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The Impact of Academic Advising on the Retention of First-year Students in a Gulf-Arab University

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The Impact of Academic Advising on the Retention of
First-year Students in a Gulf-Arab University

by

Selma Haghamed

A DISSERTATION

Presented to the Faculty of
Graduate College at the University of Nebraska
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The Impact of Academic Advising on the Retention of First-year Students in a Gulf-Arab University

Selma Haghamed, Ph.D.
University of Nebraska, 2014

Advisor: Miles T. Bryant

This study investigated academic advising and retention in a Gulf-Arab university. Quantitative and qualitative data were gathered in order to understand how academic advising could have potentially contributed to the improvement of student retention. The focus of the study was on first-year students in the College of Business and Economics and the College of Law in a Gulf-Arab national four-year institution. The study compared the Grade Point Average (GPA) and the number of credit hours in two groups of first-year students: 1) a treatment group of students who utilized academic advising services and (2) the control group of students who did not.

Findings included: 1) Students who participated in the Academic Advising intervention had significantly higher GPAs than those who did not participate. 2) Students who participated in the Academic Advising intervention registered for courses in the semester following their admission in greater numbers. 3) The use of the College Student Inventory (CSI) by academic advisors was perceived to be an effective tool in assessing student attitudes and perceptions. 4) Non-returning students reported job and work responsibilities as a major reason for their dropping out.
Recommendations for improved practice included: building a comprehensive retention plan based on (1) data, (2) attrition factors unique to the institution, (3) institutional mission and strategic objectives, and (4) institutional resources with special emphasis on academic advising. Recommendations for future research included replicating this study with a longitudinal design that tracks the development and persistence of students who receive the academic advising intervention across multiple semesters or until graduation with more control over variables not related to the academic advising intervention.
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Chapter 1

Introduction

Concerns regarding first-year retention rates and programming for first-year college students are increasing in higher education. In the United States, only about 59% of full-time, first-time bachelor’s degree seeking students, enrolled in fall 2005 at 4-year institutions completed a degree by the year 2011 (National Center for Education Statistics, 2012). Discussions focused on strategies to decrease attrition rates and identify exemplary practices of retention of first-year students have increased in recent years. The quest to improve graduation rates fuels these discussions. While these discussions have been frequent in the U.S. for sometime, it now appears that similar discussions, even debates, are moving east to the Gulf-Arab region as well.

The Gulf-Arab region has a significant number of higher education institutes. These institutes seek to provide a quality education for their students. In pursuing this mission, they face the same challenges as other institutions around the world.

This study was conducted in a Gulf-Arab State national university in which the Ministry of Education decided to open enrollment and abolish a bridge program that was in place. The purpose of the bridge program was to give students a strong foundation for high quality higher education. Abolishing this bridge program led to the admission of a large number of underprepared students, changing the demographics of the students admitted. The new admission policy presented a challenge to the institution. Consequently, a number of retention initiatives were introduced with academic advising being among the first.
A newly established academic advising program was in place when the open admissions changes were introduced. This program included a center that administers around 15 academic advising offices around the campus. Full time academic advisors were hosted locally in each college. The average caseload for advisors fluctuated between 300 and 500 students. The purpose of the academic advising program was to increase the retention of first-year students.

Academic advisors use a number of tools to assist with retention management including the College Student Inventory (CSI). Advisors use the CSI reports to improve communication with first-year students by stimulating discussions with individual students about their strengths and challenges. Advisors also use the CSI reports to explore areas of students’ needs that might result in referrals to various campus resources.

Multiple sources of data were used to build a solid background for this study regarding the impact of this intervention in fall-to-spring student persistence rates. First, institutional data about the incoming first-year student cohort of the College of Law and the College of Business and Economics in fall 2013 was used. Second, a phone survey was used to gather data regarding why some students left this institution. Third, a focus group was conducted to collect academic advisors’ perceptions about the effectiveness of the CSI as an intervention tool.

**Purpose Statement**

One of the major problems facing higher education administrators today is student attrition. Many students who enter higher education leave without earning a degree.
Research into the causes of attrition as it affects student retention and success is institution-specific (Upcraft, Gardner & Barefoot, 2005). Based on the number of variables and attributes identified through these investigations, researchers have developed many formulas for student success. Nevertheless, the applicability of these research results needs further consideration when examined within the context and the culture of institutions in other parts of the world. Research on student retention in the Gulf-Arab countries is scarce, making it even more important that each institution establish its own research efforts into the causes of attrition.

According to ACT (2014), the highest attrition rates are reported among first-year students. Consequently, this dissertation focused on the retention of first-year students. What one higher education institution did to uncover the academic and personal qualities of its incoming cohorts, how the institution used data to coordinate services and what ways were used to reach out to some of the students who might be at-risk of dropping out were explored.

Cultures in the Gulf-Arab region are rather collective in nature (Hofstede & Hofstede, 2005). Living with their parents after the age of 18 is a cultural norm for students in the region. Therefore, most students in the Gulf-Arab region who enroll in college live with their parents. Another substantial number of students is married and has children and continues to go to college. This results in a large number of commuter students in higher education institutes in the Gulf-Arab region.

The complexity of the household unit in the Gulf-Arab region is one of the characteristics of the collective culture in which students live. According to Khalaf
(2001), although the traditional household unit of extended family has been undermined, United Arab Emirates society is still family and kin oriented. Tribal kinship units play a significant role in social identification and one's position within the community. As a consequence of this orientation, most students live in the same neighborhood as their kin and are required to attend events in order to be part of their community.

The family forms the basis of the Kuwaiti society and culture. Extended families live together, to provide an opportunity for all family members to be involved in the socialization of future generations and maintain familial and cultural traditions (Loew, 2001). Similarly, in Bahrain, it is not unusual for extended families to live together under one roof -- parents, children, grandparents, and other relatives (Stanford, 2001).

Retention in general and the reasons for departure in commuter institutions specifically were explored in this study. In addition, some variables identified for their significant impact on retention were examined. Since finding the reasons for and causes of attrition are important, the findings from this study are key for uncovering the local retention culture and context of the institution.

The CSI, which is one of the instruments used in this study, was validated with students who were not studying in institutions in the Gulf-Arab region. Establishing the utility of CSI as an early alert retention system and a predictor of success of Gulf-Arab students was initiated in this study. The purpose of this study was to evaluate the results of using academic advisors as an intervention by comparing the mean Grade Point Average (GPA) and the mean credit hours of students who took the CSI and met with their academic advisors with the mean GPA and mean credit hours of those who did not
meet with academic advisors. Additionally, data were gathered on the utilization of the academic advising program.

**Context and Background**

**Historical overview of the institution.** The institution where this study took place opened in the seventies. Higher education in the GCC (Gulf Cooperation Council) states where this study took place is new relative to other institutions in the Middle East and North Africa regions.

**The institution today.** Today, this four-year institution has seven different colleges (Education, Law, Islamic Study, Arts and Science, Engineering, Business and Economics, and Pharmacy). The institution offers undergraduate education, some master degrees and a few doctoral degree programs on two segregated campuses, one for men and one for women.

A number of circumstances in the institution fueled the quest for better retention rates. One of them was the Education Council’s (the equivalent of the Department of Education in United States) sudden decision to open enrollment for students with diverse academic backgrounds. The bridge program, which was the major retention strategy at the institution prior to the Education Council’s decision, was abolished for most of the colleges. This bridge program was mainly a foundation program created to provide underprepared students with remedial courses to help them develop their academic skills. Courses in English, math, and technology were the most frequent offerings.

Students typically stayed for one year in the bridge program. At the end of this period, students were admitted to their desired colleges, if they achieved the required
score on the appropriate admission tests, e.g., SAT, ACT, TOEFL and IELTS. The bridge program was in place for approximately six years. According to the institutional research office of this university, roughly 52% of first-year students completed the Foundation Program successfully and were admitted to an undergraduate program in one of the seven colleges. Students not meeting the criteria for college admission were forced to leave the institution. The options for students not admitted to an undergraduate program are limited since this institution is the only national four-year university in the country. Other four-year institutions are mainly private and highly selective.

In 2012 the bridge program was abolished and admissions to the institution increased by more than 80%. Consequently, the number of students and the demographics of the admitted students changed. A component of that change was an increase in the number of underprepared students. The only retention initiative available for students was this bridge program, no other measures to control attrition existed. This resulted in a significant number of students either leaving or being expelled from this specific institution. As a consequence, retention became one of the major issues in the reform agenda for this institution. As the challenge of retaining students increased in importance, studies in student demographics and the factors that promoted retention assumed vital importance as well.

The quest for SACS accreditation. The University leadership at the study location launched a reform agenda around eight years ago. Currently, the institution is seeking accreditation from the Southern Association of Colleges and Schools (SACS). However, despite the change in admission policy, the leadership of this institution chose
not to modify the previously existing standards in order to continue the quest for quality education. This factor was among those that fueled the institution’s quest for better retention policies and strategies.

According to Schuh (2009) graduation rates are becoming true measures of the credibility and accountability of higher education institutions. A report from the Commission of the Secretary of Education (U.S. Department of Education, 2006) listed a number of recommendations of improvement for post-secondary institutions with the purpose of creating “a robust culture of accountability and transparency” (p. 21). The Commission’s report clearly stated that accreditation agencies should make completion rates the core of their assessment efforts. Therefore, the ability of the institution to retain and graduate a reasonable portion of its students is reviewed by accrediting agencies, such as SACS. The health of an organization is also measured by its graduation rates.

**Change in institutional policies.** With the beginning of the Arab Spring in 2011 the voices endorsing open enrollment and expanded access for students with lower academic abilities were loud and in greater numbers than ever before. In response, the study site leadership made the decision to abolish the bridge program, cancel international admission tests such as the American College Test (ACT), Test of English as a Foreign Language (TOEFL) and International English Language Testing System (IELTS) and change the language of instruction to Arabic. This action changed the admission policies and opened the doors for a significant number of students to enter the institution without proper K-12 preparation. In response, the university also introduced
two major initiatives to give students more chances to succeed and, thus, improve retention rates:

1. Developing policies that could potentially lead to retention

2. Developing a first-year program

*Developing retention policies.* In the past, academic standing policies were not flexible enough to help retain students. Therefore a committee was formed to review some of the existing academic standing policies and recommend a number of changes to these policies to help retain students and give them additional chances to succeed. For instance, under the previous policy, students were placed on probation as soon as they reached 2.00 out of 4.00 GPA. Under the new policy, students were given multiple chances:

First, students were not put under probation if their GPA fell below 2.00 until they reached 24 credit hours.

Second, students were granted a chance to be on probation for three consecutive times before they would be dismissed.

Third, if students were dismissed because of being on probation three consecutive times, they were granted a chance to appeal.

Finally, students who were expelled in the past because of being on probation could apply to be reinstated. If their application was accepted, they were readmitted with specific conditions.
Although these policies are less rigorous than the ones previously in place, they align with SACS accreditation standards and are more flexible than the ones the institution followed in the past.

First-year experience program. The University started a comprehensive first-year experience project to retain first-year students. The project began with a self-study with the purpose of recommending changes in course offerings, academic support services and learning communities development. Also, as a part of the project, the institution piloted a first-year course with the intention of orienting students to the institution.

Academic Advising

The academic advising program operating in this institution was established in June 2012. That advising model was centralized and self-contained with branch offices in each of the University’s seven colleges. In the new model, all full-time academic advisors were to report to the Center for Academic Advising.

College Student Inventory (CSI)

Academic advisors in the College of Law and the College of Business and Economics used the College Student Inventory with first-year students in fall 2013. The CSI can be used by academic advisors to uncover the motivational qualities, coping skills and levels of receptivity to support services of the incoming first-year students (Stratil, 1988). In this study the CSI was used with the student cohort in fall 2013 as an intervention with first-year students.
CSI was designed by Noel-Levits as a retention management tool. Producers of the inventory claim that it helps institutions identify students at risk and, therefore, directs early intervention programs and services to the students who are most in need (Noel-Levits, 2010). This study used CSI as a) a means of improving communication between academic advisors and students, b) to differentiate between students who participated in the CSI Intervention and the ones who did not and, c) to compare students’ academic performance as measured by GPAs. This also served as a starting point for evaluating the utility of CSI as an intervention tool by using the reports to initiate advising of first-year students.

**Description of CSI.** CSI Form B was used in this study. This form of the instrument has 99 items with response options presented in Likert format. Since the instrument was used in a Gulf-Arab institution, it was translated into Arabic.

The Planning and Summary Report of the CSI provides information in areas such as Dropout Proneness, Predicted Academic Difficulty, and Educational Stress. Table 1 shows the results of these scales.

Dropout Proneness is claimed to measure the average of the overall inclination of the respondent to drop out of college before finishing a degree. The Advisor Guidebook cautions users that this measure does not actually decide which students drop out of college, but rather gives an indication of which students possess a pattern of intellectual and motivational traits that are loosely associated with dropping out (Noel-Levitz, 2010).
The Predicted Academic Difficulty was developed to predict who is likely to have low grades in college, based on a student’s self-reported high school GPA (Noel-Levitz, 2010).

The Educational Stress Scale claims to measure the student’s general feelings of distress in the college environment. Although the Advisor Guide states that there are important facets of mental health that this scale does not measure, the Guide claims that this scale can still be used to refer students to personal counseling (Noel-Levitz, 2010).

In addition to the areas above, the CSI has three main content areas: 1) academic motivation, 2) general coping skills, and 3) receptivity to institutional assistance. Each of these content areas is divided into subscales. Upon completing the CSI, each student receives an individual report called the Student Report. The Student Report presents subscale scores as percentile rank.

In addition to the Student Report, the institution also receives a Summary and Planning Report. The institution uses this report to plan services for students. Information in the report gives the reader a general idea about the cohort who took the inventory. Some of the data from the Summary and Planning Report for the institution where this study took place is presented in Table 1.
Table 1

*CSI Data from the Planning and Summary Report*

<table>
<thead>
<tr>
<th>Summary Observation</th>
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<tr>
<td>Dropout Proneness</td>
<td>41.2</td>
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<tr>
<td>Predicted Academic Difficulty</td>
<td>33.8</td>
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<tr>
<td>Educational Stress</td>
<td>56.0</td>
</tr>
<tr>
<td>Receptivity to Institutional Help</td>
<td>50.8</td>
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<tr>
<th>Academic Motivation Scales</th>
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<td>Study Habits</td>
<td>52.2</td>
</tr>
<tr>
<td>Intellectual Interests</td>
<td>55.1</td>
</tr>
<tr>
<td>Math and Science Confidence</td>
<td>54.0</td>
</tr>
<tr>
<td>Desire to Finish College</td>
<td>35.9</td>
</tr>
<tr>
<td>Attitude Towards Educators</td>
<td>47.5</td>
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</table>

<table>
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<tr>
<th>General Coping Scales</th>
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<td>Family Emotional Support</td>
<td>60.8</td>
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<tr>
<td>Optional Tolerance</td>
<td>42.5</td>
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<tr>
<td>Sense of Financial Security</td>
<td>77.8</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Receptivity Scales</th>
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<tbody>
<tr>
<td>Academic Assistance</td>
<td>46.0</td>
</tr>
<tr>
<td>Social Enrichment</td>
<td>51.3</td>
</tr>
<tr>
<td>Career Counseling</td>
<td>56.4</td>
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The percentiles in Table 1 are the summary of scores for the population in this study. These students are first-year students in the College of Law and the College of Business and Economics.
The statistics for all scales, whether in the Student Report or the Summary and Planning Report, are computed from percentile scores. For all of the scales in Table 1, the national norm in the United States is the 50th percentile. Scores below 50 are less than the national norm in United States and scores over 50 are greater than the national norm in the United States.

The CSI also contains questions designed as internal validity measures. These questions identify students who respond randomly to questions. One of the fields in the Student Report is designed to show whether or not a student has been checking answers randomly. Some student reports did show that some students were choosing answers to the questions randomly.

The Academic Motivation Scale is designed to uncover the student’s perceptions about skills and attitudes that could be necessary for success in college such as, study habits, intellectual interest, verbal and writing confidence, math and science confidence and the desire to finish college (Noel-Levits, 2010).

The General Coping Skills is composed of subscales such as Family Emotional Support, Opinion Tolerance and Sense of Financial Security (Noel-Levits, 2010).

Receptivity to Institutional Assistance is composed of subscales such as Academic Assistance, Personal Counseling and Career Counseling (Noel-Levits, 2010).

Institutions that purchase and use the CSI receive scores for each student who takes the CSI on students’ drop out proneness. Drop out proneness is part of each of the individual Student Reports. When meeting with students, academic advisors focus on Dropout Proneness subscale.
**Analysis of CSI data.** Scales, such as the Predicted Academic Difficulty, depend on student’s self-reported High School GPA to predict the level of difficulty that the student will encounter in college. The CSI attempts to identify students who are at risk through students’ reported high school GPAs even though there is a possibility that the GPA reported by a student is not correct. Additionally, in some countries the student’s GPA might not reflect the actual academic level of the student. For instance, in some countries high school GPA is inflated. In the country where this study took place the average high school GPA of the cohort of students in the College of Business and Economics and the College of Law who were admitted in fall 2013 was 3.46. However, the average GPA of the same cohort was 1.8 by the end of the first semester in college.

