

Electronic Theses and Dissertations, 2004-2019

2018

International Students' Expectations of and Satisfaction with Academic Advising at a Community College

Marieta Chemishanova
University of Central Florida

 Part of the [Educational Leadership Commons](#), and the [Higher Education Administration Commons](#)
Find similar works at: <https://stars.library.ucf.edu/etd>
University of Central Florida Libraries <http://library.ucf.edu>

This Doctoral Dissertation (Open Access) is brought to you for free and open access by STARS. It has been accepted for inclusion in Electronic Theses and Dissertations, 2004-2019 by an authorized administrator of STARS. For more information, please contact STARS@ucf.edu.

STARS Citation

Chemishanova, Marieta, "International Students' Expectations of and Satisfaction with Academic Advising at a Community College" (2018). *Electronic Theses and Dissertations, 2004-2019*. 5770.
<https://stars.library.ucf.edu/etd/5770>

INTERNATIONAL STUDENTS' EXPECTATIONS OF AND SATISFACTION
WITH ACADEMIC ADVISING AT A COMMUNITY COLLEGE

by

MARIETA P. CHEMISHANOVA
B.A. University of Plovdiv, 2000
M.A. Oklahoma State University, 2006

A dissertation submitted in partial fulfillment of the requirements
for the degree of Doctor of Education
in the Higher Education and Policy Studies Program
in the Department of Child, Family, and Community Sciences
in the College of Education and Human Performance
at the University of Central Florida
Orlando, Florida

Spring Term
2018

Major Professor: J. Thomas Owens

© 2018 Marieta Chemishanova

ABSTRACT

This study sought to identify what expectations international students' had with regards to academic advising and how satisfied they were with their advising experience at a large community college in a southeastern state in the United States. Previous research on academic advising services (e.g. Belcheir, 1999; Hale, Graham, & Johnson, 2009; Mottarella, Fritzsche, & Cerabino, 2004; Propp & Rhodes, 2006; Lynch, 2004; Smith & Allen, 2006) had not distinguished between domestic and international students' expectations of and satisfaction with advising especially at the 2-year and community college levels and in organizational structures where the foreign student advisors serve as both the students' academic and immigration advisors. Such research is timely in the face of the highly competitive international education market and the increasing demands for U.S. institutional of higher education to meet students' consumer expectations with regards to educational services. Grounded in Expectation Disconfirmation Theory and employing a quantitative research design, this study investigated how factors such as age, gender, country of citizenship, class standing, and degree program impacted international students' expectations of and satisfaction with academic advising. Descriptive statistics, analyses of variances, and a partial least squares structural equation model (PLS-SEM) were used to answer the research questions. While the advising literature strongly advocates developmental advising, students in this study expressed a strong desire for elements of prescriptive advising.

To my family.

ACKNOWLEDGMENTS

I would like offer my special thanks and sincere gratitude to my dissertation committee chair Dr. J. Thomas Owens for continuously conveying the spirit of adventure with regards to research and scholarship and for his commitment and guidance throughout this process. I would like to thank my committee members, Dr. Rosa Cintrón Delgado, Dr. Catherine Penfold Navarro, and Dr. Randall Hewitt for their wisdom, support, and constant encouragement to believe in myself and in my research. I would like to express my deep appreciation to Dr. Cintrón Delgado who will always have a special place in my heart for her enthusiasm for teaching, learning, and scholarship. Your words, “Your desire to learn counts more than any other qualification, and seriousness more than brilliance” (Cintron, 1994) will continue to inspire me and my work as I embark on the next chapter of my life.

I would like to express my deep love and sincere gratitude to my sister, Dr. Polina Chemishanova. Words cannot describe how grateful and fortunate I am to have in you in my life. Thank you for your unconditional love, patience, moral support, constant encouragement, and advice, without which I would not have been able to celebrate this achievement now.

I would also like to express my endless love and appreciation to my wonderful parents for all their love, patience, immense support, and sacrifices they have made over the years to see me and my sister become well-educated, strong, and independent women.

TABLE OF CONTENTS

LIST OF FIGURES	viii
LIST OF TABLES	ix
CHAPTER 1 INTRODUCTION TO THE STUDY	1
Background	1
Statement of the Problem	2
Purpose of the Study	5
Research Questions	5
Significance of the Study	6
Theoretical Framework	9
Definitions of Terms	12
Organization of Dissertation	13
Summary	14
CHAPTER 2 LITERATURE REVIEW	16
Introduction	16
Recent Trends in International Student Enrollment in the U.S	17
Economic Impact of International Student Enrollment	18
Approaches to Academic Advising	20
Academic Advising and Student Satisfaction Assessment in Higher Education	25
Research on Community College Students' Satisfaction with Advising	33
Research on International Students Satisfaction with Academic Advising	35
Instruments for Measuring Student Satisfaction	38
Criterion Variables in Student Satisfaction Research	46
Personal Variables: Age, Gender, Race/Ethnicity	47
Personal Variables: GPA, Class Standing, Program of Study, Financial Aid	49
Institutional Variables: Advising Style and Advisor Status	50
The Expectation Disconfirmation Theoretical Framework	55
Summary	60
CHAPTER 3 METHODOLOGY	62
Introduction	62
Research Questions	62
Research Design	63
Description of Research Setting and Participants	64
Data Collection and Instrumentation	65
Data Analysis	69
Descriptive Statistics	69
Reliability and Validity	70
Originality Score	72
Summary	72

CHAPTER 4 RESEARCH FINDINGS	73
Introduction.....	73
Survey Responses and Participants Demographics	73
RQ1: Importance of Advising Functions Results	77
RQ2: Satisfaction with Advising Functions Results.....	80
Overall Satisfaction with Academic Advising Results	84
RQ3: Performance Gap Score and Expectation Disconfirmation Theory	86
Measurement Model	88
Assessment of structural model	91
RQ4: Predictors of International Students’ Disconfirmation Gap	92
Summary	95
CHAPTER 5 CONCLUSIONS AND RECOMMENDATIONS	96
Introduction.....	96
Discussion of Key Findings and Conclusions	96
Limitations of the Study.....	99
Implications for Advising of International Students.....	100
Implications for Policy and Practice	102
Recommendations for Future Research	103
APPENDIX A STUDENT SATISFACTION WITH ADVISING SURVEY	105
APPENDIX B INSTITUTIONAL REVIEW BOARD APPROVALS	111
.....	112
APPENDIX C PERMISSION TO USE SURVEY	114
APPENDIX D DEMOGRAPHIC COMPARISON OF SURVEY PARTICIPANTS AND INTERNATIONAL STUDENTS AT RESEARCH SITE	116
REFERENCES	119

LIST OF FIGURES

Figure 1: Expectation Disconfirmation Theory of Academic Advising.....	10
Figure 2: Measurement Model.....	90

LIST OF TABLES

Table 1 Alignment of Operational Constructs and Survey Item Categories	45
Table 2 Comparison of Criterion Variables in Academic Advising Surveys.....	55
Table 3 Age Distribution of International Students, Fall 2017.....	65
Table 4 Advising Functions Characteristics Included in the Survey	67
Table 5 Alignment of Research Questions, Data Collection, and Data Analysis.....	69
Table 6 Cronbach’s Alpha for Importance of Advising Functions Ratings	71
Table 7 Cronbach’s Alpha for Satisfaction with Advising Functions Ratings.....	71
Table 8 Survey Respondents’ Gender Distribution	74
Table 9 Survey Respondents’ Age Distribution	75
Table 10 Survey Respondents’ Highest Academic Degree	76
Table 11 Survey Respondents’ Degree Program Distribution.....	76
Table 12 Top Five Countries of Citizenship for Survey Participants.....	77
Table 13 International Students’ Importance of Advising Functions Ratings.....	78
Table 14 Means and Standard Deviation for Importance Ratings	80
Table 15 International Students’ Overall Satisfaction with Advising at ISS.....	81
Table 16 Means and Standard Deviation for Satisfaction Ratings	82
Table 17 Means, Standard Deviation, and Ranks of Importance and Satisfaction Ratings	83
Table 18 International Students’ Overall Satisfaction with Advising at ISS.....	85
Table 19 Performance Gap Analysis of Variance.....	87
Table 20 One-way ANOVA and Test of Linearity Results.....	87
Table 21 Measures of Association.....	88
Table 22 Measurement Model using PLS-SEM.....	88

Table 23 Discriminant Validity: Fornell–Larcker Criterion.....	90
Table 24 Discriminant Validity: Heterotrait–Monotrait Ratio (HTMT)	90
Table 25 R Square Measure for Performance Gap	91
Table 26 Hypothesis Testing	92
Table 27 Multivariate Test Results for Demographic Predictors	93

CHAPTER 1 INTRODUCTION TO THE STUDY

Background

At the time of the present study, the latest report released by the Institute of International Education (IIE) revealed that in academic year 2016-2017, the number of international students at U.S. colleges and universities had surpassed one million for the second consecutive year after a 3.4% increase from the previous year to a record high number of 1,078,822 students. Compared to the previous year, in 2016-2017 there were almost 35,000 more international students enrolled in U.S. higher education institutions. Even more impressively, 85% more international students were studying at U.S. colleges and universities compared to a decade ago (IIE, 2017a). The steady increase in the number of international students confirms that the United States maintains its position as a destination of choice in higher education. The Institute of International Education also estimated that in 2016-2017, 96,472 international students were enrolled in one of the 1,655 community colleges in the United States. International students at community colleges comprised 8.9% of the total international student enrollment in U.S. higher education institutions and 1.4% of the total community college enrollment (IIE, 2017b).

According to a report published by the National Association of Foreign Student Advisors [NAFSA] (2017), the 1,078,822 international students studying at U.S. colleges and universities and their dependents contributed approximately \$36.9 billion and supported more than 450,331 jobs to the U.S. economy during the 2016-2017 academic year, a significant increase in contribution to the economy and in jobs supported from the previous 2015-2016 academic year. In the state of Florida alone, in 2016-2017 the 45,718

international students generated a financial impact of more than \$1.4 billion and supported 16,493 jobs (NAFSA, 2017). More specifically, the international students at this large state college, which ranked among the association's top 40 institutions hosting international students in 2015-2016 with a total enrollment of 1,509 international students and top 15 among Florida Higher Education Institutions in terms of international students' economic value, generated \$48.6 million alone and supported 298 jobs (NAFSA, 2017) compared to the \$39 million revenue and the 251 supported jobs in the prior year.

As the number of international students enrolled in the U.S. higher education has continued to grow and competition for attracting these students has stiffened, schools across the United States have faced the challenge of providing students from diverse demographic and socioeconomic backgrounds with the advising support services they need to succeed in college. To remain competitive in the global market for international students, U.S. institutions, specifically two-year colleges, need to develop a better understanding of what expectations international students have with regard to academic advising and how satisfied they are with their advising experiences.

Statement of the Problem

Historically, an academic advisor has been defined as a staff member who ensures students' individual academic trajectories align with their educational and personal interests and abilities (Midgen, 1989) and whose responsibility is to provide indispensable answers to specific questions and to facilitate discussion of academic issues and career goals (Creamer, 2000). Academic advising, then, broadly refers to "the

intentional interactions between students and higher education representatives (including both faculty and staff members) that support students' growth and success" (He & Hutson, 2016, p. 213). It is a "decision making process during which students realize their maximum educational potential through communication and information exchanges with an advisor" (Grites, 1979, p. 1). Within the context of this research study, the term advisor denotes a full-time staff member in the International Student Services (ISS) office who serves as the primary academic advisor for international students at a public state college in a southeastern state.

Although there has been a plethora of research on academic advising as an important aspect of college students' success, research on what characteristics of academic advising are most effective from a student's perspective has largely been limited to domestic students at four-year institutions whose experience with advising primarily includes full-time faculty members as advisors or professional advising counselors (Belcheir, 1999; Hale, Graham, & Johnson, 2009; Miville & Sedlacek, 1995; Mottarella, Fritzsche, & Cerabino, 2004; Propp & Rhodes, 2006; Lynch, 2004; Sayrs, 1999; Schlee, 1998; Schroeder, 2012; Smith & Allen, 2006; Sybesma, 2007). Furthermore, with the exception of Mottarella et al., most researchers had not fully explored how students' demographics, including age and country of citizenship, impact their advising expectations and satisfaction despite evidence from Upcraft and Stephens (2000) who suggested that changing student demographics have implications for advising. Upcraft and Stephens recommended that higher education institutions become more knowledgeable of the needs of their student population and develop or improve

programs and services designed to meet those needs. Smith, Szelest, and Downey (2004) went even further, suggesting that evaluation of advising services should reflect student voices on their experiences with advising and attitudes concerning the advisor/advisee relationship.

Examining international students' expectations of and satisfaction with academic advising is an important part of an institution's satisfaction assessment and can be useful in identifying unmet needs regarding advising services for international students, especially since the organizational structure of advising programs in place at state and community colleges varies greatly by institution. International students' satisfaction with their educational experiences, including advising services, emanates from a set of multifaceted factors. Understanding what those factors and expectations are and how they collectively influence satisfaction is critical. Thus, foreign student staff advisors who are concerned with student satisfaction as an outcome of their undertakings need to consider what role student expectations play particularly when dealing with a diverse multicultural international student population. Previous research on academic advising services has not distinguished between domestic and international students' expectations of and satisfaction with advising especially at the two-year and community college levels and in organizational structures where the foreign student advisors serve as both the students' academic and immigration advisors. Such research is needed if state and community colleges are to maintain a sustainable advantage in recruiting international students by understanding and meeting their consumer expectations.

Purpose of the Study

The purpose of this study was to identify what factors determine international students' satisfaction with their academic advising experience at a public state college in a southeastern state. The researcher investigated what international students considered important with regard to advising services, what their expectations for these services were, and how satisfied they were with the services provided by their institution.

Research Questions

This study sought to answer the following research questions:

1. What are international students' expectations of academic advising at a community college in a southeastern state?
2. How satisfied are international students with their academic advising experience at a community college in a southeastern state?
3. Do performance gap scores support Expectation Disconfirmation Theory (EDT) as a predictor of international students' satisfaction with academic advising?
4. Does international students' disconfirmation gap analysis vary by age, gender, country of citizenship, class standing, and degree program?

Because this study focused on academic advising satisfaction from the perspective of the international students at a community college in a southeastern state, it assumed a relative degree of consistency and uniformity among the advising practices of the staff advisors in the International Students Services Office at the research site. Furthermore, for the purpose of this project, the term community college was used when referring to the study's research site even though the institution, similar to many other community

colleges in a southeastern state, removed the word “community” from its name once it began offering a limited number of bachelor’s degree programs.

Significance of the Study

Scholars have continuously proclaimed academic advising as a top predictor of students’ success and satisfaction during their college careers and a critical component in positively affecting retention and graduation rates and overall student engagement in their educational experience (Anderson, Motto, & Bourdeaux, 2014; Bean, 1985, 2005; Campbell & Nutt, 2008; Council for the Advancement of Standards in Higher Education [CAS] (2011); Drake, 2011; Elliott & Healy, 2001; Glennen, 1976; Noel, 1976; Pascarella & Terenzini, 2005; Sayles & Shelton, 2005; Smith & Allen, 2006; Young-Jones, Burt, Dixon, & Hawthorne, 2013). Results from the 2014 Noel-Levitz National Student Satisfaction and Priorities Report highlighted academic advising as a core category and revealed that students at two-year community, junior, and technical colleges considered academic advising as one of their most important needs. The survey asked participants to rate the importance of the following items along with their satisfaction about each: advisor knowledge about major course of study requirements, advisor’s approachability, advisor’s concern about individual student success, the advisor’s helpfulness with goal setting, and advisor care toward students as individuals. Students at two-year colleges rated academic advising as the third most important aspect of college success behind Instructional Effectiveness and Registration Effectiveness and identified advisor knowledge as the most important (88%) aspect and care about students as individuals as of least importance (74%). Similarly, Ashburn (2007) concurred that

students at two-year institutions consistently rated academic advising as the most important service a community college can provide.

However, according to the 2015 Community College Survey of Student Engagement (CCSSE), over half (61%) of students use academic advising services “sometimes” or “often,” and one-third (32%) “rarely” or “never” use them. Additionally, students continued to report low satisfaction with their advising experience (Noel Levitz, 2011; Smith & Allen, 2008). This is significant in light of prior research that linked students’ unhappiness with academic advising with students’ overall dissatisfaction with their educational experience (Allen & Smith, 2008; Keup & Stolzenberg, 2004; Kuh, Kinzie, Schuh, & Whitt, 2005).

Not surprisingly, with increasing demands to demonstrate accountability, the pressure to evaluate the effectiveness and efficiency of advising services has reached a new level of importance. Oglethorpe (1999), in his research on students’ satisfaction, suggested that students’ expectations of advising are directly connected to their expectations of the quality of their advising experience. As a result, as Saving and Keim (1998) concluded, students’ expectations must be considered when examining the quality and effectiveness of advising support services. Propp and Rhodes (2006) concurred that it was important to include student expectations when designing effective academic advising, particularly at a time when the concept of students as customers was becoming increasingly prevalent in higher education. Recent changes in higher education, Propp and Rhodes argued, were forcing institutions to view students as customers, re-evaluate

how they assess student support services, and examine what gap, if any, existed between students' expectations for and satisfaction with advising services.

Finally, as Upcraft and Stephens (2000) remarked, changing student demographics, including every increasing enrollment of international students, have implications for academic advising; as a result, higher education institutions need to become more knowledgeable about the needs and expectations of their student populations with regard to student support programs and services. It is critical, therefore, for higher education institutions to address international students' perceptions of service performance in order to improve their attitudes toward the institution, which, in turn, leads to a competitive advantage in the recruitment of foreign students.

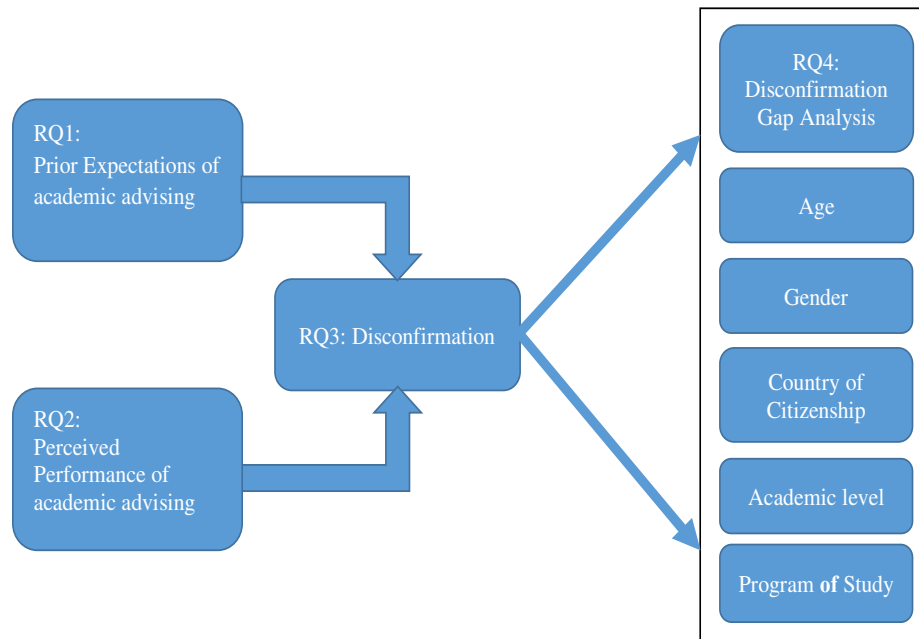
In this study, the researcher sought to provide higher education professionals with insight on the perspectives and needs of international students with regard to academic advising at the state and community college level. In an area of increasing emphasis on assessment and accountability, higher education institutions have been increasingly pressured to systematically evaluate and assess the quality and effectiveness of services they offer. Satisfaction assessments similar to the one in this study have been used in the past to determine if students' experiences with programs or services are consistent with their expectations and with the institution's mission (Noel-Levitz, 2006, 2007, 2010, 2014; Damminger, 2001; Pitman, 2000; Schuh, Upcraft, & Associates, 2001) and are an integral part of profession-wide guidelines and standards for student affairs professionals. Understanding what factors impact international students' satisfaction with their advising experience can help higher education institutions to more effectively recruit foreign

students and to create a supportive learning environment that meets students' expectations.

Theoretical Framework

The concept of satisfaction measurement in higher education is not a new development in the field of student affairs. For decades, student affairs practitioners have advocated for the importance of satisfying students' expectations. Studying and addressing student satisfaction within a consumer-oriented framework, however, has become more prominent in recent years in part because of the increasing consumerism of higher education which Rudolph (1993) defined as a style by which an institution carries out its purpose in response to societal change. The consumer-oriented approach that has saturated higher education has led to the examination of the use of and satisfaction with student services from a student's perspective as a way of assessing the quality of the service provided (Anthrop, 1996; Rodriguez, 1999) in an effort to "respond to the needs of the market and to treat students as customers" (Swenson, 1998).

Student satisfaction with advising services can be addressed within a consumer-oriented conceptual framework using the disconfirmation perspective of consumer satisfaction paradigm. Expectation Disconfirmation Theory (EDT), displayed in Figure 1, is one of the dominant models developed to analyze customer satisfaction with a product or service and has been widely used in customer satisfaction research in the fields of consumer behavior and marketing (Bitner & Hubbert, 1994; Edgel, Kollat, & Blackwell, 1968; Hom, 2000; Oliver, 1974, 1980, 1993; Oliver & DeSarbo, 1988; Oliver, Rust, & Varki, 1997).



