Developing Autonomy Inventory (Hood & Jackson, 1986)?

H₀₅: There will be no statistically significant differences in mean scores on the subscales of the Iowa Developing Autonomy Inventory between college students living on-campus and college students living off-campus.

H_{a5}: There will be statistically significant differences in mean scores on the subscales of the Iowa Developing Autonomy Inventory between college students living on-campus and college students living off-campus.

- 6) Are there differences between college students living on-campus and college students living off-campus in the habits of being proactive, beginning with the end in mind, putting first things first, thinking win-win, seeking first to understand, synergy, sharpening the saw as measured by Steven Covey's Seven Habit Self Scoring Profile (Covey, NA)?

H₀₄: There will be no statistically significant differences in mean scores on the Seven Habits of the Seven Habit Self Scoring Profile between college students living on-campus and college students living off-campus.

H_{a4}: There will be statistically significant differences in mean scores on the Seven Habits of the Seven Habit Self Scoring Profile between college students living on-campus and college students living off-campus.

- 7) Is there a relationship between the subscales of mobility, time management, money management, interdependence, emotional independence - Peers and emotional independence – parents as measured by the Iowa Developing Autonomy Inventory (Hood & Jackson, 1986) and the habits being proactive, beginning with the end in mind, putting first things first, thinking win-win,

seeking first to understand, synergy, sharpening the saw as measured by Steven Covey's Seven Habit Self Scoring Profile (Covey, NA)?

H₀₇: There will be no statistically significant correlations between the subscales of mobility, time management, money management, interdependence, emotional independence - Peers and emotional independence – parents as measured by the Iowa Developing Autonomy Inventory (Hood & Jackson, 1986) and the habits being proactive, beginning with the end in mind, putting first things first, thinking win-win, seeking first to understand, synergy, sharpening the saw as measured by Steven Covey's Seven Habit Self Scoring Profile (Covey, NA).

H_{a7}: There will be statistically significant correlations between the subscales of mobility, time management, money management, interdependence, emotional independence - Peers and emotional independence – parents as measured by the Iowa Developing Autonomy Inventory (Hood & Jackson, 1986) and the habits being proactive, beginning with the end in mind, putting first things first, thinking win-win, seeking first to understand, synergy, sharpening the saw as measured by Steven Covey's Seven Habit Self Scoring Profile (Covey, NA).

Significance of the Study

This study has the potential to have a strong impact in higher education. As a new generation enters college, it will be important to find effective ways to facilitate their cognitive and psychosocial development. By knowing relationships between recognized student development theories (Chickering and Riesser, 1993) and contemporary

management theories (Covey, 1989), student affairs professionals and their instructional colleagues can acquire an integrative learning activity focusing on living/learning initiatives and classroom instructional procedures that promote healthy student development.

Definitions of Terms

The following definition of terms includes concepts important to the understanding of the present study.

Autonomy: “Social-cognitive theorists have similarly depicted autonomy as a freedom from external influences” (Ryan & Deci, 1989, p. 5060).

Begin with the end in mind: Covey (1989) said that successfully creating long term measurable goals was based on personal principles and beginning the process by keeping the end in mind.

Be proactive: Covey (1989) explained being proactive as change starting from within and to make decisions to improve lives through influence, rather than by reacting to external forces.

Dependent: “Dependent people need others to get what they want” (Covey, 1989, p. 49).

Emotional independence: Chickering and Reisser (1993) defended emotional independence as “Freedom from continual and pressing needs for reassurance, affection, or approval from others” (p. 117).

Habit: “A habit can be defined as an intersection of knowledge, skill and desire” (Covey, 1989, p. 47).

Independence: Chickering and Reisser (1993) defined independence as, “the ability to carry on activities and solve problems in a self-directed manner, and the freedom and confidence to be mobile in order to pursue opportunity and adventure” (p. 117)

Interdependence: Evens, al et., (2010) defined interdependence as, “An awareness of interconnectedness with others” (p. 68).

Mobility: “Independence involves literal mobility [meaning] the ability to leave one place and get to another, to leave a bad situation and arrive safely at a better one” (Chickering and Reisser, 1993, p. 138)

Money management: Money management is defined by, “the process of knowing where you are spending your money today, and having a well thought-out plan in place for where you want it to go” (balancetrack.org, 2010).

Put first things first: “First things are those things you, personally, find of most worth. If you put first things first, you are organizing and managing time and events according to the personal priorities” (Covey, 1989, p. 147)

Think win-win: Seek agreements and relationships that are mutually beneficial (Covey, 1989).

Time management: “Time management is going to mean the development of a process and tools that help you be more productive and efficient.”
(<http://www.timemanagementtools.net/>)

Sharpening the saw: Covey (1989) explains someone who takes the time to build personal renewal of the physical, mental, social/emotional, and spiritual dimensions as someone who is sharpening the saw.

Seek first to understand, then be understood: Covey (1989) describes “seek first to understand, then be understood” (p. 235) as having the ability to first seek to understand the other person and then try to be understood.

Synergy: “Synergy is defined as to create a whole that is greater than the sum of the parts” (Covey, 1989, p. 262).

Chapter Summary

Chapter I contained the question of any potential relationship between two theories (Covey and Chickering) of personal development and outlined the purpose of the present study and research questions which guided the study. Chapter II is a review of research and popular literature regarding the use and development of both theories, The Seven Habits of Highly Effective people and Chickering and Riesser’s (1993) third vector, “moving through autonomy toward interdependence” (p. 115). Chapter II also includes literature pertaining to a student’s development based on class rank, the student’s sex and the student’s residence. Chapter III contains the methodology, procedures for data collection and analysis. Chapter IV contains the research findings. Chapter V contains a discussion of the research findings, applications for professional and academic practice, conclusions drawn, and recommendations for future researchers in the area of college students and student development.

Chapter II

Literature Review

The literature review for the current study assessing the relationship between The Seven Habits of Highly Effective People and Chickering's third vector, moving through autonomy toward interdependence, addressed four broad areas: an introduction to the seven habits, Chickering's student development theory, the Iowa student development inventories, a measure of Chickering's vectors, and related developmental theories focusing on autonomy. The seven habits section defined The Seven Habits of Highly Effective people according to Covey and practical applications of the seven habits in educational and personal settings. Literature reviewed also highlighted selected theories of student development focusing on autonomy. A section dedicated to The Iowa Student Development Inventories addressed what the inventories are and the validity behind each of them. These four areas were broad, but are all equally important in developing a framework to assess if the seven habits are being effectively learned through a student's journey through college.

The Seven Habits

Over 15 million copies of *The Seven Habits of Highly Effective People* have been sold (Covey, 1989). Covey defined habits as "the intersection of knowledge, skill and desire" (p. 47), in other words knowledge is what to/why to do something, the skill is the how to do something, and the desire is the want to do something. The seven habits focus

on the journey from dependence to interdependence. Habits 1 through 3 address the stages of dependence, habits 3 and four address the stages of independence, and habits 4 through 7 address the stages of interdependence. The first three habits focus on self. Habit one details the importance of becoming proactive; underscoring the need to not find oneself sitting around and waiting to be told to do something and provide the initiative. Habit two is “to begin with the end in mind.” (Covey, 1989, 97) Set goals for yourself, aim for them and establish a sense of direction as a leader (Covey, 1992). Habit three is defined as “put first things first” (Covey, 1989, pp.145), and this habit focuses on time management skills to accomplish tasks in terms of priority. Habits four through six focuses on interdependence; Habit four focuses on “win/win” (Covey, 1989, pp.204) situations. Find that middle ground where no one will lose; it’s all about the power of considering compromise. Covey’s habit five deals with empathic communication; “seek first to understand, then to be understood” (Covey, 1989, pp.235). Take the time to listen to others and understand what they want so that you will be able to talk back and be more easily understood. Habit six talks about synergy; synergy is a concept where the energy from everyone is used to come up with the best idea possible. Habit seven focuses on renewal. Covey looks at the analogy “Sharpen the saw” (Covey, 1989, pp. 287) by reviewing the past six habits and applies it through self improvement for the future (Covey, 1992).

In an interview, Covey (1994) explained why he thought the seven habits are important and why he believed they are effective. In the interview, Covey was questioned about the difference between the seven habits and other management theories. Covey responded that the seven habits are a personal journey; people must develop the first three

habits before they can work on the interpersonal skills in habits 4, 5, and 6. Covey also responded, “success and happiness are not based on technique, they are based on character growth” (Interview, 1994, p. 382). The next questions posed revolved around the second habit and the importance of a “personal mission statement” (p. 382). Covey stated “a personal mission statement is central to personal leadership and building goals and strategies in both personal and professional life” (p. 382). Covey went on to talk about how mission statements create personal vision based on character values. Covey then explained his technique for helping someone create their personal mission statement. This included asking about role models and what someone wants out of life or does not want. A mission statement is not finding specific goals but finding an identity of who you are. The purpose of the mission statement, Covey explained, “is to give balance in life and helps with people’s inner self” (p. 382). Covey explained how a mission statement should not change. Over time, one will learn more and may have to adjust the statement but one should not change it.

The interviewer went on to ask how people learn to “put first things first” (p. 383). Covey explained that to teach someone this habit they need to teach themselves to live in the quadrant of life labeled “important, but not urgent” (p. 384), which is referred to as quadrant 2. Covey said many people live in the “important, urgent” (p. 384), also known as quadrant one, where all they do is move from one problem to the next. Covey explained the seven habits are all in quadrant 2. By focusing on quadrant 2 people will cut out the time they begin to waste in day to day life.

These seven habits have been applied in a wide range of settings. However, in preparation for the present research, no empirically based articles demonstrating the

validity of the seven habits were identified. Only single setting action research articles describing improvements in “day-to-day practice” (McMillan & Shoemaker, 2006, p. 414) were located.

An elementary school teacher in North Carolina approached Covey to ask if the seven habits of highly effective people would work on elementary students (Covey, 2009). Muriel Summers asked parents and the local community what they wanted out of their students. The parents and community replied they were looking for “students who were responsible, showed initiative, were creative and knew how to set goals and meet them, who got along with people of various backgrounds and cultures and could resolve conflicts and solve problems.” (Covey, 2009, p. 63) Summers created a leadership theme for the school as opposed to an academic theme. Summers devoted the first week of the school year to teaching students the seven habits of highly effective people and differences in culture. Since the time of the study A.B Combs Elementary School has had some exceptional results. Leadership days, leaders of the week and service projects are examples of what the school has done. There was also an academic result, “the percentage of students passing end-of-grade tests rose from 67 percent to a peak of 97 percent” (Covey, 2009, p. 65). According to parents the most outstanding result was the increased level of student self confidence. Parents said they have never seen it so high. “More than 40 schools in the United States have now embedded the seven habits into their schools’ culture and about 100 more have begun the process this year (2009)” (Covey, 2009, p. 65). In addition, educators from more than 30 countries have now visited A. B. Combs, and several other schools across the country are creating leadership-

themed cultures in their schools. The teachers' instructional methods at A. B. Combs were a prime example of the use of the Seven Habits of Highly Effective People.