The fact that many students are academically underprepared, but is not reflected in their High School GPA suggests that their high school GPA is inflated. This situation poses a real challenge to the institution because a number of students who are at risk might not get the attention they need because even if they report their true GPA, it is inflated. Depending on high school GPA alone is not enough of a predictor of academic difficulty. The institutional report does not necessarily contain all of the students who are at risk because inflated high school GPAs may keep many students from being included in the report.

**Globalization of Higher Education in the Gulf-Arab States**

Higher education in the Gulf-Arab states is growing and evolving rapidly. If economic growth and development are to accelerate, the tremendous need to educate the local labor force and attract and train regional and international students to work as
skilled labor in these countries must be addressed (Knight, 2011). Thus, the need for economic development and the dearth of skilled labor in this region drive this growth in higher education.

On the other hand, higher education in the Gulf-Arab states is largely affected by internationalization and globalization of higher education. There are local national institutions as well as franchise type institutions. As a result, the Gulf-Arab region has witnessed a tremendous emphasis in raising standards of higher education. Growth in the quality and quantity of higher education institutes reflect this emphasis. The Gulf-Arab region has the largest share of international branch campuses (IBCs) in the world (Lane, 2011). According to Lane, the Gulf-Arab states attracted around 56 IBCs with UAE hosting almost a third of these. According to Knight (2011) there are around 162 branch campuses in the world. The Middle East hosts the largest number of these branch campuses.

The globalization of higher education in the Middle East took a different structure, one in which higher education hubs are formed. Knight called these structures educational hubs (Knight, 2011). Knight analyzed the claims of three countries from the Middle East that they have formed educational hubs. All of them are Gulf-Arab Countries. The three countries are Qatar, UAE and Bahrain. She also compared these with other countries around the world that give their higher education structures the same name. According to Knight, an educational hub is defined as “a planned effort to build a critical mass of local and international actors strategically engaged in education, training, knowledge production and innovation initiatives” (Knight, 2011, p. 33).
One of the main manifestations of globalization is massification (unprecedented growth). In the institution where this study took place, the higher education environment was opened to students from varying academic backgrounds, in order to satisfy the growing need for higher education. Large class size is one of the consequences of massification (Hornsby & Osman, 2014). The resulting large classes represented a challenge to retention in the institution where this study took place.

**Financial resources.** Gulf-Arab States have significant financial resources. The Gulf-Arab countries belong to the Gulf Cooperation Council (GCC). The GCC includes Qatar, United Arab Emirates (UAE), Saudi Arabia, Kuwait, Oman and Bahrain. Countries that belong to the GCC have one of the highest Gross Domestic Product (GDP) per capita in the world. Qatar has the highest GDP per capita followed by Kuwait, Saudi Arabia, United Arab Emirates, Bahrain and Oman respectively. All Gulf-Arab countries are among the 50 countries with the highest GDP per capita (CIA World Factbook, 2013).

Higher education in this Gulf-Arab state has been allocated an abundance of financial resources. Therefore, retention is not aimed at bolstering an institution’s financial resources. Since the government funds higher education institutes (Al-Kandari, 2008), the financial resources of the institution are not affected by the number of students who leave or by attrition rates. Rather, retention is a matter of accountability to the community. The institution where this study occurred is the only national four-year institution in the country. The government provides funding and the institution is held accountable for offering education to the student enrolled.
**Research Objectives**

Three objectives were pursued in this research:

- To compile and analyze reasons such as demographic, academic, motivational and social factors that lead to students departing this specific institution.
- To explore the utility of CSI as an intervention strategy to work with students who are at risk in this specific institution.
- To find out if there is a relationship between first-year student satisfaction with advising visits and students’ persistence from fall to spring

**Significance of the Study**

Education and training in general and in higher education specifically play a significant role in the development and growth of the economy of the Gulf-Arab countries. For instance, Saudi Arabia is focused on employment for its large youth population (CIA World Factbook, 2013). Thus, the country needs to develop its educational capacity to give its youth the education and training needed for them to successfully enter the job market. Simultaneously, UAE is focused on creating more opportunities for nationals through improved education (CIA World Factbook, 2013). “The spread of education in society is at the foundation of success in countries that are late-comers to development” (Nayyar, 2008, p. 40)

Countries in the Gulf-Arab region spend generously on higher education. The United Arab Emirates expenditure per student in US dollars is $18,616 compared to $16,484 in the United Kingdom (Center for Higher Education Data and Statistics, 2013). Improving the quantity and quality of higher education has been important for Gulf-Arab
countries. In United Arab Emirates, there are approximately 102 higher education institutions (Center for Higher Education Data and Statistics, 2012). These countries invest in higher education to speed their economic growth.

One objective of this study was to find the most common reasons for student attrition in this specific institution. The hope was that such findings would facilitate a powerful predictive model specifically for this institution and for other institutions in general. Additionally, other Gulf-Arab national institutions may be able use the model of retention proposed by this study.

A major goal of this study was to explore whether the analysis of the results of CSI provides institutions with an in depth picture of their incoming cohorts. Can CSI be used to guide institutional polices aimed at retention and resource allocation? This study was an attempt to provide recommendations in this direction with the hope that such analysis might help other Gulf-Arab institutions determine the value of CSI as a source of data for adjusting their institutional policies.

Additional goals of the research were a) to inquire about the quality and the importance of academic advising to student retention in this institution, and b) to justify resource allocations for academic advising in general and for the advisors’ professional development, specifically. Academic advising is the single most underestimated service in higher education institutions (Light, 2001). Therefore, conducting research on the impact of academic advising in retention and highlighting its importance, especially in young higher education institutes in the Gulf-Arab region, is critical.
Definition of Terms

Some terms used in this study might be defined differently than in previous studies. Therefore, these terms are defined within the context of this study. Below are a few definitions of terms that are regularly used throughout this paper.

*Academic advising*—Academic advising is a learning opportunity outside the classroom for students in higher education. Academic advisors are educators. In this context, academic advising was viewed as more than course registration (Drake, 2011). In this study, academic advising was viewed as a developmental process that helps connect students’ career, life and educational goals with higher education goals on one hand, and their educational plan on the other.

*Attrition*—Attrition includes both voluntary withdrawal from a course or a semester and an involuntary leave, such as academic dismissal.

*College Student Inventory (CSI)*—CSI is a retention management tool that should be administered during the first few weeks upon matriculation of the student in the institution. Based on their responses to a questionnaire, each student receives a report about their potential areas of strengths and challenges. The student then discusses his or her report with an academic advisor who is trained to use the report to facilitate discussions with students. More details about the CSI are available in Chapter 3.

*Drop out*—A student is considered a drop out if he or she enrolls in an institution and stops without completing his or her formally declared program of study. Drop out is used in this study to describe voluntary leaving only. The term is also used to describe students who do not register for any courses during a given semester. Even if they
continue to register for courses in other semesters, they are considered a drop out of that specific semester.

_Gulf-Arab national institution_—A Gulf-Arab national institution is a higher education institution located in one of the countries of the Gulf Cooperation Council (GCC). The GCC includes Qatar, United Arab Emirates, Saudi Arabia, Kuwait, Oman and Bahrain.

_Persistence_—A student is considered persistent if he or she manages to maintain a Grade Point Average (GPA) of 2.00 or more and registers for courses in the semester following his or her admission.

_Retention_—Retention is the ability of the institution to keep its students until graduation. Some studies calculate retention as a percentage of the students who graduate out of a specific cohort (Seidman, 2012). This study specifically focuses on the retention of first-year students.

_Skills for university success_—This is a course offered by the institution where this study took place. CSI is administered as one of the activities in this course.

**Summary**

Massification of higher education is a global phenomenon that has impacted the Middle East as well as other parts of the world. The implications of massification are many, with student attrition being among the most prominent. Institutions should strike a balance between providing high quality educational experiences for their students and facilitating access and accessibility to a wide range of students. In pursuing this balance, institutions must invest in planning their retention efforts. Most of the time, planning
means conducting research, looking carefully into data and making informed decisions based on data generated.
Chapter 2

Literature Review

To better understand how academic advising fits in the big picture of college student retention, it is vitally important to take a holistic view of previous research on student retention in general and those specifically related to academic advising.

Although research on student retention is relatively new, a significant amount of literature is available as a starting point for retention initiatives. According to Seidman, research in student retention is only about 50 years old (2010). In fact, the considerable progress in understanding retention took place even more recently, in the past 25 years (Braxton, Hirschy, & McClendon, 2004). A review of the literature revealed some studies about retention in countries, such as the United Kingdom and Australia. However, the bulk of research in college student retention emerged from United States.

Rationale behind this Literature Review

Since this study took place in a typical Gulf-Arab national institution, the literature review was focused on studies in institutions with similar characteristics. Because first-year student retention is one of the most important parts of any success initiative the literature review was also focused on first-year students’ attributes and factors of retention.

Highlighting the importance of academic advising to first-year student retention and success is also imperative. Correspondingly, additional literature reviewed provided a framework for understanding the importance of academic advising to retention of students. However, academic advising is not the only support service that institutions
provide for students. Thus, a comprehensive view to successful first-year retention programs was included as well.

Through a review of research conducted in similar institutions in other parts of the world and a close look at the students’ characteristics most relevant to students in the Gulf-Arab region, this literature review helped identify possible gaps in the literature on student retention and a framework of understanding retention in the first-year.

**Attrition in the First-year**

Attrition is a chronic problem in higher education institutions and a real challenge for students, especially those in the first-year of college. Regardless of differences in terms of needs or characteristics, first-year students are generally more prone to dropping out of college than students who are further along in their studies. Therefore, attrition in the first-year is of particular concern for most university administrators.

Students, who depart higher education, usually make that decision during their first two weeks in college (Ketkar & Bennett, 1989). Approximately 25% of students at 4-year institutions do not persist to the second year of college in United States (Kahn, Nauta, Gailbreath, Tipps & Chartrand, 2002). Furthermore, around 42% of community college students do not manage to make it to the second year (Kahn, Nauta, Gailbreath, Tipps & Chartrand, 2002). According to ACT, only 57.8% of first-year students in open enrollment, four year, public institutions made it to the second year of college in 2014 (ACT, 2014). The retention rates of first-year students in Australia differed from the ones in United States. A report for the year 2004 for the former Department of Education,
Science and Training (DEST) in Australia stated that the attrition rates of first-year students in Australia was 21.2% (O’Keeffe, 2013).

**Why Do Students Leave or Stay?**

There are a number of factors involved in students’ attrition. A number of scholars and practitioners in the field of retention, including Vincent Tinto (1975, 2012), Kuh, Kinzie, Schuh, Whitt and Associates (2005), Pascarella and Terenzini (2005), Bean and Metzner (1985) and Braxton, Hirschy and McClendon (2004) have investigated the phenomenon of attrition. They looked at the reasons for attrition from different perspectives. What one researcher described as the process of attrition in one institution might not apply to the other researchers’ efforts. This point stood out when looking at the different models of attrition. Therefore, some models look more descriptive in nature while the predictive working models actually solve the attrition problem. For instance, Tinto’s propositions of the importance of socialization of students do not apply to commuter institutions (Braxton, Hirschy, & McClendon, 2004). Also one model of retention might not explain the full picture of retention in a given institution. Because retention is institution-specific (Kalsbeek & Zucker, 2013), this literature review focused on the perspectives that were most relevant to the institution where this study took place.

Tinto (1975) and Bean and Metzner (1985) attempted to conceptualize the process of interaction of the individual characteristics upon entry with the higher education environment and how this process might lead to attrition. Tinto went as far as using Durkhiem’s theory of suicide to describe the process of drop out. He assumed that drop out resulted mainly from the lack of integration of the student within the fabric of the
institution (1975). Tinto also argued that in order for students to integrate into the fabric of the institution, they should become separated from their previous communities, those prior to enrollment. He also thought that students should be fully immersed in the new culture of the institution in order to persist (1987).

Kuh, Kinzie, Schuh, Whitt and Associates argued that the two most important contributors to student success and engagement were first, the amount and effort students put into their studies and second, the extracurricular activities and the way the institution rallies its resources to provide meaningful experiences to student (2005).

**Nontraditional Student**

Wlodkowski, Mauldin and Campbell (2002) had a different perspective of the reasons that nontraditional students persist or drop off college. One of their studies focused on students who enrolled in fall 1999 but did not re-enroll in fall 2000. They used multiple tools to identify the reasons for student attrition. First, they used an Exit Questionnaire to survey 128 students. Second, they conducted phone interviews with 62 nontraditional students who had not re-enrolled in fall 2000, focusing on students’ experiences prior to withdrawal (Wlodkowski, Mauldin, & Campbell, 2002).

Wlodkowski, Mauldin and Campbell (2002) divided the reasons they found to have significant impact on retention into two major categories: (1) those related to the student including factors such as the student academic performance, employment, financial status and other personal circumstances, and 2) reasons related to the institution itself such as co-curricular learning opportunities and the general institutional
environment. Since the study focused on typical adult students in two specific institutions, their findings have limited generalizability to other populations.

Bean and Metzner (1985) offered a definition of non-traditional students based on the heterogeneity and a mix of characteristics related to residency status, age, enrollment status or a combination of any of these characteristics (1985). Resident students have more opportunities for involvement in student life whereas commuters spend less time exploring or taking advantage of campus activities (Newbold, Mehta, & Forbus, 2011). One of the most defining characteristics of a non-traditional student is being a commuter, not living in the residence, and thus receiving less integration opportunities into the culture of higher education.

Bean and Metzner (1985) claimed that their conceptual model is better in describing attrition of non-traditional students. Tinto’s model (1975) focuses heavily on the social integration of students, especially the first-year students into the institution but this might not apply to non-traditional students. Bean and Metzner (1985) claimed that when non-traditional students come to the institution, they leave with lesser degree of social interaction. Therefore, a different model that focuses on a student’s external life rather than the culture of the institution is needed to describe the attrition process of non-traditional students, especially the ones in commuter institutions.

A significant number of non-traditional students are usually enrolled in commuter institutions. In United States a number of political, social and economic developments led to the dramatic increase in enrollment of nontraditional students (Bean & Metzner, 1985).
Likewise a number of economic, political and social developments led to the increased number of nontraditional students, aged 24 or more, in the country where this study took place. Among the major changes were economic growth, the globalization effect and the impact of massification of education (Lane, 2011). Most institutions of higher education in the Gulf-Arab region are spending more money in educating their citizens. Also many of them are seeking accreditation as a strategy to improve the quality of education offered (Center for Higher Education Data and Statistics, 2013).

As a result of these changes, the higher education standards rose to meet the demands of a rapidly growing economy and to cover the needs of the job market. In the past, citizens of the Gulf-Arab region could secure employment with high school degrees. Currently, however, the job market demands more skills and favors candidates with higher education degrees. In response, individuals have to raise their educational standard to meet the job market demands if they want to gain employment and increase their income. As a result many older students are entering institutions of higher education as a way to acquire additional education that will increase their income and improve their socio-economic status.

Retention in Commuter Institutions

Braxton, Hirschy and McClendon (2004) argued that Tinto’s internationalist model of student departure (1993), though widely cited, did not provide a full description of the process of attrition in commuter institutions. Commuter institutions enroll students with different needs. They are usually non-traditional age students who might be 24 years or older. Students in commuter institution may have family responsibilities, work
responsibilities or both. In many cases they may not be married or have family but still live with family, which means that they spend less time on campus and more time in their original home culture.

Commuter institutions have lower retention rates than residential institutions (Braxton, Hirschy, & McClendon, 2004; Seidman, 2012). In the commuter institutions students live outside campus and in residential ones students live in communities in residence halls. Braxton, Hirschy, and McClendon (2004) claimed that commuter colleges and universities lack structured and well-defined social communities for students to belong to. This might lead to a decreased sense of belonging.

Sense of belonging is an important aspect of persistence in college. The students’ sense of belonging to their institution is the feeling that “one is a valued member of the college community” (Hausmann, Schofield, & Woods, 2007, p. 804). Hausmann, Schofield and Woods (2007) concluded that sense of belonging to the institution tends to decline over the first-year. They set up three groups of students. One group received enhanced treatment to boost the group’s sense of belonging; the second group received less enhanced treatment; and, the third group received no treatment. They found that efforts spent in connecting students to the institution lead to less decrease in sense of belonging over the first-year.

Braxton, Hirschy and McClendon (2004) attempted to revise Tinto’s theory (1975) and provided a framework of understanding for what they call the ill-structured puzzle of the departure of commuter students. They also thought that Tinto’s propositions were not strong enough to explain the departure puzzle in commuter
colleges. Consequently, they offered institutionalized solutions of retention and exemplary programs to decrease student attrition. For example, rooms equipped with kitchen, computers and other amenities are provided for commuter students in the University of Seattle to help them feel at home and ease their transition into college (Braxton, Hirschy, & McClendon, 2004).