Note: Copyright 2018 by M. Chemishanova

Figure 1: Expectation Disconfirmation Theory of Academic Advising

According to the theory, disconfirmation stems from discrepancies between expectations and actual performance or experience. Developed by Oliver (1977, 1980), EDT also known as expectancy disconfirmation model, integrates four constructs: expectations, performance, disconfirmation, and satisfaction. Disconfirmation arises when discrepancies between prior expectations and actual perceived performance of a product or service occur. Oliver, Rust, & Varki (1997) classified disconfirmation as either a positive one which occurs when the experience is better than expected or a negative one which happens when the experience is below expectations. Positive disconfirmation generates satisfaction, whereas negative disconfirmation results in dissatisfaction.

Within EDT, consumer satisfaction is seen as a relative construct, always dependent on a set of standards (expectations) and perceived quality of service (performance). According to Reeves and Rednar (1994), the concept of quality has been defined in consumer behavior and marketing literature in different terms, (e.g., as a value, meeting certain specifications, attending to customers' expectations, and loss avoidance). Within the realms of higher education and academic advising specifically, the concept of quality can be conceived in terms of how student expectations of services have been met by the university; that is, quality refers to perceptions, either positive or negative, formed by students about advising service performance as a result of student attitudes and expectations about services.

Given the nature of the information it provides, EDT appears to be a suitable conceptual framework for investigating the relationship between student expectations and student satisfaction to determine if a service has met students' expectations of performance. Though primarily a business framework, in recent years EDT has been applied to analysis of students' and alumni's satisfaction with academic programs and student support services as well (Appleton-Knapp & Krentler, 2006; Arambewela & Hall, 2009; Athiyaman, 2004; Conant, Brown, & Mokwa, 1985; Franklin & Shemwell, 1995; Gwinner & Beltramini, 1995; Kitchroen, 2004; Orpen, 1990; Southward, 2002). Franklin and Shemwell (1995), in particular, posited that EDT provides a more appropriate framework to measure student satisfaction because it allows researchers to consider how students' intrinsic expectations of advising impact satisfaction ratings.

Definitions of Terms

Academic Advising: “a developmental process which assists students in the clarification of their life and/or career goals, development of educational plans, and adaptation into the academic environment. It is a decision-making process by which students realize their maximum educational potential through communication and information exchanges with an advisor; it is an ongoing, multifaceted responsibility of both student and advisor” (Crockett, 1987). For the purpose of this study, academic advisor refers to a full-time foreign student staff advisor who provides both immigration and academic advising services.

Community College: a regionally accredited institution that awards the associate in arts or the associate in science degree as the highest degree (U.S. Department of State, 2016).

Disconfirmation: the discrepancies between prior expectations and actually perceived performance of a product or a service (Churchill & Suprenant, 1982)

Expectations: customers’ anticipation of a product’s or a service’s performance (Churchill and Surprenant, 1982)

Expectation Disconfirmation Theory: initially proposed by Oliver (1977, 1980) in the field of consumer behavior and marketing research, EDT stipulates that customers’ satisfaction is in part determined by the direction and level of disconfirmation of their initial expectations (Oliver 1977, 1980; Oliver, Rust, & Varki, 1997).

International Student: a foreign student who is a legal citizen of another country, has a non-immigrant visa, and is currently enrolled at an institution of higher education

(NAFSA, 2017). For the purpose of this study, the terms international student and foreign student are used interchangeably.

NACADA: formerly known as the National Academic Advising Association, this professional association now referred to as the Global Community for Academic advising is dedicated to the support and professional growth of academic advisors through its mission of promoting quality academic advising in institutions of higher education (NACADA, 2005).

Performance Gap: the difference in students' expectation scores and their satisfaction scores (Juillerat, 1995).

Satisfaction: a positive outcome of purchase and use of a product or a service based on a "consumer's evaluative comparison of the rewards and costs of a purchase in relation to the expected consequences" (Churchill & Suprenant, 1982).

Student Affairs Practitioners/Student Affairs Professionals: people who provide services and support for students at institutions of higher learning to enhance student growth and development (Rupande, 2015, p. 26).

Organization of Dissertation

This dissertation is comprised of five chapters. Chapter 1 provides a brief overview of recent trends in international students' enrollment in the United States and a succinct discussion of the impact of academic advising on student success. It establishes the need for developing a better understanding of international students' expectations of and satisfaction with academic advising from a consumer point of view in light of the

increasing commercialization of higher education. The chapter concludes with definitions of terms frequently used in the study.

Chapter 2 includes a review of literature relevant to the study of undergraduate international students' expectations and satisfaction with academic advising at a large community college in a southeastern state. It highlights scholarship pertinent to international student enrollment in two- and four-year institutions and synthesizes prior scholarship on academic advising and student satisfaction assessment in higher education. Included in this section is an overview of commercially-developed instruments of measuring student satisfaction including satisfaction with academic advising.

Chapter 3 outlines the study design, the data collection and analysis methodology, and the research site and participants. It also addresses the reliability and validity of the data collection instrument.

Chapter 4 presents the statistical analysis of the data and discusses the results of the study whereas Chapter 5 summarizes the key findings of the study, reviews the limitations of the study, and presents recommendations and implications for future research.

Summary

Chapter 1 outlined the aim and scope of this study which seeks to identify international students' expectations for academic advising and their satisfaction with their advising experience at a large community college in a southeastern state. Previous researchers on academic advising services have not distinguished between domestic and international students' expectations of and satisfaction with advising especially at the

two-year and community college levels and in organizational structures where foreign student advisors serve as both the students' academic and immigration advisors. Such research is timely in the face of increasing demands for institutions of higher education to meet international students' consumer expectations with regard to educational services in the United States.

CHAPTER 2 LITERATURE REVIEW

Introduction

This chapter offers a review of the literature relevant to the study of undergraduate international students' expectations of and satisfaction with academic advising at a large community college in a southeastern state. This prior scholarship establishes the conceptual and theoretical framework for this study.

The first section of the literature review addresses the internationalization of higher education in the United States; it reviews scholarship pertinent to international student enrollment in two- and four-year institutions and highlights the economic impact that international students have on higher education. Reviewing the literature on historical trends related to international student enrollment is essential in increasing one's understanding of institutional policies and initiatives that have the potential to contribute positively to international student enrollment in the face of growing competition from UK, Australia, and Canada for foreign students. It also permits the exploration of the level of international students' expectations for and satisfaction with their academic advising as part of their educational experience.

The second section of the literature review addresses the scholarship on academic advising and student satisfaction assessment in higher education. Included in this section is an overview of commercially-developed instruments of measuring student satisfaction including satisfaction with academic advising. The overarching goal of this literature review is to connect the theoretical underpinnings of a consumer-oriented framework of

customer satisfaction with prior research on academic advising and recent trends in international student enrollment.

Recent Trends in International Student Enrollment in the U.S

As mentioned in chapter 1, the 2017 Institute of International Education (IIE) report registered a record high number of 1,078,822 of international students enrolled in U.S. colleges and universities in academic year 2016-2017. This constituted an increase of 3.4% compared to the previous year. These numbers represent a continuing upward trend in international student enrollment, a trend which began in academic year 2006-2007 after a four-year decline in enrollment following the September 11, 2011 attacks and the heightening of immigration regulations for foreign students. Worth noting is that the state of Florida, which ranks seventh in international student enrollment, enrolled 45,718 international students in 2016-2017, a 5.2% increase compared to 2015-2016 (IIE, 2017a).

Although international students have maintained a growing presence at universities across the country since the beginning of the 20th century, their enrollment in community colleges has been more of a mid-20th century development. The first data regarding foreign students enrolled in community colleges came from a 1969 report of the IIE and provided the first rough estimate of 13,003 international students enrolled in 486 two-year institutions (Bevis & Lucas, 2007), though the numbers were more of an estimate rather than a precise count. In the most comprehensive history of international students in the U.S., Bevis & Lucas discussed some noteworthy differences in the population of international students as a whole and the foreign students enrolled in the

community colleges. Though Asia has been historically the place of origin for an overwhelming number of international students enrolled in four-year institutions, “forty-five percent of foreign student enrollment in two-year institutions were from Latin America, compared with a national percentage of about 20 percent (Bevis & Lucas, 2007, p. 167-168).

More recently, IIE estimates indicated that in 2016-2017, 96,472 international students were enrolled in one of the 1,655 of community colleges in the United States. International students comprised 8.9% of the total international student enrollment in U.S. higher education institutions and 1.4% of the total community college enrollment (IIE, 2017b). Enrolling 1,201 international students at the time of the present study, the community college that represents the research site for this project ranked among the top 20 associate’s institutions hosting international students in 2016-2017, a significant growth from its top 30 ranking with 763 international students in 2013-2014 (IIE, 2017b). These numbers suggest that the recent trends of rising enrollments are likely to continue in the coming years, thereby providing institutions with higher tuition revenue while simultaneously increasing the pressure to satisfy international students’ expectations of the educational experience.

Economic Impact of International Student Enrollment

According to a report published by the National Association of Foreign Student Advisors (NAFSA), the 1,078,822 international students studying at U.S. colleges and universities and their dependents contributed approximately \$36.9 billion and supported more than 450,331 jobs in the U.S. economy during the 2016-2017 academic year, a

significant increase in contribution to the economy and in jobs supported from the previous 2015-2016 academic year. Although the number of international students enrolled in the U.S. higher education has continued to grow, competition for attracting these students has stiffened (Wildavsky, 2010). Several countries have established national policies to increase global student recruitment. Chief among them is Japan with its ambitious goal of increasing its international student enrollment from 120,000 to one million students by 2025 (Wildavsky, 2010). Similarly, The UK and Australia have long developed comprehensive recruitment programs for international students and have established themselves as direct competitors of the United States in the global market for foreign students (Pandit, 2007). International students and scholars have become a significant source of revenue not only for U.S. higher education institutions but also for K-12 and colleges and universities in Canada, United Kingdom, Australia, and Germany, among others (Kuehn, 2012; Kunin & Associates, 2009; Labi, 2012; Walker, 2010; Zevallos, 2012). Kuehn's report on the economic impact of foreign students revealed that in 2011-2012 international students studying in the province of British Columbia generated a record amount of \$138,848, 821 in tuition revenue for the academic year due in part to an increased enrollment of roughly 500 students from the previous year. In an earlier study commissioned by the Department of Foreign Affairs and International Trade, Kunin & Associates concluded that "[i]n 2008, international students in Canada spent in excess of \$6.5 billion on tuition, accommodation and discretionary spending; created over 83,000 jobs; and generated more than \$291 million in government revenue (p. III). Similarly, Zevallos (2012) stated that Australian universities are increasingly

relying on revenue generated from international students as they “contribute \$15.9 billion to Australia’s economy through tuition fees and living expenses” (p. 41).

The internalization of education continues to be one of the main challenges that universities face because of the increasing mobility of foreign students. As internalization becomes a priority and often a part of the mission of American higher education institutions, it is important that colleges and universities are prepared to adequately meet the needs of the growing international student population by providing them with a quality academic experience and fostering a campus environment that promotes student development and engagement in meaningful learning practices. Meeting students’ needs and expectations and striving to maintain student satisfaction and loyalty have become key objectives for many universities. Investigating international students’ expectations with regard to advising services and their levels of satisfaction with services is, therefore, a timely endeavor given these students’ status as a “hot global commodity” (Pandit, 2007, p.156) and in light of their significant economic impact.

Approaches to Academic Advising

The birth of modern day academic advising can be traced back to Charles William Eliot, former president of Harvard College, who in the late 19th century suggested that faculty should assist and advise students outside of the classroom as well as inside. This emphasis on advising students on matters related to their educational experience was also at the core of the advising initiative at Alfred University where the first form of what has come to be known as academic advising emerged under the leadership and direction of one of its presidents in the middle of the 20th century (Frost, 2000). The proposed

academic advising initiative involved the development of a “personnel” office charged with enculturating freshman and sophomore students to the history and tradition of the university (Frost, 2000). This initial version of advising was grounded in both a concern for the interest and welfare of the student and in the emphasis on the appropriate scholarly activities expected of university students. Since then, academic advising centers staffed by student development or student affairs practitioners have flourished across American higher education institutions, in large part in response to growing student enrollments (Winston, 1989).

Much of the early literature on academic advising focused on defining and characterizing the various approaches to academic advising, and later on, on determining student preferences with one or both of the dominant advising styles, namely developmental and prescriptive advising. Crookston’s (1972) and O’Banion’s (1972) groundbreaking work established student development as the theory base of academic advising. Crookston, in particular, posited two distinct types of advising, prescriptive and developmental. He defined prescriptive or traditional advising as a relationship built on the authority and expertise of the advisor with the advisor providing the student with the institutional course registration and graduation requirements that the student was then supposed to follow. According to Creamer and Scott (2000), the prescriptive approach to advising is concerned primarily with informing students about requirements for a specific course or a degree program.

The developmental approach to academic advising, on the other hand, takes a much different view on the role of the advisor in the advisor/advisee relationship.

Developmental advising style, as defined by Crookston (1972), is based on “the belief that the relationship itself is one in which the academic advisor and the student differentially engage in a series of developmental tasks, the successful completion of which results in varying degrees of learning *by both parties* (p. 13). Developmental advising, according to Crookston, “is concerned not only with a specific personal or vocational decision but also with facilitating the student’s rational processes, environmental and interpersonal interactions, behavior awareness, and problem-solving, decision-making and evaluation skills” (p. 12). O’Banion (1972), whose advising model was geared primarily toward community colleges, concurred that “related to the rationale that the student is a whole person is the recognition that the steps in academic advising form a whole process” (p. 66).

In the developmental advising model, a bond is formed between an advisor and an advisee, and their interaction is focused more on helping the advisee achieve personal and professional growth. Developmental advising, as viewed by Creamer and Scott (2000), requires advisors to not only be knowledgeable on a broader range of topics but to also encourage students to discuss and set personal, professional, and life goals. To advise developmentally, Raushi (1993) agreed, is to view the student at work on life tasks and in context of his or her whole life setting that includes the college experiences. To this end, advisors have the responsibility to foster an advising relationship that encourage students to develop a life purpose plan. Similarly, Ender (1997) defined developmental advising as a special relationship between advisor and advisee, in which the relationship is supportive of the student’s quest for a better educational experience. The wise advisor, according to

Ender and Wilkie (2000), considers the students' interests, aptitudes and chosen academic or career path when helping them to plan life goals. Within the context of developmental advising, the advising process moves beyond discussions of course registration and matriculation requirements and instead becomes a model of shared responsibility between the advisor and the advisee as a means for enhancing a student's decision-making skills.

Ender, Winston, and Miller (1982) identified the primary characteristics of developmental advising as follows: (a) developmental advising is a process, (b) developmental advising is concerned with human growth, (c) developmental advising is goal related and its goals are central to its purpose, (d) developmental advising requires the establishment of caring human relationship, (e) advisors serve as adult role models and mentors, (f) developmental advising is the cornerstone of collaboration between academia and student affairs; and finally (g) developmental advising utilizes all campus and community resources (p. 7-8). Not surprisingly, then, the National Academic Advising Association (NACADA) promoted the developmental advising model because of the perceived link to retention, decreased attrition, and the assumption that it made the university more oriented to students (Pardee, 1994).

Earlier scholarship on academic advising examined the dichotomy of prescriptive and developmental advising and overwhelmingly positioned developmental advising as the preferred advising style (Alexitch, 1997; Crookston, 1972; Fielstein, Scoles, & Webb, 1992; Grites & Gordon, 2009; King, 2005; O'Banion, 1972; Winston, Ender, & Miller, 1982). In their survey of 429 undergraduate students, Hale, Graham, and Johnson (2009),

for instance, discovered that 95.5% of the students preferred developmental advising over prescriptive advising. Additionally, students with developmental advisors and a preference for developmental advising had significantly higher satisfaction than students with prescriptive advisors and a preference for developmental advising. Herndon, Kaiser, and Creamer (1996) also concluded that both male and female students preferred developmental academic advising to traditional academic advising with female students having a significantly higher preference for the developmental method than male students.

Recent studies on academic advising, however, have suggested that prescriptive advising is not necessarily all bad either because knowledge of relevant degree requirements and academic policies is extremely important to students. In fact, research suggested that students were not universally satisfied with developmental advising alone (Mottarella, Fritzsche, & Cerabino, 2004; Smith, 2002) and that they did not consider prescriptive or developmental approaches to advising as mutually exclusive. Empirical research (Fielstein, 1989; Saving & Keim, 1998) indicated that most students preferred a combination of developmental and prescriptive advising styles depending on the specific advising activity at hand and the student's developmental level. Furthermore, Weir, Dickman, and Fuqua (2005) argued that both forms of advising could be necessary components of advisement sessions over time and that "they could be complimentary rather than mutually exclusive" (p. 75). Smith and Allen (2006) agreed that effective advising likely includes both developmental and prescriptive attributes and that offering only one style of advisement was not in the best interest of students.

Academic Advising and Student Satisfaction Assessment in Higher Education

Academic advising is often regarded as one of the key components in higher education that directly impact student development and success (Astin, 1993; Chickering & Gamson, 1987; Tinto, 1993; Tuttle, 2000). Various studies have documented the positive effects of academic advising on student persistence (Elliott & Healy, 2001; Pascarella & Terenzini, 2005; Swecker, Fiftolt, & Searby, 2013), on satisfaction with the institution (Anderson et al., 2014; Roberts & Styron, 2010; Sutton & Sankar, 2011; Teasley & Buchanan, 2013), and on overall academic and personal success (Allen & Smith, 2008; Smith & Allen, 2006; Young-Jones et al., 2013). Research on academic advising encompasses a wide range of topics from addressing faculty members' perceptions of advising (Allen & Smith, 2008; Harrison, 2009) and students' needs and desires for academic advising (Christian & Sprinkle, 2013; Smith & Allen, 2006) to ways to educate and support students outside of the classroom (Burt, Young-Jones, Yadon, Carr, 2013), and, most frequently, ways to improve academic advising (Freeman, 2008; Hunter & White, 2004; Johnson & Morgan, 2005; Sullivan-Vance, 2008).

For decades, scholars have asserted that effective academic advising is crucial in supporting student persistence and graduation and can positively and constructively impact student attitudes toward college, learning, academic and personal development, motivation, and retention (Bean, 1985, 2005; Chickering & Reisser, 1993; Grites & Gordon, 2000; Pascarella & Terenzini, 2005). Crockett (1985), for instance, suggested that "Academic advising, effectively delivered, can be a powerful influence on student development and learning and as such, can be a potent retention force on campus" (p.

24). Pizzolato (2008) explained that “An academic advisor who has built a one-on-one relationship with a student over an extended period of time is in an ideal position to become a partner in helping shape the advisee’s academic experience” (p. 18). The National Academic Advising Association (NACADA, 2005) agreed that, “Few experiences in students’ post secondary career[s] have as much potential for influencing their development as does academic advising.” According to Nutt (2003),

Academic advising is the only structured activity on the campus in which all students have the opportunity for one-to-one interaction with a concerned representative of the institution.... academic advising is the very core of successful institutional efforts to educate and retain students. For this reason, academic advising...should be viewed as the “hub of the wheel” and not just one of the various isolated services provided to students. Academic advisors provide students with the needed connection to the various campus services and the students. In addition, academic advisors offer students the personal connection to the institution that the research indicates is vital to student retention and student success. (¶3)

Gordon and Habley (2000) concurred that academic advisors can foster positive connection with students and establish themselves both as knowledgeable student advocates and important resources. Similarly, Kuh (1997) also stressed the importance of academic advising:

For many students, advisors are the only institutional agents who seem to know what is required to negotiate the academic path to graduation. In a sea of

ambiguity, somebody with definitive answers is a lifesaver! Few others know students as well as their academic advisors. Thus, academic advisors are uniquely qualified to help students decide not only what classes to take, but also what to make of college. (p. 9)

More recently, Drake, Jordan, and Miller (2013) emphasized the important connection between academic advisors and advisees in fostering student success. Drake (2013) maintained that academic advisors often “play a powerful and central role in student success by providing [students] the opportunity (sometimes the only one) for an ongoing, durable relationship with someone who cares about their academic goals” (p. 22). Effective academic advising not only provides students with guidance with regard to their educational trajectory but also often enhances student achievement. As noted by Deil-Amen (2011), Dykes-Anderson (2013) and Smith and Allen (2014), guidance and support from an academic advisor can counteract students’ lack of academic preparation and prevent them from dropping out. Other scholars have stressed that student satisfaction with academic advising has a positive effect on students’ overall satisfaction with and persistence in college (Corts, Lounsbury, Saudargas, & Tatum, 2000; Enos, 1981; Higginson, 2000; Light, 2001; Lotkowski, Robbins, & Noeth, 2004; Soria 2012). Soria, for instance, emphasized the critical link between retention and student satisfaction and acknowledged that more efforts should be committed to learning about the impact of students’ satisfaction with academic advising.