Lambert and Milner (2008) applied the seven habits to their K-12 music program in an attempt to become leaders in the eyes of their students, and use action research to attempt to produce a better school music program. Lambert and Milner found if the student feels potential and self worth, the student takes a step to success. Lambert and Milner defined a habit as having the, "what to", "how to" and the "want to" (p. 88) to make a difference. After reviewing the seven habits Lambert and Milner recommended ways to involve students in thinking in the way of the seven habits. Their recommendations detailed how alternating seating would help students grow in development as he or she would start to interact with more people. Videotaping a music audition to look at what can be improved on was another recommendation.

Another educational study took place at the University of Limpopo, South Africa, where Efthimiadis (2007) used the Foundation Like-Skills Module (FLSK) to create workshops for students to access personal transformation and leadership skills. . The main focus of the workshops covered time management, study skills, and basic life skills. The program was also designed to cover topics in gender, environmental, and disability awareness. Lack of participation in the initial program led the program to become more of a leadership course when it was offered again (2003). The module was re-structured into a 7 habits of highly effective people based course (2006). The students would take a four week course on dependable strengths, followed by a ten week, seven habits course. Based on the success of Covey's book, the module took on the seven habits with overwhelming participation using habits one through three in class one and habits four

though seven in another course. “Of the total number of participants in the course, 92 percent indicated they have applied one of the first three habits in their life and of the total participants 52 percent claimed it was helpful” (p.868). Efthimiads concluded the course equipped students to identify and prioritize their personal values, be proactive toward setting up mission statements, and work accordingly. By teaching the seven habits the students were able to become more confident and participate successfully in cooperative work groups.

Aside from action research in educational settings, the seven habits have also been used in personal life applications and other career fields. Parachin (2004), “an ordained minister” (p. 47), reframed each of the seven habits to address personal living on a day to day basis. In his application, habit one begins with “great givers”, explaining people with highly effective lives should not expect return, but still be willing to give. The second habit, “take action”, explains people need to be willing to step up and take the lead when needed. Habit three addresses the need of turning “adversity into advantage” and to learn from mistakes and crisis. The fourth habit highlights forgiveness, living effectively means you need to have the willingness to forgive. Parachin pointed out in habit five that you must have impulse to care; many times when someone is in need, people just walk by. Highly effective living involves stopping to help. Habit six; be kind, being angry and mad will not help anyone’s situation. The last habit Parachin pointed out was to maximize strengths and minimize weaknesses. This will help show others how strong you are and it will force you to find your strengths and weaknesses. Examples like Parachin’s (2004) work provide an excellent illustration of how the seven habits have been adapted into many areas of life.

Haimes (2001), a professor of engineering, adapted the seven habits to risk and systems analysis. The main focus was to relate problem solving of systems analysis, risk management and Covey's *Seven Habits of Highly Effective People*. The systems analysis approach identifies three steps to solving a problem. Build an understanding, improve the decision making process, identify, quantify and evaluate risks (Haimes, 2001). Haimes found a close relationship between systems analysis, risk management and the seven habits. Haimes assessed risk management; again finding three principles to solving a problem; (1) What can go wrong? (2) What is the likelihood it would go wrong and what are the consequences? (3) Seeing that systems analysis and risk management had the same basic values, Haimes looked at the seven habits and found the seven habits are broken down into three principals as well. The first three habits help find a solution, habits 4 and 6 help guide personal development and work toward solving the problem and habit 7 pushes for re-evaluations and improvement. His analysis suggested there was a close relationship between the seven habits with risk management and systems analysis. Haimes' study is another example of how the seven habits have been applied to other problem solving procedures.

Chickering and Riesser's Student Development Theory

The ERIC Higher Education report (2002) summarized four main development theories: Erikson, Marcia, Josselson, Chickering and Reisser, all of which provide the background necessary to understand later research on identity. Erikson explained identity development as "the ability to experience one's self as something that has continuity and sameness and to act accordingly" (Erikson, 1964 p.42). There are many theories that have a focus of autonomy (Erikson, 1964; Marcia, 1966). Specifically, the present study will

focus upon an aspect of Chickering and Riesser's (1993) third vector, "moving through autonomy" (p. 117).

Based on Erikson (1964), Chickering developed a seven stage vector system on how students develop through their college years (Chickering, 1972). Typically, traditional aged college students explore the first three vectors in their first few years of college, while upper-class students wrestle with vectors four, five and possibly six. Individuals continue to work through the later vectors throughout their life and may revisit issues within a vector as they develop. The seven stages consist of: developing competence, managing emotions, moving through autonomy to interdependence, developing mature interdependence relationships, establishing identity, developing purpose and developing integrity (Chickering and Reisser, 1993).

The Iowa Student Development Inventories

The Iowa student development inventory was developed by faculty, staff, and students at the University of Iowa and consists of six individual instruments, each measuring a specific vector of development. Hood (1986) suggested that there was no instrument to measure the last vector, developing integrity. These instruments' are based on the original definitions of Chickering's vectors. For this reason, the present study utilizes the Iowa Developing Autonomy Inventory (Hood & Jackson, 1986).

The Iowa Developing Autonomy Inventory is a measure of Chickering's vector of moving through autonomy to interdependence (Hood & Jackson, 1986). This ninety item instrument includes six subscales: mobility, time management, money management, interdependence, emotional independence from peers and independence from parents.

“Reported coefficients for the scale were .94, no validity information has been reported” (Evans, Forney & Guido-DiBrito, 1998, p. 44).

The Iowa Student Development Inventory was used by White & Hood (1989) to examine the validity of Chickering’s vectors of development. The six instruments were distributed to 225 students. The study indicated limited support for the theory; factors generally paralleled the developing purpose, developing integrity, and establishing identity.

Related Development Research

In a study conducted by Mohammadi, Schwitzer and Nunnery (2010) students were examined on the effects of residence and gender on college student adjustment in Iran. The authors examined effects of on-campus residence in comparison to commuter students, academic performance, self-efficacy, and perceptions of the college environment among female and male students. As presented by Mohammadi, et al., self efficacy refers to a “person’s beliefs about his or her capabilities” (p. 62), thus creating a connection between Mohammadi, et al.’s study and the current study. Mohammadi, et al., (2010) stated that “individuals in a university residence are expected to engage more in learning experiences; in turn greater engagement is expected to have a positive impact on residential students’ academic pursuits and personal development” (p.67). Mohammadi, et al. found this statement true among the females involved in their study which supports on-campus living creating a better atmosphere for personal development (Blimling, 1989), and females may personally develop faster than men if required to live in a residential setting. Mohammadi, Schwitzer and Nunnery also found that “residential

males experienced greater self-efficacy than commuter males” (p.67), but there was no significant influence for females, thus leading to the conclusion that self-efficacy and personal development may be higher among on-campus residential students compared to similarly aged off-campus students.

Astin (1993) “employed some eighty-two different outcome measures, more than 150 student input measures, and nearly 200 different environmental measures” (Astin, 1993, pp. 4) to measure student outcomes and how they are affected by the college environment. One of the aspects studied was the effect of the college environment on student academic performance and personal development. Astin found that “The single most powerful source of influence on the undergraduate student's academic and personal development is the peer group” (p.4) and “Student-student interaction had its strongest positive effects on leadership development, overall academic development, self-reported growth in problem-solving skills, critical thinking skills, and cultural awareness.” (p.4). Astin's results could lead to a comparison between on and off campus living. Living on-campus creates an environment where there is more student interaction; because of this the development of a student living on campus compared to one living off campus could be vastly different.

Using Hood's (1997) The Vocational Purpose Inventory, Flowers (2002) found seniors self-reported significantly higher levels of vocational purpose in college than freshmen. The Vocational Purpose Inventory was developed to measure Chickering's sixth vector, developing purpose. Flowers “sought to examine the extent to which students were developing purpose in college becoming more goal directed, independent, and focused on vocational interests as a result of their college experience” (p.479).

Flowers demonstrated both the construct validity of the instrument and that students developed a sense of life purpose in their journey through college. Since freshmen and seniors are at two significantly different stages of overall personal development, there is evidence to suggest that levels of personal autonomy will also be different from the freshman to the senior year in college.

Chapter Summary

Literature reviewed in Chapter II encompassed student development theory related to autonomy and Covey's Seven Habits of Highly Effective People. Within Chickering's student development theory, vector three, moving through autonomy toward interdependence, there seems to be similarities with characteristics found in The Seven Habits. Chapter II also addressed differences in development as related to the research questions based on student housing, class rank, and gender, supporting the research questions presented in Chapter 1. More importantly answering these questions will determine if the seven habits are useful in student development. In Chapter III, the methodology for the present study will be presented.

CHAPTER III

Methodology

The goal of the present study was to survey students at a mid-sized Midwestern four year public institution to assess their level of autonomy as measured by The Iowa Developing Autonomy Inventory (Hood & Jackson, 1986), and their perception of their mastery of the “Seven Habits of Highly Effective People” as measured by the Covey Seven Habits Self Profile (Covey, 2010) . These data were used to compare and contrast students at the freshman and senior level in order to determine if there was a difference in level of autonomy and acquisition of the “Seven Habits of Highly Effective People” across the college experience by gender, and on and off-campus residence. The institution surveyed introduced both Chickering’s theory and “The Seven Habits” in their housing and dining department to incoming professional staff, graduate students, and resident assistants during staff training, thus leading the Principal Investigator (PI) to research the relationship that may be found between the constructs.

Site Selection

A four year mid-sized public comprehensive institution was chosen as the primary site for the locally developed on-line survey administered in fall 2010. The site was chosen based on the location and experience of the PI. Enrollment at the institution at the time of the study was 11,630; this included both graduate and undergraduate students (EIU Fact Sheet, 2010).

Research Participants

A total of 5,511 students (2,262 freshmen and 3,249 seniors (EIU Fact Sheet) were eligible for participation in the current study. Freshmen and seniors were chosen to assess the development of autonomy as students travel through college. The age of participants typically ranged from 17-23 years of age, reflecting traditional college freshmen and seniors. The ideal sample size return to ensure relevant data for statistical analysis was to consist of 333 freshmen and 334 seniors (Sample size calculator, 2010).