Variables of Retention

A number of defining variables and characteristics describe the process of attrition of non-traditional student. Some of these variables may have a direct or indirect effect on attrition (Bean & Metzner, 1985). Some of these variables may affect attrition on their own or in combination with other variables (McGrath & Braunstein, 1997). Retention theories tend to divide variables into different categories. Variables from one category can interact with variables from a different category and impact retention differently (Lotkowski, Robbins, & Noeth, 2004). Theorists of student retention have clustered these variables differently. The following clustering resulted from reviewing the literature of retention theories:

1. Student background variables
2. External variables
3. Institutional variables

Student background variables. Student background variables include student characteristics such as age, enrollment status (part time or full time), residence status (commutes or lives in resident halls), the existence of educational goals, levels of
motivation and academic ability. These background variables are expected to define how the student interacts with the institution (Bean & Metzner, 1985).

According to Braxton, Hirschy and McClendon (2004), student’s entry-level characteristics, such as family educational and financial background, high school grades and age, play a significant role in retention. They assumed that these variables determine the student’s initial level of commitment to higher education. These variables also determine the student’s subsequent level of commitment to the institution and the student’s ability to adjust to the internal environment of the institution (Braxton, Hirschy, & McClendon, 2004).

**Academic ability.** Many studies emphasized the importance of students’ academic ability as the sole predictor of success and persistence in college. In many institutions around the world, high school Grade Point Average (GPA), admission tests such as ACT and SAT, and English language tests such as TOEFL and IELTS are the major criteria for predicting retention. Students who have low high school GPA or low admission test results are considered underprepared (Porter & Polikoff, 2011). Generally speaking, students who are underprepared tend to leave because they are unable to meet the expectations of the institution.

Literature on student retention emphasized the importance of developmental education in bridging the gap for students who are identified as underprepared or don’t have the academic ability to succeed in higher education. For instance Fike and Fike (2008) found out that developmental education in general and developmental reading specifically are powerful predictors of semester-to-semester persistence rates. They
argued that students who take developmental reading tend to drop out of college. Tinto (2012) stated that students that lag behind in basic skills, especially reading, are not likely to succeed in college.

Motivation. Another variable that is considered part of the student’s background is his or her motivation. Although many studies focused on a student’s academic ability as the most important predictor, other research found that motivation has a bigger share in influencing retention (Alarcon & Edward, 2012). Conscientiousness, which is associated with better performance and high retention rates, is a factor that can be used to measure motivation. For instance, if a student is highly motivated, then he or she is likely to be conscientious. Alarcon and Edward (2012) found that students who are more conscientiousness are likely to attend lectures, take good notes, and study well.

Alarcon and Edward (2012) also described positive affection (recalling positive experiences, enthusiasm and interest) as being part of students’ motivation and therefore a very strong predictor of retention. On the other hand, negative affection (recalling negative information and getting distressed) is a factor in attrition. Yet another perspective was offered by Wlodkowski, Mauldin, Campbell (2002). They found that motivational variables are associated with higher grades for traditional students only. More research is needed to explore the relationship between motivation and the grades of non-traditional students.

Student study skills and habits. Proctor, Prevatt, Adams, Reaser and Petscher (2006) found that students who experience academic difficulties in college possess weak study skills compared to their normal-achieving counterparts. Experiencing difficulty in
maintaining good grades is a major reason for many students to drop out of college (Bean & Metzner, 1985).

**Enrollment status.** The number of hours in which the student is enrolled in a given semester was found to be the third most important predictor of retention in community colleges (Mohammadi, 1994). The same study conducted by Mohammadi (1994) indicated that the attrition rates were higher among students enrolled part-time or took only one or two courses per semester.

**External variables.** This category of variables includes factors that contribute to student attrition and are relevant to student life outside the institution, such as the student’s financial situation, which determines the availability of financial aid to continue in college. Other important factors that are considered external are the student’s employment status, support from significant others, and family responsibilities.

External variables were found to be strong predictors of non-traditional student attrition (Bean & Metzner, 1985). These variables can have a direct or indirect effect on drop out proneness. According to Bean and Metzner, direct effect comes through the impact on psychological outcomes such as stress and utility of education (1985). Unlike the individuals in residential institutions, commuter students are less likely to integrate in their institution’s internal environment because of the profound effect of their external lives on their persistence (Tinto, 1987).

**Institutional variables.**

**Institutional practices.** Scholars and practitioners have identified a number of institutional practices that impact retention. Kuh, Kinzie, Schuh, Whitt and Associates
(2005) based their study, which is called Documenting Effective Educational Practices (DEEP), on findings of the best practices followed by 20 best institutions. The institutions identified in Kuh, Kinzie, Schuh, Whitt and Associates’ (2005) study varied widely by mission, selectivity, size, student characteristics and other factors. Therefore, a wide range of institutions can easily adopt the educational policies and practices followed by these institutions. For instance, some of these institutions are selective in admission, some enroll a large proportion of underprepared students, some are predominantly white, and some enroll students of color.

“Our have to reach them to teach them” is the adage followed by Fayetteville State University (FSU). Two-fifths of FSU’s students receive low scores on math and reading proficiency exams (Kuh et al., p. 90, 2005). The number of underprepared students enrolled in this institution, however, did not stop it from being among the DEEP institutions nor did it cause them to apologize to their students. Instead, the adage expresses the institutional commitment to admit and work with students with diverse talents and academic abilities.

**Institutional resources.** The availability of resources in institutions is a major determinant of student retention. Resources such as a financial aid office, career services, student clubs and organizations, and campus recreational facilities are important to student retention and persistence. Reason (2009) found that these services have either a direct or indirect effect on retention. They are also a vital part of the student’s college experience (Pascarella & Terenzini, 2005) and student success (Kuh, 2011).
The year 2004 witnessed the emergence of the document Learning Reconsidered. This document highlighted the importance of extra-curricular opportunities, such as student leadership clubs and organizations, to student learning and development and the role the different campus resources, such as career services, personal counseling, learning support, academic advising and financial aid, play in educating the student as a whole (The National Association of Student Personnel Administrators & The American College Personnel Association, 2004). The document also defined a number of learning outcomes expected from students. Academic departments alone cannot achieve these learning outcomes. Rather a number of campus resources in the student affairs operations need to collaborate with academic units to educate the student as a whole (The National Association of Student Personnel Administrators & The American College Personnel Association, 2004).

As a result, the educational mission of such resources cannot be eliminated even in difficult times. Eliminating these resources simply means going back to the times when the intellectual development of students was separated from the development of the whole student.

*Availability of seats in desired courses.* Bean and Metzner (1985) listed a number of empirical studies at 4 and 2-year institutions that indicated student dissatisfaction with the availability and timing of seats in desired courses were a major factor in student attrition. Course availability and flexible course scheduling are one of the major factors of student retention in commuter institutions. Institutions should analyze the characteristics of their incoming cohort carefully when scheduling courses. An institution
might offer courses at times that are not suitable for nontraditional students. Students’ perceptions about the availability of desired courses, whether these courses are scheduled at suitable times and whether these courses have sufficient capacity for student demand is one of the major factors of retention of nontraditional students and especially in commuter institutions (Bean & Metzner, 1985).

**Importance of Academic Advising**

An extensive body of literature investigated the impact of academic advising on the retention, persistence and success of first-year students (Drake, 2011; Gordon, Habley, Grites, & Associates, 2008; White & Schulenberg, 2012). The impact could have different shapes and shades on different aspects such as student learning, personal development, expectations and self-assessment. On the other hand, some argued that increasing academic advising and mentoring might not have a significant impact on student engagement and therefore retention (Kerkvliet & Nowell, 2005). Studies of the impact of academic advising on student retention can be grouped into three different categories:

1. **Student learning**
2. **Student expectations of the institution**
3. **Student self-assessment and regulation**

**Student learning.** Academic advising could play a significant role in fostering student learning and development, and research shows that students learn a great deal outside the classroom (Pascarella & Terenzini, 2005). Academic advisors teach students the process of course selection and acquaint them to graduation requirements.
**Student expectations.** Students drop out of college because they find out that perhaps college is not what they have expected. Students’ perceptions about success in higher education are shaped by expectations. Academic advising help students form realistic expectations by matching students’ perceptions with the reality of success in higher education institutions.

Academic advisors work with students to help them see the realities of success. Tinto (2012) organized success in this domain in three different vectors: “success in the institution as a whole, success in a program of study, and success in a course which the student is enrolled” (p. 24). Academic advisors’ main responsibilities are helping the students navigate the pass of success through these three vectors by explaining the complex rules, regulations and requirements of completing a degree.

Hollis emphasized the importance of the work of academic advisors with nontraditional students (2009). To alleviate the students’ feelings of stress and disengagement, advisors are in a very good position to guide first-year students through the general education requirements, academic policies and deadlines (Hollis, 2009).

**Student’s self-assessment and regulation.** Giving constructive and a timely feedback is one of the characteristics of successful institutions that are identified as having the most effective educational practices by Kuh et al. (2005). Vincent Tinto work (2012) laid the foundations of conditions for student success. He identified feedback as one of the major factors in student retention but he also couples it with assessment. Both Kuh et al. (2005) and Tinto (2012) focused on the importance of assessment in the classroom.
Hollis explored how academic advisors can help student engage in a process of true self-assessment (2009). Advisors help students engage realistically in a process of analysis of their true academic abilities in relation to required courses.

In one of his most recent works, Vincent Tinto (2012) gave assessment and feedback a broader perspective. He did not only think that first-year students should be assessed for placement in classrooms through such assessment test like Accuplacer, but he also claimed that attitudes of incoming cohorts should be measured systematically (Tinto, 2012). The College Student Inventory (CSI) can measure attitudes such as drop out proneness.

For the most part, institutions that have open enrollment for students from a diverse academic background such as community colleges and four-year institutions with open enrollment use the CSI. This includes institutions such as Iona College in New Rochelle, New York use CSI (McGrath & Braunstein, 1997). On the other hand, there are other tests, such as Making Achievement Possible (MAP), that is used by Appalachian State University. These inventories are regarded as one of the effective practices to institutionalize feedback. The purpose of such assessment and feedback is to alert the institution to the possible risk factors as early as the first week of class and to speed institutional response by referring students to appropriate support services such as counseling, academic support and financial aid.

Another form of effective assessment and feedback are the electronic early alert systems. These systems have grown in recent years to alert faculty and support staff when a student is at high risk (Tinto, 2012). Early alert systems are emerging as one of the
major tools available to institutionalize a culture of retention in higher education institutions. These systems use technology and software solutions to build a sense of community in the large and fragmented campuses of today.

The early alert system was a vital component of Lyndon State College's initiative to retain first generation low-income students (Dalton, Moore, & Whittaker, 2009). In a study conducted by Faulconer, Geissler, Majewski and Trifilo (2014), 93% of students who were identified as at risk and who were contacted by staff indicated that it was motivational to receive such feedback.

The feedback capability of such systems is usually strengthened by the referral component. At Dakota State University the referral system is a vital part of their early alert system (Lorenzetti, 2009). As soon as a student is identified as at risk, a number of institutional responses are triggered, including referring the student to appropriate campus resources based on their needs. Faculty buy-in is also an important component of this feedback tool (Norin, 2010).

Academic advisors can be an important component in a campus-wide initiative of feedback in response to students at risk. Nowadays, academic advisors are part of early alert systems for students at risk (Hollis, 2009). The group of students at risk includes developmental, nontraditional and first-year students who need to take general requirements or remedial education to reach their potential and cross the bridge to success.

In their report, *What Works in Student Retention (2004)*, Habley and McClanahan emphasized the importance of academic advising to first-year retention. They identified
some retention practices that could be responsible for the greatest contribution to retention in four-year public institutions. They divided these practices into three main categories:

a) Academic advising that is well connected to other campus resources such as counseling and career services
b) First-year programs with first-year seminars for academic credit
c) Learning Support that provides services such as tutoring, writing and math help

Notably, academic advising is the first category in the list. Additionally, academic advising could be part of the other two categories because of its capacity to refer students to campus resources. Habley and McClanahan (2004) have also identified first-year programing and first-year seminars for credit as among the vital components of successful retention initiatives.

In many institutions, academic advisors teach first-year programs and, therefore, act as both instructors and mentors for students. The evaluation of the program that employs academic advisors as instructors of first-year courses in Midland Technical College in Columbia, South Carolina concluded that The GPA and the first-to-second semester persistence rates of students in the experimental group is higher than the ones in the control group (Ryan, 2013). The experimental group students are taught by Instructors who received special training in academic advising taught the experimental group and instructors who did not receive training in academic advising and did not provide advising for their students taught the control group.
Habley and McClanahan (2004) identified learning support as another vital component of first-year retention. Academic advisors facilitate the use of learning support because of the referral capacity of academic advising programs. Good academic advising programs train advisors on how, when and where to refer students to campus resources, such as those of learning support (Upcraft, Gardner, & Barefoot, 2005).

Some argue that the importance of academic advising in commuter institutions stems from the importance of students perceptions to the level of commitment to of the institution to student’s welfare (Braxton, Hirschy & McClendon, 2004). When students get the chance to meet with an official of the institution from the beginning and form a positive relationship with that official, they, have a greater chance of having positive images and perception about the institution The level of commitment of a college or a university is manifested in preparing a good support person who is available to communicate and guide students through their journey within the institution (Braxton, Hirschy & McClendon, 2004).

Research revealed the challenges faced by commuters (Seidman, 2012) when they attempt to integrate in higher education institutions. The relationship with academic advisors is important for retention of students who are commuters (Hernandez, Hogan, & Hathaway, 1999) or underprepared (Choy, 2001; Fox, 1986) because it helps them integrate academically by acquiring skills and behaviors to survive in higher education (Padilla & Pavel, 1994).
Impact of First-year Programs in Retention

Cox, Schmitt, Bobrowski and Graham (2005) described ideal first-year programs as well rounded programs that couple effective instructional strategies with support outside the classroom. They claim that such programs yield great benefits. Upcraft, Gardner and Barefoot (2005) emphasized the wholeness of the student experience. They argued that cognitive and social development aspects complement each other and that both are important during the first-year of college. Programs of first-year should focus on the academic success and should also be inclusive of the career, emotional and spiritual development of the student (Upcraft, Gardner, & Barefoot, 2005).

Tinto (2012) described the wholeness of the first-year experience in a different way. He emphasized the importance of expectations, commitment, engagement, immediate feedback, support and professional development.

The historical background of the first-year experience programs and how they emerged is fascinating. A number of political and economic conditions in the United States led to the emergence of programs for first-year experience. The recent changes in American higher education such as opening access to a diverse student body resulted in the enrollment of students from different ethnic, academic and socio-economic backgrounds. This in turn resulted in increased attrition rates. Higher education leaders were faced with a dilemma. Facilitating access to all students is a requirement of a democratic society. In addition, the workforce needs require this openness in enrollment. Leaders of higher education concluded that because of the political and economic conditions in the country, they could not deny access to students; however, they could
improve the quality of instruction and support outside the classroom to help students succeed in college and to reduce the attrition rates (Upcraft, Gardner, & Barefoot, 2005).

Institutions like Vanderbilt University’s Peabody College emphasized the importance of the wholeness of the student experience in the first-year and took a different approach to retention (Brier, Hirschy, & Braxton, 2008). The Dean of Students in Peabody College made around 3,400 phone calls to first-year students. The calls were divided to make sure each student received one call in fall and one in spring. Brier, Hirschy and Braxton reported that although each call lasted only between 2-3 minutes, the results were a 7-10 percent increase in the first-to-second-year retention rate (2008).

Some scholars like John Gardner (Upcraft, Gardner, & Barefoot, 2005) strongly advocated the impact of well-organized, holistic and intense first-year programming and its positive impact on student retention. Alexander and Gardner (2009) described their framework of thinking and planning for the first-year success as a practical and comprehensive approach. They claimed that their framework, which is called the Foundations of Excellence, helped institutions engage in a dialogue process.

Through the Foundations of Excellence process, institutions were encouraged to engage in conversations around nine major dimensions that incorporate multiple aspects of first-year program administration such as strategic planning, organizational structure, and continuous improvement (Alexander & Gardner, 2009). Moreover, scholars, like John Gardner, advocated the professional development of staff and faculty, especially in the areas of effective pedagogies and practices with first-year students. Advocates argued
that professional development for staff and faculty is a vital aspect of the first-year experience programs (Evenbeck & Jackson, 2005).

John N. Gardner Institute for Excellence in Undergraduate Education provided consultation that is mainly focused on putting together different components of the first-year program. Since 2003, the Institute has consulted with 322 colleges and universities. Most of these institutions are located in United States with a few in the Republic of the Marshal Island, Mexico and Port Rico. The Institute has recently started reaching out globally. It is currently providing consultation to one institution in Qatar (Gardner, 2014).