Not surprisingly, then, students’ satisfaction with their educational experience has become an important component of quality assurance in higher education. In his study of

student retention, Kuh (2008), for example, considered the quality of advising on a college campus as among the most powerful predictors of overall campus satisfaction. Across the country, higher education officials have increasingly realized that student satisfaction contributes to an overall favorable image of their respective institutions as well. At the same time, the review of literature on student satisfaction indicated that a higher degree of satisfaction was directly linked to student persistence and retention and academic success (Athiyaman, 1997; DeShields, Kara, & Kaynak, 2005; Elliott & Healy, 2001; Helgesen & Nettet, 2007; Metzner, 1989).

The emphasis on advising satisfaction is particularly important for community college students whose needs, including advising needs, are often different from those of their counterparts at four-year institutions. Scholars such as King (2002) and Shaffer, Zalewski, and Leveille (2010) indicated that advising at community colleges was more student-focused and geared towards a unique and varied study body (e.g., first-generation, commuter students, often from lower socioeconomic backgrounds). Advisors at community colleges, King (2002) claimed, frequently spend more time “on the practical rather than the philosophical” (¶2) aspect of advising; that is, advisors created a class schedule, explained the need for developmental courses, reviewed graduation requirements, and counseled students on availability of student support resources on campus. O’Banion (2013) went even further to suggest that advising is even more critical at the community college level than at four-year institutions:

As community colleges experiment with and engage in promising and high impact practices to improve and expand the student success pathway to

completion, academic advising is emerging as one of the most important programs in a student's experience. (p. xvi)

Given the strong correlation between effective academic advising programs and student retention and satisfaction (CAS, 2011; Drake, 2011; Hale et al., 2009; Winston & Sandor, 2002), it is not surprising that the Council for the Advancement of Standards (CAS) in Higher Education stresses the need for advising services and programs to incorporate an evaluation method using students' feedback to ascertain the effectiveness of these services:

The academic advising program must regularly conduct systematic and quantitative evaluations of program quality to determine the extent to which state mission and goals are being met. Although methods of assessment may vary, the academic advising program must employ a sufficient range of measures to insure objectivity and comprehensiveness. Data collected must include responses from students and other affected constituencies. (Miller, 2001, p. 31)

Similarly, Cuseo (2003) asserted that advisor evaluation has major implications for student satisfaction with and perception of an institution's ideology with regards to student success. Cuseo proclaimed,

Evaluating advisor effectiveness sends a strong and explicit message to all academic advisors that advising is an important professional responsibility; conversely, failure to do so tacitly communicates the message that this student service is not highly valued by the institution. (§2)

With increasing demands to demonstrate accountability, the assessment of how

effective and efficient advising services are has reached a new level of importance. Previous research on students' satisfaction suggested that students' expectations of advising were directly connected to their perceptions of the quality of their advising experience. Similar to customer satisfaction, students' satisfaction with their educational experience depended on a number of factors including the expectations students bring to the experience (Ogletree, 1999). As a result, as Saving and Keim (1998) concluded, students' expectations must be considered when examining the quality and effectiveness of advising support services. Propp and Rhodes (2006) concurred that it is important to include students' expectations when designing effective academic advising, particularly at a time when the concept of students as customers had become increasingly prevalent in higher education. Recent changes in higher education, Propp and Rhodes argued, have forced institutions to view students as customers, re-evaluate how they assess student support services, and examine what gap, if any, exists between international students' expectations for and satisfaction with advising services. Student satisfaction assessment that considers both the students' expectations and their satisfaction is important because it provides the foundation for developing effective student success programs and academic advising services (Pitman, 2000). Without knowing what students' expectations of advising are, advisors may not be in a position to address them and can potentially inadvertently violate them, thereby contributing to students' poor experiences and ratings of the advising process. Lotkowski et al. (2004) agreed that without knowing the expectations of students, it is difficult for advisors to successfully meet student needs and build quality interactions to promote satisfaction and retention.

In an age of accountability and scarce financial resources, student affairs practitioners are often asked to demonstrate the effectiveness of student services using quantifiable and reliable methods of assessment. Current best practices of academic advising assessment are best understood in the context of a learning-centered paradigm. As Campbell and Nutt (2008) explained, “viewing academic advising as an educational process moves it from a paradigm of teaching that focuses on information or inputs to a paradigm of learning that focuses on outcomes for student learning” (p. 4). In recent years the field of academic advising has experienced a paradigm shift in the area of assessment moving away from looking at students’ perceptions of the services they received and towards a more systematic focus on outcomes assessment, both in terms of process/delivery outcomes (P/DOs) and student learning outcomes (SLOs) of academic advising (Robbins & Zarges, 2011). Process/delivery outcomes refers to expectations of how academic advising should be delivered in terms of the academic advising interaction and are typically measured using student satisfaction surveys. Student learning outcomes of academic advising are anchored in the areas of cognitive learning (what students are expected to know), behavioral learning (what students are able to do), and affective learning (what students value) as a result of their academic advising experiences (Campbell, et al., 2005; Powers, Carlstrom, & Hughey, 2014; Robbins, 2009, 2011; Robbins & Zarges, 2011).

While a focus on outcome-based assessment is the direction the field of academic advising is moving towards, the need to consider the student perspective with regards to advising services and particularly their expectations and levels of satisfaction with the

advising they receive remains important as well. Despite the fact that student satisfaction measures cannot capture long-term student learning outcomes and, as Creamer and Scott (2000) pointed out, they “may be influenced by unrealistic or uninformed expectations about the role of an advisor” (p. 344), these types of measures, nevertheless, provide valuable snapshots of students’ perceptions of academic advising.

There are many reasons that justify the need for student satisfaction assessment but perhaps the one that would most significantly impact the field of student affairs is the move towards a business-oriented model of higher education. Scott (1999) explained that the “marketisation of higher education has been promoted as encouraging diversity, quality, and an improved experience for the student-as-customer/consumer” (p. 194), and it is meant to achieve educational institutions’ objectives while taking into consideration the college experience from the students’ perspective. “Higher education is now a business,” (p.197) concluded Scott (1999), in which “educational managers are forced, within a marketised higher education system, to view the teaching and learning process in business terms” (Scott, 1999, p. 197). She suggested that a more appropriate concept than customer satisfaction in the consideration of student services in higher education might be a student-focused paradigm where “in order to achieve quality, the expectations of the students need to be taken into account” (p. 198). Finally, as Upcraft and Stephens (2000) remarked, changing student demographics, including the ever increasing enrollment of international students, had implications for academic advising. As a result, higher education institutions need to become more knowledgeable about the needs and

expectations of their student populations with regard to student support programs and services. As Cuseo (2003) explained:

Applying this satisfaction-vs.-importance rating scheme to the advisor evaluation instrument would, in effect, enable it to co-function as a student *satisfaction* survey and a student *needs assessment* survey. This would be especially advantageous because it would allow for the systematic collection of data on student needs. Historically, institutional research in higher education has made extensive use of satisfaction surveys, which are designed to assess how students feel about what *we* are doing; in contrast, comparatively short shrift to has been given to assessing what *they* (our students) need and want from us. (§ 26)

It is critical, therefore, for higher education institutions to manage international students' attitudes towards their U.S. educational experience by improving the students' perceptions of service performance.

Research on Community College Students' Satisfaction with Advising

Teague's (1977) study of community college student satisfaction with academic advising represents one of the earliest attempts to investigate students' perspective on advising at two-year institutions. Teague compared community college student satisfaction scores with the following four advising models: (a) instructor–advisors with the instructors doing most of the advising, (b) advisor–instructor with the advisor conducting most of the advising, (c) advisors only, and (d) instructors only. A total of 719 students from eight community colleges in Maryland completed the Advising Satisfaction Questionnaire. Using a multivariate analysis of variance and a post hoc analysis, Teague

concluded that significant differences existed among advising models and between full- and part-time students' satisfaction with advising.

A vast majority of research on academic advising, however, has traditionally been confined to four-year institutions whereas recent studies of community college students' experiences with advising have been largely limited to unpublished doctoral dissertations (e.g. Clark, 2013; Dedeaux, 2011; Johns-Reed, 2013; Walleser, 2014). For example, Clark's comparison in satisfaction with academic advising among students at a two-year college and at the four-year institutions into which they transferred revealed that transfer students' level of satisfaction at their four-year institutions was significantly higher than their satisfaction at the community college. In contrast, Dedeaux, in his research on student satisfaction with advising at a rural community college, determined that student demographics impacted participants' ratings of academic advising services and that female and traditional-age participants tended to rate advisors higher than male and non-traditional participants.

Johns-Reed (2013) also focused on examining community college students' satisfaction with academic advising services and the impact that students' characteristics such as gender, race, student status, etc. had on advisement satisfaction. Students from each of the 15 community colleges in Mississippi completed ACT's Survey of Academic Advising and rated their satisfaction with advising at their respective institutions. Interestingly enough, unlike previous studies on this topic, Johns-Reed's findings suggested that there was no statistically significant relationship between students' satisfaction with advisement and their gender or status (non-traditional, first-generation,

commuter or residential student), but students' satisfaction with academic advising was related to their race.

Walleser (2014), in his dissertation research, also found that student variables did not have a statistically significant impact on the students' satisfaction with associate degree academic advising at Madison Area Technical College. A total of 2,365 participants completed a survey of academic advising designed to measure the correlation between student expectations and their satisfaction with the advising services they received. Not surprisingly, the results of the survey showed that students rated advisors' ability to communicate effectively and to provide accurate information related to academic policies and degree and program requirements as most important. Overall, Walleser concluded that a positive correlation existed across the board between students' expectations and their satisfaction levels despite the fact that liberal arts transfer students were generally less satisfied with advising compared to their peers in other academic programs and that white/Caucasian students also indicated lower levels of satisfaction compared to their non-white counterparts.

Research on International Students Satisfaction with Academic Advising

Although international students' overall experiences in American higher education institutions are well documented in the literature, there is a noticeable scarcity of research on their expectations of and satisfaction with academic advising. Similar to research on community college students' experiences with advising, most of the findings on international students' satisfaction with advising services have come from unpublished doctoral dissertations. Khabiri's (1985) doctoral dissertation represents one of the earliest

attempts to examine international students' perceptions of academic advising at a university in the Southwest. A total of 187 international graduate students, 184 domestic graduate students, and 69 graduate faculty advisors completed three separate survey instruments. The instruments were designed to collect demographic data and the participants' satisfaction with academic advising and their perceptions of advisors' interest, roles, and responsibilities in the advising process. Based on descriptive statistics for analysis, Khabiri (1985) concluded international graduate students tended to have higher expectations of advising than did faculty advisors, and that cultural factors may have led students to blame advisors and the advising process in general as a result of their generalized feelings of frustration and perceptions of ineffectiveness of the advising service.

Similar to Khabiri (1985), Tincu (2008) also chose to focus on the advising experience of international doctoral students. Her study aimed to explore how international doctoral students and faculty advisors in the college of education in a Midwestern university perceived their advising experience. Using a qualitative multiple case-study methodology and a phenomenological framework, Tincu conducted in-depth interviews with three international doctoral students and three faculty advisors to gather information about the participants' experiences with regard to advising. Analysis of the interview data indicated that from the students' perspective, language was seen as a means of communication in large part due to the students' language proficiency and ability to communicate clearly and effectively in English. The faculty advisors, however,

indicated that language was a challenging factor in advising communication because it carried the possibility of acting as barrier in the advisor-advisee relationship.

More recently, Kuttig (2012) revisited the study of the academic advising of international doctoral students on female Mainland Chinese students' advising experience. In her dissertation, she aimed to identify the factors that influenced the students' experience with advising and their perceptions of challenges and concerns related to their educational experience. Using a grounded theory approach, Kuttig conducted 28 in-depth qualitative interviews with 12 female Mainland Chinese doctoral students and four faculty and advisors. The findings indicated that overall, female Mainland Chinese doctoral students consider their advising experience to be both rewarding and productive and that they credited their positive and productive advising experience to advisors' support and amiability.

Both Tincu's (2008) and Kuttig's (2012) research was qualitative in nature and was limited to international doctoral students. Mataczynski, however, in a 2013 quantitative dissertation study, sought to explore what institutional and cultural factors impacted international undergraduate students' satisfaction with academic advising and perception of the advising relationship, sense of belonging, and retention. A total of 301 undergraduate international students completed three different measurement tools: The Academic Advising Inventory, Stephenson's Multigroup Acculturation Scale, and The Sense of Belonging to Campus Questionnaire. Mataczynski found that acculturation and a positive advisor-advisee relationship were significant predictors of international students' satisfaction with academic advising. Additionally, acculturation and advising

satisfaction was determined to impact students' sense of belonging which, in turn, represented an important variable in predicting international students' intent to persist to graduation.

It is worth noting that although research on international students' satisfaction with academic advising has been limited, a number of recent studies have focused on other aspects of international students' experiences with advising services. Newell (2015), for instance, reviewed previously published literature on the use of developmental advising in helping student-athletes, and international student-athletes in particular, with transitioning to college life. On the other hand, Zhang (2015), in a qualitative study, examined the construct of intercultural communication competence in academic advisors' experiences in communicating with international students in a community college in Texas. In a separate study, Zhang (2016) investigated what role academic advising played in international community college students' adjustment by validating or invalidating their academic and social experiences.

Instruments for Measuring Student Satisfaction

Student perceptions constitute a primary form of assessment in academic advising because assessment data are most frequently collected through surveys of student satisfaction with their advisor (Powers, Carlstrom, & Hughey, 2014; Severy, Lee, Carodine, Powers, & Mason, 1994; Srebnik, 1988). Some scholars, however, have questioned the reliability of such data given the fact that satisfaction measures could reflect student bias created by unrealistic or uninformed expectations of the advisor (Lotkowski et al., 2004; Powers et al., 2014).

A review of the literature on academic advising assessment indicated that most empirical research studies on student satisfaction are based on either one of the major commercially available instruments or specific models and instruments developed by the authors. The great variety of models and the proliferation of the use of adapted instruments yield a depth and breadth of perspectives on student satisfaction. The drawback, however, is that the results of these studies cannot be easily compared to similar explorations of the same topic.

Nevertheless, there are a number of models in the literature that attempt to connect student satisfaction to other interrelated variables. Srebniak (1988) and more recently the National Academic Advising Association (NACADA 2012) reviewed the dominant qualitative or quantitative evaluation instruments that institutions across the country have created to assess student satisfaction with advising. Although these models differ in the number of variables considered and the methodologies and theoretical frameworks used to analyze the data, they share a similar underlying principle of studying student satisfaction from the perspective of customer satisfaction. Scholars have used quantitative instruments to compare student preferences of advising to advising sessions in practice (Dickson & McMahon, 1991; Fielstein, 1989; Fielstein & Lammers, 1992; Fielstein, Scoles, & Webb, 1992), to explore the differences between student and faculty or staff perceptions of advising (Creeden, 1990; Grites, 1981; Saving & Keim, 1998; Severy et al., 1994), to assess students' overall satisfaction with advising within a specific academic unit or institution (Bitz, 2010; Kelley & Lynch, 1991; Lynch, 2004; Reinartz & Ehrlich, 2002; Smith & Allen, 2006; Zimmerman & Mokma, 2004), and to

investigate the differences between advisor type, professional advisors vs. faculty advisors within departments (Lynch, 2004).

There are also a number of standardized, commercially-developed instruments of measuring student satisfaction that have specifically targeted evaluation of academic advising. These instruments have an already established validity and reliability, were constructed on a rigorous theoretical basis and have been thoroughly vetted for their psychometric properties (Cuseo, 2003; Srebniak, 1988). Some of the most widely adopted instruments include Winston and Sandor's (1984, 2002) Academic Advising Inventory (AAI), The American College Testing's (ACT) Survey of Academic Advising (SAA), and Noel-Levitz' Student Satisfaction Inventory (SSI). These instruments provide not only useful information about an institution but also benchmarks to compare the institution to its peers. The SSI instrument is somewhat unique as it asks students to assess how important each aspect of the academic experience is to them and to simultaneously evaluate their satisfaction with it; unlike the SAA and the AAI instruments which focus solely on academic advising, the SSI is comprehensive in nature and is designed to assess students' satisfaction with their overall college experience including core educational program, student support services, (e.g., academic advising, admissions and financial aid), and campus life.

A number of advising satisfaction studies (e.g. Alexitch, 2002; Anderson et al., 2014; Coll, 2008; Davis & Cooper, 2001; Frost, 1990; Hale et al., 2009; Mottarella et al., 2004; Weird, Dickman, & Fuqua, 2005) employed the Academic Advising Inventory originally developed by Winston and Sandor (1984). The Academic Advising Inventory

is a 52-item questionnaire designed to provide the means for evaluating advising programs. The questionnaire includes four parts:

- Part 1 focuses on developmental and prescriptive advising and measures how the student perceives his/her advising;
- Part 2 examines the frequency of activities a student observes during sessions with his/her advisor;
- Part 3 measure student satisfaction with advising scored on a 4-point scale; and
- Part 4 collects demographic information (Winston & Sander, 1984).

Another widely used commercially-developed instrument for measuring student perceptions of and satisfaction with advising is ACT's Survey of Academic Advising (Belcheir, 1999; Clark, 2013; Crawford, 1991; Dedeaux, 2011; Lynch, 2004; Stolar, 1996). The instrument had been administered at multiple institutions for purposes of assessing student satisfaction with advising which allows for national norms to be established. Noel-Levitz' Student Satisfaction Inventory was also developed as a reliable comprehensive instrument for establishing nationwide students' satisfaction benchmarks. The survey is available in three versions: one specific to four-year private and public institutions; a second one designed for community, junior, and technical colleges; and a third version intended for two-year career and private colleges. The Student Satisfaction Inventory asks students to assign an importance and a satisfaction score to various expectation statements encompassing twelve areas of their college experience. These areas include: (a) academic advising, (b) campus climate, (c) campus life, (d) campus support services, (e) concerns for the individual, (f) instructional effectiveness, (g)

recruitment and financial aid, (h) registration effectiveness, (i) response to diverse populations, (j) safety and security, (k) service excellence, and (l) student centeredness.

Though not exclusively an instrument for measuring academic advising, the Noel-Levitz' Student Satisfaction Inventory is often used in large-scale studies of advising satisfaction and student support (Kress, 2006; Laureano, 2003; Heiserman, 2013; Oja, 2011). Santa Fe Community College, as one example, used the instrument to establish a benchmark of students' perceptions of and satisfaction with support services to help the college prioritize allocation of resources in the process of renewing its learner-centered focus (Kress, 2006).

A significant drawback that all three instruments (Winston and Sandor's Academic Advising Inventory, ACT' Survey of Academic Advising, and Noel-Levitz' Student Satisfaction Inventory) share is their focus on domestic students as their primary target audience. The design of the survey instruments and the subtle nuances in the ways in which the questions are framed could present a daunting reading comprehension challenge for most international students, the majority of whom are non-native speakers of English and whose English language proficiency may not be as advanced as that of their domestic peers. Noel-Levitz' Student Satisfaction Inventory, for example, asks students to rate how important statements such as "Channels for expressing student complaints are readily available." This statement could prove challenging even for domestic undergraduate students to understand let alone for English as a second language learners. Similarly, Winston and Sandor's Academic Advising Inventory requires students to decide which one of the two related and similarly worded statements most

accurately describes the academic advising they have received and then decide how accurate or true that statement is. Students are asked to choose between a pair of statements such as “My advisor suggests what I should major in” or “My advisor suggests steps I can take to help me decide on a major.” Although most native speakers of English will likely naturally differentiate the subtle differences in meaning with regard to advising style, the same cannot be easily said for international students given the slight differences in the ways the two statements are framed.

Finally, it is worth noting that Winston and Sandor’s Academic Advising Inventory does not differentiate between domestic and international students, whereas ACT’s Survey of Academic Advising and Noel-Levitz’ Student Satisfaction Inventory collect information on residency status (in-state, out-of-state, or international, not a U.S. citizen). While the residency variable provides some useful information with regard to domestic students, it can also yield inaccurate or conflicting responses from students who are citizens of a country other than the United States but who have legal permanent resident status in America. Defining the international category under the residency variable as “not a U.S. citizen” excludes students who are permanent residents of the United States but have a foreign citizenship. As it currently stands, the residency variable does not accurately distinguish between domestic and international students. This renders as questionable the surveys’ results of residency status as predictor of student satisfaction. To truly account for domestic and international students’ responses, one must either survey the two populations separately or include non-immigrant visa categories (such as M, J, and F-visas) as part of the residency variable.

In addition to these three commercially developed survey instruments, various other data collecting instruments have been created by scholars to measure student satisfaction with advising services (Allen & Smith, 2008; Smith & Allen, 2006, 2014; Teasley & Buchanan, 2013). Smith and Allen's (2006) Inventory of Academic Advising Functions, for example, identifies 12 advising functions categorized under one of five operational constructs: integration, referral, information, individuation, and shared responsibility. Curricular integration functions are grounded in holistic advising under the premise of helping students connect their academic, career, and life goals. Referral functions familiarize students with the availability of campus resources to address academic and nonacademic problems that can potentially impact students' persistence and retention. The information functions signify the advisors' responsibility to provide students with accurate information about degree requirements and to help students understand institutional policies and procedures, (e.g., deadlines; policies, and procedures with regard to registration, graduation requirements, and grade appeals). The individuation functions include knowing students as individuals and taking into consideration their unique skills, interests, and abilities. Finally, shared responsibility involves helping students develop planning, problem-solving, and decision-making capabilities so that they come to assume greater responsibility for their education. These operational constructs and survey item categories associated with the Inventory of Academic Advising Functions are presented in Table 1.