Instrumentation

Iowa Developing Autonomy Inventory (Appendix A) — Created by Hood and Jackson (1986), the Iowa Developing Autonomy Inventory was designed to measure Chickering's third vector of development, moving through autonomy toward interdependence. The Iowa Developing Autonomy Inventory contains 90 Likert-type items with a response set measured on a 5-point scale (e.g., 1 = never characteristic of me, 2 = seldom characteristic of me, 3 = sometimes characteristic of me, 4 = often characteristic of me, 5 = almost always characteristic of me). The inventory consists of six subscales consisting of 15 items each; mobility, time management, money management, interdependence, emotional independence - Peers and emotional independence - Parents. The PI obtained permission to use the instrument through email and phone conversations with Dr. Will Barrett, one of Dr. Hood's doctoral students, who has "used the instrument in several studies" (Personal communication, April 13, 2010).

Seven Habits Self Profile (Appendix B) — The Seven Habits Self Profile

instrument consists of 27 Likert type items measured on a 6-point scale (e.g., 1 = very poor, 2 = poor, 3 = fair, 4 = good, 5 = very good, 6 = outstanding). The profile consists of nine three-item categories; emotional bank account, life balance, be proactive, begin with the end in mind, put first things first, think win-win, seek first to understand, synergize, and sharpen the saw. (Covey, ND) The instrument was designed to assess how close respondents aligned to the 7 habits of highly effective people.

Present Study Survey (Appendix C) - The two instruments were converted to an on-line survey administered through an online survey tool (www.zoomerang.com). The PI obtained permission from the housing department at the PI's institution of employment to use its Zoomerang account. The PI created a single on-line survey incorporating an implied consent form (*Appendix D*), demographic variables, and items from both empirical instruments. The survey was developed in the following format. The first 90 items were questions of the Iowa Developing Autonomy Instrument (Hood & Jackson, 1986); items 91 through 118 were drawn from the Seven Habits Self-Profile (Covey, ND), and the last items pertained to demographics: What is your gender, what is your current class standing, do you currently live on or off campus, how many semesters have you lived on campus? The demographic items allowed the PI to find possible relationships within the three demographic categories, developing autonomy, and acquisition of the Seven Habits of Highly Effective People. The PI also added an optional question to enter into a drawing as an incentive to complete the survey instrument.

Research Design and Assumptions

The current cross sectional research design included the following assumptions.

- 1) It was assumed the starting developmental stage of the seniors would have been equal to the developmental stage of freshmen starting fall 2010.
- 2) The second assumption was that the ending developmental stage of the current freshmen would have been equal to the ending developmental stage of seniors in fall 2010.
- 3) The third assumption was that the college experience of the entering first year students would have been like the college experience seniors have had over the past four years.

Data Collection

The PI obtained permission from the University Housing and Dining office to use on and off campus email addresses for eligible students for the purposes of the study. Through the use of Cboard, a university student database, the Housing and Dining department emailed the PI an Excel spreadsheet of eligible participants (freshmen and seniors). The spreadsheet included first and last names, sex, email, class status, and indicated if the student lived on or off campus. Data were collected between the dates of September 27th, 2010 and October 31st, 2010. Follow-up emails were sent to participants weekly from the initial start date to the end data to increase the rate of return. The email solicitation sent to students included a hyperlink to the instrument, and assumed clicking on the hyperlink to the instrument was implied consent (appendix D). Due to Cboard

records and missing information, 4,497 of the 5,511 eligible participants were emailed the instrument. A total of 425 (8.5% of total emailed) students participated in the current study (145 (34%) freshmen, 242 (56%) seniors, 38 (9%) other). Unfortunately, the sample return rates did not match the desired return rates of 333 for freshmen students, and 334 for senior students for the ideal sample size return to generalize the data analysis to the overall student sample (Sample size calculator, 2010).

Data Analysis

Data for the present study were analyzed using Predictive Analytics Software (PASW), formally known as Statistical Package for the Social Sciences (SPSS). The raw data were downloaded, coded, and reverse scored (see appendix A for reverse scores) in an Excel spreadsheet and then downloaded into PASW. Descriptive statistics were created per item, Iowa subscale and Covey habits. Each provided the mean, range, variance, and standard deviation. Following descriptive statistics a test of differences between means was created using a 2-tailed t-test (significance set at $p < .05$) for each Iowa subscale and Covey habit to study potential differences between gender, class rank, and housing location. Data were reported in the aggregate, based on the subscales of the Iowa Developing Autonomy Inventory (Hood) and Covey Self Profile (Covey) habits. The main focus was the correlations created between results of Iowa subscales and Covey Habits figures. Pearson Product-Moment correlations were calculated to create a table which showed correlations between the Iowa Developing Autonomy Inventory subscales, Covey's habits, and total scores.

Chapter Summary

This chapter has described the research participants, instrumentation, data collection and analysis. There were 5,511 participants eligible for the current study, 4,497 were sent the instrument through email and 425 participated. The data were analyzed using PASW to determine significant differences between male and female students, freshmen and seniors, and students living on or off campus. Pearson Product-Moment correlations were calculated to show correlations between the two instruments and their total scores. The fourth chapter will present results from the data analysis.

Chapter IV

Results

The data reported below were collected to determine if there were any significant differences in the development of autonomy as measured by the Iowa Developing Autonomy Inventory (Hood & Jackson, 1986) and The Seven Habits Self Profile (Covey, N/A). Results were reported on the differences between male and female students, freshmen and seniors, and students living on or off-campus. Pearson Product Moment correlations were also calculated to determine any significant correlations between the two instruments. A total of 5,511 students were eligible for the current study, 4,497 were sent the instrument and 425 participated in the study.

Internal Consistency Reliability

The internal consistency reliability (Cronbach's Alpha) of the six subscales, as measured by The Iowa Developing Autonomy Inventory (Hood & Jackson, 1986) and the Seven Habits, as measured by The Seven Habits Self Profile (Covey, N/A) was determined for all participants (Appendix F). The Cronbach -Alpha reliabilities of each subscale and Seven Habits category reliabilities demonstrated students responded to the factors with comparable consistency and at a high enough level of reliability to analyze group data with dependable outcomes (McMillan & Schumacher, 2006).

Population and Response Rate

Table 1 displays the population and proportion rate of the total number of participants for the current study (N = 425) according to participant gender, class rank and housing status.

Table 1
Population and Response Rate

	N	Percent
Population	425	
Gender		
Male	107	25.20
Female	318	74.80
Class		
Freshmen	145	34.10
Sophomore	19	4.50
Junior	19	4.50
Senior	242	56.90
Housing Status		
On Campus	200	47.10
Off Campus	225	52.90

Descriptive Statistics – Iowa Developing Autonomy Inventory

Table 2 displays descriptive statistics from the Iowa Developing Autonomy Inventory based on the six subscales: “Interdependence” (M = 58.68, SD = 7.18), “Emotional Interdependence – Parents” (M = 50.25, SD = 9.81), “Time Management” (M = 57.52, SD = 8.59), “Money Management” (M = 53.79, SD = 9.87), “Emotional

Independence – Peers” (M = 52.77, SD = 7.59), “Mobility” (M = 52.27, SD = 9.72) and the total score (M = 325.28, SD = 36.59).

Table 2
Descriptive Statistics – Iowa Developing Autonomy Inventory

Measures ^a	M	Range	Variance	SD
Interdependence	58.68	43	51.52	7.18
Emotional Independence - Parents	50.25	50	96.14	9.81
Time Management	57.52	52	73.81	8.59
Money Management	53.79	47	97.37	9.87
Emotional Independence - Peers	52.77	39	57.61	7.59
Mobility	52.27	52	94.47	9.72
Total	325.28	203	1338.86	36.59

^an = 425

Descriptive Statistics – Seven Habits Self Profile

Table 3 displays descriptive statistics from the Seven Habits Self profile based on the Seven habits: “Be Proactive” (M = 13.58, SD = 2.63), “Begin With The End In Mind” (M = 12.86, SD = 3.10), “First Things First (M = 12.21, SD = 2.91), “Win/Win” (M = 14.37, SD = 2.54), “Seek To Understand” (M = 14.34, SD = 2.66), “Synergy” (M = 13.64, SD = 2.52), “Sharpen The Saw” (M = 13.72, SD = 2.69) and the total score (M = 94.72, SD = 14.33).

Table 3
Descriptive Statistics – Seven Habits Self Profile

Measures ^a	M	Range	Variance	SD
Be Proactive	13.58	15	6.94	2.63
Begin with End in Mind	12.86	15	9.60	3.10
First things First	12.21	15	8.48	2.91
Win/Win	14.37	14	6.49	2.54
Seek to Understand	14.34	13	7.08	2.66
Synergy	13.64	12	6.36	2.52
Sharpen the Saw	13.72	15	7.21	2.69
Total	94.72	90	205.42	14.33

^an = 425

Differences between Males and Females – Iowa Developing Autonomy Inventory

Table 4 displays results of differences between means using a two-tailed t-test (significance set at $p < .05$) of males and females from the Iowa Developing Autonomy Inventory. Female students ($n = 318$, $M = 59.25$, $SD = 7.68$) measured significantly higher on “Interdependence” than male students ($n = 107$, $M=56.99$, $SD = 6.92$) ($t = -2.83$, $p < .05$). Female students ($n = 318$, $M=58.19$, $SD = 8.36$) measured significantly higher on “Time Management” than male students ($n = 107$, $M = 55.53$, $SD = 8.90$) ($t = -2.89$, $p < .05$). Male students ($n=107$, $M=53.60$, $SD = 9.67$) measured significantly higher on “Emotional Independence – Parents” than female students ($n = 318$, $M = 49.13$, $SD = 9.48$) ($t = 4.16$, $p < .05$). There was no significant difference measured in “Money Management” between male students ($n= 107$, $M = 54.74$, $SD = 10.70$) and female students ($n = 318$, $M = 53.47$, $SD = 9.57$). No significant difference was found while measuring “Emotional Independence – Peers” between males ($n = 107$, $M=53.19$, $SD = 8.06$) and females ($n = 318$, $M = 52.64$, $SD = 7.44$). There was

no significant difference in “Mobility” found between males ($n = 107$, $M = 53.12$, $SD = 9.97$) and females ($n = 318$, $M = 51.98$, $SD = 9.63$).

Table 4

Differences between Males and Females – Iowa Developing Autonomy Inventory

	Male ^a		Female ^b		<i>t</i>
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	
Interdependence	56.99	7.68	59.25	6.92	-2.83*
Emotional Independence - Parents	53.60	9.48	49.13	9.67	4.16***
Time Management	55.53	8.90	58.19	8.36	-2.79*
Money Management	54.74	10.7	53.47	9.57	1.15
Emotional Independence - Peers	53.19	8.06	52.64	7.44	0.65
Mobility	53.12	9.97	51.98	9.63	1.05
Total	327.2	40.32	324.64	35.29	0.62

* $p < .05$. *** $p < .001$.