To conclude, the evaluation of the effectiveness of the programs established by the Gardner Institute is not part of the initial consultation. Although it was claimed that the institutions that received help from the Gardner Institute managed to establish efficient systems for the first-year experience, the establishment of such programs is not free of challenge and are still at their infancy. Similarly, the effectiveness of such approach to instigating productive and effective dialogue on campuses between the major stakeholders of such program is not fully examined.

The major challenge is to bring together the different designs for the first-year experience (FYE). Nelson, Smith and Clarke described the culture of FYE in any institutional culture as fragmented (2012). However they did not identify a specific approach of how to address the fragmentation. Perhaps fragmented administrations are not uncommon, especially in large organizational systems. Nelson, Smith and Clarke did not provide the reader with suggestions on how bring this idea of bringing the institution together.
A disconnect between the major stakeholders of the first-year experience undermines the wholeness of the student experience and causes the program to be ineffective. The major administrative and service stakeholders are academic affairs and student affairs units. One of the most important aspects of higher education in general and the first-year experience specifically is the wholeness of the student experience. The wholeness of the student experience is achieved by integrating the student experience outside the classroom with the one inside the classroom for full engagement of the student. The most current trends in first-year experience emphasizes the design for the student’s experience including all campus constituencies that contribute to the education of the student, especially the ones in student affairs and academic affairs (Upcraft, Gardner, & Betsy, 2005).

Another issue that is rarely addressed by research regarding the administration of first-year experience programs is the preferred organizational structures. For instance is it best to establish one unit that encompasses all the curricular and co-curricular opportunities such as a University College? Or, is it best if academic and student affairs units report to their respective deans or vice presidents? Which organizational structure is more efficient?

Nelson, Smith and Clarke’s study focused on the development and enhancement of the process (2012). Their study described three important dimensions: the curriculum, support services and engagement. But it does not indicate how the different entities of the FYE are connected.
Assessing the impact of first-year programs. There are diverse ways to measure the impact of first-year experience programs but academic variables of success are generally the focus. Some studies found an average increase in students’ GPA but no positive impact on retention rate; if, however, courses met the basic criteria specified by the institution for a first-year course, then retention rate impacts were positive (Jamelske, 2008). Other studies found no direct effect on academic performance (Clark & Cundiff, 2009).

Although a number of research studies found significant correlation between social integration and student success (Tinto, 2012; Pascarella & Terenzini, 2005; Braxton, Hirschy & McClendon, 2004), the focus on variables such as social integration still lack focus. Faculty-to-student, student-to-student and student-to-staff relationships are all important factors in integration (Tinto, 2012); however, GPA and other predictors of academic success dominate the research on college student retention.

Another interesting aspect about first-year experience is the diversity of the methods used to assess its impact on student retention. Some first-year courses emphasize career, academic and social development in college (Cannici & Poulton, 1990). Many studies have attempted to prove that first-year courses might be used as means of intervention to improve the chances of students adjusting to college (Cannici & Poulton, 1990). To measure the impact of such courses as intervention, some researchers compared a control group against an experimental group engaged in a course or a treatment. When the differences are compared across many different variables, the results of their intervention showed better grades, better return rates and lower rates of
placement on academic probation for students enrolled in first-year courses (Cannici & Poulton, 1990).

Can the effect on GPA alone be enough indicator of success of first-year initiatives? And what are the benefits of first-year programs and interventions? Meeting academic expectations, an increase in GPA and persistence from one semester to the other could be predictors of success. However, academic achievement and an increase in GPA should not be the sole indicators of integration and success. Other factors are as crucial as those should be included, for instance, students’ satisfaction and content with social life, sense of belonging and motivation for learning should be among the outcomes of first-year programming. A documented increase in student’s skills in building effective and healthy relationships across the institution could be one of the indicators of success.

Although most of the studies that measure the impact of first-year interventions focus on variables such as the GPA, semester-to-semester persistence, graduation rates and student satisfaction, this study focuses on different variables such as the student’s decision not to register for courses in the semester following their first semester in the institution. In addition, a comparison of semester-to-semester persistence rates and the differences in the GPAs of those students who received the treatment versus the ones who did not was completed. These measures are also coupled with an exploration of the reasons most often cited by students themselves for why they decided not to register for any courses.
Gulf-Arab Students

This research focuses on external variables such as student’s employment status, support from significant others, family responsibilities and financial status rather than institutional or student’s background variables. Braxton, Hirschy and McClendon (2004) claimed external variables to be characteristic of commuter institutions. Since students in collectivist cultures continue to live with family during their first-year of college, the necessary separation of the student from his or her home culture theorized by Tinto (1987) as important to guarantee the complete integration into the new university culture is not attainable. The Gulf-Arab students in the institution where this study took place are mostly commuters. Tinto’s separation is unattainable in both a physical and mental sense. Not only this, but its utility is also questionable in the light of cultural differences. These students live off campus with parents, some have work and some have family responsibilities. Therefore, it is necessary to examine the impact of external and environmental variables on student retention. Looking at academic factors and academic preparation alone will not reveal the full picture of retention or attrition.

A study at Kuwait University by Alkandari (2008) found out that the aspiration to obtain a degree is perceived as significant contributing factor that affects students’ decision to persist in their studies. It also found out that students are not responsible for tuition as this is considered a national university funded by the government of Kuwait. Unlike students in United States, covering the cost of college is not likely to form a barrier to retention. Surprisingly, this study found out that students perceived getting a university degree as prestigious. It seems that the social status and prestige of a university
degree are significant predictors when pursuing and persisting in higher education. The study also indicated that students in Kuwait University regard high standards and reputation of the university is important for their decisions to continue in an institution.

Although finding from Alkandari’s study (2008) indicated that students need to perceive the institution as prestigious in order to persist, the study did not explain what prestigious mean. For instance what are the markers of status? Perhaps another study could explore whether beautifully designed buildings, professors with degrees from western institutions, endorsement of the ruling family or accomplishments of graduates would make a degree from an Arab institution something to be coveted.

Since students in Kuwait University had special regard to standards and prestige, they should perceive the institution to be prestigious enough and have high standards in order to enroll and persist in it. A mismatch between the actual realities of the institution and student’s perception could be a significant factor in attrition. The perceived level of institutional commitment to the welfare and the success of students becomes a major factor in persistence. Wardley, Belanger and Leonard (2013) emphasize this. They argued that the image the university gives to students about its reality in daily life through its branding, publication, and web site determines retention to a great extent. For instance, the more the institution gives a true picture of its identity, student life, values what it is recognized for, the more likely the students will be informed and have better expectations (Wardley, Belanger & Leonard, 2013). If expectations match reality, it is more likely that students will be satisfied. In order to better inform students and improve their
expectations, institutions should strike a balance between promoting their campuses and reflecting realities in their branding and publications.

A typical Gulf-Arab national institution can be diverse in a different way than a typical North American university. For instance, students enrolled in universities in North America could be diverse in terms of ethnicity, socio-economic background and religious affiliation. In the institution where this study took place student are characterized by differences in age, marital status and employment status. Wardley, Belanger and Leonard (2013) found out that the needs of traditional students aged 18-22 could be different from those of non-traditional students aged 22-55+. Therefore, the indictors and the meaning of success and retention could be different as well.

Another aspect that influences retention in Gulf-Arab national institutions is the process by which students determine their major and college choice. According to Noel-Levitz (2013) and Tinto (1987), student’s choice of the institutions, whether it was first, second or another, determines to a great degree their intentions to stay or leave. Also the student’s level of commitment is determined by the way they choose an institution (Braxton, Hirschy & McClendon, 2004). Unlike the United States, Australia and United Kingdom, students in the Gulf-Arab region start to show an interest in an institution only a few months prior to the start of the year (Lane, 2011). This could mean that they spend less time thinking about their college major with perhaps less help from school counselors to explore their fit for a specific institution or a major.

Many students in the Gulf-Arab region lack the English language necessary to succeed in institutions with high quality education (Lane, 2011). Not only this but many
students do not take the necessary standardized exams that determine a student’s academic ability (Lane, 2011). These tests are part of the requirements of success in many recognized institutions. This lack of evaluative information in turn threatens a student’s potential for success in higher education and therefore put the student at greater risk.

**Conclusion of Literature Review**

Research in four-year commuter institutions is less compared to that in four-year residential colleges and community colleges in United States. This resulted in a gap in the research about commuter four-year institutions. Braxton, Hirschy and McClendon (2004) emphasized the importance of environmental and external variables in retention of commuter students. On the other hand, many theories on student retention pay less attention and consideration to the impact of environmental and external variables in student departure (Mohammadi, 1994). There is a significant need to conduct more studies about commuter institutions and the variables that control for student attrition in these institutions.

The remarkable expenditure in education in general and in higher tertiary education in specific is coupled with scarcity in retention research and scarcity in organizations that collect data about higher education institutions in the Gulf-Arab region. Although, raising the standards of higher education and meeting standards such as those of SACS accreditation is the trend in the Gulf-Arab nations, this trend is not coupled with significant research in retention. Research is important to guide retention initiatives with the goal of improving student success in institutes with international
standards of education. The literature review reveals an abundance of research in United States but this is coupled with scarcity of studies in college student retention in the Gulf-Arab region.

The review of the literature of college student retention revealed that the causes and the factors that play significant role in attrition vary. The programs and strategies adopted to address this issue differ by institutions (Tinto, 1987; Gardner, 1989). Therefore, retention is institution-specific (Kalsbeek & Zucker, 2013; Ishler & Upcraft, 2005) and sometimes even culture-specific.
Chapter 3

Methodology

In the design of this study the researcher utilized three sources of data; two were quantitative and one was qualitative. Quantitative data were obtained from institutional records and a phone survey. Qualitative data were obtained through interviews and focus groups. The three sources of data are explained in the following sections in more details.

Advisor Visits and Student GPA

Advisor visits and GPA data for the students who were the focus of the CSI intervention were obtained from the Institutional Research Office and the Academic Advising Center. The data were comprised of the students’ names, contact information, registration status (the number of credit hours for which the student registered), students’ Grade Point Average (GPA), advisor notes about the students’ visits and the academic advisor referral of students to campus resources. These data were analyzed to assess the impact of academic advising on student persistence from fall to spring.

To assess the impact of CSI as an intervention, the students were divided into two groups. The Treatment Group was comprised of students who met with academic advisors and the Control Group was comprised of students who did not meet with academic advisors.

This source of data was used to address the following questions:

1. Are there significant differences in student GPA between the Treatment Group (students who met with academic advisors) and the Control Group (students who did not meet with academic advisors)?
2. Are there significant differences in the number of credit hours for which students registered between the Treatment Group and the Control Group?

3. Is the percentage of students who are under academic warning (GPA less than 2.00) in the Treatment Group different from that of the Control Group?

4. Is the percentage of students who failed to register for credit hours in the Treatment Group different from that of the Control Group?

To answer the first two questions, a *t* statistic was computed using the Statistical Package for Social Sciences (SPSS). The following two null hypotheses were tested:

1. There will be no significant difference in the mean GPA values of the Treatment Group and the Control Group as measured at the .001 confidence level.

2. There will be no significant difference in the mean of the number of credit hours the students registered for in the Treatment Group and the Control Group as measured at the .001 confidence level.

The critical region was located with a degree of freedom of 360. The alpha level is set at .001 for a two-tailed test. The null hypotheses were evaluated based on whether the value of the *t* statistic fell within the critical region.

**Reasons for Student Departure**

Two sets of quantitative data were collected through the Student Phone Survey. These data were crucial for understanding the reasons for student departure. Students provided their perceptions of the reasons for attrition. Variables of attrition mentioned in the literature of commuter institutions were used to frame the questions on the survey.
These variables were the ones most commonly identified by professionals in retention employed at the institution where this study took place. The questions from the Phone Survey are listed in Appendix A.

These data were used to address the fifth research question: “What reasons do students report for not persisting into the spring semester?”

**Advisors’ Perceptions**

The third set of data was qualitative in nature. It was collected in a focus group with the academic advisors. This data incorporated academic advisors’ perspectives about the effectiveness of their services in student retention. The focus group protocol is available in Appendix F.

The consent to participate in the focus group was sent in advance to the academic advisors by electronic e-mail. The ones who agreed to participate were invited for a focus group. The academic advisor consent to participate in the focus group is available in Appendix E. The focus group protocol is available in Appendix F.

This source of data was used to address the following questions:

1. What are the perceptions of academic advisors about the importance of their contributions to the first-year student success?

2. What are the perceptions of academic advisors about the effectiveness of their services in supporting student retention?

3. How the academic advisors are engaged in the process of improvement of academic advising services to their students?
Components of the College Student Inventory (CSI) Intervention

Students who participated in the CSI Intervention took the questionnaire, met with academic advisors and went through the complete steps of the intervention. Based on who met with academic advisors to discuss their CSI reports, two groups of students were identified, i.e., the Treatment Group and the Control Group. Students in the Treatment Group were the students who participated in the CSI Intervention. The Control Group included only students who did not meet with academic advisors and therefore did not participate in the CSI Intervention.

This intervention was designed to be comprehensive in the sense that it addressed all the aspects related to the quality of advising offered to students: academic advisor training, visits with students, and tracking of the visits through a track sheet. The intervention is composed of the following steps:

1. Training the advisors on how to use the CSI reports as means of improving communication with students. During the training the advisors went through the different parts of the student report to learn how to use the report, how to interpret the report to students and when to refer students to campus resources. The advisors also received examples of open-ended questions that could stimulate discussion with students. A consultant from Noel-Levitz, the vendors of CSI, was invited to facilitate a workshop for academic advisors on campus. In the workshop the advisors had a chance to either participate in a mock advising visit or watch the visit. During the mock visit, academic advisors experienced advising diverse students-- for instance students who do
not agree to the scores in the report as being descriptive of their strengths or challenges, students who are reluctant to speak about their scores, and students who are highly involved in the advising process.

2. Communicating with students through e-mails and phone calls, promoting the importance of discussing their CSI reports and inviting them to come for a one-on-one meeting.

3. Visits with students are scheduled as one-on-one visits. The academic advisors used the CSI report as a tool to initiate discussion and to establish rapport with students regarding their strengths and areas that needs improvement.

4. Registration Card. During these visits, the academic advisors discussed their study plans and the advisors tried to connect the courses they take to their career and life goals. The students also had a chance to build their course schedule at least for the following two semesters based on the discussion of their CSI report. As part of the visit, students are required to fill out a registration card. A copy of the Registration Card is available in Appendix G.

5. Referral to campus resources. Students who have needs such as tutoring, writing and counseling are referred to different campus resources. According to CSI the receptivity to institutional help of this cohort of students is in the fiftieth percentile; that is almost within the norm of receptivity to institutional help in U.S. institutions.
6. After the advising visit is over the academic advisor uses a tracking sheet to record notes about the student’s visit, the referral to campus resources and the date of the student visit to the advising office. This tracking sheet is used by the Academic Advising Center to track referral. The academic advisor lists which campus resource the student is referred to. At a later stage the campus resource where the student is referred will be contacted to see if the student responded to the advisor referral by visiting the campus resource. The tracking sheet is also used by the Academic Advising Center administration to verify which student actually came to the advising office in his or her college and discussed the report with the advisor.

**Research Questions**

A total of eight research questions were addressed by this study:

1. Are there significant differences in student GPA between the Treatment Group (students who met with academic advisors) and the Control Group (students who did not meet with the academic advisors)?

2. Are there significant differences in the number of credit hours that the students registered for between the Treatment Group (students who met with academic advisors) and the Control Group (students who did not meet with the academic advisors)?

3. Is the percentage of students who are under academic warning (GPA less than 2.00) in the Treatment Group (students who met with academic advisors)
different from that of the Control Group (students who did not meet with the academic advisors)?

4. Is the percentage of students who failed to register for credit hours in the Treatment Group (students who met with academic advisors) different from that of the Control Group (students who did not meet with the academic advisors)?

5. What reasons do students report for not persisting into the spring semester?

6. What are the perceptions of academic advisors about the importance of their contributions to the first-year student success?

7. What are the perceptions of academic advisors about the effectiveness of their services in supporting student retention?

8. How the academic advisors are engaged in the process of improvement of academic advising services to their students?

**Study Population**

This study focused on individuals who are first-year students and enrolled in the College of Law and the College of Business and Economics. The institution where this study took place defined first-year students as those individuals who accumulated less than 30 credit hours in their first semester at the university. These students are also enrolled in a first-year experience course named Skills for University Success designed mainly for the College of Law and the College of Business and Economics students.

The Skills for University Success Course is in its pilot phase and it is intended as the first course in a series of courses that will be offered as Core Curriculum courses.
This course is designed to introduce the new students to the institution. It is intended to assist first-year students in developing essential skills and learning strategies needed for effective study and success at the university level. The course covers topics such as study skills, time management for academic success, campus and community resources for student engagement and academic advising and planning. The course emphasizes informal classroom settings, and uses engaging pedagogies such as discussions, collaborative projects and peer-to-peer interaction.

Students’ meetings with the academic advisors are part of the requirements of the Skills for University Success Course. These meetings are part of the Academic Coping and Retention Module. During this module and in the third week of classes the students take the College Student Inventory (CSI). Then around three weeks later they come to discuss with the academic advisors their strengths and challenges related to their persistence in college as indicated in the CSI report.