Table 1
Alignment of Operational Constructs and Survey Item Categories

Operational Construct	Survey Item Categories
Integration	<p><i>Overall connect</i>—advising that helps students connect their academic, career, and life goals.</p> <p><i>Major connect</i>—advising that helps students choose courses in their major that connect their academic, career, and life goals.</p> <p><i>Gen ed connect</i>—advising that helps students choose General Education classes that connect their academic, career, and life goals.</p> <p>Degree connect—advising that helps students decide what degree program to pursue</p> <p><i>Out-of-class connect</i>—advising that helps students identify out-of-class activities (e.g., student clubs and organizations, internships, community service)</p>
Referral	<p><i>Academic referral</i>—advising that refers students to campus resources that address academic problems (e.g. counseling, tutoring services, student life)</p> <p><i>Non-academic referral</i>—advising that refers students to campus resources that address non-academic problems (e.g., child-care, financial, physical and mental health)</p>
Information	<p><i>Academic information</i>—advising that helps students understand academic policies and procedures such as registration deadlines, financial aid, class attendance, graduation, petitions and appeals, etc.</p> <p><i>Accurate information</i>—advising that gives students accurate information about degree requirements.</p>
Individuation	<p><i>Individual's skills</i>—advising that considers students' skills, abilities, and interests when advising them on choosing courses.</p> <p><i>Knowledge of student</i>—advising that gets to know and advise each student as an individual.</p>
Shared responsibility	<p><i>Shared responsibility</i>—advising helps students develop planning, problem-solving, and decision-making skills.</p>

Note: Adapted from Smith and Allen (2006).

Smith and Allen's Inventory of Academic Advising Functions is similar to Noel-Levitz's Student Satisfaction Inventory in that it asks students to rate both the importance

of and their satisfaction with academic advising functions. Unlike Noel-Levitz' SSI, which includes only five statements directly related to academic advising, however, Smith and Allen's survey asks students to rate their expectation of and satisfaction with 12 academic advising functions that cover features of both developmental and prescriptive advising. Students, therefore, score how important they think a specific advising function is using a 6-point Likert-type scale, where 1 indicates "not important" and 6 indicates "very important." This allows researchers to capture students' expectations for academic advising and then compare their scores to their ratings of how satisfied they are with the advising experience.

Criterion Variables in Student Satisfaction Research

Various definitions of the concept of student satisfaction can be found in the scholarship. Seidman (1991) conceptualized satisfaction as "the degree of agreement with positive statements about the faculty and the institution" (p. 16), whereas Astin and Antonio (2012) defined it as students' subjective experience throughout the college years and their perceptions of the value of the educational experience. Regardless of how satisfaction is conceptualized, however, a major thread throughout the literature is the focus on the two categories of factors that influence student satisfaction: (a) personal factors related to the student and (b) institutional factors related to the educational experience. Within the first category of personal factors, variables such as age, gender, race/ethnicity, grade point average, class standing and program of study have all been found to significantly impact student satisfaction (Alexitch, 2002; Clark, 2013; Dedeaux, 2011; Fredericksen, Pickett, Shea, Pelz, & Swan, 2000; Johns-Reed, 2013; Laureano,

2003; Mottarella et al., 2004; Oja, 2011; Porter & Umbach, 2001; Smith & Allen, 2006;).

Within the second category of institutional factors, variables such as advising style (developmental vs. prescriptive) and advisor status (full-time professional staff advisors vs. faculty advisors vs. peer advisors) have been documented to have foremost effect on student satisfaction with academic advising (Anderson et al., 2014; Belcheir, 1999; Coll, 2008; Frost, 1990; Hale et al., 2009; Lynch, 2004; Stollar, 1996; Teague, 1977).

Personal Variables: Age, Gender, Race/Ethnicity

Prior scholarship on academic advising assessment indicated that age, gender, and race/ethnicity are significant predictors of student satisfaction. Smith and Allen found, in their 2006 study at a single institution, that women, older students, and students of color (specifically African American, Asian American, and Hispanic) placed greater importance on advising functions and had higher expectations of advising than their peers. In her doctoral dissertation on student satisfaction with academic advising at a rural community college, Dedeaux (2011) also concluded that students had overall high or very high impressions of their advisors and that student demographics such as gender and age impacted participants' ratings of academic advising services. Female participants, Dedeaux suggested, tended to rate their perceptions of advisors higher than male participants; and traditional-age participants scored advisors higher than non-traditional students.

Similarly, in their study of advising variables that contribute to student satisfaction, Mottarella et al. (2004) concluded that students' ratings of academic advising differed by gender, advising experience, and age. In a 90-minute session, 468

participants in the study completed the Academic Advisory Inventory survey and scored 48 advising scenarios that tested various aspects of approach to advising and the advisor-advisee relationship. Mottarella et al. determined that traditional-aged students expressed greater desire for personal development advising, and nontraditional-aged and non-White students perceived that they had been receiving less interpersonal support from their advisors and were less satisfied with their advising experiences.

In a similar study, Alexitch (2002) administered the Academic Advisory Inventory together with the Learning Orientation-Grade Orientation Scale to 361 first-year undergraduate students to examine the relationship between students' gender, age, grades, and the style and content of advising that students had received from faculty in an effort to predict the style and content of advising that students preferred from faculty. The results of the survey indicated that not all students received the style, content, or frequency of advising that they would prefer to receive from faculty and that student variables, specifically gender, did in fact predict student preferences. Female students, Alexitch found, were more likely to seek help from their advisors and expressed a preference for strong developmental advising.

Not all researchers, however, found a strong correlation between student characteristics and their satisfaction with advising services. Johns-Reed's (2013) findings in a study of community college students' satisfaction with academic advising services suggested that there was no statistically significant relationship between students' satisfaction with advisement and their gender or status (non-traditional, first-generation, commuter or residential student), yet students' satisfaction with academic advising was

marginally related to their race: Caucasian students reported being slightly more satisfied with their advisors than African American and other students.

Personal Variables: GPA, Class Standing, Program of Study, Financial Aid

Other personal variables related to students' academic standing and performance have also been shown to impact expectations of and satisfaction with academic advising. Oja's (2011) investigation of the relationship between students' satisfaction with services at a community college in southern California, for example, revealed that student performance and GPA were statistically related to their level of satisfaction with student services. Specifically, students with lower grades were less satisfied in the areas they rated as important including academic advising and counseling and registration effectiveness.

Similarly, in her doctoral dissertation, Laureano (2003) examined the expectation, satisfaction, and performance gap levels of undergraduate education students enrolled at the University of Central Florida between 1998 and 2001. Using students' responses to the Noel-Levitz' Student Satisfaction Inventory and to the Graduating Seniors Questionnaire (GSQ) distributed to undergraduate graduating seniors, Laureano analyzed their levels of expectation and satisfaction, controlling for the variables of class level, class load, gender, and ethnicity. Comparison of student responses from 1998 and 2001 indicated that students' expectations and satisfaction levels were impacted by their class standing, class load, and ethnicity, but not by gender. Laureano speculated that the changing demographic of the student body at UCF would likely increase the impact that student characteristics have on students' perceptions of and satisfaction with student

services.

Institutional Variables: Advising Style and Advisor Status

In addition to personal variables, prior researchers indicated that institutional variables such as advising style and advisor status also factor in students' satisfaction with advising services. Teague's (1977) study of community college student satisfaction with academic advising represents one of the earliest attempts to compare students' experiences using four different advising models: (a) instructor–advisor with the instructors doing most of the advising; (b) advisor–instructor with the advisor conducting most of the advising; (c) advisors only; and (d) instructors only. Teague concluded that significant differences existed in students' satisfaction with advising models and that these differences correlated, in part, with the differences in full- and part-time student status.

Students' preference for advising style has been shown to predict students' level of satisfaction with the advising services they received. In her examination of the advising attitudes and practices of faculty members at two women's liberal arts colleges, Frost (1990) surveyed students, using the Academic Advising Inventory, to identify advisors who subscribed to the developmental approach to advising. Analyzing the frequency distribution of responses, Frost concluded that developmental advisors use the academic advising relationship to engage students in college experiences; to help students identify what factors contribute to their success, and to demonstrate interest in students' academic and extracurricular progress. The data showed students' appreciation for

developmental advisors who portrayed interest in their individual concerns such as out-of-class activities, classroom experiences, and personal values.

Coll's (2008) research on student's perception of and satisfaction with advising also indicated a strong preference for developmental advising. A total of 191 freshman students completed the Academic Advising Inventory in conjunction with the World Assumption Scale (WAS), a 32-item questionnaire used to assess individual worldviews. The analysis of the two surveys revealed a statistically significant correlation between developmental advising and students' satisfaction, suggesting that students favored a developmental style of advising versus a prescriptive one. Interestingly enough, male and female students reported similar levels of satisfaction with advising despite results indicating significant differences between gender and levels of benevolence in the world. Coll concluded that the style of advising (developmental vs. prescriptive) was more relevant to advising satisfaction compared to overall student characteristics.

Hale et al. (2009) also set out to investigate the relationship between students' perceptions of their advisor's academic advising style (prescriptive or developmental) compared to their preferred advising style. The researchers used the Academic Advising Inventory to assess 429 students' level of satisfaction with academic advising in the College of Agricultural, Food and Life Sciences (AFLS) at their institution. The researchers found that the majority of students (79.8%) identified their current advisor as using a developmental advising style. Hale et al. concluded that nearly all (95.5%) of the respondents indicated preference for developmental advising, a conclusion that supported previous studies in this area. Not surprisingly, students who identified their current

advisor's academic advising style as developmental had significantly ($p < .05$) higher satisfaction with advising than students with prescriptive advisors.

Similarly, Davis and Cooper (2001) compared student perceptions of their academic advisor using the Academic Advising Inventory (AAI) developed by Winston and Sandor because of its focus on the prescriptive and developmental advising styles. They surveyed 198 students at a medium-sized, regional, public, four-year institution in the southeast who evaluated the advising style, activities, and their level of satisfaction with full-time professional vs. faculty advisors. The results of independent t-tests of participants' responses indicated that although students were generally pleased with the academic advising services they are receiving at the institution, they scored professional advisors considerably higher than the faculty advisors on all items of significance. Students' preference for professional advisors was confirmed by Mottarella et al. (2004) whose research revealed that students showed preference for having a professional advisor rather than a faculty advisor and that being known to and receiving support from the advisor were important determinants of their satisfaction with the advising experience.

Belcheir's (1999) study also reported on student satisfaction with advising services using ACT's survey. Belcheir compared student satisfaction with various academic advising models (full-time staff advisors vs. per advisors vs. faculty advisors within specific college or academic unit) at a public university. Based on 890 surveys representing a 75% response rate, Belcheir determined that only 5% of the students considered advising to be exceptionally good, whereas 51% of the students agreed that it

was adequate and 23% rated it as less than adequate. Similar to previous research, students expressed more satisfaction with full-time staff advisors.

Belcheir's conclusions regarding students' preference for professional staff advisors were corroborated by Lynch (2004) in his study of an academic advising system at a Midwestern land-grant university. A total of 28,895 students completed the Advising Satisfaction survey comparing the three advising methods at the university: professional advisors located in centralized advising centers, professional departmental advisors, and faculty advisors whose primary responsibilities are teaching and research. The results of the survey revealed that students advised by professional advisors expressed higher levels of overall satisfaction with their advising and that professional advisors often rated more favorably than faculty advisors; professional advisors, both in the centralized advising centers and in specific departments, were viewed as being knowledgeable about advising and more willing to discuss long-term plans or assist students with nonacademic concerns.

More recently, Anderson et al. (2014) adapted Winston and Sandor's Academic Advising Inventory to examine the relationship between students' expectations about advising and advisors' ability to meet these expectations. Using expectation disconfirmation and expectancy violations theories as lenses, the researchers hypothesized that "the alignment between student expectations of the advising process and perceived advisor behaviors increases student satisfaction with the advising process" (p. 28). A total of 115 participants rated fourteen 7-point Likert-type statements of their perceptions of advisor behaviors along with another fourteen 7-point Likert-type

statements of their expectations of advising. Unlike previous studies, Anderson et al. found that students' expectations were not related to perceptions of behaviors and that there was no correlation between prescriptive expectations and behavior and developmental expectations and behavior. The researchers concluded that the lack of correlation between both prescriptive and developmental expectations and behaviors, as reported by the participants, suggested that students did not perceive academic advisors as meeting their expectations.

In sum, prior research revealed that students' advising needs and expectations may differ on the basis of personal characteristics such as age, gender, race/ethnicity, academic performance, class standing, class load etc. or institutional characteristics such as advising style and advisor status. Student grades/GPA is another criterion variable that has been used in the past. For the purpose of this study, the most commonly studied characteristics influencing students' satisfaction with academic advising, (i.e., age, gender, class standing, and program of study), were selected as the criterion variables. In addition, country of citizenship rather than race/ethnicity was also included as a variable given the focus of this study on international students' expectations of and satisfaction with academic advising. Not considered as variables in this study were enrollment (full-time vs. part-time) and employment status because immigration regulations have required all international students to carry a full-time enrollment status and limit employment opportunities to no more than 20 hours of on-campus employment only. Finally, financial aid was also omitted as a variable because undergraduate international students do not receive financial aid comparable to that of their domestic peers.

Table 2
Comparison of Criterion Variables in Academic Advising Surveys

Criterion Variables	Survey Instrument			
	ACT's Survey of Academic Advising	Noel-Levitz' Student Satisfaction Inventory	Winston & Sandor's Academic Advising Inventory	Smith & Allen's Inventory of Academic Advising Functions
Age	X	X	X	X
Gender	X	X	X	X
Race/ethnicity	X	X	X	X
Residency	X	X		
Class standing	X	X	X	X
Degree program		X		
GPA	X	X		
Enrollment status	X	X		X
Advisor type	X		X	X
Length of advising session	X		X	
Number of sessions	X		X	X
Importance rating		X		X
Satisfaction rating	X	X	X	X

Consequently, Smith and Allen's Inventory of Academic Advising Functions was adapted (with permission) and adopted as the data collection instrument for this study. The survey's focus on students' expectations of and satisfaction with academic advising aligns with the purpose of this research project and the expectation disconfirmation theoretical framework that grounds it.

The Expectation Disconfirmation Theoretical Framework

Within consumer and marketing studies, Hunt's (1977) definition of consumer satisfaction is one that has often been quoted. "Consumer satisfaction with a product," wrote Hunt, "refers to the favorableness of the individual's subjective evaluation of the various outcomes and experiences associated with buying it or using it" (p. 49). In the context of education and advising services in particular, student satisfaction can be said to

refer to the favorability of students' subjective evaluations of the overall experience of their relationships and interaction with their academic advisor.

Expectation Disconfirmation Theory, originally developed in the field of consumer studies to examine customer's satisfaction with a product or service, has garnered increased popularity as a framework for assessing student satisfaction with academic support services and their overall educational experience (e.g. Anderson et al., 2014; Appleton-Knapp & Krentler, 2006; Arambewela & Hall, 2009; Athiyaman, 2004; Conant, Brown, & Mokwa, 1985; Franklin & Shemwell, 1995; Spreng & Mackoy, 1996). More recently, Anderson et al. used the premises of the expectations disconfirmation theory and Burgoon's (1993) expectancy violations theory as lenses to investigate the link among students' expectations of the advising process and their perceptions of advisor behaviors and levels of satisfaction with academic advising.

Conant et al. (1985) were among the first researchers to adopt the Expectation Disconfirmation Theory of consumer satisfaction in the context of higher education. Their empirical study sought to evaluate the degree of satisfaction of 262 MBA prospective and current students at a large urban university. The results of the study indicated that both expectations and disconfirmations directly influenced student satisfaction, and that satisfaction was usually correlated with the disconfirmation encountered. Conant et al.'s study provided researchers with a new framework within which to examine student satisfaction in higher education and a renewed view of how expectations can influence student satisfaction in the educational context.

A decade later, Franklin and Shemwell (1995) also asserted that the Expectation Disconfirmation Theory presented a more appropriate framework for measuring student satisfaction and allowed researchers to consider students' satisfaction rating as interrelated to their intrinsic expectations of advising. They questioned the quality of data generated using the traditional way of measuring student satisfaction of advising which included simply asking students whether or not they were satisfied with the advising services they received. Based on a survey of 104 students, Franklin and Shemwell discovered a significant difference in student satisfaction rating when using the disconfirmation model compared to the traditional follow-up satisfaction survey. One measurement at the end of service, they concluded, was not an adequate or authentic way of assessing a multi-dimensional process. They advocated instead that students' expectations of services be measured along with their satisfaction. More importantly, Franklin and Shemwell contended that using the traditional one-question summary instrument at the end of service often gave institutions a misleading view of student satisfaction. In contrast, using a disconfirmation process measured both students' perceived quality expectations and their satisfaction with the service.

Gwinner and Beltramini (1995) also adopted the Expectation Disconfirmation Theory to examine alumni satisfaction with respect to the attributes of the academic department of their major (e.g. quality of instruction, academic advising, course requirements) and the extent to which satisfaction ratings would correlate to future participation in institution-sponsored alumni activities. They surveyed 491 recent marketing graduates of a large urban university. Their responses signaled that alumni

satisfaction was a function of meeting their expectations both at the department level, (e.g. instructor quality, course offerings, faculty availability), and also at the university level, (e.g. parking, advising services, library and computer facilities). Furthermore, alumni satisfaction correlated positively with their behavioral intentions including participation in alumni events and gift giving.

Similarly, Arambewela and Hall (2009) employed Expectation Disconfirmation Theory in a mixed methods study to examine differences in student satisfaction levels with educational and non-educational services among postgraduate international business students from China, India, Indonesia, and Thailand studying in Australia. Arambewela and Hall surveyed 573 postgraduate international students from five different universities in Australia and conducted focus groups with 31 of the participants. Analyses of the survey and focus group data identified seven constructs (education, social orientation, safety, image and prestige, economic considerations, technology, and accommodations) as significant predictors of student satisfaction. Arambewela and Hall concluded that a blanket approach to delivering educational services to all students might not be as appropriate in light of significant differences in student expectations as a result of culturally diverse backgrounds.

Appleton-Knapp and Krentler (2006) used the expectation disconfirmation theoretical framework to predict students' satisfaction with a course by comparing their perceptions to their expectations generated interesting implications for satisfaction studies methodology. They compared the results of two studies they conducted on predicting student satisfaction. The only difference between the studies was in the point

in the research process at which students were surveyed about their expectations.

Analyses of the two studies exposed a marked divergence in the predictive power of the performance gap between the students' expectations of the course and their satisfaction with it. Appleton-Knapp and Krentler found that the performance gap of the Expectation Disconfirmation Theory was adequate at predicting student satisfaction when students were asked to recall their expectations of the course at the end of the semester as part of assessing their satisfaction with it. When students were asked about their expectations of the course prior to or very early in the semester, however, the performance gap between their expectations and actual satisfaction had little predictive power. This could be attributed to students having uninformed or unrealistic expectations about the course at the beginning of the semester.

In addition to studies examining satisfaction with advising services, the Expectation Disconfirmation Theory has also been used in research focusing on various aspects of higher education. O'Leary and Quinlan (2007), for instance, used it to investigate the impact of one telephone interaction between online students and their instructor at the beginning of the semester on students' reported satisfaction with and achievement in the course. Similarly, Schwarz and Zhu (2015) applied it as a lens to determine what effect students' expectations about online homework software and in-person discussion groups have on student engagement. Bordia, Wales, Pittam, and

Gallois (2006) also adapted the Expectation Disconfirmation Theory to develop a model of student expectations about TESOL course content and teaching methodology.

Despite its dominance, EDT is not without its limitations. At its most fundamental level, EDT predicts that customers will evaluate a service favorably as long as their expectations are met or exceeded (Iacobucci, Grayson, & Ostrom, 1994) but that is not guaranteed. As scholars have pointed out, EDT cannot accommodate the dynamic nature of expectations particularly with regards to experiential services rather than tangible products (Hill, 1985; Yuksel & Yuksel, 2001). Consumers might rank their initial expectations of a service differently from how they would rank their expectations if measured after several encounters with the experience. It is possible that multiple encounters of academic advising services impacts to some extent students' expectations. Nevertheless, even with its limitations, the Expectation Disconfirmation Theory has been adopted as conceptual framework in wide range of higher education research studies and has proven to be a suitable context for investigating students' expectations of and satisfaction with educational services.

Summary

Several important themes regarding student satisfaction with academic advising emerged from this literature review. On one hand, domestic students' experiences and satisfaction with advising services at four-year institutions have been well documented in the literature, and several reliable commercially-developed instruments such as the Academic Advising Inventory, the Survey of Academic Advising, and the Student Satisfaction Inventory have been available to researchers. On the other hand, additional

research that seeks to examine students' reported levels of satisfaction with support services and academic advising services in particular in community college settings is much needed as there is a noticeable scarcity of research on international students' expectations of and satisfaction with academic advising at both four- and two-year institutions. Given recent trends in international student enrollment, the all-time record high number of international students in U.S. colleges and universities in academic year 2016-2017, and the economic impact that these students have, it is important that academic advisors have a good understanding of international students' needs and expectations with regard to advising services in order for U.S. colleges and universities to maintain a sustainable advantage in the highly competitive international education market. A consumer-oriented framework, such as EDT, offers a suitable approach of investigating the relationship between international students' advising expectations and their satisfaction with the services they received.