^a $n = 107$, ^b $n = 318$

Differences between Male and Females – Self Profile

Table 5 displays results of differences between means using a two-tailed t-test (significance set at $p < .05$) of males and females from the Covey Self Profile. Female students ($n = 318$, $M = 13.21$, $SD = 3.01$) measured significantly higher on “Begin with End in Mind” than males ($n = 107$, $M = 11.79$, $SD = 3.07$) ($t = -4.18$, $p < .05$). Female students ($n = 318$, $M = 14.55$, $SD = 2.53$) measured significantly higher on “Seek to Understand” than males ($n = 107$, $M = 13.69$, $SD = 2.94$) ($t = -2.92$, $p < .05$). Female students ($n = 318$, $M = 12.38$, $SD = 2.81$) also measured significantly higher on “First Things First” than males ($n = 107$, $M = 11.71$, $SD = 3.15$) ($t = -2.08$, $p < .05$). “Be Proactive” showed no significant difference between male students ($n = 107$, $M = 13.46$, $SD = 3.07$) and female students ($n = 318$, $M = 13.62$, $SD = 2.47$). “Win/Win” produced no significant difference between male ($n = 107$, $M = 14.07$, $SD = 2.98$) and female

($n = 318$, $M = 14.48$, $SD = 2.38$) students. There was no significant difference in “Synergy” between male ($n = 107$, $M = 13.24$, $SD = 2.58$) and female ($n = 318$, $M = 13.77$, $SD = 2.49$) students. There was no significant difference in “Sharpen the Saw” between male students ($n = 107$, $M = 13.32$, $SD = 2.99$) and female students ($n = 318$, $M = 13.86$, $SD = 5.57$).

Table 5
Differences between Males and Females – Covey Self Profile

	Male ^a		Female ^b		<i>t</i>
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	
Be Proactive	13.46	3.07	13.62	2.47	-0.56
Begin with End in Mind	11.79	3.07	13.21	3.01	-4.18***
First things First	11.71	3.15	12.38	2.81	-2.08*
Win/Win	14.07	2.98	14.48	2.38	-1.45
Seek to Understand	13.69	2.94	14.55	2.53	-2.92*
Synergy	13.24	2.58	13.77	2.49	-1.87
Sharpen the Saw	13.32	2.99	13.86	5.57	-1.80
Total	91.28	15.52	95.87	13.74	-2.89*

* $p < .05$. *** $p < .001$.

^a $n = 107$, ^b $n = 318$

Differences between Freshmen and Seniors – Iowa Developing Autonomy Inventory

Table 6 displays results of differences between means using a two-tailed t-test (significance set at $p < .05$) of freshmen and senior students from the Iowa Developing Autonomy Inventory. Senior students ($n = 242$, $M = 59.54$, $SD = 6.86$) measured significantly higher on “Interdependence” than freshmen ($n = 145$, $M = 57.32$, $SD = 7.48$) ($t = -2.98$, $p < .05$). Senior students ($n = 242$, $M = 59.59$, $SD = 8.03$) measured significantly higher in “Time Management” than freshmen students ($n = 145$, $M = 54.67$, $SD = 8.43$) ($t = -5.73$, $p < .05$). Senior students ($n = 242$, $M = 56.40$, $SD = 9.50$)

measured significantly higher on “Money Management” than freshmen students ($n = 145$, $M = 49.33$, $SD = 8.91$) ($t = -7.26$, $p < .05$). There was no significant difference in “Emotional Independence – Parents” between freshmen students ($n = 145$, $M = 49.22$, $SD = 9.84$) and senior students ($n = 242$, $M = 50.81$, $SD = 9.85$). There was no significant difference in “Emotional Independence – Peers” between freshmen students ($n = 145$, $M = 52.23$, $SD = 7.94$) and senior students ($n = 242$, $M = 53.33$, $SD = 7.20$). There was also no significant difference in “Mobility” between freshmen students ($n = 145$, $M = 51.02$, $SD = 9.51$) and senior students ($n = 242$, $M = 53.00$, $SD = 10.00$).

Table 6

Differences between Freshmen and Seniors – Iowa Developing Autonomy Inventory

	<u>Freshman^c</u>		<u>Senior^d</u>		<i>t</i>
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	
Interdependence	57.32	7.48	59.54	6.86	-2.98*
Emotional Independence - Parents	49.22	9.84	50.81	9.85	-1.53
Time Management	54.67	8.43	59.59	8.03	-5.73***
Money Management	49.33	8.91	56.40	9.50	-7.26***
Emotional Independence - Peers	52.23	7.94	53.33	7.20	-1.40
Mobility	51.02	9.51	53.00	10.00	-1.92
Total	313.80	34.86	332.67	35.42	-5.12

* $p < .05$. *** $p < .001$.^c $n = 145$, ^d $n = 242$ *Differences between Freshmen and Seniors – Covey Self Profile*

Table 7 displays results of differences between means using a two-tailed t-test (significance set at $p < .05$) of freshmen and seniors from the Covey Self Profile. There was no significant difference measured in “Be Proactive” between freshmen students ($n = 145$, $M = 13.57$, $SD = 2.77$) and senior students ($n = 242$, $M = 13.65$, $SD = 2.55$). “Begin with End in Mind” measured no significant difference between freshmen students

($n = 145$, $M = 12.85$, $SD = 3.09$) and senior students ($n = 242$, $M = 12.94$, $SD = 3.14$). There was no significant difference in “First Things First” between freshmen students ($n = 145$, $M = 12.26$, $SD = 2.91$) and senior students ($n = 242$, $M = 12.31$, $SD = 2.92$). “Win/Win” measured no significant difference between freshmen students ($n = 145$, $M = 14.36$, $SD = 2.50$) and senior students ($n = 242$, $M = 14.39$, $SD = 2.70$). There was no significant difference in “Seek to Understand” between freshmen students ($n = 145$, $M = 14.22$, $SD = 2.78$) and senior students ($n = 242$, $M = 14.39$, $SD = 2.57$). “Synergy” measured no significant differences between freshmen students ($n = 145$, $M = 13.66$, $SD = 2.64$) and senior students ($n = 242$, $M = 13.63$, $SD = 2.40$). There was no significant difference in “Sharpening the Saw” between freshmen ($n = 145$, $M = 14.06$, $SD = 2.70$) and senior students ($n = 242$, $M = 13.58$, $SD = 2.62$).

Table 7
Differences between Freshmen and Seniors – Covey Self Profile

	<u>Freshman^c</u>		<u>Senior^d</u>		<u>t</u>
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	
Be Proactive	13.57	2.77	13.65	2.55	-0.28
Begin with End in Mind	12.85	3.09	12.94	3.14	-0.27
First things First	12.26	2.91	12.31	2.92	-0.17
Win/Win	14.36	2.50	14.39	2.70	-0.11
Seek to Understand	14.22	2.78	14.39	2.57	-0.60
Synergy	13.66	2.64	13.63	2.40	0.11
Sharpen the Saw	14.06	2.70	13.58	2.62	1.72
Total	94.98	14.51	94.86	14.12	0.06

* $p < .05$. *** $p < .001$.

^c $n = 145$, ^d $n = 242$

Differences between On and Off Campus Living – Iowa Developing Autonomy Inventory

Table 8 displays results of differences between means using a two-tailed t-test (significance set at $p < .05$) of living on or off-campus from the Iowa Developing Autonomy Inventory. Students living off-campus ($n = 225$, $M = 59.72$, $SD = 6.93$) measured significantly higher on “Interdependence” than students living on-campus ($n = 200$, $M = 57.51$, $SD = 7.29$) ($t = -3.20$, $p < .05$). Students living off-campus ($n = 225$, $M = 59.51$, $SD = 8.42$) measured significantly higher on “Time Management” than students living on-campus ($n = 200$, $M = 55.28$, $SD = 8.24$) ($t = -5.23$, $p < .05$). Students living off-campus ($n = 225$, $M = 56.62$, $SD = 9.60$) also measured significantly higher on “Money Management” than students living on-campus ($n = 200$, $M = 50.61$, $SD = 9.20$) ($t = -6.58$, $p < .05$). There was no significant difference found in “Emotional Independence – Parents” between students living on-campus ($n = 200$, $M = 49.52$, $SD = 9.74$) and students living off campus ($n = 225$, $M = 50.90$, $SD = 9.84$). There was no significant difference on “Emotional Independence” between students living on-campus ($n = 200$, $M = 52.21$, $SD = 7.86$) and students living off-campus ($n = 225$, $M = 53.28$, $SD = 7.32$). There was also no significant difference on “Mobility” between students living on-campus ($n = 200$, $M = 51.44$, $SD = 9.70$) and students living off-campus ($n = 225$, $M = 53.00$, $SD = 9.70$).

Table 8
Differences between On and Off Campus Living – Iowa Developing Autonomy Inventory

	<u>On Campus^e</u>		<u>Off Campus^f</u>		<i>t</i>
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	
Interdependence	57.51	7.29	59.72	6.93	-3.20*
Emotional Independence - Parents	49.52	9.74	50.90	9.84	-1.45
Time Management	55.28	8.24	59.51	8.42	-5.23***
Money Management	50.61	9.20	56.62	9.60	-6.58***
Emotional Independence - Peers	52.21	7.86	53.28	7.32	-1.45
Mobility	51.44	9.70	53.00	9.70	-1.66
Total	316.60	35.75	333.03	35.64	-4.75***

* $p < .05$. *** $p < .001$.

^e $n = 200$, ^f $n = 225$

Differences between On and Off Campus Living – Covey Self Profile

Table 9 displays results of differences between means using a two-tailed t-test (significance set at $p < .05$) of living on or off-campus from the Covey Self Profile. There was no significant difference on “Be Proactive” between students living on-campus ($n = 200$, $M = 13.63$, $SD = 2.71$) and students living off-campus ($n = 225$, $M = 13.54$, $SD = 2.57$). “Begin with End in Mind” measured no significant difference between students living on-campus ($n = 200$, $M = 13.06$, $SD = 2.94$) and students living off-campus ($n = 225$, $M = 12.68$, $SD = 3.22$). There was no significant difference on “Put First Things” first between students living on campus ($n = 200$, $M = 12.17$, $SD = 2.75$) and students living off-campus ($n = 225$, $M = 12.25$, $SD = 3.06$). “Think “Win/Win” measured no significant difference between students living on-campus ($n = 200$, $M = 14.40$, $SD = 2.48$) and students living off campus ($n = 225$, $M = 14.36$, $SD = 2.61$). There was no significant difference on “Seek to Understand” between students living on-campus ($n = 200$, $M = 14.23$, $SD = 2.67$) and students living off-campus ($n = 225$,

M = 14.44, SD = 2.64). “Synergy” measured no significant difference between students living on-campus (n = 200, M = 13.60, SD = 2.52) and students living off-campus (n = 225, M = 13.67, SD = 2.53). There was no significant difference on “Sharpen the Saw” between students living on-campus (n = 200, M = 13.91, SD = 2.69) and students living off-campus (n = 225, M = 13.55, SD = 2.68).