The total number of first-year students in the College of Law and the College of Business and Economics in fall 2013 was around 986. Although the visit to discuss the CSI report with the academic advisor is mandatory for each student and required by the Skills for University Success Course, only 361 students took the CSI and came to discuss the reports with the academic advisors. The focus of this study is in the students who took the CSI and managed to discuss it with their advisors. Around 267 of these are females and 94 are males. Details about the students who met with their academic advisors (Treatment Group), the ones who didn’t (Control Group) and the general population are available in Table 2.
Table 2

*Description of the Treatment Group, Control Group, and General Population*

<table>
<thead>
<tr>
<th>Measure</th>
<th>Treatment Group</th>
<th>Control Group</th>
<th>General Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants</td>
<td>361</td>
<td>625</td>
<td>986</td>
</tr>
<tr>
<td>Female</td>
<td>74%</td>
<td>41%</td>
<td>53%</td>
</tr>
<tr>
<td>Gulf-Arab Nationals</td>
<td>86%</td>
<td>83%</td>
<td>84%</td>
</tr>
<tr>
<td>High School Mean GPA (out of 4)</td>
<td>3.52</td>
<td>3.38</td>
<td>3.46</td>
</tr>
<tr>
<td>First Semester Mean GPA (out of 4.00)</td>
<td>2.42</td>
<td>1.42</td>
<td>1.80</td>
</tr>
<tr>
<td>First Semester SD GPA</td>
<td>0.88</td>
<td>1.22</td>
<td>1.20</td>
</tr>
<tr>
<td>Second Semester Mean Credit Hours</td>
<td>11.49</td>
<td>8.18</td>
<td>9.39</td>
</tr>
<tr>
<td>Second Semester SD Credit Hours</td>
<td>3.89</td>
<td>5.92</td>
<td>5.50</td>
</tr>
<tr>
<td>Second Semester Minimum Number of Credit Hours</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Second Semester Maximum Number of Credit Hours</td>
<td>18</td>
<td>18</td>
<td>18</td>
</tr>
</tbody>
</table>

Table 2 contains description of the Treatment Group, Control Group and the General Population. The General Population is the group that contains all first-year students in the College of Law and the College of Business and Economics--these are all of the students under study. Figure 1 illustrates the composition of the General Population.
Figure 1. General population.

![Pie chart showing the distribution of participants in Treatment and Control Groups.]

Figure 1 shows the number of participants in the Treatment Group and Control Group. Both groups represent the General population.

Figure 1 provides details about the general population of students. This group represents the total number of the population under this study. Therefore, the General Population is comprised of the Treatment Group and the Control Group combined together.

It is noticeable that the Control Group contains less number of females than the Treatment Group. However, both groups have similar High School mean GPA.

Comparing the Treatment Group and the Control Group the difference between high school GPA and first semester GPA has increased.

The researcher obtained permission from the Internal Review Board (IRB) of the institution where this study took place to use data about students’ visits with the academic...
advisors, Grade Point Average (GPA) for the fall 2013 semester and status of registration in spring 2014 semester. Below is a detailed description of the three sets of data that were obtained from the institution:

**Students’ visits with advisors.** The students came to visit with their advisors during fall 2013. Data about these visits were collected. The academic advisors received training on how to conduct visits with students using CSI reports as a communication tool. During this visit the academic advisors discuss with students their strengths and challenges, ask their feedback about the accuracy of the CSI scores and refer students to campus resources if necessary.

**Students’ GPA.** The student GPA for the fall 2013 semester is an important indicator of student success. According to the Institutional Planning Office of this institution, a student who manages to maintain a GPA of 2.00 or more is likely to persist to the next semester, whereas a student who fails to obtain a GPA of 2.00 or above is likely to be dismissed or leave.

**Number of credit hours.** In addition to GPA, data were obtained about the number of credit hours these students registered for in spring 2014. The students who did not register for courses in spring 2014 were identified as part of a special population who needs special attention from the institution. Registering for 0 credit hours was used as an indication that the student is intending to drop out of the institution. In this study, students who were enrolled in the institutions and their records indicated that they did not register for courses in a specific semester were referred to as students who failed to register for credit hours.
This study seeks to understand the reasons why some students choose not to register for courses in spring 2014. In addition to this, it attempts to measure the satisfaction level of the special population of students with academic advisors. These steps are taken as an attempt to understand the effectiveness of the intervention using College Student Inventory to retain first-year students in the College of Law and the College of Business and Economics.

**Research Tools**

Since this study adopts a mixed method approach to collect data, two research tools are used:

1. **Student Phone Survey**
2. **Academic Advisor Focus Group**

**Student phone survey.** The goals of the phone survey were to find the most important reasons for students’ attrition in the institution where this study took place, which reasons are more common and whether there is a significant relationship between student satisfaction with advising and their persistence to the next semester. The actual survey questions are listed in Appendix A.

A short phone survey is designed and used to collect data to answer some of the questions of this study. The survey is intended to take no more than five minutes of the students’ time. The questions of the study that are addressed by the survey are:

1. What were the concerns of freshmen who began their enrollment during fall 2013 and did not come back in spring 2014?
2. Was the dissatisfaction with academic advising services one of the main reasons for not registering for courses?

3. What was the level of satisfaction with academic advising of first-year students who received the CSI intervention but did not register for courses?

The phone survey targeted first-year students who were identified as part of a special population in the College of Business and Economics and the College of Law. This study considered the number of credit hours the student was registered for as a condition to identify a student as part of a special population. The student was identified as part of a special population because he or she took the CSI, managed to visit with the advisor but did not register for courses in spring 2014.

This group of special population of students was difficult to reach out to via traditional survey such as paper-based or Internet-based because they have already left campus. Hence, the designed the survey used the phone as a medium of interaction and was designed to provide an easy to use tool with these students. The Phone Survey was designed to be conducted over the phone and was estimated to take an average of five minutes.

The survey was pretested in two different ways. Firstly, an expert in questionnaire quality was consulted for his opinion about whether the questions in this survey measures what it is supposed to measure. Secondly, cognitive interviews were conducted with three students to identify potential problems that will result from the survey being administered over the phone, wording and question order. The Cognitive Interview Protocol is listed in appendix B.
The Phone Survey targeted only students who participated in the CSI intervention in fall 2013, yet they failed to register for any credit hours in spring 2014. The total number of students who met this criterion was 30 students. The response rate was 53%.

**Advisor focus group.** Academic support staff plays a significant role in student learning and development. Research proves that students learn a great deal outside the classroom (Pascarella & Terenzini, 2005). For instance learning support staff teaches students tips on how to manage their time or how to take notes in class, academic advisors teach students the policies and procedures related to probation and writing specialists gives students tips in writing that lasts for a lifetime. Therefore, their voices are vitally important for understanding the scope of impact and the contribution they make to student retention.

Eliciting staff input towards improving academic advising is important to support institutional efforts of student success. In order to improve retention of students, the researcher thought it is important to incorporate academic advisors’ voices in the improvement process. Their voices add to the understanding of effectiveness of interventions with first-year students and add to the understanding of first year student departure as a whole.

**Sample of the focus group.** Five non-faculty full time academic advisors participated in the focus group interview. The participants are directly involved in delivering academic advising to undergraduate students in the College of Business and the College of Law. First-year students are part of their caseload. They have met once with the first-year students to discuss the results of the CSI reports. To prepare them for
their roles as facilitators of the CSI report, they received at least two training sessions on how the CSI is designed to improve communication with first-year students and how to use it as a retention management tool.

A group of five participants was enough to stimulate a rich discussion. Information about the participants’ titles and pseudonyms is available in Table 3. In addition to this, the number of students under each participant’s caseload is illustrated in Table 3. Under their caseload are also students who are sophomore, junior or senior students.

Table 3

Description of the Focus Group Sample

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>Position Title</th>
<th>Years of Experience as Academic Advisor</th>
<th>Number of Students in Advisor Caseload</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dan</td>
<td>Academic Advisor</td>
<td>1</td>
<td>520</td>
</tr>
<tr>
<td>Fahima</td>
<td>Academic Advisor</td>
<td>2</td>
<td>514</td>
</tr>
<tr>
<td>Ghalia</td>
<td>Senior Academic Advisor</td>
<td>3</td>
<td>403</td>
</tr>
<tr>
<td>Hala</td>
<td>Head of Academic Advising Office</td>
<td>7</td>
<td>400</td>
</tr>
<tr>
<td>Sally</td>
<td>Academic Advisor</td>
<td>1</td>
<td>517</td>
</tr>
</tbody>
</table>

Method of the focus group. To better understand the perspective of academic advisors, this study used a rich discussion approach to allow for the in-depth exploration of the academic advising services for first-year students. Employing this qualitative approach allowed the researcher to collect and analyze the focus group interview utilizing
semi-structured interview protocols. The focus group questions were pre-determined but used flexibly to allow emergence of participants’ responses (Merriam, 2009).

Purposeful sampling was used to select people who were perceived to be most knowledgeable about the topic (Merriam, 2009). A list of the names and contact information of eight academic advisors was obtained from the Academic Advising Center of the institution where this study took place. The request was sent together with a copy of the IRB of the same institution and University of Nebraska. This study sampled a total of five full-time, non-faculty academic advisors who were directly involved in delivering academic advising services to first-year students.

The participants were sent an e-mail explaining the purpose of the interview. At the beginning of the interview, the researcher explained the purpose of the interview, went through the Advisor Consent Form in details, and allowed for questions before starting to collect data. The Advisor Consent Form is available in Appendix E. The participants were also informed that while the interview would be recorded, their identity would be concealed through the use of pseudonyms.

Each interview lasted approximately 90 minutes. The focus group interview took place on the premises of the institution where this study took place. It was conducted with permission from the Internal Review Board (IRB) of this institution. Another IRB was also maintained from the University of Nebraska at Lincoln.

The researcher used open-ended questions to initiate discussions around the topics. A group of questions were framed out of one central and one sub-question. In
addition to this probes were added to enrich the conversation and provide more qualitative data.

A voice recording software application called Audio Memo was used to record the interview. This software was purchased and installed in an iPad. Upon the completion of the interview, the complete recording was transcribed and a 21-page document was produced. The names of the participants were concealed and replaced with pseudonyms.

To understand the retention phenomenon, a triangulation design was used to interpret how the academic advising intervention (using CSI) impacted first-year student retention. In such designs, researchers discuss the themes emerging from the data and how they support or refute the statistical analysis (Creswell, 2009). With this in mind, this study was set out to identify contextual factors that shape the process of retention and explore the dynamics in the relationship between the academic advisor and the student that leads to retention.

Since the recording of the focus group produced a 21-page transcript, the researcher preferred to use a simple word processor. Microsoft Word was used to analyze the results. Notes were made in the margins of the Word document. The notes described the text. Accordingly, segments in the transcript that has the potential of answering the research questions were identified. These segments are used as units of data (Merriam, 2009). Using what Merriam describes as the process of open coding, the transcript was eventually divided into multiple units of data (2009). Then these units were compared with each other and were categorized into codes. Each code was a standalone piece of information that would give the reader a meaning.
The researcher identified 15 different codes that have the potential of explaining the retention phenomenon and how it occurs. Then using what Merriam (2009) describes as the process of analytical coding these codes were grouped under three major themes. Another round of analysis was conducted to insure that the codes under each theme are mutually exclusive. According to Merriam (2009), this process insures that codes belong exclusively to the themes under which they are placed.
Chapter 4
Analysis and Findings

This study addressed attrition in multiple ways. First, the impact of an intervention using academic advising was investigated. Second, reasons why first-year students decided not to register for courses in the semester following the semester of their admission into the institution were compiled. Third, the academic advisors’ voices were incorporated in the study by taking into consideration the importance and effectiveness of academic advising in student retention. The results of this study based on the research questions are reported in this chapter.

Are there Significant Differences in Student GPA between the Treatment Group and the Control Group?

The mean for students in the Treatment Group was one point higher than the mean for students in the Control Group. Unlike the Control Group, the GPA scores of students in the Treatment Group tended to be less scattered. It was concluded that the average of the GPA of students in the Treatment Group was higher than that of students in the Control Group.

Results. The Treatment Group who participated in the CSI intervention earned more points in their first semester GPA ($M = 2.42, SD = .88$) than the Control Group that did not participate in the CSI intervention ($M = 1.37, SD = 1.22$). Statistical analysis revealed that the first-year students who participated in the CSI intervention had a significantly higher GPA by the end of their first semester in the institution; $t(360) = +14.20, p < .001$, two tailed.
Accordingly the null hypothesis was rejected. The mean of the student GPA of the Treatment Group was significantly higher than the mean of the student GPA of the Control Group. This data indicated that the sample mean of 2.42 was significantly higher than the Control Group of 1.80 (Table 2). Consequently, it is concluded that the mean of the Treatment group is significantly different from the Control Group. Such sample is not likely to occur by chance. This significant difference could be due to the treatment. The SPSS output with the details of the \( t \) test is available in Appendix I1.

**Are there significant differences in the number of credit hours that the students registered for between the Treatment Group and the Control Group?**

The number of credit hours that the student registered for was considered one of the indicators of attrition in this study. Students who did not register for any credit hours following the semester of their admission were considered at risk of dropping. Therefore
this study used the number of credit hours the student register for as one of the indictors of success of transition to the next semester.

Students in the Treatment Group who participated in the CSI intervention had registered for more credit hours in the semester following their admission to the institution ($M = 11.49$, $SD = 3.89$) than the Control Group that did not participate in the CSI intervention ($M = 8.18$, $SD = 5.92$). Statistical analysis revealed that the first-year students who participated in the CSI intervention had registered for a significantly higher number of credit ours in their second semester in the institution; $t(360) = +9.50$, $p < .001$, two tailed.

Accordingly the null hypothesis was rejected. The mean of the credit hours of the Treatment Group was significantly higher than the mean of the credit hours of the Control Group. This data indicated that the sample mean of 11.49 was significantly higher than the Control Group of 8.18 (Table 2). Consequently, it is concluded that the mean of the Treatment group is significantly different from the Control Group. Such sample is not likely to occur by chance. This significant difference could be due to the treatment. The SPSS output with the details of the $t$ test is available in Appendix I2.

Is the percentage of students who are under academic warning (GPA less than 2.00) in the Treatment Group different from that of the Control Group?

Another way of analyzing student GPA was by counting the number of students who were in academic warning in both groups. The institution where this study took place, defined academic warning as the academic standing of a student who earned less than 25 credit hours with a GPA less than 2.00. It is one of the situations that put students
at risk of dismissal from the institution, if they continue to score less than 2.00 for the following semesters. Analyzing GPA in terms of student’s academic warning status also yield similar results. As illustrated in Table 4, the percentage of students in the Treatment Group who are on academic warning is two times less than the percentage of students who are on academic warning in the Control Group. Only 25% of students in the Treatment Group were on academic warning compared to 63.04% in the Control Group.

**Is the percentage of students who failed to register for credit hours in the Treatment Group different from that of the Control Group?**

The percentage of students who failed to register for credit hours in the Treatment Group was different from that of the Control Group. Taking a closer look at the percentage of students who failed to register for credit hours, it seemed that the percentage of students who failed to register for credit hours was only 8.31 in the Treatment Group compared to 32 in the Control Group. Similarly, the number of students who registered for courses in the Control Group is almost three times higher than those in the Treatment Group.

**What reasons do students report for not persisting into the spring semester?**

Understanding the reasons for departure is an integral part of institutionalizing retention. The literature review showed that there is an abundance of reasons and explanations of student departure. In addition to this, in practice the reasons are multiple, complex and defined by a wide range of variables. This study selected a limited number of possible reasons for departure in this specific institution. Furthermore, the researcher selected specific students to conduct the survey with. These students are already
classified as high risk because they did not register for courses during spring 2014 despite the fact that these students were included in the CSI intervention.

Six reasons for the departure of students in commuter institutions were examined in this study. These reasons for departure were identified as those most cited in the literature and retention specialists in the institution where this study took place. Table 5 lists the reasons for departure in terms of those most reported by students. These reasons are

1. *Conflict of campus life with social life.* In communal cultures, like the ones in the Gulf-Arab region, spending time with family members such as parents, grandparents, siblings and friends is emphasized and includes devoting substantial time to family gatherings. These family expectations may put pressure on the student’s schedule and cause conflict for the student in terms of meeting the demands and rigor of the college environment.

2. The unavailability of classes to meet the student’s schedule

3. Lack of information about how to succeed in University

4. Maintenance of good grades in college is difficult for unprepared or underprepared students

5. *Conflict of college life with family responsibilities*

6. *Conflict of college life with job responsibilities*

Students who took the CSI, met with their advisors, but did not register for any courses in spring 2014 semester were identified as the population for this study. Thirty-six students met these criteria. These students were identified as at risk. A text message to
inform student about the study was sent to the mobile phone of each student. The content of the text message is available in Appendix C. In a second phone contact, each student was asked for their verbal consent to participate in the study and invited to take a five-minute survey. The consent form is available in Appendix D. The response rate was 44%.