CHAPTER 3 METHODOLOGY

Introduction

The goal of this quantitative study was twofold: (a) to investigate international students' expectations of and satisfaction with academic advising services at the community college level and (b) to explore if performance gap scores support EDT as a predictor of international student satisfaction with advising. This chapter describes the overall research design of the study and the methodology for data collection and analysis. Included is an overview of the data collection instrument and the research site chosen for this study. Finally, the chapter also includes information about the validity and reliability of the data collection instrument.

Research Questions

Congruent with the underpinning principles of quantitative research design, this study is based on quantitative research questions which sought to identify the relationship between two or more variables. According to Johnson and Christensen (2008), a quantitative research question is "an interrogative sentence that asks a question about the relationship that exists between two or more variables" (p. 78). Questions in a quantitative study, Johnson and Christensen stipulated, seek answers to questions such as "How much?" "How frequently?" or "What is the relationship between variable 1 and variable 2?" Therefore, quantitative research questions were appropriate for this study given its focus on determining what international students consider important with regard to advising services and how satisfied they are with the services provided by their

institution. To this end, the study sought to answer the following quantitative research questions:

1. What are international students' expectations of academic advising at a community college in a southeastern state?
2. How satisfied are international students with their academic advising experience at a community college in a southeastern state?
3. Do performance gap scores support Expectation Disconfirmation Theory (EDT) as a predictor of international students' satisfaction with academic advising?
4. Does international students' disconfirmation gap analysis vary by age, gender, country of citizenship, class standing, and degree program?

Research Design

This study utilized quantitative data to determine international students' expectations of their academic advisement experience and level of satisfaction with the services received. A quantitative exploratory study design is appropriate for this study given its aim to assess the connection between variables. Additionally, a quantitative research design permits the researcher to examine independently the variables conditioning student expectations of and satisfaction with academic advising. Lastly, as Flick (2015) explained, one main advantage of quantitative research is that "It allows for the study of a large number of cases for certain aspects in a relative short time frame and its results have a high degree of generalizability" (p. 12) which, in this particular study, leads to a richer data collection, as it allows all international students enrolled in the

institution to participate and share their expectations for and experience with academic advising. A quantitative survey as a data collection instrument also lends itself to a more robust statistical analysis especially when the survey instrument has been developed and tested elsewhere.

Description of Research Setting and Participants

While this study does not pose any known risks to human subjects, approval for the research project was sought from the Institutional Review Boards at the University of Central Florida and at the community college where this research took place (Appendix B).

The public state college that served as the research site for this study had a total enrollment of 60,962 students during 2016-2017 academic year. As an open-access institution, it served a diverse student body comprised of 35.1% Hispanic students, 29.5% Caucasian students, 17.0% African-American students, 4.8% Asian students, and 13.7% other (Hawaiian, Native American, multi-race, etc.). In 2016-2017, 61.3% of the students were pursuing an Associates of Arts degree, 16.7% were enrolled in an Associate of Science program, and 21.3% were non-degree seeking students. Female students comprised 55.8% of the student body (34,030) compared to 43.3% of male students (26,393) (Institutional data from the research site, 2017).

In Fall 2017 when the data collection took place, the college served 1,201 international students from 132 countries. The top five countries of citizenship were Brazil (308 students), Venezuela (208 students), China (50 students), Vietnam (46 students), and Saudi Arabia (36 students). Gender-wise, 566 students of the 1,201

international students identified themselves as female, 606 identified themselves as male, and 29 were reported as other. Eight hundred twenty-five or 68.69% of international students were pursuing an Associates of Arts degree whereas 330 or 27.48% were enrolled in an Associate of Science program. Table 3 below presents the age distribution for all international students enrolled at the college during the Fall 2017 semester (Institutional data from the research site, 2017).

Table 3
Age Distribution of International Students, Fall 2017

Age category	N of students
17 and younger	39
18-24 years	862
25-29 years	132
30-39 years	97
40-49 years	54
50-59 years	17
60 years and older	0

The median age of international students in Fall 2017 was 21 and the mean age was 23.66 (Institutional data from the research site, 2017).

Data Collection and Instrumentation

This study employed Smith and Allen’s (2006) survey on student satisfaction with academic advising as the primary data collection instrument. It allowed for gathering quantifiable information about research participants and their individual attitudes, beliefs, and expectations of a product or service. The survey method was selected as the most viable way to collect quantitative data from the international student population of

interest given Creswell's (2014) assertion that surveys provide an opportunity to capture quantitative descriptions of trends from a broad population and can provide the researcher with opportunities to generalize or draw inferences from a specific data set to a larger population. Additionally, quantitative survey has long been established as the dominant data collection instrument in previous research on students' satisfaction with student services and academic advising in particular (Bitz, 2010; Kelley & Lynch, 1991; Lynch, 2004; Reinartz & Ehrlich, 2002; Smith & Allen, 2006; Zimmerman & Mokma, 2004).

The survey used in this study was adapted, with permission, from Smith and Allen's (2006) Inventory of Academic Advising Functions-Student Version. Although, as indicated in Chapter 2, a number of commercially-developed surveys that seek to measure satisfaction with student services exist, Smith and Allen's survey is most closely related to the scope and goals of this research project and will allow the researcher to gather robust data on what academic advising functions international students consider important and how satisfied they are with the advising services they have received. This survey instrument, with its theoretical grounding in EDT, is particularly suited for this research project, because it allows the researcher to explore the performance gap between students' expectations of and their satisfaction with advising services. The 12 advising functions included in the survey cover the main characteristics of both developmental and prescriptive advising style, as demonstrated in Table 4 below.

Table 4
 Advising Functions Characteristics Included in the Survey

Developmental Advising	Prescriptive Advising
Q10.1 Connect academic, career, and life goals	Q10.2 Courses in the major
Q10.6 Referral to academic resources	Q10.3 General education
Q10.7 Referral non-academic	Q10.4 Degree program
Q10.10 Consider skills	Q10.5 Out-of-class activities
Q10.11 Know student as individual	Q10.8 Policies information
Q10.12 Problem solving skills	Q10.9 Accurate information

For the purpose of this study, Smith and Allen’s original 48-item Inventory of Academic Advising Function-Student Version was modified (with specific attention to preserving the instrument’s validity and reliability) in one of two ways: by either removing questions not aligned with the scope of the research project or by adding questions pertinent to it. Demographic-based questions not relevant to this study were omitted, (e.g. ethnicity, enrollment status, and students’ financial need); immigration regulations stipulate that international students must be enrolled full-time throughout the school year which renders questions regarding enrollment status (part-time vs. full-time) unnecessary. Additionally, questions related to participants’ ratings of advising learning outcomes were removed as well, because these questions do not pertain to the aim and scope of the proposed study.

Instead, demographic questions such as country of citizenship and highest academic degree attained before enrolling at the community college were added to account for the difference in the international student population that is the subject of this

study. Often, international students have some type of higher education experience prior to being enrolled at the community college, and this experience could factor into their expectations of and satisfaction with advising. Similarly, given the scope of this research project, instructions for participants to rate only the academic advising they have received in the International Student Services Office (ISS) were added to the importance and satisfaction questions. The adapted survey, which is contained in Appendix A, retained the original importance and satisfaction measures from Smith and Allen's Inventory of Academic Advising Functions and the six-point Likert-scale ranging from 1 = not at all important to 6 = very important. The language of the importance and satisfaction questions remained unaltered in the adapted version of the survey. This is important to note because the original survey has a high degree of reliability, as recorded by Smith and Allen (2006), with .90 Cronbach's alpha coefficient for the importance ratings and .94 coefficient for the satisfaction ratings.

The adapted survey was administered electronically via Qualtrics to all international students enrolled as full-time students in Fall 2017. They were invited through an email message to provide input on academic advising services at the International Student Services office. The email explained the purpose of the study and included a link to the Qualtrics survey. The survey was launched on November 6, 2017 and remained open until December 30, 2017. A total of 359 students (29.89% of all international students) responded to the survey and answered at least one question; 240 were considered research participants for the purpose of this study representing a 20.65%

response rate for the 1,162 international students who were 18 years or older at the time of the survey and eligible to participate in the study.

Data Analysis

The quantitative data collected through the survey were analyzed using the IBM SPSS software package to generate descriptive statistics and analyses of variances. In addition, SmartPLS 3.0 (Ringle, Wende, & Becker, 2015) was used to address the structural model of the disconfirmation gap.

International students' expectation of academic advising (measured using their ratings of importance of the 12 academic advising functions) and their satisfactions with the advising functions are the primary variables that lay at the core of the Expectation Disconfirmation Theory. Because students' expectations of and satisfaction with academic advising may vary based on their demographics, the respondents' gender, age, country of citizenship, class standing, and degree program were also analyzed.

Descriptive Statistics

Table 5
Alignment of Research Questions, Data Collection, and Data Analysis

Research Question	Data Collection	Data Analysis
What are the international students' perceptions of expectations of academic advising at a community college in a southeastern state?	<u>Quantitative survey</u> Importance ratings of the 12 functions of advising	Descriptive statistics
What are the international students' perceptions of satisfaction with their academic advising experience at a community college in a southeastern state?	<u>Quantitative survey</u> Satisfaction ratings of the 12 functions of advising	Descriptive statistics

Research Question	Data Collection	Data Analysis
Do performance gap scores support Expectation Disconfirmation Theory (EDT) as a predictor of international students' satisfaction with academic advising?	<u>Quantitative survey</u> Satisfaction and importance ratings of the 12 functions of advising	Performance gap score ANOVA PLS-SEM structural model
Does international students' disconfirmation gap analysis vary by age, gender, country of citizenship, class standing, and degree program?	<u>Quantitative survey</u> Demographic data Performance gap score	MANOVA

Reliability and Validity

Fundamental to good quantitative research methodology are two important concepts, namely, reliability and validity. Quantitative research results are considered reliable with regard to the degree to which the same results will be generated if a research study is replicated with a similar group of participants. Validity refers to the degree to which a specific instrument actually measures what it is intended to measure. The data collection instrument used in this study measures international students' perceptions of importance and levels of satisfaction with the 12 concrete functions of academic advising as identified by Smith and Allen (2006). It is important to note that Smith and Allen's survey has been previously administered to thousands of students at nine different institutions which helps its validity.

Reliability, on the other hand, refers to the consistency of the data collection instrument and affects the degree to which a researcher can make generalizations about the results of the study. As mentioned earlier, the original survey instrument that was

used for data collection has been tested using Cronbach Alpha Reliability Test, one of the most commonly used forms of reliability testing. The Cronbach Alpha Reliability Test performed by Smith and Allen (2006) returned a Cronbach's alpha coefficient of .90 for the importance ratings and .94 coefficient for the satisfaction ratings. Although Smith and Allen's survey has been modified for the purpose of this study, the questions related to importance and satisfaction ratings were not altered in any way. Nevertheless, the Cronbach Alpha Reliability Test was performed to ensure the reliability of the results. The test returned a Cronbach's alpha coefficient of .943 for the importance ratings (as seen in Table 6) and .977 coefficient for the satisfaction ratings (as seen in Table 7).

Table 6
Cronbach's Alpha for Importance of Advising Functions Ratings

Reliability Statistics	
Cronbach's Alpha	N of Items
.943	12

Table 7
Cronbach's Alpha for Satisfaction with Advising Functions Ratings

Reliability Statistics	
Cronbach's Alpha	N of Items
.977	12

Originality Score

This manuscript was submitted to iThenticate to ensure the originality of its content. The Chair of the Dissertation Committee discussed the results with the rest of the committee members.

Summary

Chapter 3 provided an overview of the quantitative research design of this study focusing on the research questions that the researcher seeks to answer, the research site and survey instrument chosen for data collection, and the proposed framework for data analysis. The validity of the instrument used to assess respondents' importance and satisfaction ratings was discussed as well.

CHAPTER 4 RESEARCH FINDINGS

Introduction

This study sought to identify what expectations international students' had with regards to academic advising and how satisfied they were with their advising experience at a large community college in a southeastern state in the United States. Additionally, the study investigated how factors such as age, gender, country of citizenship, class standing, and degree program impact international students' expectations of and satisfaction with academic advising. This chapter presents an analysis of the survey data and outlines the major findings of this study which are organized by the four research questions.

First, descriptive statistics were reported for students' importance and satisfaction ratings followed by the results of the analyses of variances. A partial least squares structural equation model (PLS-SEM) was used to test the structural model of the performance gap.

Survey Responses and Participants Demographics

Survey data were collected from November 6, 2017 through December 30, 2017. An email invitation to participate in the survey was sent to all international students enrolled during the Fall 2017 semester at the community college that served as the research site for this study. Reminder emails were sent out on a weekly basis to encourage student participation. A total of 359 students (29.89% of all international students) responded to the survey; 240 of them rated the 12 advising functions on the

basis of importance and satisfaction and are considered research participants for the purpose of this study representing a 20.65% response rate.

Demographic variables provide relevant information about the international students who participated in this study. These data include student gender, age, country of citizenship, degree program, and highest academic degree completed prior to enrolling at this institution. Female students represented 54.2% of total survey respondents as demonstrated in Table 8. This percentage was slightly higher than the college's international student population where female students accounted for 47.12% of the total international students enrolled in Fall 2017 (Institutional data from the research site, 2017).

Table 8
Survey Respondents' Gender Distribution

		Frequency	Percent	Valid Percent
Valid	Male	90	37.5	40.9
	Female	130	54.2	59.1
	Total	220	91.7	100.0
Missing	System	20	8.3	
Total		240	100.0	

Age information for survey respondents was also collected as presented in Table 9. International students between the ages of 18-22 and 23-25 comprised the two largest groups of respondents. The data indicated that the survey respondents were overall representative of the international student population recorded for the college in Fall 2017 when the 18-24 age group comprised 71.77% of the international students that semester.

Table 9
Survey Respondents' Age Distribution

		Frequency	Percent	Valid Percent
Valid	18-22	123	51.3	51.7
	23-25	41	17.1	17.2
	26-29	25	10.4	10.5
	30-39	29	12.1	12.2
	40-61	20	8.3	8.4
	Total	238	99.2	100.0
Missing	System	2	.8	
Total		240	100.0	

Additionally, information about respondents' highest academic degree prior to enrolling at this community college was collected as well. Prior to the launch of this study, anecdotal evidence suggested that a significant number of the international students who chose to enroll at the college had already completed some form of post-secondary education. The survey respondents confirmed this anecdotal evidence; as seen in Table 10, 33.8% of the respondents had an associate or bachelor's or master's degree. The lack of institutional data on international students' highest academic degree prior to enrolling at the college hinders comparison between the survey respondents and the overall international student body.

Table 10
Survey Respondents' Highest Academic Degree

		Frequency	Percent	Valid Percent
Valid	High school diploma or GED	152	63.3	63.9
	Associate degree	25	10.4	10.5
	Bachelor's degree	47	19.6	19.7
	Master's degree	9	3.8	3.8
	Other (please specify)	5	2.1	2.1
	Total	238	99.2	100.0
Missing	System	2	.8	
Total		240	100.0	

Information about the survey participants' current degree program was collected as well. Table 11 breaks down the distribution of the degree programs the participants were pursuing at the time of completing the survey. The Associate of Arts category recorded the highest percentage (55.4%) which is not surprising given that this was the most popular degree program among international students during the Fall 2017 semester.

Table 11
Survey Respondents' Degree Program Distribution

		Frequency	Percent	Valid Percent
Valid	Associate of Arts	133	55.4	55.9
	Associate of Science	90	37.5	37.8
	Bachelor of Science	15	6.3	6.3
	Total	238	99.2	100.0
Missing	System	2	.8	
Total		240	100.0	

Finally, for the purpose of analyzing if students' country of citizenship impacts disconfirmation gap analysis, the top five countries of citizenship for survey participants were identified below (Table 12).

Table 12
 Top Five Countries of Citizenship for Survey Participants

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Brazil	85	35.4	35.4	35.4
	Venezuela	26	10.8	10.8	46.3
	Vietnam	12	5.0	5.0	51.2
	China	8	3.3	3.3	54.6
	Jamaica	5	2.1	2.1	56.7
	Other countries	104	43.3	43.3	100.0
	Total	240	100.0	100.0	

In Fall 2017, the highest numbers of international students enrolled at the college came from Brazil, Venezuela, Vietnam, and China which are the top four countries of citizenship for survey respondents as well. The country of citizenship frequency for the survey responses, then, corresponds to the overall distribution of country of citizenship among the whole international student body at the college.

RQ1: Importance of Advising Functions Results

RQ1: What are international students' expectations of academic advising at a community college in a southeastern state?

The international students who responded to the survey were asked to consider what level of importance they assigned to each one of the 12 academic advising functions as a way to measure their expectations of academic advising. The 6-point Likert-type scale gave students the following response options: very unimportant (V Unimp), unimportant (Unimp), somewhat (S Unimp), somewhat important (S Imp), important (Imp), and very important (V Imp). The responses were coded one through six with

1=very unimportant and 6=very important. Table 13 details the frequency of the students' ratings of the 12 academic advising functions.

Table 13
International Students' Importance of Advising Functions Ratings

	V Unimp	Unimp	S Unimp	S Imp	Imp	V Imp
Connect goals	6 2.5%	3 1.3%	5 2.1%	23 9.7%	58 24.4%	143 60.1%
Courses in the major	6 2.5%	3 1.3%	4 1.7%	22 9.2%	71 29.6%	134 55.8%
General education	5 2.1%	2 0.8%	10 4.2%	31 13.0%	74 31.1%	116 48.7%
Degree program	4 1.7%	7 2.9%	10 4.2%	38 15.9%	76 31.8%	104 43.5%
Out-of-class activities	10 4.2%	14 5.8%	11 4.6%	43 17.9%	71 29.6%	91 37.9%
Referral to academic	7 2.9%	6 2.5%	10 4.2%	33 13.9%	72 30.3%	110 46.2%
Referral to non-academic	6 2.5%	7 3.0%	14 5.9%	41 17.3%	75 31.6%	94 39.7%
Policies information	4 1.7%	4 1.7%	2 0.8%	22 9.3%	62 26.3%	142 60.2%
Accurate information	3 1.3%	1 0.4%	3 1.3%	8 3.4%	57 24.2%	164 69.5%
Consider skills	4 1.7%	3 1.3%	6 2.6%	34 14.5%	82 34.9%	106 45.1%
Know as individual	3 1.3%	4 1.7%	7 3.0%	31 13.2%	65 27.7%	125 53.2%
Problem solving skills	3 1.3%	7 3.0%	16 6.8%	35 14.9%	70 29.8%	104 44.3%

Note: the percentages reported here represent the valid percentages excluding any missing cases.

The lowest category, very unimportant, had single-digit responses across all but one of the 12 advising functions. Only 1.3% to 4.2% of the responses fell into this category; more importantly, with the exception of the “out-of-class activities” function, less than 3% of the respondents ranked the other 11 advising functions as very unimportant. Similarly, in the unimportant category, most of the responses were again in

the single digits with the exception of the same “out-of-class activities” advising function.

Not surprisingly, the large majority of student responses fell in the important or very important categories. When the important and very important responses were added together, the 12 advising functions were easily categorized into three groups. The top group, or functions that most international students viewed as important or very important, included receiving accurate information (93.7%), understanding academic policies and procedures (86.5%), choosing courses in the major (85.4%), and connecting academic and career goals (84.5%). The middle category included knowing the student as an individual (80.9%), considering student’s skills (80%), choosing general education classes (79.8%), referring to academic resources (76.5%), and selecting a degree program (75.3%). The last category of the advising functions that international students rated as least important included identifying out-of-class activities (67.5%), referring to non-academic resources (71.3%), and developing problem-solving skills (74.1%). Noteworthy is the fact that at least 70% of the international students who participated in the survey ranked all but one of the advising sections—identifying out-of-class activities—as either important or very important.

Identifying out-of-class activities had the lowest mean as well. In general, all but two of the 12 advising importance questions had a mean above 5.0 as evidenced in Table 14. The two advising functions international students found to be most important were receiving accurate information and understanding academic policies and procedures. The

two advising functions students found least important were identifying out-of-class activities and referral to non-academic resources.

Table 14
Means and Standard Deviation for Importance Ratings

	N	Min	Max	Mean	Std. Deviation
Connect goals	240	1	6	5.32	1.090
Courses in the major	240	1	6	5.30	1.071
General education	240	1	6	5.16	1.080
Degree program	240	1	6	5.04	1.136
Out-of-class activities	240	1	6	4.77	1.374
Referral to academic	240	1	6	5.05	1.208
Referral to non-academic	240	1	6	4.92	1.207
Policies information	240	1	6	5.37	1.000
Accurate information	240	1	6	5.57	.828
Consider skills	240	1	6	5.15	1.022
Know as individual	240	1	6	5.24	1.032
Problem solving skills	240	1	6	5.02	1.146
Valid N (listwise)	240				

Overall, a substantial majority of the students viewed almost all advising functions as quite important. The functions international students rated as most important are associated with prescriptive advising while the functions they considered relatively less important fall within the developmental advising style.

RQ2: Satisfaction with Advising Functions Results

RQ2: How satisfied are international students with their academic advising experience at a community college in a southeastern state?