Table 9

Differences between On and Off Campus Living – Covey Self Profile

	<u>On Campus^e</u>		<u>Off Campus^f</u>		<i>t</i>
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	
Be Proactive	13.63	2.71	13.54	2.57	0.36
Begin with End in Mind	13.06	2.94	12.68	3.22	1.28
First things First	12.17	2.75	12.25	3.06	-0.29
Win/Win	14.40	2.48	14.36	2.61	0.16
Seek to Understand	14.23	2.67	14.44	2.64	-0.81
Synergy	13.60	2.52	13.67	2.53	-0.27
Sharpen the Saw	13.91	2.69	13.55	2.68	1.38
Total	94.99	13.87	94.48	14.75	0.37

* $p < .05$. *** $p < .001$.

^en = 200, ^fn = 225

Correlations of Seven Habits of Highly Effective People and Iowa Developing Autonomy Inventory

Table 10 displays results of Pearson Product-Moment correlations which were calculated to establish relationships between the Iowa Developing Autonomy Inventory subscales, Covey’s habits and their total scores.

Iowa Developing Autonomy Inventory – Interdependence: Significant correlations ($p < .05$) between Covey’s Seven Habits of Highly Effective People and the Iowa Developing Autonomy Inventory subscale – “Interdependence” are as follows: “Be

Proactive” ($r = .37$), “Begin with End in Mind” ($r = .30$), “First Things First” ($r = .33$), “Win/Win” ($r = .56$), “Seek First to Understand” ($r = .51$), “Synergy” ($r = .49$) and “Sharpen the Saw” ($r = .44$).

Iowa Developing Autonomy Inventory – Emotional Independence: Significant correlations ($p < .05$) between Covey’s Seven Habits of Highly Effective People and the Iowa Developing Autonomy Inventory subscale – “Emotional Independence – Parents” are as follows: “Be Proactive” ($r = .18$), “Seek to Understand” ($r = .12$), and “Synergy” ($r = .12$).

Iowa Developing Autonomy Inventory – Time Management: Significant correlations ($p < .05$) between Covey’s Seven Habits of Highly Effective People and the Iowa Developing Autonomy Inventory subscale – “Time Management” are as follows: “Be Proactive” ($r = .46$), “Begin with End in Mind” ($r = .51$), “First Things First” ($r = .56$), “Seek to Understand” ($r = .25$), “Synergy” ($r = .24$) and “Sharpen the Saw” ($r = .32$).

Iowa Developing Autonomy Inventory – Time Management: Significant correlations ($p < .05$) between Covey’s Seven Habits of Highly Effective People and the Iowa Developing Autonomy Inventory subscale – “Money Management” are as follows: “Be Proactive” ($r = .27$), “Begin with End in Mind” ($r = .21$), “First Things First” ($r = .24$), “Win/Win” ($r = .14$), “Seek to Understand” ($r = .14$) and “Synergy” ($r = .17$).

Iowa Developing Autonomy Inventory – Emotional Independence - Peers: Significant correlations ($p < .05$) between Covey’s Seven Habits of Highly Effective People and the Iowa Developing Autonomy Inventory subscale – “Emotional Independence – Peers” are as follows: “Be Proactive” ($r = .31$), “Begin with End in

Mind” ($r = .11$), “First things First” ($r = .15$), “Win/Win” ($r = .10$), “Synergy” ($r = .15$) and “Sharpen the Saw” ($r = .10$).

Iowa Developing Autonomy Inventory – Mobility: Significant correlations ($p < .05$) between Coveys Seven Habits of Highly Effective People and the Iowa Developing Autonomy Inventory subscale – “Mobility” are as follows: “Be Proactive” ($r = .27$), “Win/Win” ($r = .18$), “Seek to Understand” ($r = .17$), “Synergy” ($r = .26$) and “Sharpen the Saw” ($r = .13$).

Chapter Summary

As results indicated, there were significant differences between males and females, freshmen and seniors, and students living on or off-campus as measured by the Iowa Developing Autonomy Inventory as well as Covey’s Self Profile of The Seven habits of Highly Effective people.

The Iowa Developing Autonomy Inventory results showed females scoring significantly higher in two subscales, males scoring higher in one subscale and no significant differences appeared on three of the subscales. Covey’s Self Scoring Profile showed females scoring higher in three habits while there were no significant differences in four habits. Between freshmen and seniors The Iowa Developing Autonomy Inventory results showed seniors scoring higher in three subscales while there was no significant differences found in the other three subscales. Covey’s Self Scoring Profile results showed no significant differences between college freshmen and seniors. College students living off-campus measured higher on three subscales of The Iowa Developing Autonomy Inventory, while there were no significant differences measured on four

subscales. Covey's Self Scoring Profile showed no significant differences between college students living on or off-campus.

Results also indicated many significant correlations between the instruments used in the current study. Interdependence correlated with all of the Seven Habits, Emotional Independence – Parent correlated with three of the Seven Habits, Time Management correlated with six of the Seven Habits, Money Management correlated with six of the Seven Habits, Emotional Independence – Peers correlated with six of the Seven Habits and Mobility correlated with five of the Seven Habits. The fifth chapter will reveal implications, thoughts and discussion from the findings of the present study and recommendations for future research.

Table 10

Correlations of Seven Habits of Highly Effective People and Iowa Developing Autonomy Inventory

Measure	<u>Be</u> <u>Proactive</u>	<u>Begin with the End in</u> <u>Mind</u>	<u>First things</u> <u>First</u>	<u>Win/</u> <u>Win</u>	<u>Seek to</u> <u>understand</u>	<u>Synergy</u>	<u>Sharpen</u> <u>the Saw</u>	<u>Total</u>
Interdependence	0.37*	0.30*	0.33*	0.56*	0.51*	0.49*	0.43*	0.56*
Emotional Independence - Parents	0.18*	-0.04	0.03	0.07	0.12*	0.12*	-0.05	0.08
Time Management	0.46*	0.51*	0.56*	0.33	0.25*	0.24*	0.32*	0.51*
Money Management	0.27*	0.21*	0.24*	0.14*	0.14*	0.17*	0.06	0.24*
Emotional Independence - Peers	0.31*	0.11*	0.15*	0.10*	0.08	0.15*	0.10*	0.19*
Mobility	0.27*	0.09	0.09	0.18*	0.17*	0.24*	0.13*	0.22*
Total	0.44*	0.27*	0.32*	0.31*	0.29*	0.33*	0.21*	0.41*

*Note. Correlations significant at $p < .05$.

Chapter V

Discussion/Recommendations/Conclusion

The purpose of the present study was to examine the relationship between a measure of Chickering's third vector, moving through autonomy toward interdependence (Chickering & Reisser, 1993), and a measure of Covey's Seven Habits of Highly Effective People (Covey, 1989), specifically focusing on relationships between male and female college students, freshmen and senior college students, and college students living on or off-campus. These relationships were examined through six subscales; mobility, time management, money management, interdependence, emotional independence - Peers and emotional independence - Parents as measured by the Iowa Developing Autonomy Inventory (Hood & Jackson, 1983b) and The Seven Habits of Highly Effective People (Covey, 1989); be proactive, begin with the end in mind, put first things first, think win-win, seek first to understand, synergize, and sharpen the saw as measured by the Covey Seven Habits Self Profile (Covey, N/A).

Discussion

Figure 5.1 displays a chart of significant differences based on the results displayed in Chapter IV. This figure can be used as a visual guide to understand the findings as they are discussed in Chapter V. Sub-groups named scored significantly higher (had higher means) than did sub-groups not named.

Table 11
A Visual Display of Significant Differences

Variable	Gender	Class	Location
<i>Developing Autonomy Subscales</i>			
Interdependence	Female	Seniors	Off-Campus
Emotional Independence - Parents	Male	-	-
Time Management	Female	Seniors	Off-Campus
Money Management	-	Seniors	Off-Campus
Emotional Independence - Peers	-	-	-
Mobility	-	-	-
<i>Coveys' Seven Habits</i>			
Be Proactive	-	-	-
Begin with End in Mind	Female	-	-
First things First	Female	-	-
Win/Win	-	-	-
Seek to Understand	Female	-	-
Synergy	-	-	-
Sharpen the Saw	-	-	-

Differences between Males and Females. Mohammadi, Schwitzer and Nunnery (2010) examined the effects of residence and gender on college student adjustment and found on-campus females were more personally engaged than males, leading to greater personal development. As Mohammadi et. al. stated, “greater engagement is expected to have a positive impact on residential students’ academic pursuits and personal development” (p.67). Many other studies (Pascarella & Terenzini, 1991, 2005) show that females are developmentally mature sooner than males. Results of the present study appeared consistent with prior research, since females measured significantly higher on two of the six subscales (Interdependence and Time management) as measured by The Iowa Developing Autonomy Inventory (Hood & Jackson 1983b) while males only measured significantly higher in one subscale (Emotional Independence – Parents). In addition to females showing signs of being more personally

developed according to The Iowa Developing Autonomy Inventory, Covey's Self-Scoring Profile (Covey, N/A) results showed females were significantly higher in three of the seven habits (Begin with the End in Mind, First Things First and Seek First to Understand, Then Be Understood), while males did not measure significantly higher on any of the seven habits. These findings may be influenced by membership in peer groups where females potentially create a grater bond between one another (Astin, 1993). Examining the results of The Iowa Developing Autonomy Inventory (Hood & Jackson, 1893b) and The Seven Habits Self Scoring Profile (Covey, N/A) together using the definitions presented in Chapter I, it could be concluded that Covey's Habits, Put First Things First and Begin with the End in Mind, could be associated with Hood and Jacksons (1983b) Time Management sub-scale. Within the present sample of 425 students, the correlation of Time Management with Put First Things First ($r = .51$) and Begin With The End in Mind ($r = .56$) were the strongest correlations in the entire set of calculations.