Table 5

Results of the Phone Survey

<table>
<thead>
<tr>
<th>No.</th>
<th>Question</th>
<th>Percentage of Students who Strongly Agree of Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Conflict with job responsibilities is one of the reasons for not registering for courses</td>
<td>81.25%</td>
</tr>
<tr>
<td>2</td>
<td>The unavailability of classes to meet my schedule is one of the reasons that made me decide not to register for courses this semester.</td>
<td>43.75%</td>
</tr>
<tr>
<td>3</td>
<td>I did not have a social life. This is one of the reasons that made me decide not to register for courses this semester.</td>
<td>43.75%</td>
</tr>
<tr>
<td>4</td>
<td>Maintaining good grades at this University is difficult for me. This is one of the reasons why I did not register for courses this semester</td>
<td>43.75%</td>
</tr>
<tr>
<td>5</td>
<td>Conflict with family responsibilities is one of the reasons for not registering for courses</td>
<td>37.50%</td>
</tr>
<tr>
<td>6</td>
<td>I was not given enough information about how to succeed in this University. This is one of the reasons why I did not register for courses this semester</td>
<td>37.50%</td>
</tr>
</tbody>
</table>

From Table 5, the major concern of first-year students and the most likely reason for departure seems to be the conflict of enrollment in university with job responsibilities. This reflected the dilemma that employed students in commuter institutions face in trying to balance school with work responsibilities.
Based on the data in Table 5, first-year students reported three common concerns: 1) the unavailability of courses that meet the student’s schedule, 2) the difficulty of having a social life while in school, and 3) the inability to maintain good grades. These three concerns have the same score.

Conflict with family responsibilities and not having enough information about how to succeed did not seem to be a common reason for departure among students who took the CSI, but did not register for courses in spring 2014.

The detailed results of the Phone Survey are available in Appendix H.

The Phone Survey was used to investigate whether or not the dissatisfaction with academic advising was one of the reasons for attrition. It did not seem to be a reason for departure. In fact, most students reported that they were satisfied with academic advising.

The details of student satisfaction with academic advising are available in Table 6.

Table 6

<table>
<thead>
<tr>
<th>Question</th>
<th>Very Satisfied</th>
<th>Satisfied</th>
<th>Dissatisfied</th>
<th>Very Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>How satisfied are you with your academic advisor?</td>
<td>75.00%</td>
<td>18.75%</td>
<td>.25%</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

Table 6 contains the results of students’ satisfaction with academic advising. Around 75 % of students were very satisfied with advising. Ninety-four percent (94%) of the students who were contacted reported that they were either strongly satisfied or
satisfied with academic advising services. None of the students contacted were very dissatisfied with academic advising.

**Results of the Focus Group**

Three themes and 15 codes emerged from the process of coding data from the academic advisors focus group. The three themes and codes are listed in Table 7. The themes were:

1. Improving Students’ Self-Assessment
2. Improving Students’ Educational Planning Skills
3. Identifying Barriers to Implementation

These themes and codes were organized under the three sub-questions that guided the focus group.

The three themes listed in Table 7 were reported by advisors as possible ways to help reduce attrition of students in the first-year. Some codes under the reported themes were possible steps that advisors could take in their daily work with students to help students build necessary skills.

**What are the perceptions of academic advisors about the importance of their contributions to the first-year student success?** Academic advisors identified their contribution to first student success mainly as improving student’s self-assessment. Improving student’s self-assessment was one of the major themes that emerged from the
Table 7

Themes and Codes of Focus Group

<table>
<thead>
<tr>
<th>Themes</th>
<th>Improving Student’s Self-Assessment</th>
<th>Improving Student’s Educational Planning Skills</th>
<th>Identifying Barriers to Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Building relationships</td>
<td>1. Setting goals</td>
<td>1. Student’s reluctance to engage in CSI activities</td>
<td></td>
</tr>
<tr>
<td>2. Students realizing self</td>
<td>2. Teaching students the study plan</td>
<td>2. Pitfall of administering CSI</td>
<td></td>
</tr>
<tr>
<td>(strengths and weaknesses)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>right questions</td>
<td>scheduling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Advisors gaining</td>
<td>4. Improve expectations</td>
<td>4. Unavailability of courses</td>
<td></td>
</tr>
<tr>
<td>experience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Referral to institutional resources</td>
<td></td>
<td>5. Plagiarism</td>
<td></td>
</tr>
<tr>
<td>6. Balancing schedule</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The students in this sample came to the advising offices with low levels of opinion tolerance coupled with high levels of financial security. The national norm in CSI is in the 50th percentile. According to the CSI results in Table 1, this cohort scored below the national norm in opinion tolerance (42.5) and above the norm in their sense of financial security (77.8). The combination of these two could lead to faulty self-assessment. The self-assessment theme described the road the advisors take to contribute to student’s retention.

Academic advisors felt responsible for motivating students and helping them build skills such as self-assessment. This is seen vividly in Fahima’s comments:
So I am trying to build something like the survey for myself to motivate her [the advisee] more or to give her the recommendation how to start with good point in her life. Or it's very critical in age in their life and actually we have to build their motivation and their skills.

According to academic advisors, improving student’s self-assessment was a process that took place through many different venues such as building relationships with students, discussing with students their strengths and weaknesses, helping them identify their goals, empowering them to build their study plans based on these goals and referring them to institutional resources to identify their needs.

**Discussing strengths and weaknesses.** Advisors made several comments about the students’ need to discuss their strengths and weaknesses. Without this discussion the student might have limited chances to plan for their future. The self-realization or self-assessment is the starting point towards building skills. “And it is very effective because when I give them the results in front of them and I tell them tell me if this is you. It's like a mirror in front of them. It’s like it's reflecting their own personality; their own skills.” Dan commented, “The self-assessment is important especially for students with special needs. Some students were unaware of their special need situation, until they visited with an advisor.” Hala explained how the shortcomings of some students are not revealed unless they have a conversation with an advisor. She said:

So when you ask them [the students] what are you doing for next exam? Did you study nicely? [the student says] I don’t know what happens to me before exam...Before, she said ok I am fine; everything is good. Then you notice that she have exam anxiety. They never say we have exam anxiety. And then you ask them questions. This is what I notice with my students. They never say I have exam anxiety. This is nothing. They never mention this.
Some students were in a denial stage before they started acknowledging the areas in which they needed improvement. Dan elaborated on the advisors’ role and responsibility to help students overcome denial and guide them to realization of their shortcomings.

Actually everybody knows themselves the best. It’s only the problem of accepting it or not. So they might not. They might just go like no I don’t have this [the weakness or the need]. But after discussion they might come to realization okay no I really do.

Advisors also went through the study habits of the students and helped them analyze their skills in this area and see if their study habits fit the courses they are taking. Students in this cohort scored within the national norm. Table 1 shows that the score in study habits is 52.2. Discussing students’ study habits during visits was mentioned many times during this focus group. The study habits responses for male students in first-year of the College of Business and the College of Law is 43.6. This is 6 points below the norm of students in the U.S.

Academic advisors admitted that building a relationship with students was not an easy task. Students were hesitant in the beginning to trust the advisors, but once the advisors managed to break the ice, students kept coming to see them. It took time for the relationship to evolve to the next stage was discussing strengths and weaknesses with students.

**Building relationships.** Building relationships with students was the main vehicle towards retention. Any other measures that advisors attempted to take would not be effective without building relationships with students. Through these relationships
academic advisors helped students realize their strengths and weakness. Dan considered the use of CSI an opportunity to connect to students:

but for me it’s more of interpersonal relationship with the student because we get to sit down for a longer time and we get to discuss personal thing, for example. I get to know the student.

Building relationships with students also included helping them build effective relationships with others. There are numerous employees in the institution providing services for students. Helping students build relationships with them through referrals was also another possible way of retaining students. Advisors said that improving students’ self-awareness was achieved though students building relationships not only with advisors but also with other staff who students are referred to. For instance a shy student was referred to the Volunteer Center to help her build self-esteem through volunteering. Sally explained the results of referral of one of her students:

So one of the students [referred by Sally] came by like I guess two weeks [later], she was saying I have volunteering session I was so happy when I was starting to talk with others. She is like, she doesn’t have too many friends in the university and she said that it was helpful, I started to build friendship with others and Insha Allah [God willing] I will be improved by [attending] QU.

Setting goals. Students need to identify their life and career goals. Academic advisors helped students identify their life and career goals and link them to the courses in their study plans. Identifying and discussing goals was mentioned multiple times during the focus group.

Teaching the study plan. In the focus group, academic advisors mentioned that they taught students their study plans. Fahima said, “All the students specially the first-year students, they don’t know anything about their study plan. And our job is teaching
the student their study plan.” Academic advisors discussed the different parts of the study plan with the student such as the general requirements, core courses and elective courses.

**Referral to institutional resources.** One of the important components of students’ self-assessment is their awareness of their needs. On the other hand, their knowledge of the resources provided by the institution to satisfy their needs is parallel to self-realization. First-year students usually lack knowledge about the resources available for them to satisfy their needs and to help them meet their educational planning goals. This cohort scored below the norm in receptivity to academic assistance (46) but above the norm in receptivity to career counseling (56.4). Therefore, it appears that advisors need to put more effort into convincing this cohort of students to seek help from academic assistance resources, such as math tutoring and writing assistance.

The role of academic advisors is invaluable in educating students about the availability and use of resources provided by the institution to meet their academic, social, personal or career needs. For instance, if a student’s report showed that the student needed improvement in math skills, the advisor should first find out if the student agrees with the score. If the student agrees, the advisor could refer him or her to student learning support resources, such as math tutoring, before they take a course that might require advanced math skills. Hala stated that she encouraged such students to use math-tutoring resources in the semester prior to the one in which the student is taking a course in Business. Hala explained how she advised such a student: “You need to put resources. That’s what I am saying [to] them. Don’t say [math tutoring] resources are just for fun, just when I need them. No, resources are part of your course.”
What are the perceptions of academic advisors about the effectiveness of their services in supporting student retention? Students need Educational Planning Skills or success in college. Academic advisors’ effectiveness in improving students’ educational planning skills was one of the major themes that emerged from the advisor focus group. Improving student’s educational planning skills was achieved by helping students build a schedule. However, academic advisors explained that competence in helping students improve their educational planning skills entailed more than just building a schedule of courses. A number of interconnected steps were necessary to help students gain such skill. These steps are explained below.

**Directing the right questions.** According to academic advisors, their effectiveness in supporting a student’s retention is a function of the advisor’s ability to direct the right questions to the student. In addition to this, advisors should select the type and the area of the question carefully and tactfully. For instance, when the CSI results show that a student has low desire to finish college, the academic advisors must direct some questions to this area and try to help the student link his or her life goals with career and educational goals. Ghalia commented on that by saying:

> I feel I need to [ask] for example when we… when the result shows that the student has a low desire to finish college. You need here to start asking the student why, for example. And what’s your goal in your life? Why do?... which kind of job you want to work. And you can ask her many many questions to improve this desire, for example. One of [the] student[s], I say for her please close your eyes and dream after four years what you are going to be?

Advisors’ questions were perceived as important for students’ motivation and planning skills. Advisors mentioned that many students had not ever been asked such questions before. Questions, such as, what are your goals and what do you want out of
higher education, stimulated a student’s motivation. Some of the students stated that no one in their lives had ever asked them these questions and they realized how important these questions were for their self-understanding. Some students stated that their parents pushed them to go to college because it was good but they never asked them what their goals were and what they wanted from life? Ghalia stated the importance of these questions as:

Do you like reading? Nobody ask them before these questions. So this is a very very useful. For [it’s a] chance to sit one hour, for example with someone for the students to ask her unusual questions because they, for example in the schools nobody asks her: Do you like math? Do you like…

Using self-assessment in scheduling. In addition to teaching the student about the study plans, advisors used the student’s self-assessment to help them make decisions about for which courses to register. Self-assessment and scheduling go together as Fahima stated:

Since when I know the personality of the student that was coming to my office and we are looking to the strength[s] and weakness[es] to this student, then I know the student can go through this course. For example, our courses in the college of Law, for example, Effects of Obligations, this course is a very very critical course and the students who don’t have the skills to or study skills I don’t actually tell them that you have to take this course.

Linking the results of the CSI to the scheduling part was an opportunity for developmental advising as Hala commented:

So when I discuss the scheduling, I ask them questions. Okay, what are you good at? What are you weak at? So, it [the question] goes [with] their assessment [CSI report]. So she [the student] understand[s] what is important, the assessment [CSI report].

The academic advisors encouraged students to think about their strengths and weaknesses when they schedule courses. The process of identifying strengths and
Helping students balance their schedule. Another aspect of advisor effectiveness is their encouragement of students to balance curricular with extra-curricular and leisure activities to make their time enjoyable in college. Dan advised his student to balance study time with socializing time. He thought it is necessary for students to do the things that would make them enjoy and cherish their time in the university. Dan perceived this to be an important component of the student schedule. He said:

Actually this is very important because student in order to be successful in university he needs to he or she needs to love the life of university. Not to see it as work because a lot of students see university as work. They come to class, take the class, exam whatever, they go home. They do not participate in anything in university. That is very very sad because university life, I keep telling my students university life is a life that you will never forget. I just emphasize on the importance of you know liking the life in university… you know talking, and staying with not only with friends outside the university but making friends from the classes, going to the Activities Building, playing sports, going you know hanging out with students from inside university.

According to academic advisors, the steps followed by them in helping students build educational planning skills had a great impact on many aspects of a student’s experience in the first-year. First, advisors played a vital role in decreasing a student’s feeling of uncertainty by helping them build a schedule for the next two semesters. As a result, the student then had a roadmap that guided their path to graduation. This gave the student an incentive to persist to the next semester. Second, by guiding students in building a proper schedule, academic advisors helped students match the university
expectation with their own expectations and consequently build the student’s positive perceptions about the institution and university life. This decreased students’ feelings of uncertainty, and helped them develop responsibility. Dan explained the importance of responsibility among different types of students:

Well I think it has a lot to do with responsibility. A student who is responsible, will directly go and do the homework and come directly to you. And I have had so many cases, now I can basically differentiate. We have students that are already married and have families and work and study. And we have students who come directly after high school.

**How the academic advisors are engaged in the process of improvement of academic advising services to their students?** Academic advisors reported being actively engaged in improvement of academic advising services by gaining experience and improving their skills in developmental advising techniques. In addition to this, advisors pointed out challenges to the implementation of CSI. These challenges may apply to any intervention program with first-year students.

**Advisors gaining experience and improving their skills.** Discussing the CSI reports with students was a way to practice developmental advising for some academic advisors. Advisors stated that CSI helped them know how to pose tactful questions that stimulated student’s motivation, even with students who did not take CSI such as sophomores, juniors or seniors. Sally said, “I implement this survey on the other students [students who are not first-year students] to make sure that I understand them more.”

**Identifying barriers to implementation.** Many first-year students were reluctant to engage in activities related to CSI. For example, some students did not see the usefulness of engaging in activities related to CSI, such as writing about their strengths or
weaknesses or listing their goals. Hala said, “A lot of students they don’t like to actually sit and write.” According to Hala some students refused to sit and wanted the advisors to just tell them what courses to register for. Hala explained how she faced this challenge and turned it into a learning opportunity for the students:

So, this[is] what I am saying, sometimes they come. Okay, I just have, I just want to know if I can take this class, I say you need to sit down. Just sit down. I cannot give you an answer when you stand up. Sit down. And then I open the transcript (the students’ record of what courses they have taken) and then from this I give her many open questions and she understand[s] many things that she did not know.

Academic advisors also identified a number of barriers to implementation of CSI from the student side. Many students came to the office and asked the advisor why she was bothering them with phone calls. Hala said one of the students came to her office in response to an appointment that Hala scheduled by phone and the student asked “What you want from me?” “And then she [the student] say why you calling me you keep calling me? What you want? What you need? Some students think they are fine they don’t need CSI.”

Dan had a few students who were not interested in engaging in conversations about the CSI report for instance, “there are students who come and we will talk and they will just look. So, from that point I get that [the students are] not very interested in CSI. [It seemed as if the student was saying:]I just want to finish.”

Fahima described one of the students as “careless”. The student stated to Fahima that she was answering the CSI randomly just to get done. Fahima added that the student was saying “I was just clicking clicking clicking clicking till I finished the survey”. Academic advisors mentioned that they faced these challenges with students, yet they
tried to turn these challenges into opportunities to engage in meaningful conversations with students.

**Identifying pitfalls in administering CSI.** The CSI was administered by instructors during a first-year student course. Academic advisors reported a number of issues with the administration of CSI. According to the advisors, some students claimed that some instructors did not give them enough time to choose the suitable answer. In addition to this, some instructors did not spend enough time explaining the importance and the benefits of CSI. This caused students to give the wrong answers or choose not to answer CSI. Also some students who came to the advisors to discuss CSI shared that they feel that CSI does not represent their strengths and weaknesses.