In order to determine how satisfied international students were with the academic advising they received at the International Student Services Office, survey respondents were also asked to rate their satisfaction with the 12 advising functions (Table 15). In

recording their level of satisfaction, students could choose from the following response options: very dissatisfied (V Diss), dissatisfied (Diss), somewhat dissatisfied (S Diss), somewhat satisfied (S Sat), satisfied (Sat), and very satisfied (V Sat). The responses were coded one through six with one being very dissatisfied and six being very satisfied.

Table 15
International Students' Overall Satisfaction with Advising at ISS

	V Diss	Diss	S Diss	S Sat	Sat	V Sat
Connect goals	16 6.7%	12 5.0%	18 7.5%	57 23.8%	68 28.3%	65 27.1%
Courses in the major	19 7.9%	19 7.9%	16 6.7%	40 16.7%	77 32.1%	64 26.7%
General education	18 7.5%	16 6.7%	19 7.9%	38 15.8%	83 34.6%	60 25.0%
Degree program	20 8.3%	19 7.9%	24 10.0%	41 17.1%	75 31.3%	57 23.8%
Out-of-class activities	34 14.2%	27 11.3%	15 6.3%	50 20.8%	65 27.1%	45 18.8%
Referral to academic	28 11.7%	23 9.6%	19 7.9%	40 16.7%	73 30.4%	50 20.8%
Referral to non-academic	30 12.5%	22 9.2%	20 8.3%	53 22.1%	65 27.1%	45 18.8%
Policies information	17 7.1%	16 6.7%	16 6.7%	38 15.8%	75 31.3%	74 30.8%
Accurate information	20 8.3%	15 6.3%	18 7.5%	33 13.8%	71 29.6%	79 32.9%
Consider skills	28 12.0%	19 8.1%	14 6.0%	46 19.7%	67 28.6%	60 25.6%
Know as individual	31 13.3%	17 7.3%	20 8.6%	42 18.0%	64 27.5%	59 25.3%
Problem solving skills	32 13.7%	20 8.5%	17 7.3%	46 19.7%	67 28.6%	52 22.2%

Similarly to the importance ratings, the survey respondents rated the “out-of-class activities” advising function as the one they were most dissatisfied with (14.2%) followed by developing problem-solving skills (13.3%), and knowing the student as individual (12.9%). The top three advising functions students were satisfied or very satisfied with

included receiving accurate information (62.5%), understanding academic policies and procedures (62.1%), and choosing courses in the major (58.8%). Once again, the functions international students were most satisfied with are associated with prescriptive advising while the functions they were most dissatisfied with fall within the developmental advising style. Also noteworthy is the fact that for all 12 advising functions, more students chose the satisfied response option rather than the very satisfied one.

The satisfaction mean responses did not vary greatly from the importance means. The lowest mean was for the advising function of out-of-class activities (3.93) and the highest was for understanding academic policies and procedures (4.53) followed closely by receiving accurate information (4.51). With the exception of the out-of-class activities advising function, all other functions recorded means above 4.0 as seen in Table 16.

Table 16
Means and Standard Deviation for Satisfaction Ratings

	N	Min	Max	Mean	Std. Deviation
Connect goals	240	1	6	4.46	1.430
Courses in the major	240	1	6	4.40	1.529
General education	240	1	6	4.42	1.485
Degree program	240	1	6	4.28	1.536
Out-of-class activities	240	1	6	3.93	1.678
Referral to academic	240	1	6	4.10	1.628
Referral to non-academic	240	1	6	4.00	1.615
Policies information	240	1	6	4.53	1.502
Accurate information	240	1	6	4.51	1.562
Consider skills	240	1	6	4.22	1.634
Know as individual	240	1	6	4.15	1.664
Problem solving skills	240	1	6	4.08	1.660

Generally, the means for the satisfaction responses were lower than the importance means. The means and standard deviations of the participants' importance and satisfaction ratings for the 12 advising functions are presented in Table 17. For convenience, the table also includes the rank score for importance and satisfaction on each function.

Table 17
Means, Standard Deviation, and Ranks of Importance and Satisfaction Ratings

Advising Function	Importance Rating				Satisfaction Rating			
	N	Mean	SD	Rank	N	Mean	SD	Rank
Connect goals	240	5.32	1.090	3	240	4.46	1.430	3
Courses in the major	240	5.30	1.071	4	240	4.40	1.529	5
General education	240	5.16	1.080	6	240	4.42	1.485	4
Degree program	240	5.04	1.136	9	240	4.28	1.536	6
Out-of-class activities	240	4.77	1.374	12	240	3.93	1.678	12
Referral to academic	240	5.05	1.208	8	240	4.10	1.628	9
Referral to non-academic	240	4.92	1.207	11	240	4.00	1.615	11
Policies information	240	5.37	1.000	2	240	4.53	1.502	1
Accurate information	240	5.57	.828	1	240	4.51	1.562	2
Consider skills	240	5.15	1.022	7	240	4.22	1.634	7
Know as individual	240	5.24	1.032	5	240	4.15	1.664	8
Problem solving skills	240	5.02	1.146	10	240	4.08	1.660	10

On the importance end of the scale, participants rated all but two functions above 5.0 on a 6-point scale. The satisfaction ratings were, perhaps not surprisingly, lower but still on the upper end of the scale with all but one of the functions above 4.0 on a 6-point scale. The top-rated functions showed the least variability in their importance and

satisfaction ratings. The functions with the highest mean importance ratings—accurate information and policies information—were also the two functions students were most satisfied with. At the same time, students reported least satisfaction with the two advising functions they rated least important as well—referral to non-academic resources and out-of-class activities. While some functions showed some discrepancies between rank order of importance and satisfaction ratings, several advising functions (e.g. connect goals, consider skills, problem solving, etc.) received the same importance and satisfaction rank. Overall, however, student satisfaction with the 12 advising functions is not commensurate with the importance they attach to it.

Overall Satisfaction with Academic Advising Results

To better understand international students' experience with academic advising, the survey included a question regarding their overall satisfaction with the academic advising they received at the International Student Services Office at the college. The 6-point Likert scale included the following response options: very dissatisfied (V Diss), dissatisfied (Diss), somewhat dissatisfied (S Diss), somewhat satisfied (S Sat), satisfied (Sat), and very satisfied (V Sat). Two hundred thirty-six students or 98.3% of total respondents indicated their level of satisfaction with advising services. The results are summarized in Table 18 showing student responses in each ranking. Dissatisfied students (very dissatisfied, dissatisfied and somewhat dissatisfied) accounted for 20.8% of the respondents. A total of 58.4% of the respondents were either satisfied or very satisfied with their academic advising received at ISS whereas 19.2% were somewhat satisfied.

Table 18
International Students' Overall Satisfaction with Advising at ISS

		Frequency	Percent
Valid	Very dissatisfied	23	9.6%
	Dissatisfied	13	5.4%
	Somewhat dissatisfied	14	5.8%
	Somewhat satisfied	46	19.2%
	Satisfied	83	34.6%
	Very satisfied	57	23.8%
	Total	236	98.3%
Missing	System	4	1.7%
Total		240	100.0%

In addition to rating their level of satisfaction (or dissatisfaction) with advising services, students were given the opportunity to provide written comments regarding their advising experiences at ISS. Respondents generally disliked the lack of drop-in advising, the need to schedule an appointment to meet with an advisor, the limited number of advisors available at the ISS office, the long wait to meet with an advisor, and the inconsistency in advising styles among the various advisors working in the office. On the other hand, respondents remarked how their experiences with the courteous and knowledgeable advisors who took the time to get to know their particular circumstances as individuals and as students positively impacted not only their level of satisfaction with the advising services they received in the ISS office but also their overall satisfaction with their educational experience and the college as a whole.

From a researcher's perspective, giving respondents the opportunity to provide comments regarding their advising experience yielded an unexpected phenomenon. Some respondents took the open-ended question as an opportunity to explain their satisfaction

with academic advising ratings. One student in particular noted that s/he “didn’t require or request some of these services, so [s/he] marked them as Very Dissatisfied.” To minimize future occurrence of this type and to improve the accuracy of the data sample, future studies using this type of survey should consider including Not Applicable (N/A) as a response option especially for the satisfaction rating questions.

RQ3: Performance Gap Score and Expectation Disconfirmation Theory

RQ3: Do performance gap scores support Expectation Disconfirmation Theory (EDT) as a predictor of international students’ satisfaction with academic advising?

The theoretical model in this study was the Expectations Disconfirmation Model. Oliver (1980) stipulated that the main predictor of customer satisfaction is the difference between perceived and expected quality of service. In theory, the importance rating should influence the level of perceived satisfaction students reported. Thus, an advising function that students considered as very important should have a very high impact on their satisfaction with the advising experiences. To test this assumption, the performance gap score for students’ importance and satisfaction ratings was computed using the means of students’ importance ratings (MADV) and means of their satisfaction ratings (MSAT).

The one-way analysis of variance (ANOVA) in Means was used to determine the structure and strength of the relationship between the means of the students’ importance ratings and the means of their satisfaction ratings. As seen in Table 19, there was a statistically significant difference in international students’ mean expectation ratings and their mean satisfaction ratings of the 12 advising functions as determined by one-way ANOVA ($F(76,163) = 1.60, p = .007$).

Table 19
Performance Gap Analysis of Variance

			Sum of	df	Mean	F	Sig.
			Squares		Square		
MADV *	Between	(Combined)	77.075	76	1.014	1.600	.007
MSAT	Groups						
	Within Groups		103.332	163	.634		
	Total		180.407	239			

Table 20 contains tests for the linear, nonlinear, and combined relationship between the importance and the satisfaction means. The test for linearity has a significance value smaller than .05, indicating that there is a linear relationship between importance and satisfaction ratings. The test for deviation from linearity does not have a statistically significant value which indicates lack of a nonlinear relationship.

Table 20
One-way ANOVA and Test of Linearity Results

			Sum of	df	Mean	F	Sig.
			Squares		Square		
MADV *	Between	(Combined)	77.075	76	1.014	1.600	.007
MSAT	Groups	Linearity	14.153	1	14.153	22.325	.000
		Deviation from Linearity	62.922	75	.839	1.323	.072
	Within Groups		103.332	163	.634		
	Total		180.407	239			

A strength of association measure provides an estimate of the amount of variance in the dependent measure that can be explained or accounted for by the independent measure. As seen in Table 21, the measures of association difference seen in the test ($\eta^2=0.427$) signifies a medium effect size.

Table 21
Measures of Association

	R	R Squared	Eta	Eta Squared
MADV * MSAT	.280	.078	.654	.427

Additionally, survey data were analyzed in a partial least squares structural equation model (PLS-SEM) using the SmartPLS 3.0 software package (Ringle, Wende, & Becker, 2015) to test both the structural model and hypotheses. PLS-SEM models are an alternative to covariance-based structural equation modeling (traditional SEM); in the context of PLS-SEM, factors are the latent variables which are extracted as linear (usually equally weighted) combinations of the measured (indicator) variables. The independent variable was overall satisfaction; the dependent variable of interest was the performance gap. After running the PLS-SEM algorithm, estimates for the constructs in the model (e.g., goodness of measure and path coefficients) were obtained.

Measurement Model

As seen in Table 22, the reflective constructs dealing with performance gap had outer loadings values of 0.784–0.887, average variances extracted (AVEs) of 0.703, and composite reliability values of 0.933, all of which exceed recommendations for reliability and convergent validity (Hair, Matthews, Matthews, & Sarstedt, 2017).

Table 22
Measurement Model using PLS-SEM

Constructs and Items	Outer Loadings	AVE	CR	Rho_A	Cronbach's alpha
Performance Gap		0.703	0.933	0.966	0.961

Constructs and Items	Outer Loadings	AVE	CR	Rho_A	Cronbach's alpha
Understand policies and procedures	0.849				
Academic, Career, life goals.	0.846				
Address academic problems	0.866				
Address non-academic problems	0.830				
Choose General Education classes	0.859				
Choose courses in major	0.887				
Considered skills, abilities, interests	0.857				
Decide what degree program to pursue	0.817				
Get to know students	0.829				
Accurate information about degree requirements	0.847				
Problem-solving, and decision-making skills.	0.784				
Identify out-of-class activities	0.849				

Composite reliability (CR) is a preferred alternative among researchers in PLS-based research to Cronbach's alpha as a test of convergent validity in a reflective model because Cronbach's alpha may over- or underestimate scale reliability. Compared to Cronbach's alpha, composite reliability is said to provide higher estimates of true reliability. The acceptable cutoff for composite reliability is the same as for any measure of reliability, including Cronbach's alpha (Hair, Matthews, Matthews, & Sarstedt, 2017).

To assess discriminant validity of our reflective constructs, the Fornell–Larcker criterion (Table 23) was used with the more conservative heterotrait–monotrait ratio (HTMT; Table 24). The squared AVEs for each construct exceeded correlations with other constructs in the model, providing evidence in support of discriminant validity (Hair et al., 2017); HTMT value for Performance Gap and Overall Satisfaction is 0.693,

which implies that by this measure, discriminant validity for the constructs was established, as the typical cutoff is 0.9 or lower (Henseler, Ringle, & Sarstedt, 2015). The Fornell–Larcker criterion, therefore, indicates discriminant validity.

Table 23
Discriminant Validity: Fornell–Larcker Criterion

Construct	Performance Gap	Overall Satisfaction
Performance Gap	0.838	
	-0.681	1.00

Table 24
Discriminant Validity: Heterotrait–Monotrait Ratio (HTMT)

Construct	Performance Gap	Overall Satisfaction
Performance Gap		
Overall Satisfaction	0.693	

The measurement model (Figure 2) shows that the interactions between constructs were considered reflective.

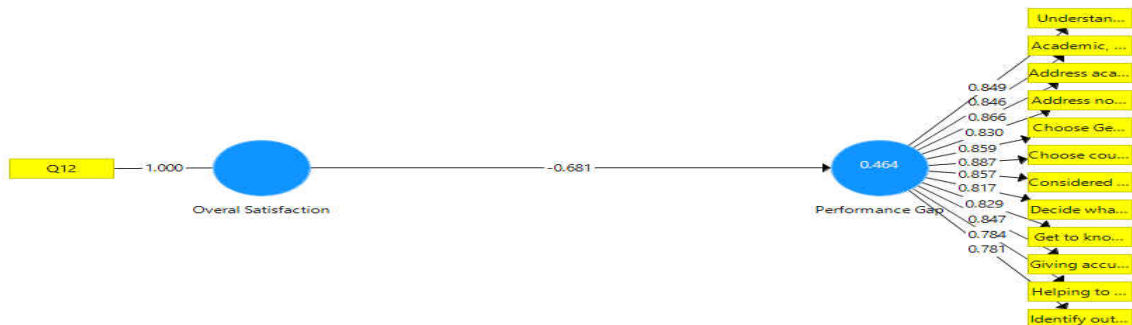


Figure 2: Measurement Model

Assessment of structural model

PLS-SEM is a comprehensive multivariate approach, which can analyze linear relationships between Latent variables (Performance Gap and Overall Satisfaction) to assess the structural model. There are two criteria which should be measured and interpreted, the R^2 measure for the endogenous constructs and the path coefficients (Ali et al., 2018; Chin, 2010).

Results of the analysis (Table 25) show an R^2 of 0.462 for the performance gap.

Table 25
R Square Measure for Performance Gap

	R Square	R Square Adjusted
Performance Gap	0.464	0.462

R^2 , also called the coefficient of determination, is the overall effect size measure for the structural model. The R^2 value indicates the amount of variance in dependent variables that is explained by the independent variables. Thus, a larger R^2 value increases the predictive ability of the structural model. Chin (2010) described results above the cutoffs 0.67, 0.33 and 0.19 to be “substantial”, “moderate” and “weak” respectively. The R^2 here would be considered to be of moderate strength or effect.

Table 26 shows the results of structural model assessment via SmartPLS which can produce the statistical significance of the path coefficients via bootstrapping procedure with a resample of 5000 (Hair et al., 2017). Path coefficients are always standardized path coefficients; path weights, therefore, vary from -1 to +1 with weights closest to absolute 1 reflecting the strongest paths. Weights closest to 0 reflect the

weakest paths. The results of the structural model assessment indicate that overall satisfaction had negative and significant effect on the performance gap ($\beta=.68$; $\rho= 0.000$).

Table 26
Hypothesis Testing

	Path coefficient	t-Value	Supported
Overall Satisfaction -> Performance Gap	-0.681	0.000	Supported

RQ4: Predictors of International Students' Disconfirmation Gap

RQ4: Does international students' disconfirmation gap analysis vary by age, gender, class standing, and degree program?

In order to determine whether international students' disconfirmation gap analysis vary by age, gender, class standing, and degree program, multivariate analysis of variance (MANOVA) was performed. Country of citizenship was not included in the MANOVA test because of the large number of responses. The MANOVA results, as seen in Table 27, revealed that no statistically significant difference across the vectors measured. International students' disconfirmation gap was not significantly dependent on their age, gender, class standing, and degree program.

Table 27
Multivariate Test Results for Demographic Predictors

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power ^d
Intercept	Pillai's Trace	.830	467.324 ^b	2.000	191.000	.000	.830	934.649	1.000
	Wilks' Lambda	.170	467.324 ^b	2.000	191.000	.000	.830	934.649	1.000
	Hotelling's Trace	4.893	467.324 ^b	2.000	191.000	.000	.830	934.649	1.000
	Roy's Largest Root	4.893	467.324 ^b	2.000	191.000	.000	.830	934.649	1.000
Sex	Pillai's Trace	.025	2.403 ^b	2.000	191.000	.093	.025	4.805	.481
	Wilks' Lambda	.975	2.403 ^b	2.000	191.000	.093	.025	4.805	.481
	Hotelling's Trace	.025	2.403 ^b	2.000	191.000	.093	.025	4.805	.481
	Roy's Largest Root	.025	2.403 ^b	2.000	191.000	.093	.025	4.805	.481
Age	Pillai's Trace	.077	1.533	10.000	384.000	.126	.038	15.325	.759
	Wilks' Lambda	.924	1.547 ^b	10.000	382.000	.121	.039	15.472	.764
	Hotelling's Trace	.082	1.562	10.000	380.000	.116	.039	15.617	.768
	Roy's Largest Root	.076	2.929 ^c	5.000	192.000	.014	.071	14.644	.845
Degree program	Pillai's Trace	.013	.604	4.000	384.000	.660	.006	2.417	.199
	Wilks' Lambda	.988	.602 ^b	4.000	382.000	.662	.006	2.407	.198
	Hotelling's Trace	.013	.600	4.000	380.000	.663	.006	2.398	.198
	Roy's Largest Root	.011	1.012 ^c	2.000	192.000	.365	.010	2.025	.225

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power ^d
Class standing	Pillai's Trace	.068	.612	22.000	384.000	.916	.034	13.468	.505
	Wilks' Lambda	.933	.611 ^b	22.000	382.000	.917	.034	13.436	.504
	Hotelling's Trace	.071	.609	22.000	380.000	.918	.034	13.403	.502
	Roy's Largest Root	.050	.867 ^c	11.000	192.000	.574	.047	9.538	.475
<p>a. Design: Intercept + Q1 Sex + Q3 Age + Q6 Degree program + Q5 Class standing</p> <p>b. Exact statistic</p> <p>c. The statistic is an upper bound on F that yields a lower bound on the significance level.</p> <p>d. Computed using alpha = .05</p>									

Summary

By and large, the international students at the college where this study took place were overwhelmingly satisfied with their overall academic advising experiences at the International Student Services Office. Additionally, the advising functions with the highest importance ratings were also those that respondents were most satisfied with as well. However, satisfaction levels in all 12 advising functions were lower than students' expectations, indicating an opportunity to reconsider how academic advising processes are carried out at the college. Performance gap analysis revealed a statistically significant difference in international students' mean importance ratings and their mean satisfaction ratings of the 12 advising functions. The results of the structural model assessment indicated that overall satisfaction had negative and significant effect on the performance gap while age, gender, class standing, and degree program had no significant effect on it.

CHAPTER 5 CONCLUSIONS AND RECOMMENDATIONS

Introduction

The purpose of this study was to identify international students' expectations of and satisfaction with the academic advising services they received at the public college in a southeastern state. A second purpose of the study was to determine if the performance gap score supported Expectation Disconfirmation Theory (EDT) as a predictor of international students' satisfaction with academic advising and what effects age, gender, country of citizenship, and degree program had on it. Descriptive statistics, analyses of variances, and a partial least squares structural equation model (PLS-SEM) were used to answer the four research questions. This chapter discusses the key findings and conclusions from this study, the limitations of the study, and the implications and recommendations for future research.

Discussion of Key Findings and Conclusions

Three major conclusions can be drawn from this study, the first of which is considering the critical role of importance in understanding international students' satisfaction with academic advising. Indisputably students' perceptions of the importance of academic advising functions impacted their perceived satisfaction with the academic advising they received at the International Student Services Office. While students consistently rated the 12 academic functions as important or very important, they reported lower levels of satisfaction with these same functions which, in turn, resulted in a significant negative disconfirmation. At the same time, when asked to evaluate their

overall satisfaction with academic advising, 77.6% of the survey respondents indicated positive level of satisfaction (somewhat satisfied, satisfied, or very satisfied). One way to address the negative disconfirmation between students' expectations of advising and their satisfaction with the actual advising experience could be to engage international students (and advisors) in a meaningful dialogue of the functions of academic advising.