Differences between Freshmen and Seniors. Flowers (2002) "sought to examine the extent to which students were developing purpose in college, becoming more goal directed, independent, and focused on vocational interests as a result of their college experience" (p.479). Results of Flowers' study showed seniors at a significantly higher stage of personal development, suggesting that levels of personal autonomy would also be different from freshman to the senior year in college. The present study revealed seniors measuring significantly higher on three of the six subscales of the Iowa Developing Autonomy Inventory, confirming Flowers research, indicating college students may travel through autonomy toward interdependence while in college. However, Covey's Self-Scoring Profile indicated no significant differences between college freshmen and college seniors, disputing Flowers study and the PI's findings for the Iowa Developing Autonomy Inventory as presented in Chapter IV. The difference in results could be

due to each instruments' original target participants. Evans, Forney & Guido-DiBrito (1998) reported The Iowa Developing Autonomy was designed to measure college student levels of autonomy. Coveys' *Seven Habits of Highly Effective People* (1989) was created to produce steps anyone who infuses the habits in their life could take to become "happy, achieve success and grow character" (Interview, 1994, p. 382), leading to a plausible conclusion that the Seven Habits are focused on long term adult development and not on short term college development. The difference found between freshmen and senior mean scores on the two instruments could also be explained by working adults consistently practicing the Seven Habits across time verses the personal development students gain in college from the freshman to senior year (Astin, 1993). The Seven Habits are designed, in what seems to be a step by step process (Covey, 1989), where if an individual does not practice those steps they may not be seen as developing the habits measured by the Covey Self-Scoring Profile (Covey, N/A). Whereas the Iowa Developing Inventory is not based on a conscious process of acquiring life habits, but by items which measure the development of individual autonomy in college-aged youth (Evans et al., 1998) based on seminal student development theory (Chickering, 1972).

Differences between Living On and Off-Campus. Astin (1993) found "The single most powerful source of influence on the undergraduate student's academic and personal development is the peer group" (p.4). Living on-campus creates an environment where there is more student interaction with peers compared to living off campus. Research has shown college students living on-campus for a longer period of time tend to leave college with a better understanding of self, be more independent, and travel through dependence toward autonomy quicker than students living off-campus (Astin, 1993; Pascarella & Terenzini, 1991, 2005; Mohammadi, et al., 2010). There was a disconnect between the present study and prior research. In the present study

students living off-campus had higher mean scores in all six subscales of The Iowa Developing Autonomy Inventory compared to on-campus students, and three of the scores measured significantly higher. However, mean results from Coveys' Self Scoring Profile comparing on and off-campus students showed no significant differences by place of residence.

Since the start of the current study Arum and Roksa (2011) published *Academically Adrift*, and cited data from student surveys and transcript analysis that showed many college students have minimal class work expectations. The 2,300 students took the Collegiate Learning Assessment, which measures gains in critical thinking, analytic reasoning, and other skills taught at college at various points before and during their college experience. Of the 2,300 students, 45 percent did not demonstrate any significant improvement in learning during the first two years of college, while 36 percent of students did not demonstrate any significant improvement in learning over four years of college. Their research could lead to an explanation for the findings of the current study. Students tend to stay on-campus for one to two years then tend to move off-campus for their later years (Astin, 1993). Astin's research combined with findings from Arum and Roksa (2011) could justify reasons the PI found seniors to have significantly higher scores in developing autonomy as measured by the Iowa Developing Autonomy Inventory (Hood & Jackson 1983b), yet no significant changes in Covey's Seven Habits Self-Scoring Profile (NA) compared to freshman students. Students electing to move off campus may have a higher level of personal autonomy than students remaining in on-campus residence halls, but consistent with no significant improvements in learning across time, including critical thinking and analytic reasoning, students may not have the self-discipline required to master the Seven Habits of Highly Successful People (Covey, 1989).

Relation between Chickering's Third Vector and the Seven Habits of Highly Effective People. Table 12 displays a chart of correlations based on the results displayed in Chapter IV. This table can be used as a visual guide to understand the findings as they are discussed in Chapter V.

Table 12

Visual Display of Correlations of Seven Habits of Highly Effective People and Iowa Developing Autonomy Inventory

Measure	<u>Be Proactive</u>	<u>Begin with the End in Mind</u>	<u>First things First</u>	<u>Win/Win</u>	<u>Seek to understand</u>	<u>Synergy</u>	<u>Sharpen the Saw</u>	<u>Total</u>
Interdependence	*	*	*	*	*	*	*	*
Emotional Independence - Parents	*				*	*		
Time Management	*	*	*		*	*	*	*
Money Management	*	*	*	*	*	*		*
Emotional Independence - Peers	*	*	*	*		*	*	*
Mobility	*			*	*	*	*	*
Total	*	*	*	*	*	*	*	*

*Note. Correlations significant at $p < .05$.

The Iowa Developing Autonomy Inventory is a valid measure of Chickering's third vector, moving through autonomy toward interdependence (Evans, Forney & Guido-DiBrito, 1998). While there were no empirically based articles demonstrating the validity of the Seven Habits Self-Scoring Profile (Covey, N/A), Covey's *Seven Habits of Highly Effective People* (1989) have been implemented as a journey from dependence to interdependence in many single study settings (Covey, 2009; Lambert and Milner, 2008; Parachin 2004; Hamies, 2001). There was no previous research found measuring any type of similarities or differences between moving from dependence to interdependence as measured by The Iowa Developing Autonomy Inventory and moving from dependence to interdependence as measured by The Seven Habits Self-Scoring Profile.

The present study found 33 of 42 possible correlations to be significant between the six subscales of the Iowa Developing Autonomy Inventory and The Seven Habits Self-Scoring Profile. The Iowa Developing Autonomy Inventory Subscale - Interdependence correlated significantly with all Seven Habit categories. Both theories (Chickering & Riesser, 1993; Covey, 1989) imply the idea of reaching a state of interdependence, thus explaining the relationships between Interdependence and all of Covey's Seven Habits.

The Iowa Developing Autonomy Inventory Subscale – Emotional Independence – Parents correlated significantly with three of the seven habits categories, Be Proactive, Seek First to Understand, then be Understood, and Synergy. As defined by Chickering and Reisser (1993) emotional independence is the “freedom from continual and pressing needs for reassurance, affection, or approval from others” (p. 117), which could relate with being proactive by creating personal freedom and completing tasks on one's own. Using Chickering and Reisser's definition of emotional independence, an argument could be made that seeking to understand what others

take away from seeking the approval of others, which could explain the correlation between emotional independence – parents and seek first to understand, and then be understood.

Emotional Independence – Parents focuses on creating freedom from one’s parents, while the habits with no significant correlations pertain to a self relationship rather than a relationship with others such as ones parents, thus explaining the lack of significant relationships.

The Iowa Developing Autonomy Inventory Subscale – Time Management correlated significantly with six of the seven habits. In an interview (1994), Covey explained the Seven Habits were developed around creating a personal mission statement, creating goals and completing them in order of importance, summarizing the first three habits. Efthimiadis (2007) explained how the Seven Habits were used to develop the framework for a time management workshop to help participants acquire basic life skills, thus offering an explanation for the six significant correlations. Time management is defined as the development of a process and tools that help you be more productive and efficient (Johnston, 2011), so by definition this could explain significant correlations between the first three habits and the Iowa subscale of Time Management. Habits five through seven pertain to taking the time to listen to others and the time to understand oneself (Interview, 1994); to manage ones time wisely in terms of listening and working with others could create another inference about why time management correlates significantly with these habits.

The Iowa Developing Autonomy Inventory Subscale – Money Management correlated significantly with six of the seven habits. Money management is defined by, “the process of knowing where you are spending your money today and having a well thought-out plan in place for where you want it to go” (balancetrack.org, 2010, ¶ 1). Being proactive, beginning with the end in mind, and putting first things first are habits based on creating a well thought-out plan

(Covey, 1989), possibly explaining a significant relationship between the Iowa Developing Autonomy Inventory and The Seven Habits Self Profile. Think win/win, seek first to understand, then be understood, and synergy appear to relate more to empathy and self actualization (Covey, 1989) leading to no inference as to why money management would correlate with those three habits.

The Iowa Developing Autonomy Inventory Subscale – Emotional Independence – Peers correlated significantly with six of the Seven Habits. Astin (1993) stated the importance of peers in individual development: “The single most powerful source of influence on the undergraduate student's academic and personal development is the peer group” (p.4), which could possibly explain the significant correlations between the two instruments analyzing personal development. Covey (2009) also cited the importance of a peer group when the Seven Habits of highly Effective People were applied to an elementary school where an academic result of “passing end-of-grade tests rose from 67 percent to a peak of 97 percent” (p. 65).

The Iowa Developing Autonomy Inventory Subscale – Mobility measured significant correlations with five of the Seven Habits. Chickering and Reisser (1993) defined mobility as “the ability to leave one place and get to another, to leave a bad situation and arrive safely at a better one” (p. 138). Haimes (2001), a professor of engineering, adapted the seven habits to risk and systems analysis, where the habits were associated with three steps involved in problem solving. Mobility and problem solving could be related in that when one is solving problems, they are moving from a bad situation to arrive safely at another. Covey’s (1989) second and third habits, Beginning with the End in Mind and Put First Things First, are goal oriented, often with a set plan or path to achieve each goal. Based on the purpose of those habits one could argue they could not significantly correlate with mobility. When analyzing why there are significant

correlations, Being Proactive implies people improve their lives through influence rather than reacting to external forces (Covey, 1989). Thus, to have the Iowa Mobility scale correlate significantly with Being Proactive makes good sense because one never knows when they could have a chance to influence another's life, thus changing paths for both individuals. People thinking Win/Win have a mind set to veer away from a set path and being able to negotiate with themselves, and others, to find a solution where each individual wins (Covey, 1989). Creating a Win/Win situation may correlate significantly with the flexibility implied by the Iowa Mobility scale. Seek to Understand, Synergy, and Sharpen the Saw are three habits which all correspond to Covey's (1989) interdependent stage, and are also a large part of Chickering and Riesser's (1993) Interdependent stage, thus finding a significant relationship between the last three Habits as measured by The Seven Habits Self Scoring Profile (Covey, N/A) and Mobility as measured by The Iowa Developing Autonomy Inventory (Hood & Jackson, 1986) seems reasonable.

Recommendations from the Results of the Present Study

The following suggestions for student development professionals are based on the findings in the present study.

1. Student Affairs practitioners should develop an educational model designed around one theory of development that meets needs for their institution. Although the current study showed mixed results between demographic groups, the instruments used displayed 33 of 42 significant correlations, showing a strong relationship between theories. If student affairs practitioners educate based on one theory, the practitioners can educate students in a step by step process, based on that theory, to help students achieve interdependence.