Sally said that one student told her that, “I was just clicking because the instructor was so fast that’s why I was clicking on anything.” Another student said that she was clicking because she “wants to keep up with the instructor” Sally pointed out ways to improve the administration of CSI by saying

We have to double check the questions before we give them to the students. We make sure we understand the questions better. Then they [the administrators of CSI] give it to them to make sure that they will understand it[the CIS questions].

Hala also had suggestions to overcome the challenges of administering CSI to students:

If you can collect them [students] in one session like that can take 40 students like 2 sessions in one classroom that have the same time in a bigger [space] and then have somebody explain to them [students] the benefit of it [CSI].and then they can do it [CSI].

Some academic advisors thought that the CSI is so important that the student should not have a choice but to take it. Fahima said:
This is the part of sharing the survey [CSI report]. I think it should be for all the students. I think it’s no need to give them the chance for the or not the chance, a choice to share it or not.

*Cultural differences.* Another challenge that the academic advisors pointed out was the cultural differences in the implementation of CSI as a method of intervention. Because CSI was designed to be used in United States and was transported for use in a Gulf-Arab national institution, a challenge, in terms of many cultural aspects, is posed.

Dan explained some of these aspects as he said:

The survey was designed for United States. And from United States you design for the students that go to university in the United States. So the culture of the students is different from the culture of students here. The culture of people there is different from the culture of people here. The way of thinking there is different from way of thinking here. It’s different in any different culture has different way of thinking [and] different culture..

Dan explained that another cultural challenge that impacted the proper implementation of CSI is the translation:

Now also the other effect is the translation. A lot of things change and are misleading when they are translated from another language. It can be understood differently. Like desire to finish college, it can be understood differently from different students.

One of the ways that academic advisors were engaged in improvement of CSI as an intervention was raising questions and examining the validity of CSI as a tool that measures student’s attitudes across different cultures. Table 1 shows that the Desire to Finish College was the lowest score (35.9). It was around 14 points below the norm in United States. Academic advisors were discussing the Desire to Finish College Scale score with each student individually. In doing so, they came to realize that this score does not reflect the student’s perceptions of their desire to finish college but rather, could be
due to many reasons such as misinterpretation of the questions related to this attitude, the way the questions were asked, the translation or the cultural differences in the way of thinking and measuring attitudes might have affected this part of CSI.

**Unavailability of courses.** Advisors pointed out a number of limitations related to scheduling. There was not a wide range of courses to help students select from according to their abilities. Dan said: “I don’t think we have a lot of space to maneuver with the courses”. The role of the academic advisor was to help students develop responsibility towards their educational plan by helping them acknowledge and realize this limitation of taking a course because it is the only available course. Advisors helped students see the shortcoming in course scheduling.

**Plagiarism.** Academic advisors mentioned that some students plagiarized the registration card. A copy of the registration card is available in Appendix G. They explained that this behavior posed a challenge to CSI implementation. However, advisors stated that even when students plagiarized, an opportunity to link the student’s life with the university was available. They explained the risk of plagiarizing the registration card to those students. Each student is different and their schedule is unique to their career and life goals. Therefore what applies to other students might not apply to him or her. Fahima explained:

They take registration card from each other. So, I have to explain [to students] the procedure. What [is] effect [ive] for other student is not effect [ive] for you [advisee]. So, your case is different than the other student. I have to sit with you [advisee] and to make a discussion which courses you have to take it after your case, or your lifestyle.
Chapter 5

Discussion and Recommendations

This study used quantitative measures to investigate the impact of academic advising on first-year student persistence. Through these quantitative measures, data was analyzed using tools such as Statistical Package for the Social Sciences (SPSS), Microsoft Excel Spreadsheet and phone survey. This study also used a qualitative measure represented in the focus group with academic advisors who are involved in providing services to first-year students. In this chapter both quantitative and qualitative data were used to examine how academic advising could possibly have impacted retention.

The data gathered from the focus group could be used to explain the results and to find out whether academic advising program has the potential to impact student’s academic performance and persistence from fall to spring.

Explaining the impact of CSI intervention on Student’s Academic Performance

The focus group described how the process of retention occurred through academic advising and how advising could have possibly contributed to student success, persistence and retention. This process is visualized in Figure 2. It is a complex one and it takes place in a social setting. It also occurs through building a relationship with the advisor. Through this relationship the advisor addresses negative behaviors that lead to attrition. Simultaneously, the advisor helps students see the importance of healthy behavior to success such as students changing their study habits and managing their time and anxiety.
Figure 2. How Academic Advising Could Have Possibly Impacted Retention.

Figure 2 illustrates the different components of the impact of academic advising in student retention.
In this study, the impact of academic advising on student’s academic performance was measured in two ways: (1) the impact on students’ GPA and (2) the impact on student’s academic standing.

**Impact on GPA.** The analysis of data of first-year students revealed differences in academic performance between students in the Treatment Group and the ones in the Control Group. The average GPA among students who went through the CSI Intervention is significantly different from the one for those who didn’t. This difference could be mainly attributed to academic advising.

Data showed that there is a significant difference in the mean GPA for students who took the CIS Intervention. This significant difference could be seen as a sign of academic success and academic advising could be the reason behind this success.

**Impact on academic standing.** Academic standing is part of higher education institutional policies that determines whether the student may continue to enroll in the institution or should be terminated. Academic standing is largely determined by GPA. Usually there are different types of academic standing such as probation, honor or dismissal. In the institution where this study took place, the academic standing for students who accumulated less than 24 credit hours and their GPA is less than 2.00 out of 4.00 is considered academic warning.

According to the analysis of data, the percentage of students who fell on academic warning among students who participated in the CSI intervention was significantly less than the percentage of the same students who did not participate in CSI. This difference could also be attributed to academic advising.
Through building relationships with students, academic advisors helped students realize their strengths and tap into them. For instance one advisor explained that one of the students had scores in the CSI report that shows that he or she has above average reading skills. This student was advised by the academic advisor to use this strength.

On the other hand, academic advisors discussed challenges and areas that needs improvement, for instance, students who expressed agreement with the scores in CSI that show that they have a specific challenge in areas such as math are immediately referred to math tutoring resources in the University. Also discussions about improving study habits were mentioned multiple times during the focus group; which indicate that advisors were actively engaged in helping students gain effective study habits. This realization of strengths and weaknesses helped students study better, acknowledge and use resources to improve their academic performance. Perhaps this resulted in better GPA among students who participated in the CSI intervention.

Explaining the Impact of CSI intervention on Student’s Persistence

In this study, persistence of first-year students to the next semester is measured in two ways: (1) the impact on the number of credit hours the student have registered for following the semester of his or her admission to the institution and (2) the impact on the percentage of students who failed to register for credit hours. Registering for less credit hours in the semester following their admission to the institution or registering for no credit hours is considered an indicator of attrition.

**Impact on the number of credit hours.** In average students who participated in the CSI intervention registered for more credit hours than those who didn’t. The average
of the number of credit hours the students in the sample have registered for in the second semester is only two points higher than the general population. However, the average of the number of credit hours of students who participated in CSI is four points higher than those who did not participate in CSI. The increase in the average of credit hours could be attributed to academic advising.

**Impact on the percentage of students who failed to register for credit hours.**

The percentage of students who failed to register for credit hours was significantly greater among students who did not participate in CSI intervention. It was almost four times more among students in the Control Group. Only 8.31% of students who participated in CSI failed to register for credit hours, whereas 32% of students who did not take the CSI failed to register for credit hours. Consequently, this decrease in the number of students who failed to register for credit hours could be mainly attributed to academic advising.

It is possible that academic advising managed to improve the rates of first-year students who register for courses in the semester following their admission. It is also possible that the more the students are aware what courses to register for, the more likely they are to persist to the next semester by registering for courses. The institution where this study took place, suffer an increased number of students who stay enrolled but do not register for courses. According to the Institutional Planning Office of this institution, when this situation continues for one or more semesters, the student is likely not to return.
The results of this study showed that there was a significant difference between students who participated in the CSI Intervention and those who didn’t in the average number of credit hours the students have registered for in the semester following their admission to the institution. It is possible that academic advising had impacted first-year student’s persistence from fall to spring through the implementation of the CSI intervention.

First-year students, who had the chance to sit with an academic advisor and discuss their CSI reports, had an ample of opportunity to identify their goals and link them to the study plan of their college. In addition to this, academic advisors mentioned repeatedly in the focus group how they teach students the different components of the study plan. Consequently, students who participated in the CSI intervention knew which courses to register for. In addition to this, they had the opportunity to build a course schedule for the next two semesters with help and guidance from the academic advisor.

As a result of the academic advising session, students have a roadmap to follow during registration time. Students who did not take the CSI and did not come to visit with their advisors are not likely to have the same roadmap. Even if they have a roadmap, it might not be as clear as the one developed by students with guidance from advisors, because students who visited with advisors used a Registration Card to list the courses for the next two semesters.

Having a clear roadmap helps students overcome fears and anxieties about success in the institution. Perhaps the conversations students had with advisors helped them become more motivated to persist. Advisors mentioned multiple times how students
came back later and thanked them for the opportunity to talk and to express concerns and issues. Some students were also happy with the referral to other campus resources and it seems that they made use of the institutional resources to improve their skills and their self-confidence.

**Was academic advising one of the concerns of freshmen who began their enrollment during fall 2013 and did not come back in spring 2014?**

The concerns of first-year students resulted from the Phone Survey echoed Bean and Metzner (1985) claim that non-traditional students leave because of external life circumstances rather than the institutional culture or the resources provided by the institution.

It seemed that the most common reason for departure among students who managed to participate in CSI intervention was the conflict with job responsibilities. Bean and Metzner (1985) claimed that a different model that is focused on students’ external life rather than the culture of the institution was needed to describe the attrition process of non-traditional students. The traditional model that was used to explain the attrition of students in residential institutions focused heavily on factors related to the institution and the engagement of students in campus life.

The second most common reason of student’s attrition is the unavailability of classes to meet the student’s schedule. The results of this study emphasize previous research findings by Bean and Metzner (1985) in which course availability and flexible course scheduling were among the major factors in student retention in commuter institutions.
Another common reason for attrition reported by students is not having a social life while enrolled in college. This reason is not commonly cited in the literature. Perhaps it is unique to the Gulf-Arab students as the cultures in this part of the world are mostly communal (Hofstede and Hofstede, 2005). Communal cultures tend to value social life. Students who continue to live with parents, family and significant others have social obligations towards people they live with. For instance, unlike students in residential institutions, students in communal cultures are required to attend funeral, wedding events and other activities of close and extended family. These social activities place demand on students’ daily schedule.

It seemed that the services provided for commuter students by the institution does not play a vital role in their retention because their attrition is mainly attributed to external factors such as the conflict between job responsibilities and academic life.

Dissatisfaction with academic advising was not one of the reasons of attrition as most of the students in the sample were satisfied with advising.

The results of the survey proved that the dissatisfaction with academic advising was not one of the reasons for students failing to register for credit hours. Therefore, the dissatisfaction with academic advising was ruled out as a reason for departure at least among students who participated in the CSI intervention.
What was the level of satisfaction with academic advising of first-year students who received the CSI intervention but did not register for courses?

Most of the students who received the CSI intervention but did not register for courses were satisfied with academic advising. 94% of these students were either very satisfied or satisfied with academic advising.

This high level of satisfaction with academic advising implies that students chose to depart this institution for reasons other than the dissatisfaction with academic advising. Since commuter institutions usually enroll non-traditional students who are employed, married, have family responsibilities or live with parents, external factors other than the institution plays a significant role in their departure.

Since commuter students come and leave the institution on daily basis, they need a strong social system to connect them to the institution. Academic advisors represent one of the social systems that an institution can provide for its students.

The conversations that academic advisors had with students helped them feel as valuable members of the institution and could have potentially improved commuter student’s sense of belonging. According to Hausmann, Schofield and Woods (2007), a student’s sense of belonging tends to decrease during the first-year. It is possible that students in the Control Group, who did not participate in the CSI intervention might not have an equal chance to engage in conversations with caring officials from the institution. Therefore, their sense of belonging was not as strong as those who were in the Treatment Group. Consequently a large number of students (63.04%) in the Control Group dropped
off the institution by the end of the first semester compared to only 25% in the Treatment Group.

**Discussion of findings in relation to literature**

The literature regarding the effectiveness of academic advising stresses the importance of academic advising to students in three main areas:

1. Student’s self-assessment and regulation
2. Student expectation
3. Student learning

Figure 2 summarizes the findings from the academic advisors focus group. It illustrates how academic advisors help students through the three main areas.

Student’s self-assessment and awareness of their strengths and weaknesses is an important step towards success. Tinto (2012) believed that the attitudes of incoming cohorts should be measured systematically. Kuh et al believed that effective institutions provide a timely feedback for their students (2005). CSI is one of the ways institutions can provide assessment and feedback to students about their attitudes that could impact their success in college. For instance CSI could measures student’s attitude towards educators, the use of institutional resources and drop out proneness.

Through the self-assessment and feedback, academic advisors build relationships with students and refer them to institutional resources to satisfy their needs. They also teach students the study plan. Therefore students learn how to build a schedule, balance it with other activities and become aware what courses to register for.
This process of helping students build a schedule and utilize resources involves an orientation of students to the demands of higher education. As a result, students have an opportunity to match their expectations with the institutional expectations through academic advising. This process alleviates many fears and anxieties the student might have about how to succeed in university.

The process by which academic advisors contribute to retention is complicated. This process of retaining first-year students starts with building relationships. The dynamics of this relationship were revealed by the focus group.

The relationship with students leads to the next stage, which is self-assessment and helps the student realize their strengths and weaknesses. Self-assessment requires that the students examine their abilities, their goals, and their desire to finish college. At this stage advisors also teach students the study plan.

Based on the knowledge about their strengths and weaknesses and the different components of the study plan, the students build a schedule. Simultaneously, the academic advisors educate the new students about the resources available in the institution that will help them achieve the goals in their study plan. Resources, such as tutoring, counseling and volunteering, help students bridge gaps and improve their areas of challenge.

When students build a schedule for the next two semesters, they have a road map. They know what to expect and what to register for in the next two semesters. Because students are new, they could have many fears and misconceptions about success in higher education. Helping students build a schedule reduces uncertainty and anxiety about
university life and could likely lead to persistence to the next semester and therefore retention.

**Recommendations for Practice**

Institutions should employ criteria for determining at risk students. They should also list a number of the reasons students depart a specific institution. Close to the top of the list should be the at-risk factor of registering for low or no credit hours. Students who are enrolled in the institution but fail to register for credit hours should be contacted and asked why. Additionally, a number of other institutional responses should be designed to target this group of students.

There is no single retention model or one size fits all approach to establishing a retention program. Each institution has its own cluster of reasons for attrition and employs different approaches to retention. Worthy of mentioning, however, is that for every retention program there are fundamental elements regardless of the characteristics of a student population or the nature of the institution. Figure 3 is an attempt to understand the meaning of retention and the elements that constitute a good retention program.

Figure 3 illustrates ways in which retention can be managed in an institution by a given unit, by an administrative unit or throughout the institution as a whole.

As illustrated by Figure 2, the design of a program or an intervention piece involves more than the service itself; for instance, the design of a study should incorporate the opinions of personnel who implement the intervention and as well as explore the usefulness of professional development opportunities for support staff.
Therefore, this research design attempts to take a holistic look at an intervention that is currently in place and use it as a means to explore the full picture of retention in this specific institution.

*Figure 3. Retention Management.*

*Figure 3. Shows the different components that are important for retention management.*

Institutions should also employ criteria for measuring attitudes and self-perceptions of incoming cohorts and use them as tools to instigate effective discussions and meaningful conversations between academic advisors and first-year students. Tools
such as the CSI could be used to provide measures of attitude and self-perception. However, a number of cultural differences in the way students’ attitudes are measured could impact the validity of such measures. This in turn impacts the utility of such tools as an early alert system. Institutions should work closely with developers of such inventories to insure the applicability of their products in different cultures and to insure the proper translation to insure the validity of the tools.

When practicing the art of retention in a Gulf–Arab national institution, retention practitioners should take a comprehensive look with emphasis on non-traditional student characteristics such as:

1. Residency status: commuter versus resident students
2. Age
3. Employment status
4. Enrollment status: the number of credit hours for which the students register

Limitations

One of the limitations of this study was using the number of credit hours the students registered for as a measure of their persistence. For example, if a student was registered for one or more credit hours, they were included in the Student Phone Survey. Therefore, one of the limitations of this study is that students were regarded as persistent as long as they are registered for some credit hours. However, the Phone Survey was only administered to students not registered for any credit hours. There is a possibility that the sample identified for the study excluded many students who might be at risk.
Another limitation is that registering for no credit hours is not always an indicator of student departure. Students might have different reasons to depart temporarily, for instance, pregnancy, illness, or caring for a sick family member. These students might depart only temporarily for one or two semesters. On the other hand, there might be some students who even though they are registered for credit hours still have high dropout proneness. Because the study was focused on students who registered for no credit hours only, some students who are at risk might not be identified as such. The indicator of students not registering for courses in a given semester is not the sole at risk indicator.