The second key finding speaks to the dichotomy between prescriptive and developmental advising as discussed in the literature on academic advising and students' assumed preference for developmental advising. Research has suggested that developmental advising proves more satisfying to students than prescriptive advising because it allows students to make their own decisions, to set their own goals, and to discover their own solutions to issues raised during their college careers (Fielstein, 1994; Gordon, 1992; Smith, 2004; Winston & Sandor, 1984). While the literature on academic advising positions developmental advising as the preferred advising style, this belief is not echoed in the international students' importance ratings of the 12 academic functions. The results of the survey indicate that international students find importance in both the developmental and the prescriptive aspects of advising. A substantial proportion of the students viewed every advising function, both prescriptive and developmental, as important or very important. When it comes to what aspects of advising international students consider most important, however, the advising functions classified as prescriptive in the advising literature clearly emerged as the dominant category. International students expressed a strong preference for elements of prescriptive advising and expect academic advisors to operate from a position of authority and expertise and to

direct them rather than guide them on their educational path. This preference for prescriptive advising could very well be a residual effect of international students' lack of experience with or understanding of academic advising prior to enrolling at this institution or inability to separate their expectations of immigration advising from academic advising. Because students receive both academic and immigration advising from the advisors in the ISS office, it is possible that their expectations of the academic advising functions, and their subsequent preference for prescriptive advising, are influenced by their perceptions of immigration advising and its highly prescriptive nature.

Advisors at the International Student Services office are both immigration and academic advisors. On the one hand, immigration advising is very prescriptive due to all the federal regulations guiding international students' status in U.S. institutions. On the other hand, the institution that served as a research site has adopted a developmental advising model practiced by the ISS advisors during their academic advising sessions. Students who met with an ISS advisor and received immigration advising most likely experienced a very prescriptive model of advising. This experience may have created an expectation for the same type of advising experience when they came back for academic advising. The difference in the advising styles provided by the same advisor depending on the type of advising services the students needed could affect students' expectations of and ultimately, their satisfaction levels with their academic advising experience.

The third major conclusion is that while academic advising is a highly individualized experience for domestic students, it is even more so for international students with highly diverse backgrounds. Attempts to predict how student demographics

impact student importance and satisfaction ratings and the performance gap between the two were not supported. The disconfirmation performance gap in student views of the importance of different advising functions and their reported levels of satisfaction cannot be explained by demographic variables such as age, gender, country of citizenship, class standing, and degree program.

Limitations of the Study

Like any study, this, too, has limitations which need to be acknowledged. Participation in the study is limited to international students enrolled at a community college in a southeastern state whose demographics are not necessarily representative of the larger body of international students studying in the United States. Whereas nationwide China (20.1%), Vietnam (9.9%), South Korea (6.6%), Japan (5.5%), and Mexico (4.3%) were the top five countries of citizenship of international students at associate degree-granting institutions in academic year 2016-2017 (IIE, 2017a), that is not the case in the southeastern state or the community college where this research projects took place. According to the latest data from the Institute of International Education, in the state of Florida, the top five places of origin of international students are China (18.1%), India (13.3%), Venezuela (7.7%), Saudi Arabia (6.0%), and Brazil (4.1%). As discussed in chapter 4, at the institution of this study, Venezuela, Brazil, China, Vietnam, and Saudi Arabia are the top five countries of citizenship of international students. Thus, this study was limited to international students at one institution whose demographics profile is not necessarily representation of international students at community colleges across the United States.

The underlying premises of the theoretical framework used in this study is another limitation worth acknowledging. The premise of the framework of students as customers implicitly casts all students as consumers without sufficient empirical evidence of the extent to which students themselves express this approach towards their education. More importantly, on a philosophical level, the customer/service provider relationship can be viewed as a narrow characterization of the relationship between students and their academic advisors because advising, and more broadly education, is not simply a commodity students receive in exchange for money (George, 2007).

Finally, since very few academic advising appointments are likely to cover all 12 advising functions, a response option of “Not Applicable” for the satisfaction rating scale should be considered in future studies especially since 32.40% of the survey respondents indicated less than 15 minutes was generally spent in each advising section and 50.52% reported spending between 15-30 minutes.

Implications for Advising of International Students

The results of this study are enlightening and provide awareness of international students’ perceptions of importance and satisfaction with academic advising services. While the advising literature strongly advocates developmental advising, students in this study expressed a strong desire for elements of prescriptive advising.

In consideration of the results of this study, it would appear that international students’ expectation of and satisfaction with advising might improve from the following initiatives:

- Provide professional development training on the principles of developmental and prescriptive advising to advisors in the ISS Office in an effort to improve advisors' ability to deliver good developmental advising. ISS advisors are encouraged and supported to participate in training opportunities focusing on immigration advising; few of them, however, have any formal training in academic advising theories and practices. Their professionalization with regards to academic advising is largely limited to becoming competent with regards to the more technical components of prescriptive advising such as providing accurate information, understanding academic policies and procedures, becoming knowledgeable of degree requirements and courses in the major, etc.
- Allocate additional human resource to adequately meet the advising needs of students. The rapid growth in international student enrollment at the institution has led to a higher than desired advising load for staff members which in turn impacted students' satisfaction with the advising services. Responses to the open-ended question on the survey indicated that students were dissatisfied with the long wait to see an advisor and the limited availability of appointment times for advising.
- Develop student learning outcomes (SLOs) for academic advising as a way to promote a more rounded approach to academic advising and a more directive outcome-based measure of academic advising effectiveness. The process of developing the SLOs could also serve as a

form of professional development for advisors as it encourages candid discussions of what students and advisors value in academic advising.

- Allow students to provide feedback or rate their advising experiences immediately after the advising session which could provide snapshots of potential changes in students' expectations of and satisfaction with academic advising as they experience multiple advising situations.

Implications for Policy and Practice

Academic advising, Creamer (2000) conceptualized, is an educational activity that assists students developmentally with regards to their personal and academic lives. At the same time, changes in students' expectations of higher education and their undergraduate educational experience are precipitating the need to redefine the role of the academic advisor. In most cases, the definition of and the job requirements for advisors have slowly evolved to meet the needs of a diverse college student population. Notwithstanding, what is considered best practices and core values in academic advising remains somewhat resolute over the years. Although previous research on advising styles has discussed the benefits of both the prescriptive and the developmental approaches to advising, developmental advising remains extolled as the core competency model for student-centered advising (Bland, 2003; Campbell & Nutt, 2008; NACADA, 2017; Tuttle, 2000). The benefits of prescriptive advising have been largely overlooked in discussions of the advising preferences of domestic students.

Privileging the developmental style of academic advising overlooks the diverse needs of today's students, particularly international students studying at U.S. institutions

of higher education. The results of this study indicate that international students have high prescriptive expectations for their advisors; additionally, their perceived satisfaction with the advising process corresponds to how well their prescriptive expectations are maintained and met. The results of this study reveal a divergence between academic advising policies and core values as articulated in the literature and the publications of NACADA and the perceived importance that international students place on various advising functions, including those generally associated with prescriptive advising. Therefore, while there is no blueprint for academic advising, the common understanding of student perceptions about the functions of academic advising and their preferences for advising styles need to be retooled.

Recommendations for Future Research

Opportunities for future research on international students' expectations of and satisfaction with academic advising are plentiful. International students' experiences with academic advising particularly at the community college level have not been well researched up to this point. Future studies on this topic could identify different advising functions to consider besides the 12 advising functions used in this study and can be conducted from the perspective of the advisors as well. Understanding which advising functions advisors consider most important, for instance, could provide another dimension of data that can help us understand how international students and their advisors perceive the developmental and prescriptive components of advising.

Additionally, the quantitative data collected in this study report how international students rated the 12 advising functions in terms of importance and satisfaction, but they

do not provide information about the reasons for their responses. Further research, including qualitative research studies, is needed to better understand why some advising functions are more important to international students than others and to also identify the intersections between academic advising and immigration advising.

APPENDIX A
STUDENT SATISFACTION WITH ADVISING SURVEY

STUDENT SATISFACTION WITH ADVISING SURVEY

Part 1: Please respond to the following questions. Choose **one answer** that best represents you.

What is your sex?

- (a) Male
- (b) Female

What is your country of citizenship (please fill in)?

What is your age?

- 18 or under
- 20-22
- 23-25
- 26-29
- 30-39
- 40-61
- 62 or older

What is the highest academic degree you had before enrolling at this institution?

- High school diploma or GED
- Associate degree
- Bachelor's degree
- Master's degree
- Doctoral degree
- Other (please specify)

How many semesters have you attended this school including the current semester (please fill in)?

What is your degree program (select one):

- Associate of Arts
- Associate of Science
- Bachelor of Science

Who do you consider to be your primary academic advisor (select one)?

- (a) International Student Services (ISS) advisor
- (b) Career Programs advisor
- (c) General Advising Center advisor in Student Services
- (d) Program Advisor for articulated programs

How many times did you visit the International Student Services (ISS) office this year for **academic advising**?

- (a) None
- (b) One
- (c) Two
- (d) Three
- (e) Four or more

Approximately how much time was generally spent in each advising session?

- (a) Less than 15 minutes
- (b) 15-30 minutes
- (c) 31-45 minutes
- (d) 46-60 minutes
- (e) More than 1 hour

Part 2: Considering only the academic advising you have received in the International Student Services (ISS) Office this year, respond to the following questions:

On a scale of 1-6, rate the importance of the following academic advising functions to you? (1=not at all important; 6=very important).

How important is it for you that advising...	Not At All Important	Not Very Important	Somewhat Unimportant	Somewhat Important	Important	Very Important
helps students connect their academic, career, and life goals.						
helps students choose courses in their major that connect their academic, career, and life goals.						
helps students choose General Education classes that connect their academic, career, and life goals.						

How important is it for you that advising...	Not At All Important	Not Very Important	Somewhat Unimportant	Somewhat Important	Important	Very Important
helps students decide what degree program to pursue						
helps students identify out-of-class activities (e.g., student clubs and organizations, internships, community service)						
refers students to campus resources that address academic problems (e.g. counseling, tutoring services, student life)						
refers students to campus resources that address non-academic problems (e.g., child-care, financial, physical and mental health)						
helps students understand academic policies and procedures (registration deadlines, class attendance, graduation, petitions and appeals, etc.).						
gives students accurate information about degree requirements.						
considers students' skills, abilities, and interests when advising them on choosing courses.						
gets to know and advise each student as an individual.						
helps students develop planning, problem-solving, and decision-making skills.						

On a scale of 1-6, what is your satisfaction level with the following types of academic advising assistance you have received from your International Student Services (ISS) advisor? (1=very dissatisfied; 6=very satisfied).

My academic advisor	Very Dissatisfied	Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Satisfied	Very Satisfied
helped me connect my academic, career, and life goals.						
helped me choose courses in my major that connect my academic, career, and life goals.						
helped me choose General Education classes that connect my academic, career, and life goals.						
helped me decide what degree program to pursue						
helped me identify out-of-class activities (e.g., student clubs and organizations, internships, community service)						
referred me to campus resources that address academic problems (e.g. counseling, tutoring services, student life)						
referred me to campus resources that address non-academic problems (e.g., child-care, financial, physical and mental health)						
helped me understand academic policies and procedures (registration deadlines, class attendance, graduation, petitions and appeals, etc.).						
gave me accurate information about degree requirements.						

My academic advisor	Very Dissatisfied	Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Satisfied	Very Satisfied
considered my skills, abilities, and interests when advising me on choosing courses.						
gets to know me and advise me as an individual.						
helped me develop planning, problem-solving, and decision-making skills.						

Overall, how satisfied are you with the academic advising you receive in International Student Services (ISS) office? (Select one)

- Very Dissatisfied
- Dissatisfied
- Somewhat Dissatisfied
- Somewhat Satisfied
- Satisfied
- Very Satisfied

Do you have any additional comments regarding your satisfaction with academic advising? (Please be as specific as possible).

APPENDIX B
INSTITUTIONAL REVIEW BOARD APPROVALS



University of Central Florida Institutional Review Board
Office of Research & Commercialization
12201 Research Parkway, Suite 501
Orlando, Florida 32826-3246
Telephone: 407-823-2901 or 407-882-2276
www.research.ucf.edu/compliance/irb.html

Approval of Exempt Human Research

From: **UCF Institutional Review Board #1
FWA00000351, IRB00001138**

To: **Marieta Petrova Chemishanova**

Date: **October 10, 2017**

Dear Researcher:

On 10/10/2017, the IRB approved the following activity as human participant research that is exempt from regulation:

Type of Review: Exempt Determination, Category 2
Project Title: International Students' Expectations of and Satisfaction with Academic Advising at a Community College
Investigator: Marieta Petrova Chemishanova
IRB Number: SBE-17-13418
Funding Agency:
Grant Title:
Research ID: N/A

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research, please submit a Study Closure request in iRIS so that IRB records will be accurate.

In the conduct of this research, you are responsible to follow the requirements of the [Investigator Manual](#).

On behalf of Sophia Dziegielewski, Ph.D., L.C.S.W., UCF IRB Chair, this letter is signed by:

A handwritten signature in cursive script that reads "Renea Carver".

Signature applied by Renea C Carver on 10/10/2017 10:54:46 AM EDT

Designated Reviewer

Human Research Protection (HRP) Institutional Review Board (IRB)

IRB Determination Form

Title of Research Protocol: International Students' Expectations of and Satisfaction with Academic Advising at a Community College

Principal Investigator (PI): Marieta Chemishanova

Date Received by IRB Chair: 10/19/2017

IRB Number: 18-0003

Based on the IRB Protocol Initial Submission Form (or, as appropriate, the IRB Continuing Review/Termination Form or the IRB Addendum/Modification Form) submitted by the Principal Investigator and for the project identified above, the following determination has been made by the IRB:

- Options for IRB determination: exempt, expedited (category 1), expedited with modifications, full review, full review approved, full review disapproved.

Period of Approval: 10/26/2017 to 10/28/2018

Additional details specific to this determination are attached to this letter. It is the Principal Investigator's responsibility to read, understand, and comply with these attachments.

If you have any remaining questions about IRB process, contact the IRB Chair at irb@ .edu

Signature of IRB Chair or Designated Representative: [Handwritten Signature]

Date: 10/26/2017

C: IRB File, IRB Members, PI Supervisor/Administrator

APPENDIX C
PERMISSION TO USE SURVEY

From: Janine Allen <allenjm@pdx.edu>
Date: January 7, 2017 at 7:00:34 PM EST
To: Marieta Chemishanova <mchemishanova@valenciacollege.edu>
Cc: "smithc@pdx.edu" <smithc@pdx.edu>, "allenj@pdx.edu" <allenj@pdx.edu>
Subject: Re: Permission Request For The Use of Survey Instrument

Marieta,

You have our permission to use the survey instrument; we only ask that you credit us for its development.

Because your dissemination research will involve community college students, we thought you might be interested in the articles below where we examined community college students' responses to the survey.

Allen, J. M., Smith, C. L., & Muehleck, J. K. (2014). Pre- and post- transfer student academic advising: What students say are the similarities and differences. *Journal of College Student Development*, 55, 353-367.

Allen, J. M., Smith, C. L., & Muehleck, J. K. (2013). What kinds of advising are important to community college pre- and post-transfer students? *Community College Review*, 41, 330-345.

Best of luck with your research.

Cordially,
Janine Allen and Cathleen Smith

On Fri, Jan 6, 2017 at 2:20 PM, Marieta Chemishanova <mchemishanova@valenciacollege.edu> wrote:

Dear Dr. Smith and Dr. Allen:

My name is Marieta Chemishanova and I am a doctoral student in the Higher Education and Policy Studies Program at the University of Central Florida (UCF). For my dissertation, I am interested in investigating international students' satisfaction with academic advising at the community college level and would like to request permission to use (with full credit and citation) the survey instrument you reported on in your article "Essential Functions of Academic Advising: What Students Want and Get," published in NACADA journal in Spring 2006.

Thank you for your time and consideration.

Sincerely,

Marieta Chemishanova

APPENDIX D
DEMOGRAPHIC COMPARISON OF SURVEY PARTICIPANTS AND
INTERNATIONAL STUDENTS AT RESEARCH SITE

Table A1 Comparison based on gender

		Survey Sample		Research Site International Population	
		Frequency	Percent	Frequency	Percent
Valid	Male	90	37.5	566	47.13
	Female	130	54.2	606	50.46
	Total	220	91.7	1,172	97.59
Missing	System	20	8.3	29	2.41
Total		240	100.0	1,201	100.00

Table A 2 Comparison based on age

		Survey Sample		Research Site International Population	
		Frequency	Percent	Frequency	Percent
Valid	17 or under			39	3.25
	18-29	189	78.8	994	82.76
	30-39	29	12.1	97	8.08
	40-61	20	8.3	71	5.91
	Total	238	99.2	1,201	
Missing	System	2	.8		
Total		240	100.0	1,201	100.00

Table A 3 Comparison based on top 5 countries of citizenship

Country	Survey Sample		Country	Research Site International Population	
	Frequency	Percent		Frequency	Percent
Brazil	85	35.4	Brazil	308	25.65
Venezuela	26	10.8	Venezuela	208	17.32
Vietnam	12	5.0	China	50	4.16
China	8	3.3	Vietnam	46	3.83
Jamaica	5	2.1	Saudi Arabia	36	3.0
Other countries	104	43.3	Other countries	553	46.04
Total	240	100.0		1,201	100.0

Table A 4 Comparison based on degree program

		Survey Sample		Research Site International Population	
		Frequency	Percent	Frequency	Percent
Valid	Associate of Arts	133	55.4	825	68.7
	Associate of Science	90	37.5	330	27.48
	Bachelor of Science	15	6.3	8	0.7
	Other (certificate)	2	.8	38	3.16
Total		240	100.0	1,201	100.00

REFERENCES

- Alexitch, L. R. (2002). The role of help-seeking attitudes and tendencies in students' preferences for academic advising. *Journal of College Student Development, 43*(1), 5-19.
- Ali, F., Rasoolimanesh, S. M., Sarstedt, M., Ringle, C.M., & Ryu, K. (2018). An assessment of the use of partial least squares structural equation modeling (PLS-SEM) in hospitality research. *International Journal of Contemporary Hospitality Management*. Manuscript submitted for publication.
- Allen, J. M., & Smith, C. L. (2008). Importance of, responsibility for, and satisfaction with academic advising: A faculty perspective. *Journal of College Student Development, 49*(5), 397-411.
- Allen, J. M., Smith, C. L., & Muehleck, J. K. (2014). Pre- and post-transfer student academic advising: What students say are the similarities and differences. *Journal of College Student Development, 55*, 353-367.
- Allen, J. M., Smith, C. L., & Muehleck, J. K. (2013). What kinds of advising are important to community college pre- and post-transfer students? *Community College Review, 41*, 330-345.
- Anderson, W., Motto, J. S., & Bourdeaux, R. (2014). Getting what they want: Aligning student expectations of advising with perceived advisor behaviors. *Mid-Western Educational Researcher, 26*(1), 27-51.
- Anthrop, P. S. (1996). *Expectation and satisfaction of freshmen in higher education*. (Unpublished doctoral dissertation). University of Central Florida, Orlando, FL.

- Appleton-Knapp, S. L., & Krentler, K. A. (2006). Measuring student expectations and their effects on satisfaction: The importance of managing student expectations. *Journal of Marketing Education*, 28(3), 254-264.
- Arambewela, R., & Hall, J. (2009). An empirical model of international student satisfaction. *Asia Pacific Journal of Marketing and Logistics*, 21(4), 555-569.
- Ashburn, E. (2007). Some community-college students fall through the cracks in their first month. *The Chronicle of Higher Education*, 54(12), A30.
- Astin, A. W. (1993). *What matters in college: Four critical years revisited*. San Francisco, CA: Jossey-Bass.
- Astin, A. W., & Antonio, A. L. (2012). *Assessment for excellence: The philosophy and practice of assessment and evaluation in higher education* (2nd ed.). Lanham, MD: Rowman & Littlefield Publishers, Inc.
- Athiyaman, A. (1997). Linking student satisfaction and service quality perceptions: The case of university education. *European Journal of Marketing*, 31(7), 528-540.
- Athiyaman, A. (2004). Antecedents and consequences of student satisfaction with university services: A longitudinal analysis. *Academy of Marketing Studies Journal*, 8(1), 89-105.
- Bean, J. P. (1985). Interaction effects based on class level in an explanatory model of college student drop-out syndrome. *American Educational Research Journal*, 22(1), 35-64.
- Bean, J. P. (2005). Nine themes of college student retention. In A. Seidman (Ed.), *College student retention* (pp. 215-243). Westport, CT: Praeger.