2. Faculty members should be made aware of the theories that student affairs professionals are using. To ensure students are making the journey from dependence to interdependence, it is essential for students to learn about personal development in the classroom. Student affairs practitioners do not interact with every student on campus, however, classes can be created where students can be evaluated and taught based on the needs of their development, making it manageable to reach every incoming freshmen and possibly each out-going senior.
3. Housing professionals should encourage student development and theory-based programming that reinforces a college student's journey through autonomy. Programs could be developed in a progressive format focusing on ways to become more independent through a college student's sophomore year, while focusing on programming catering to the development of interdependence through a college student's senior year. If results of this recommendation prove to be successful housing professionals could use the facts of on-campus students leaving college with more well developed life skills as a retention tool to encourage future students to live on campus.

Recommendations for Future Research

The following recommendations for future research are based on the present study.

1. A high percentage of significant correlations existed between The Seven Habits of Highly Effective people and Chickering and Riesser's third vector, moving through autonomy, however; results showed few significant differences between college males and females, college freshmen and seniors, and college students living on or off-campus in the Seven Habits Self Scoring Profile. Future researchers could create

a controlled environment where students being taught The Seven Habits of Highly Effective People could be compared to college freshmen and seniors, thus creating a journey through autonomy using both The Seven Habits and Chickering and Riesser's theory.

2. This study was completed at a public institution. Future researchers could examine the difference in student development between students enrolled at a private institution and a public institution.
3. The current study had students respond to a 122 item quantitative instrument. Future researchers could examine the relative levels of development towards autonomy by the use of qualitative research in a mixed methods study. Many of the survey item responses could have been open to interpretation. By carrying out follow up interviews with student respondents, a researcher could add richer explanation to the significant correlations found between the subscales of the two instruments.
4. There was no validation found on The Seven Habits Self-Scoring Profile. Future researchers could validate the Profile as a predictor of acquiring interdependence, thus creating a second measurement associated with assessing Chickering and Riesser's third vector.

Conclusion

The purpose of the present study was to determine the relationship between a measure of Chickering and Riesser's third vector, moving through autonomy toward interdependence (1993), and a measure of Covey's seven habits of highly effective people (1989). Using The Iowa Developing Autonomy Inventory (Hood & Jackson 1983b) as a measure of Chickering and Riesser's third vector and The Seven Habits Self-Scoring Profile (Covey, N/A) as a measure of

the Seven Habits of Highly Effective People, the current study found 33 of 42 correlations to be significant between the subscales of the two instruments. Results also displayed mixed outcomes when analyzing the differences between college males and females, college freshmen and seniors, and college students living on or off-campus. A person's journey through autonomy to interdependence can really define who a person can become. Facilitating the associated developmental process is important to student affairs professionals for many reasons. As student affairs professionals it is important to see where a student is in their personal journey so we can learn to work and influence them to become a successful person once they leave the college environment. Today many millennial students who call their parents everyday fail to make simple decisions on their own. By understanding the process of a student's journey through autonomy to interdependence, a student affairs professional can meet the student in the middle and help encourage their development into a well rounded interdependent adult.

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Appendixes

Appendix A

Iowa Developing Autonomy Inventory
c 1985

by Albert B. Hood and Lorraine M. Jackson

INSTRUCTIONS: This inventory is designed to study attitudes and behavior of college students. You are asked to judge a number of statements in terms of how characteristic the behavior or attitude is of you. Please respond to each statement on the separate answer sheet according to the following scale:

- 1 = Never Characteristic of Me
- 2 = Seldom Characteristic of Me
- 3 = Sometimes Characteristic of Me
- 4 = Often Characteristic of Me
- 5 = Almost Always Characteristic of Me

Please answer each statement. Do not skip any.

Iowa Developing Autonomy Inventory

- I + 1. I realize that my behavior toward others will dictate how they will treat me.
- A + 2. I would go against my parents wishes if the issue was very important to me.
- T - 3. I put things off until the last minute and regret it.
- M - 4. When I am in debt, I turn to my parents for help.
- E + 5. It doesn't bother me if my friends don't accept my ideas.

- B + 6. I would like living in a variety of places.
- I - 7. I don't expect anyone to help me, and I prefer not to help anyone but myself.
- A - 8. I get upset if I don't get a letter or phone call from my family.
- T + 9. I can deal with many different responsibilities and still maintain my grades.
- M + 10. I am paying for college at least partly with my own money.
- E - 11. I don't like to go to a new place without a friend.
- B - 12. I'd like to keep my life easy by avoiding too much travel or other kinds of change.
- I + 13. I feel I have a lot to contribute to my school or community.
- A + 14. My opinions are quite independent from those of my parents.
- T - 15. My mismanagement of my time is causing me to get bad grades.
- M - 16. Right now, I could not continue my education if my parents cut off their support.
- E + 17. I plan my own social life without getting approval from friends.
- B + 18. I have taken trips alone.
- I - 19. I don't like people to depend on me for anything.
- A - 20. I need to contact my parents when I feel discouraged.
- T + 21. When academic pressures are great, I'm still able to get my outside work done.
- M + 22. I don't need help to balance my checkbook.
- E - 23. I really feel uncomfortable when I go to a party without my friends.
- B - 24. I tend to stay home rather than travel.

- I + 25. I think that we should share our wealth and expertise with poor countries.
- A + 26. I solve most of my problems on my own without family help.
- T - 27. I can't cope with my present school and outside work load.
- M - 28. My parents give me spending money.
- E + 29. I can disagree with my boy/girl friends without feeling guilty.
- B + 30. The thought of re-establishing myself in a new community does not bother me.
- I - 31. I usually get into a relationship just for what I can get out of it.
- A - 32. I get upset if my parents don't approve of my leisure activities.
- T + 33. I do not need to be reminded of deadlines in order to get things finished.
- M + 34. I can fill out my own tax forms.
- E - 35. I would feel worthless if I was not accepted by my peers.
- B - 36. I would not accept a favorable job if long distance travel was required.
- I + 37. Since I gain from group activities, I feel an obligation to contribute in return.
- A + 38. I don't feel the need to call my parents before making a financial investment.
- T - 39. I can't get anything done when I have two or more projects going on at once.
- M - 40. I don't understand all of my school bills.
- E + 41. I can evaluate my friends' values and accept or reject them.
- B + 42. After I graduate from college, I would like to be highly mobile for a while.
- I - 43. Campus groups to which I belong should not expect much help from me.

- A - 44. I look to my parents for solutions to personal problems.
- T + 45. There aren't many obstacles in or outside my education that I couldn't handle by myself.
- M + 46. I can work through financial problems without leaning on others for support.
- E - 47. I feel badly about myself when I'm not dating someone.
- B - 48. If I had to move, I'd prefer to be near my parent's home.
- I + 49. I endorse paying taxes since they support necessary services.
- A + 50. I can reject my parents' advice.
- T - 51. I never really learned how to manage effectively both school and other outside activities.
- M - 52. When I'm overdrawn at the bank, I ask my parents for the money I need.
- E + 53. I can accept the fact that some of peers don't like me.
- B + 54. If a good job required me to move to another country, I would accept it.
- I - 55. I believe a university town shouldn't expect community involvement from students.
- A - 56. I would prefer to compromise myself than go against my parents wishes.
- T + 57. Because my background training was sufficient, I'm easily able to handle my school and other work assignments.
- M + 58. I have enough money to meet my needs.
- E - 59. I become unhappy when my friends don't like my ideas.
- B - 60. I do not adjust to new surroundings quickly so I not seek a job requiring mobility.

- I + 61. I recognize the need for voting in national elections.
- A + 62. I do not feel the need for family reassurance when I embark on a new venture.
- T - 63. I could never handle taking night classes while working a full-time job.
- M - 64. I haven't thought about how I'll finish paying for the rest of my schooling.
- E + 65. I would go out on a date with someone I like even if my best friends didn't like him/her.
- B + 66. I could change my residence by myself with little trouble.
- I - 67. To feel accepted by my friends, I'll do things that are against my principles.
- A - 68. My own fearfulness of change limits my mobility.
- T + 69. I feel confident that I can be a contributing member of my country.
- M + 70. I would not feel upset when entering a place that lacked my parents' approval.
- E - 71. I think that working at a job while going to school seems more than I could handle.
- B - 72. My parents manage my budget.
- I + 73. I contribute to group activities.
- A + 74. I don't need my parents' approval of the people I date.
- E - 75. I need emotional support from friends when I try new things.
- B - 76. I lack skills in making travel arrangements.
- T + 77. I have often held an outside job in addition to being a student.
- M + 78. I have a good credit rating.

- E - 79. I feel I conform to my friends' standards.
- B - 80. My preference would be to live with my parents rather than to live somewhere else.
- I + 81. As a citizen, I feel I have an obligation to report any serious crimes I witness.
- A + 82. I feel emotionally independent of my parents.
- T - 83. I feel I need to go to someone to help me to coordinate my outside work activities and school problems.
- M - 84. I don't understand my bank statements.
- I + 85. I think the best family relationships are based on a mutual give and take.
- B + 86. Obstacles do not prevent me from moving from one place to another.
- E - 87. I worry if my friends talk about me when I'm not with them.
- A - 88. It's very important to me that my parents accept what I'm doing.
- T + 89. I know how to schedule my priorities as far as time management goes.
- M + 90. I have a part-time job so I don't have to rely on my parents for spending money.

I = Interdependence

A = Emotional Independence - Parents

T = Management of Time

M = Management of Money

E = Emotional Independence - Peers

B = Mobility

+ = Scored as is

- = Reverse scored

Appendix C
Survey Instrument:

Questions for Open-Ended interview

The following 27 question will be rated on a 1-6 scale

1 = Very Poor 2 = Poor 3 = Fair 4 = Good 5= Very Good 6 = Outstanding

1. I show kindness and consideration towards others.
2. I keep promises and honor commitments.
3. I do not speak negatively of others when they are not present.
4. I am able to maintain an appropriate balance among the various aspects of my life, work, friend, and so forth.
5. When working on task, I also keep in mind the concerns and needs of those I am working for.
6. I work hard at things I do, but no in a manner that causes burnout.
7. I am in control of my life.
8. I focus my efforts on things I can do something about rather than on this beyond my control.
9. I take responsibility for my moods and actions rather blame others and circumstances.
10. I know what I want to accomplish in life.
11. I organize and prepare in a way that reduces having to work in crisis mode.
12. I begin each week with a plan of what I desire to accomplish.
13. I am disciplined in carrying out plans (avoiding procrastination, time wasters, and so forth).
14. I do not allow the truly important activities of my life to get lost in the busy activities of my day.
15. The things I do everyday are meaningful and contribute to my overall goals in life.
16. I care about the success of others as well as my own.
17. I cooperate with others.
18. When solving conflicts, I strive to fine solutions that benefit all.
19. I am sensitive to the feelings of others.
20. I seek to understand the viewpoints of others.
21. When listening, I try to see things from the other persons point of view, not just my own.
22. I value, and seek out, the insights of others.
23. I am creative in searching for new and better ideas and solutions.
24. I encourage others to express their opinions.
25. I care for my physical health and well being.
26. I strive to build and improve relationships with others.
27. I take time to find meaning and enjoyment in life.