The differences especially in GPA between the treatment and control group could be due to the quality of students. Students, who take CSI, usually come to classes and attend advising sessions. These students are often the ones who are more motivated and have a stronger desire to succeed. However, the mean of the scores of the high school GPA is almost the same for the sample and the population, which could reduce the possibility of a biased sample.

The sample could be biased in terms of gender. Table 2 compares the sample to the population. According to this table, there were more females than males in the sample. Generally speaking the number of females in higher education is increasing and their success rates and graduation rates are also increasing.

There are many other variables that affect GPA, for instance family educational background, employment outside the institution and financial status. Such variables were not controlled. One of the limitations of this study is that it controlled for a limited number of variables that could impact GPA and the number of credit hours.
Recommendations for Future Research

This study could be replicated with a longitudinal design that tracks the development and persistence of students who receive the CSI treatment across multiple semesters or until graduation.

Future research should investigate the phenomenon of attrition with multiple at-risk indicators such as study habits or demographic factors including age and gender. In addition to this, future research may use experimental design methods to control for other variables that could have a profound effect on GPA and the number of credit hours. For example, a research design that controls student’s status of employment as a factor or age as a factor could result in better inferences.

Conclusion

Retention research represents a great opportunity for institutions to find ways to increase the number of students who stay in college and to improve graduation rates. Such research should include indictors of success as well as indictors of attrition. Additionally, combining quantitative with qualitative approaches will likely lead to a better understanding of the retention phenomenon.
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### Appendix A

**Student Phone Survey**

**Student Given ID:**

**Student Gender:**

What are your reasons for not registering for courses with this University this semester?

<table>
<thead>
<tr>
<th>Reason</th>
<th>Options</th>
</tr>
</thead>
</table>
| 1. I did not have a social life. This is one of the reasons that made me decide not to register for courses this semester. | 1. Strongly agree  
2. Agree  
3. Disagree  
4. Strongly Disagree |
| 2. The unavailability of classes to meet my schedule is one of the reasons that made me decide not to register for courses this semester. | 1. Strongly agree  
2. Agree  
3. Disagree  
4. Strongly Disagree |
| 3. I was not given enough information about how to succeed in this University. This is one of the reasons why I did not register for courses this semester | 1. Strongly agree  
2. Agree  
3. Disagree  
4. Strongly Disagree |
| 4. Maintaining good grades at this University is difficult for me. This is one of the reasons why I did not register for courses this semester | 1. Strongly agree  
2. Agree  
3. Disagree  
4. Strongly Disagree |
| 5. Conflict with family responsibilities is one of the reasons for not registering for courses | 1. Strongly agree  
2. Agree  
3. Disagree  
4. Strongly Disagree |
| 6. Conflict with job responsibilities is one of the reasons for not registering for courses | 1. Strongly agree  
2. Agree  
3. Disagree  
4. Strongly Disagree |
| 7. Your answer to this question is very important for understanding why students do not register for courses. Are there any other reasons for not registering for courses in this University this semester? Please list them below. |                                |
| 8. Did you meet with your academic advisor? | 1. Yes  
2. No |
| 9. How satisfied are you with your academic advisor? | 1. Very satisfied  
2. Satisfied  
3. Unsatisfied  
4. Very unsatisfied |
Appendix B

Cognitive Interview Protocol

Cognitive Interview Protocol
(To improve the quality of the phone survey)

Beating the Challenge of Attrition: What is the Impact of Academic Advising in First-year Student Persistence?

A. Introduction

Thank you for coming here today to help us out. The reason we asked for your help is that we are trying to find out the reasons why students in this University choose not to register for courses at a given semester. We will be conducting a phone survey with first-year students who did not register for courses in spring 2014 semester. The purpose of this discussion is to solicit your feedback about how to improve this phone survey.

Today I am going to ask you to look at the phone survey that is being evaluated for possible use in this research. Your reactions to the phone survey will provide us with information that will help make the survey as easy to complete as possible. Okay?

B. Hand respondent confidentiality form

The first thing I need to do is to ask you to read and sign this consent form. But first let me explain what it is about. This interview is voluntary. It is being conducted by the researcher for academic purposes. Everything you write on the evaluation form is confidential. The only people who can see the information you provide is the researcher. The statement we are asking you to sign indicates that you have volunteered for this interview. I will also sign it as well since I am the person conducting the interview and I want to assure you in writing of my promise to keep all of your information confidential.

C. Explain procedure

In a couple of minutes, I am going to read each question of the phone survey to you. When I do, I would like you to talk out loud about your reactions to the survey as I read the questions to you. I would like to know everything you think about it.
Talking out loud about these sorts of things may seem a little unusual, but it is going to be very helpful to me to get your feedback. I would like to know any thoughts you have about whether it strikes you in a favorable or unfavorable way, whether it is clear about what is needed from the respondent and whether you understand the questions.

D. Hand writing each question and waiting for the response

Okay, I will read the question out loud and I would like you to tell me everything you are thinking about the question.

(provide positive reinforcement, e.g., “Good, that’s what we need to know.”)

(Encourage the respondent to provide other information, e.g., “when you give me your answers just be sure that you tell us about your reactions to everything including the order of the questions, whether it’s clear what is needed, anything you don’t understand, or anything that seems strange.”)

E. Probes that might be used

- What are you thinking right now?
- Can you tell me more about that?
- Could you describe that for me?
- Don’t forget to tell me what you are thinking as I read the question to you.

F. Record relevant comments, errors, hesitations, and other indicators of potential problems during completion

a. What reactions did they volunteer, if any?

b. Any reactions/hesitations/questions to the roster instructions?

c. How long did it take the respondents to understand and answer the questions?

G. Debriefing questions

1. Overall how easy or difficult was the survey to complete?

   □ Very easy
   □ Somewhat easy
   □ Somewhat difficult
☐ Very difficult

2. Was there anything unclear or confusing about how to answer this phone survey?
   ☐ Yes → (If yes) please explain:
   ☐ No

3. If you were a student and I phoned you, explained to you the purpose of the study do you think you will be willing to participate? Why?
Appendix C

Student Text Message

Content of SMS/Phone Message to Students

Dear Student

My name is Selma Haghamed. I am conducting a research on the reasons why students decide not to register for courses during a given semester at this University. My phone call to collect information from you is expected to take around 7 minutes. I assure you that all the information obtained will remain confidential.

Thank You
Appendix D

Consent to Participate in Phone Survey

Beating the Challenge of Attrition: What is the Impact of Academic Advising in First-year Student Persistence in a Gulf-Arab National University?

Dear “Student Name”,

My name is Selma Haghamed. I am conducting research on the reasons why students decide not to register for courses during a given semester. Approval to conduct this study is obtained from this University Internal Review Board. All the information obtained will remain confidential.

This phone survey is designed only for students who are interested in taking part in this study. Please take your time to make your decision about participating. If you have any questions, please feel free to ask me.

What is the purpose of the Survey?

The purpose of this questionnaire is to find out why some students prefer not to register for courses.

What will happen if I take part in this Phone Survey?

If you agree to participate, the following activities will take place: I will ask you around ten questions and I will record your answers in an answer sheet designed for this purpose.

Answering the survey should take around seven minutes of your time.

Can I stop answering the questions at any time?

Yes. You can decide to stop at any time.

What side effects or risks can I expect from answering the phone survey questions?
There are no risks or side effects associated with the Phone Survey.

Are there benefits to taking part in the Phone Survey?

There will be no direct benefit to you from participating in this study. However, the information that you provide will help this University administrators gain better understanding of the reasons why some student decide to leave or not register for courses in this University.

The decision not to register for courses might be the result of some students experiencing difficulties. We hope that knowing the reasons will help this University plan and design services for students effectively. Therefore, your answers are important in improving services for other students.

What other choices do I have if I do not take part in this Phone Survey?

You are free to choose not to participate in the Phone Survey.

Will information about me be kept private?

All personal information gathered from this survey will be kept private. If information from this discussion is published or presented at scientific meetings, your name and other personal information will not be used.

Who can answer my questions about the Phone Survey?

If you have any questions, concerns, or complaints about this discussion, please contact Selma Haghamed at: 6678-3878 or E-mail: shaghamed@hotmail.com
Appendix E

Academic Advisor Consent to Participate in Focus Group Discussions

Beating the Challenge of Attrition: What is the Impact of Academic Advising in First-year Student Persistence in a Gulf-Arab National University?

This Focus Group discussion focuses on your knowledge, beliefs and practices and how they influence student persistence. The moderator will explain what to expect to you. Focus Group discussions include only people who choose to take part. Please take your time to make your decision about participating. If you have any questions, please feel free to ask the facilitator.

What is the purpose of the Focus Group discussion?

The purpose of this discussion is to understand the impact of academic advising services and interventions such as the College Student Inventory on first-year student persistence.

How many people will take part in this discussion?

About 4-7 people will take part in this discussion. There will be 1 moderator (the researcher who will be asking the questions). The discussion will be recorded with a small audio recorder to ensure accuracy.
What will happen if I take part in this Focus Group discussion?

If you agree to participate, the following activities will take place: When you arrive at the venue for the discussion, you will be met by the Focus Group discussion moderator. You will be given an attendance sheet and a consent form to complete. Once all participants are present, the moderator will introduce everyone present with their roles; and some guidelines for the discussion. The discussion will be in English; last about 60-80 minutes. In addition to note taking, the discussion will be recorded with a portable audio recorder in order to capture everybody’s contribution. Lunch will be served. Please show respect at all times to each other. We also would like to maintain confidentiality by not identifying names or dates and not share information with anyone outside this room.

Can I stop being in the Focus Group?

Yes. You can decide to stop at any time. Just tell the moderator right away if you wish to stop being in the discussion.

What side effects or risks can I expect from being in the Focus Group?

There are no risks or side effects associated with the Focus Group discussions.

Are there benefits to taking part in the Focus Group?

There will be no direct benefit to you from participating in this study. However, the information that you provide will help this University plan and design services for students effectively. Therefore, your answers are important in improving services for students.
**What other choices do I have if I do not take part in this Focus Group?**

You are free to choose not to participate in the Focus Group discussion. If you decide not to take part in the discussion, there will be no penalty to you.

**Will information about me be kept private?**

All personal information gathered for Focus Group discussion will be kept private. If information from this discussion is published or presented at scientific meetings, your name and other personal information will not be used.

**What are the costs of taking part in this Focus Group?**

You will not be charged for participating in the Focus Group discussion.

**What are my rights if I take part in this Focus Group?**

Taking part in this study is your choice. You may choose either to take part or not to take part in the discussion. If you decide to take part, you may leave the discussion at any time. No matter what decision you make, there will be no penalty to you in any way.

**Who can answer my questions about the Focus Group?**

If you have any questions, concerns, or complaints you have about this discussion, please contact Selma Haghamed at 6678-3878 OR EMAIL shaghamed@hotmail.com

CONSENT
Please keep a copy of this consent form for your records.

PARTICIPATION IN FOCUS GROUP DISCUSSION IS VOLUNTARY.

You have the right to decline to be in this discussion, or to withdraw from it at any point without penalty. If you wish to participate in this study, you should sign below.

________________________  ___________________________________________________________
Date                      Participant's Signature for Consent

________________________  ___________________________________________________________
Date                      Researcher/Focus Group Moderator
Appendix F

Academic Advisor Focus Group Protocol

Beating the Challenge of Attrition: What is the Impact of Academic Advising in First-year Student Persistence in a Gulf-Arab National University?

Time:
Date:
Place:

Participant 1 Name:            Title:
Participant 2 Name:            Title:
Participant 3 Name:            Title:
Participant 4 Name:            Title:
Participant 5 Name:            Title:
Participant 6 Name:            Title:
Participant 7 Name:            Title:

Introduction
Thank you for meeting with me today. As I explained earlier, this is part of a study regarding the impact of academic advising on student retention that I am conducting through the University of Nebraska. Your viewpoints will provide input toward this study.

I really want to know your perspective, so please feel free to elaborate your viewpoints. I may ask follow-up questions to ensure that I capture your viewpoint. I will be recording and transcribing what we discuss today and may ask you to clarify my interpretations within the next two weeks only for purposes of this research project.

The recording and transcription of this focus group interview will remain confidential, and will only be used in producing a final report for this class assignment; it will not be published. Only pseudonyms will be used to reference individual transcriptions and quotations, your name will not be cited in the final report. Do you have any questions about this?
<table>
<thead>
<tr>
<th>**Collect the participant’s signed consent form before proceeding! **</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shall we begin?</td>
</tr>
<tr>
<td>**Start the recorder **</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are academic advisors contributions to the first-year student success?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the perceptions of academic advisors about the effectiveness of College Student Inventory (CSI) in improving students’ persistence and success?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the academic advisors’ perceptions about the implementation of the CSI as an intervention?</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
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**Conclusion**

Thank you very much for your time and willingness to participate in this study. As a reminder, the recording and transcription of this interview will remain confidential, and will only be used in producing a final report for this research; it will not be published. Only pseudonyms will be used to reference individual transcriptions and quotations, your name will not be cited in the final report. I will be transcribing this interview recording and may ask you to clarify my interpretations within the next two weeks. I would be happy to provide you with a transcript of our focus group session, if you would like one? Names of the participants who desire a copy of the transcript:

__________________________________________________

__________________________________________________

__________________________________________________

__________________________________________________
Appendix G

Registration Card

:Student ID

:Name

:College

:Spring 2014

<table>
<thead>
<tr>
<th>Pre-requisite</th>
<th>Credit Hours</th>
<th>Course Title</th>
<th>Course Number</th>
<th>No.</th>
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:Fall 2014

<table>
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<th>Pre-requisite</th>
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<th>Course Title</th>
<th>Course Number</th>
<th>No.</th>
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<td>6</td>
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</table>
### Appendix H

**Detailed Results of the Phone Survey**

<table>
<thead>
<tr>
<th>No.</th>
<th>Question</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>I did not have a social life. This is one of the reasons that made me decide not to register for courses this semester.</td>
<td>18.75%</td>
<td>25.00%</td>
<td>31.25%</td>
<td>25.00%</td>
</tr>
<tr>
<td>2</td>
<td>The unavailability of classes to meet my schedule is one of the reasons that made me decide not to register for courses this semester.</td>
<td>37.50%</td>
<td>6.25%</td>
<td>37.50%</td>
<td>18.75%</td>
</tr>
<tr>
<td>3</td>
<td>I was not given enough information about how to succeed in this University. This is one of the reasons why I did not register for courses this semester</td>
<td>18.75%</td>
<td>18.75%</td>
<td>31.25%</td>
<td>31.25%</td>
</tr>
<tr>
<td>4</td>
<td>Maintaining good grades at this University is difficult for me. This is one of the reasons why I did not register for courses this semester</td>
<td>6.25%</td>
<td>37.50%</td>
<td>50.00%</td>
<td>6.25%</td>
</tr>
<tr>
<td>5</td>
<td>Conflict with family responsibilities is one of the reasons for not registering for courses</td>
<td>18.75%</td>
<td>18.75%</td>
<td>56.25%</td>
<td>6.25%</td>
</tr>
<tr>
<td>6</td>
<td>Conflict with job responsibilities is one of the reasons for not registering for courses</td>
<td>62.50%</td>
<td>18.75%</td>
<td>6.25%</td>
<td>12.50%</td>
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Appendix I-1

T Test Results Showing the Difference in GPA

Descriptive Statistics (GPA)

<table>
<thead>
<tr>
<th>1sr Semstr GPA</th>
<th>1=Treatment Group, 2=Control Group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
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<tbody>
<tr>
<td>Treatment</td>
<td>361</td>
<td>2.4098</td>
<td>.88958</td>
<td>.04682</td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>625</td>
<td>1.3668</td>
<td>1.22121</td>
<td>.04885</td>
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Independent Samples Test (GPA)

<table>
<thead>
<tr>
<th>1sr Semstr GPA</th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
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<td>Equal variances not assumed</td>
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### Independent Samples Test (GPA)

<table>
<thead>
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<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>Std. Error Difference</th>
<th>Lower</th>
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<tbody>
<tr>
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### Independent Samples Test (GPA)

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<th>Equal variances assumed</th>
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<th>Upper</th>
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Appendix I-2

*T* Test Results Showing the Difference in the Number of Credit Hours

### Descriptive Statistics (Credit Hour)

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<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
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<tbody>
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<td>2nd Semstr Credit Hours</td>
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<tr>
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### Descriptive Statistics (Credit Hour)

<table>
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<tr>
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<th>Std. Error Mean</th>
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</thead>
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<td>Control</td>
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### Independent Samples Test (Credit Hour)

<table>
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<th>t-test for Equality of Means</th>
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<tbody>
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<td></td>
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<td>Sig.</td>
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### Independent Samples Test (Credit Hour)

#### t-test for Equality of Means

<table>
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### Independent Samples Test (Credit Hour)

#### t-test for Equality of Means

<table>
<thead>
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<th>95% Confidence Interval of the Difference</th>
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