The following 90 questions are measured on a Yes or No scale

28. I realize that my behavior toward others will dictate how they will treat me.
29. I would go against my parents wishes if the issue was very important to me.
30. I put things off until the last minute and regret it.
31. When I am in debt, I turn to my parents for help.
32. It doesn't bother me if my friends don't accept my ideas.
33. I would like living in a variety of places.
34. I don't expect anyone to help me, and I prefer not to help anyone but myself.
35. I get upset if I don't get a letter or phone call from my family.
36. I can deal with many different responsibilities and still maintain my grades.
37. I am paying for college at least partly with my own money.
38. I don't like to go to a new place without a friend.

39. I'd like to keep my life easy by avoiding too much travel or other kinds of change.
40. I feel I have a lot to contribute to my school or community.
41. My opinions are quite independent from those of my parents.
42. My mismanagement of my time is causing me to get bad grades.
43. Right now, I could not continue my education if my parents cut off their support.
44. I plan my own social life without getting approval from friends.
45. I have taken trips alone.
46. I don't like people to depend on me for anything.
47. I need to contact my parents when I feel discouraged.
48. When academic pressures are great, I'm still able to get my outside work done.
49. I don't need help to balance my checkbook.
50. I really feel uncomfortable when I go to a party without my friends.
51. I tend to stay home rather than travel.
52. I think that we should share our wealth and expertise with poor countries.
53. I solve most of my problems on my own without family help.
54. I can't cope with my present school and outside work load.
55. My parents give me spending money.
56. I can disagree with my boy/girl friends without feeling guilty.
57. The thought of re-establishing myself in a new community does not bother me.
58. I usually get into a relationship just for what I can get out of it.
59. I get upset if my parents don't approve of my leisure activities.
60. I do not need to be reminded of deadlines in order to get things finished.
61. I can fill out my own tax forms.
62. I would feel worthless if I was not accepted by my peers.
63. I would not accept a favorable job if long distance travel was required.
64. Since I gain from group activities, I feel an obligation to contribute in return.
65. I don't feel the need to call my parents before making a financial investment.
66. I can't get anything done when I have two or more projects going on at once.
67. I don't understand all of my school bills.
68. I can evaluate my friends' values and accept or reject them.
69. After I graduate from college, I would like to be highly mobile for a while.
70. Campus groups to which I belong should not expect much help from me.
71. I look to my parents for solutions to personal problems.
72. There aren't many obstacles in or outside my education that I couldn't handle by myself.
73. I can work through financial problems without leaning on others for support.
74. I feel badly about myself when I'm not dating someone.
75. If I had to move, I'd prefer to be near my parent's home.
76. I endorse paying taxes since they support necessary services.
77. I can reject my parents' advice.
78. I never really learned how to manage effectively both school and other outside activities.
79. When I'm overdrawn at the bank, I ask my parents for the money I need.
80. I can accept the fact that some of peers don't like me.
81. If a good job required me to move to another country, I would accept it.
82. I believe a university town shouldn't expect community involvement from students.
83. I would prefer to compromise myself than go against my parents wishes.
84. Because my background training was sufficient, I'm easily able to handle my school and other work assignments.
85. I have enough money to meet my needs.
86. I become unhappy when my friends don't like my ideas.
87. I do not adjust to new surroundings quickly so I not seek a job requiring mobility.

88. I recognize the need for voting in national elections.
89. I do not feel the need for family reassurance when I embark on a new venture.
90. I could never handle taking night classes while working a full-time job.
91. I haven't thought about how I'll finish paying for the rest of my schooling.
92. I would go out on a date with someone I like even if my best friends didn't like him/her.
93. I could change my residence by myself with little trouble.
94. To feel accepted by my friends, I'll do things that are against my principles.
95. My own fearfulness of change limits my mobility.
96. I feel confident that I can be a contributing member of my country.
97. I would not feel upset when entering a place that lacked my parents' approval.
98. I think that working at a job while going to school seems more than I could handle.
99. My parents manage my budget.
100. I contribute to group activities.
101. I don't need my parents' approval of the people I date.
102. I need emotional support from friends when I try new things.
103. I lack skills in making travel arrangements.
104. I have often held an outside job in addition to being a student.
105. I have a good credit rating.
106. I feel I conform to my friends' standards.
107. My preference would be to live with my parents rather than to live somewhere else.
108. As a citizen, I feel I have an obligation to report any serious crimes I witness.
109. I feel emotionally independent of my parents.
110. I feel I need to go to someone to help me to coordinate my outside work activities and school problems.
111. I don't understand my bank statements.
112. I think the best family relationships are based on a mutual give and take.
113. Obstacles do not prevent me from moving from one place to another.
114. I worry if my friends talk about me when I'm not with them.
115. It's very important to me that my parents accept what I'm doing.
116. I know how to schedule my priorities as far as time management goes.
117. I have a part-time job so I don't have to rely on my parents for spending money.
118. What is your Gender?
119. What is your current class standing?
120. Do you currently live on or off campus?
121. How Many Semesters have you lived on campus 1 2 3 4 5 6+
122. If you would like to be entered to win an Ipod touch please enter your email.

Appendix D Informed Consent

CONSENT TO PARTICIPATE IN RESEARCH

A Quantitative Correlation of Student Development

You are invited to participate in a research study conducted by Christopher Pahl, a college student affairs graduate student from the Department of Counseling and Student Development at Eastern Illinois University.

Your participation in this study is entirely voluntary. Please ask questions about anything you do not understand, before deciding whether or not to participate.

- **PURPOSE OF THE STUDY**

The purpose of this study is to examine and find relationships between Chickering's third vector as presented in his Student development theory (Moving through autonomy into interdependence), and Stephen Covey's Seven Habits of Highly Effective People.

- **PROCEDURES**

If you volunteer to participate in this study, you will be asked to:

Fill out an online or paper copy survey. This survey will consist of three demographic questions, 27 questions pertaining to the Seven Habits, and 90 questions pertaining to Chickering's theory of development.

This survey will most likely last about 30 minutes.

- **POTENTIAL RISKS AND DISCOMFORTS**

There are no foreseeable risks for participants. All surveys can be submitted by September 30th 2010.

- **POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY**

Finding a correlation between Chickering's theory and Covey's habits may result in a way to develop students using the seven habits. The relationship may also provide ideas for the start of leadership programs, and other developmental courses that are based on the seven habits.

- **INCENTIVES FOR PARTICIPATION (*Optional*)**

There will be no incentive for participation.

- **CONFIDENTIALITY**

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. Confidentiality will be maintained by not asking, or having the participants write their name on any documents, including surveys. During the course of the study the data will be store on an online survey creation website that requires a username and password to retrieve the data. The only person that will have access to this username and password will be the principal investigator. The online survey creator will be able to receive multiple surveys from the same IP address, ensuring there is no way to find out who took the survey. For the participants that fill out a paper copy of the survey, the principal investigator will hand out and individually collect each survey. One the principal investigator inputs the data the surveys will be shredded.

- **PARTICIPATION AND WITHDRAWAL**

Participation in this research study is voluntary and not a requirement or a condition for being the recipient of benefits or services from Eastern Illinois University or any other organization sponsoring the research project. If you volunteer to participate in this study, you may withdraw at any time without consequences of any kind or loss of benefits or services to which you are otherwise entitled.

There is no penalty if you withdraw from the study and you will not lose any benefits to which you are otherwise entitled.

If you have any questions or concerns about this research, please contact:

Christopher Pahl, Principal Investigator

cmpahl@eiu.edu or 217-581-7695

Or

Dr. Charles Eberly, Thesis advisor

cgeberly@eiu.edu or 217-581-7235

- **RIGHTS OF RESEARCH SUBJECTS**

If you have any questions or concerns about the treatment of human participants in this study, you may call or write:

Institutional Review Board

Eastern Illinois University

600 Lincoln Ave.

Charleston, IL 61920

Telephone: (217) 581-8576

E-mail: eiuirb@www.eiu.edu

Appendix F
Cronbach Alpha

*Internal Consistency Reliability of The Iowa Developing Autonomy Inventory
(Cronbach Alpha)*

Variable	Overall
Interdependence	0.75
Emotional Independence - Parents	0.86
Time Management	0.82
Money Management	0.79
Emotional Independence - Peers	0.75
Mobility	0.83

*Internal Consistency Reliability of Covey's Seven Habit Self-Scoring Survey
(Cronbach Alpha)*

Variable	Overall
Be Proactive	0.71
Begin with End in Mind	0.70
First things First	0.73
Win/Win	0.79
Seek to Understand	0.79
Synergy	0.74
Sharpen the Saw	0.71

Appendix G IRB Approval

July 1, 2010

Chris Pahl

Counseling and Student Development

Thank you for submitting the research protocol titled, "Moving Through Autonomy: The Relation between Chickering's Theories and Covey's Habits" for review by the Eastern Illinois University Institutional Review Board (IRB). The IRB has approved this research protocol following an expedited review procedure. IRB review has determined that the protocol involves no more than minimal risk to subjects and satisfies all of the criteria for approval of research.

This protocol has been given the IRB number 10-072. You may proceed with this study from 6/28/2010 to 6/27/2011. You must submit Form E, Continuation Request, to the IRB by 5/27/2011 if you wish to continue the project beyond the approval expiration date.

This approval is valid only for the research activities, timeline, and subjects described in the above named protocol. IRB policy requires that any changes to this protocol be reported to, and approved by, the IRB before being implemented. You are also required to inform the IRB immediately of any problems encountered that could adversely affect the health or welfare of the subjects in this study. Please contact me, or the Compliance Coordinator at 581-8576, in the event of an emergency.

All correspondence should be sent to:

Institutional Review Board
c/o Office of Research and Sponsored Programs
Telephone: 581-8576
Fax: 217-581-7181
Email: eiuirb@www.eiu.edu

Upon completion of your research project, please submit Form G, Completion of Research Activities, to the IRB, c/o the Office of Research and Sponsored Programs.

Thank you for your assistance, and the best of success with your research.

Robert Chesnut, Chairperson
Institutional Review Board
Telephone: 581-2125
Email: rwchesnut@eiu.edu