- Belcheir, M. J. (1999). *Student satisfaction and academic advising*. Retrieved from <http://files.eric.ed.gov/fulltext/ED433772.pdf>.
- Bevis, T. B., & Lucas, C. J. (2007). *International students in American colleges and universities: A history*. New York, NY: Palgrave-Macmillan.
- Bitner, M. J., & Hubbert, A. R. (1994). Encounter satisfaction versus overall satisfaction versus quality: The customer's voice. In R. T. Rust & R. L. Oliver (Eds.), *Service quality: New directions in theory and practice* (pp. 72-84). Thousand Oaks, CA: Sage.
- Bitz, K. (2010). Measuring advisor relationship perceptions among first-year students at a small midwestern university. *NACADA Journal*, 30(2), 53-64.
- Bordia, S., Wales, L., Pittam, J., & Gallois, C. (2006). Student expectations of TESOL programs: Student and teacher perspectives. *Australian Review of Applied Linguistics*, 29(1), 4.1-4.21.
- Burgoon, J. K. (1993). Interpersonal expectations, expectancy violations, and emotional communication. *Journal of Language and Social Psychology*, 12, 30-48.
- Burt, T. D., Young-Jones, A. D., Yadon, C. A., & Carr, M. T. (2013). The advisor and instructor as a dynamic duo: Academic motivation and basic psychological needs. *NACADA Journal*, 33(2), 44-54.
- Campbell, S. M., & Nutt, C. L. (2008). Academic advising in the new global century: Supporting student engagement and learning outcomes achievement. *Peer Review*, 10(1), 4-7.

- Campbell, S., Nutt, C., Robbins, R., Kirk-Kuwaye, M., & Higa, L. (2005). *NACADA guide to assessment in academic advising*. Manhattan, KS: National Academic Advising Association.
- Chickering, A. W., & Reisser, L. (1993). *Education and identity* (2nd ed.). San Francisco, CA: Jossey-Bass.
- Chin, W.W. (2010). How to write up and report PLS analyses. In V. Esposito Vinzi, W. W. Chin, J. Henseller, & H. Wang (Eds.), *Handbook of partial least squares* (pp. 655-690). Berlin, Germany: Springer-Verlag.
- Christian, T. Y., & Sprinkle, J. E. (2013). College student perceptions and ideals of advising: An exploratory analysis. *College Student Journal*, *47*, 271-291.
- Churcill, G. A., Jr. & Suprenant, C. (1982). An investigation into the determinants of consumer satisfaction. *Journal of Marketing Research*, *19*, 491-504.
- Clark, P. L. (2013). *Transfer students' satisfaction with academic advising services: A comparative analysis of the two-year community college and the four-year institution*. (Unpublished doctoral dissertation). Argosy University, Orange, CA.
- Coll, J. E. (2008). A study of academic advising satisfaction and its relationship to student worldviews. *Journal of College Student Retention: Research, Theory and Practice*, *10*(3), 391-404.
- Community College Survey of Student Engagement. (2015). Retrieved from <http://www.ccsse.org/survey/national3.cfm>
- Conant, J. S., Brown, J. J., & Mokwa, M. P. (1985). Students are important consumers: Assessing satisfaction in a higher education context. *Journal of Marketing*

Education, 7(2), 13-20.

Corts, D. P., Lounsbury, J. W., Saudargas, J. W., & Tatum, R. A. (2000). Assessing undergraduate satisfaction with an academic department: A method and case study. *College Student Journal*, 34, 399-408.

Council for the Advancement of Standards in Higher Education (CAS). (2011). *The role of academic advising programs*. Retrieved from <https://www.uc.edu/content/dam/uc/aas/docs/PDResources/CAS%20Standards%20for%20Academic%20Advising.pdf>

Crawford, A. E. (1991). *Academic advising at UNO. Report of the 1991 survey. Essays Reports*, 4(2). Retrieved from <http://files.eric.ed.gov/fulltext/ED404888.pdf>

Creamer, D. G. (2000). Use of theory in academic advising. In V. N. Gordon & R. H. Wesley (Eds.), *Academic advising: A comprehensive handbook* (pp. 17-24). San Francisco, CA: Jossey-Bass.

Creamer, E. G., & Scott, D. W. (2000). Assessing individual advisor effectiveness. In V. N. Gordon & W. R. Habley (Eds.), *Academic advising: A comprehensive handbook* 9 (pp. 339-348). San Francisco, CA: Jossey-Bass.

Creeden, J. E. (1990). Components of good advising: Differences in faculty and student perceptions. *NACADA Journal*, 10(2), 30-36.

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Los Angeles, CA: Sage.

- Crockett, D. S. (1987). *Advising skills, techniques, and resources: A compilation of materials related to the organization and delivery of advising services*. Iowa City, Iowa: ACT Corporation.
- Crookston, B. B. (1972). A developmental view of academic advising as teaching. *Journal of College Student Personnel, 13*, 12–17.
- Cuseo, J. (2003). *Assessment of academic advisors and academic advising programs*. Retrieved from https://www.nacada.ksu.edu/Portals/0/CandIGDivision/documents/assessment%20of%20advising%20resources/Cuseo_Marymount1.pdf
- Damminger, J. K. (2001). *Student satisfaction with quality of academic advising offered by Integrated Department of Academic Advising and Career Life Planning*. (ERIC Document Reproduction Service No. ED 453-769). Retrieved from <http://files.eric.ed.gov/fulltext/ED453769.pdf>
- Davis, J. S., & Cooper, D. L. (2001). Assessing advising style: Student perceptions of academic advisors. *College Student Affairs Journal, 20*(2), 53-63.
- Dedeaux, V. M. (2011). *An investigation of students' satisfaction with academic advising and students' impressions of academic advisors at a rural community college*. (Unpublished doctoral dissertation). Mississippi State University, Starkville, MS.
- Deil-Amen, R. (2011). Beyond remedial dichotomies: Are “underprepared” college students a marginalize majority? *New Directions for Community Colleges, 155*, 59-71.
- DeShields, O. W., Kara, A., & Kaynak, E. (2005). Determinants of business student

- satisfaction and retention in higher education: Applying Herzberg's two-factor theory. *International Journal of Educational Management*, 19(2), 128-139.
- Dickson, G. L., & McMahon, T. R. (1991). The developmental advising inventory: A new approach to academic advising. *NACADA Journal*, 11(1), 34-50.
- Drake, J. K. (2011). The role of academic advising in student retention and persistence. *About Campus*, 16(3), 8-12.
- Drake, J. K. (2013). Advising as teaching and the advisor as teacher in theory and in practice. In J. K. Drake, P. Jordan, & M. A. Miller (Eds.), *Academic advising approaches: Strategies that teach students to make the most of college* (pp. 17-32). San Francisco, CA: Jossey-Bass.
- Drake, J. K., Jordan, P., & Miller, M. A. (Eds.). (2013). *Academic advising approaches: Strategies that teach students to make the most of college*. San Francisco, CA: Jossey-Bass.
- Dykes-Anderson, M. (2013). The case for comprehensive counseling centers at community colleges. *Community College Journal of Research and Practice*, 37, 742-749.
- Ender, S. C. (1997). Developmental advising. In M. Houland, E. Anderson, W. McGuire, D. Crockett, T. Kaufmann, & D. Woodward (Eds.), *Academic advising for student success and retention*. Iowa City, IA: The Noel Levitz Center for Enrollment Management.

- Ender, S., & Wilkie, C. (2000). Advising students with special needs. In V. N. Gordon & W. R. Habley (Eds.), *Academic advising: A comprehensive handbook* (pp. 118-143). San Francisco, CA: Jossey-Bass.
- Ender, S. C., Winston, R. B., & Miller, T. K. (1984). Academic advising reconsidered. In R. B. Winston, T. K. Miller, S. C. Ender, T. J. Grites & Associates (Eds.), *Developmental advising: Addressing students' educational, career, and personal needs* (pp. 3-34). San Francisco, CA: Jossey-Bass.
- Engel, J. F., Kollat, D. T., & Blackwell, R. D. (1968). *Consumer Behavior*. New York, NY: Holt, Rinehart & Winston.
- Elliott, K. M., & Healy, M. A. (2001). Key factors influencing student satisfaction related to recruitment retention. *Journal of Marketing for Higher Education*, 10(4), 1-11.
- Enos, P. B. (1981). *Student satisfaction with faculty academic advising and persistence beyond the freshman year in college*. (Unpublished doctoral dissertation). University of Iowa, Iowa City, IA.
- Fielstein, L. L. (1989). Student priorities for academic advising: Do they want a personal relationship? *NACADA Journal*, 9(1), 33-38.
- Fielstein, L. L., & Lammers, W. J. (1992). The relationship of student satisfaction with advising to administrative support for advising services. *NACADA Journal*, 12(1), 16-21.
- Fielstein, L. L., Scoles, M. T., & Webb, K. J. (1992). Differences in traditional and nontraditional students' preferences for advising services and perceptions of services received. *NACADA Journal*, 12(2), 5-12.

- Flick, U. (2015). *Introducing research methodology*. Thousand Oaks, CA: Sage.
- Franklin, K. K., & Shemwell, D. W. (1995). *Disconfirmation theory: An approach to student satisfaction assessment in higher education* (ERIC Document no. ED3888199).
- Fredericksen, E., Pickett, A., Shea, P., Pelz, W., & Swan, K. (2000). Factors influencing faculty satisfaction with asynchronous teaching and learning in the SUNY learning network. *Journal of Asynchronous Learning Networks*, 4(3) 245-278.
- Freeman, L. (2008). Establishing effective advising practices to influence student learning and success. *AAC&U Peer Review*, 10(1), 12-14.
- Frost, S. H. (1990). A comparison of developmental advising at two small colleges. *NACADA Journal*, 10(2), 9-13.
- Frost, S. H. (2000). Historical and philosophical foundations for academic advising. In Gordon V. N., Habley, W. R., & Associates (Eds.), *Academic advising: A comprehensive handbook* (pp. 3-17). San Francisco, CA: Jossey-Bass.
- George, D. (2007). Market overreach: The student as customer. *The Journal of Socio-Economics*, 36, 965-977.
- Glennen, R. (1976). Intrusive college counseling. *School Counselor*, 24, 48-50.
- Gordon, V. N., & Habley, W. R. (Eds.). (2000). *Academic advising: A comprehensive handbook*. San Francisco, CA: Jossey-Bass.
- Grites, T. J. (1979). *Academic advising: Getting us through the eighties*. (AAHE-ERIC Higher Education Report No. 7). Washington, DC: American Association of Higher Education.

- Grites, T. J. (1981). Student and self ratings of teacher-advisors. *NACADA Journal*, 1(1), 29-33.
- Grites, T., & Gordon, V. (2000). Developmental academic advising revisited. *NACADA Journal*, 20(1), 12-15.
- Gwinner, K. P., & Beltramini, R. F. (1995). Alumni satisfaction and behavioral intentions: University versus departmental measures. *Journal of Marketing Education*, 17(1), 34-40.
- Habley, W. R. (2000). Current practices in academic advising. In Gordon V. N., Habley, W. R., & Associates (Eds.), *Academic advising: A comprehensive handbook* (pp. 35-43). San Francisco, CA: Jossey-Bass.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Thousand Oaks, CA: Sage.
- Hair, J. F., Matthews, L. M., Matthews, R. L., & Sarstedt, M. (2017). PLS-SEM or CB-SEM: Updated guidelines on which method to use. *International Journal of Multivariate Data Analysis*, 1(2), 107-123.
- Hale, M. D., Graham, D. L., & Johnson, D. M. (2009). Are students more satisfied with academic advising when there is congruence between current and preferred advising styles? *College Student Journal*, 43, 313- 324.
- Harrison, E. (2009). Faculty perceptions of academic advising: "I don't get no respect." *Nursing Education Perspectives*, 30(4), 229-233.
- He, Y., & Hutson, B. (2016). Appreciative assessment in academic advising. *The Review of Higher Education*, 39(2), 213-240.

- Heiserman, J. A. (2013). *An examination of student satisfaction at a private, highly selective university*. (Unpublished doctoral dissertation). Morgan State University, Baltimore, MD.
- Helgesen, O., & Nettet, E. (2007). What accounts for students' loyalty? Some field study evidence. *International Journal of Educational Management, 21*(2), 126-143.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science, 43*(1): 115-135.
- Herndon, J. B., Kaiser, J., & Creamer, D. G. (1996). Student preferences for advising style in community college environments. *Journal of College Student Development, 6*, 637-48.
- Higginson, L. C. (2000). A frame work for training program content revisited. In V. N. Gordon, Habley, W. R., & Associates (Eds.), *Academic advising: A comprehensive handbook* (pp. 298-306). San Francisco, CA: Jossey-Bass.
- Hill, D. J. (1985). Satisfaction and consumer services. *Advances in Consumer Satisfaction, 13*, 311-315.
- Hom, W. (2000). *An overview of customer satisfaction models*. Sacramento, CA: California Community Colleges Chancellor's Office. Retrieved from <http://scr.bi/ISHnsv>
- Hudzik, J. K., & Briggs, P. F. (2012). Trends and institutional implications for international student enrollments in U.S. institutions. *Trends & Insights for*

- International Leaders*. Washington, DC: NAFSA. Retrieved from https://www.nafsa.org/_/File/_/ti_feb_2012.pdf
- Hunt, H. K. (1977). *Conceptualization and measurement of consumer satisfaction and dissatisfaction*. Cambridge, MA: Marketing Science Institute.
- Hunter, M. S., & White, E. R. (2004). Could fixing academic advising fix higher education? *About Campus*, 9, 20-25.
- Iacobucci, D., Grayson, A. K., & Ostrom, A. L. (1994). The calculus of service quality and customer satisfaction: Theoretical and empirical differentiation and integration. In T. A. Swart, D. E. Bowen, & S. W. Brown (Eds.), *Advances in service marketing and management* (pp. 1-67). Greenwich, CT: JAI.
- Institutional data from the research site. (2017). *Fall term summary report of students with non-immigrant visas*.
- Institute of International Education. (2017a). *Community college data resource*. Retrieved from <https://www.iie.org/en/Research-and-Insights/Open-Doors/Data/Community-College-Data-Resource>
- Institute of International Education. (2017b). International students at all institutions, 2016-2017. *Open Doors Report on International Educational Exchange*. Retrieved from <http://www.iie.org/opendoors>
- Johns-Reed, L. T. (2013). *Advisement satisfaction among community college students in Mississippi*. (Unpublished doctoral dissertation). The University of Southern Mississippi, Jackson, MS.

- Johnson, B., & Christensen, L. (2008). *Educational research: Quantitative, qualitative, and mixed approaches*. 3rd edition. Thousand Oaks, CA. Sage.
- Johnson, E. L., & Morgan, B. L. (2005). Advice on advising: Improving a comprehensive university's program. *Teaching of Psychology*, 32, 15-18.
- Juillerat, S. (1995). *Investigating a two-dimensional approach to the assessment of student satisfaction: Validation of the student satisfaction inventory*. (Unpublished doctoral dissertation). Temple University, Philadelphia, PA.
- Keup, J., & Stolzenberg, E. (2004). *The 2003 your first college year (YFCY) survey: Exploring the academic and personal experiences of first-year students*. (Monograph No. 40). Columbia, SC: University of South Carolina National Resource Center for The Freshman Year Experience and Students in Transition.
- Kelley, K. N., & Lynch, M. J. (1991). Factors students use when evaluating advisors. *NACADA Journal*, 11(1), 26-33.
- Khabiri, M. (1985). *Problems involved in the academic advisement process of foreign graduate students at North Texas State University*. (Unpublished doctoral dissertation). University of North Texas State, Denton, TX.
- King, M. C. (2002). *Community college advising*. Retrieved from NACADA Clearinghouse of Academic Advising Resources:
<http://www.nacada.ksu.edu/Resources/Clearinghouse/View-Articles/Two-year-college-advising.aspx#sthash.eM4TmZQj.dpuf>
- King, M. C. (2005). *Developmental academic advising*. Retrieved from
<http://www.nacada.ksu.edu/Resources/Clearinghouse/View->

Articles/Developmental-Academic-Advising.aspx

Kitchroen, K. (2004). Literature review: Service quality in educational institutions.

Abraham Baldwin Agricultural College Journal, 24(2), 14-25.

Kress, A. M. (2006). Identifying what matters to students: Improving satisfaction and

defining priorities at Santa Fe Community College. *New Directions for*

Community Colleges, 134, 37-46.

Kuehn, L. (2012). International students in BC, 2011-2012. *BCTF Research Report 2012-*

EF-03. Retrieved from

[http://www.bctf.ca/uploadedFiles/Public/Publications/ResearchReports/2012-EF-](http://www.bctf.ca/uploadedFiles/Public/Publications/ResearchReports/2012-EF-03.pdf)

[03.pdf](http://www.bctf.ca/uploadedFiles/Public/Publications/ResearchReports/2012-EF-03.pdf)

Kuh, G. (1997). The student learning agenda: Implications for academic advisors.

NACADA Journal, 17(2), 7-12.

Kuh, G. D. (2008). Advising for student success. In V. N. Gordon, W. R. Habley, & T. J.

Grites (Eds.), *Academic advising: A comprehensive handbook* (pp. 68-84). San

Francisco, CA: Jossey-Bass.

Kuh, G. D., Kinzie, J., Schuh, J. H., & Whitt, E. J. (2005). *Student success in college:*

Creating conditions that matter. San Francisco, CA: Jossey-Bass.

Kunin, R. & Associates, Inc. (2009). *Economic impact of international education in*

Canada. Retrieved from

https://globalhighered.files.wordpress.com/2009/10/rka_inted_report_eng.pdf

Kuttig, M. Y. (2012). *Doctoral advising: A grounded theory exploration of female*

mainland Chinese international students. (Unpublished doctoral dissertation).

University of Rochester, New York

- Laureano, G. M. (2003). *Expectation, satisfaction, and performance gap scores for education students regarding advising services*. (Unpublished doctoral dissertation). University of Central Florida, Orlando, FL.
- Light, R. L. (2001). *Making the most of college. Students speak their minds*. Cambridge, MA: Harvard University Press.
- Lotkowski, V. A., Robbins, S. B., & Noeth, R. J. (2004). *The role of academic and nonacademic factors in improving college retention*. Retrieved from <http://files.eric.ed.gov/fulltext/ED485476.pdf>
- Low, L. (2000). *Are college students satisfied? A national analysis of changing expectations*. Retrieved from <http://eric.ed.gov/?id=ED451816>
- Lynch, M. L. (2004). A survey of undergraduate student reactions to academic advising. *NACADA Journal*, 24(1&2), 62-74.
- Mataczynski, L. (2013). *Advising and acculturation variables as predictors of satisfaction, sense of belonging, and persistence among international undergraduates*. (Unpublished doctoral dissertation). University of Southern California, Los Angeles, CA.
- Metzner, B. S. (1989). Perceived quality of academic advising: The effect on freshman attrition. *American Educational Research Journal*, 26(3), 422-442.
- Midgen, J. (1989). The professional advisor. *NACADA Journal*, 9(1), 63-68.
- Miller, K. (2001). *Academic advising evaluation*. Retrieved from <http://www.missouri.edu/~nursing/admissions/Advevaluation.pdf>

- Miville, M. L., & Sedlacek, W. E. (1995). An assessment of centralized versus faculty advising in a college of engineering. *NACADA Journal*, 15(2), 20-25.
- Mottarella, K. E., Fritzsche, B. A., & Cerabino, K. C. (2004). What do students want in advising? A policy capturing study. *NACADA Journal*, 24(1&2), 48-61.
- NACADA. (2005). *NACADA statement of core values of academic advising*. Retrieved from the NACADA Clearinghouse of Academic Advising Resources <http://www.nacada.ksu.edu/Resources/Clearinghouse/View-Articles/Core-values-of-academic-advising.aspx>
- NACADA. (2012). *Assessment of advising commission resources*. Retrieved from <http://www.nacada.ksu.edu/Community/Commission-Interest-Groups/Administration-of-Advising/Assessment-of-Advising-Commission.aspx>
- NACADA. (2017). *NACADA academic advising core competencies model*. Retrieved from the NACADA Clearinghouse of Academic Advising Resources <https://www.nacada.ksu.edu/Resources/Pillars/CoreCompetencies.aspx>
- NAFSA. (2017). *International student economic value tool*. Retrieved from http://www.nafsa.org/Policy_and_Advocacy/Policy_Resources/Policy_Trends_and_Data/NAFSA_International_Student_Economic_Value_Tool/
- Newell, E. M. (2015). International student-athlete adjustment issues: Advising recommendations for effective transitions. *NACADA Journal*, 35(2), 36-47.
- Noel, L. (1976). College student retention: A campus wide responsibility. *Journal of the National Association of College Admissions Counselors*, 21, 33-36.

- Noel-Levitz, Inc. (2006). *National student satisfaction and priorities report*. Retrieved from https://www.ruffalonl.com/upload/Papers_and_Research/2006/SSI%20Report-A-Intro_0906.pdf
- Noel-Levitz, Inc. (2007). *National student satisfaction and priorities report*. Retrieved from https://www.ruffalonl.com/upload/Papers_and_Research/2007/2007%20National%20Student%20Satisfaction%20Report.pdf
- Noel-Levitz, Inc. (2010). *National student satisfaction and priorities report*. Retrieved from https://www.ruffalonl.com/upload/Papers_and_Research/2010/SSI%20EXEC%20SUM_report_1210.pdf
- Noel-Levitz, Inc. (2014). *National student satisfaction and priorities report*. Retrieved from https://www.ruffalonl.com/documents/shared/Papers_and_Research/2014/2014_NationalStudentSatisfactionReport.pdf
- Nutt, C. L. (2003). *Academic advising and student retention and persistence*. NACADA Clearinghouse of Academic Advising Resources. Retrieved from <http://www.nacada.ksu.edu/Clearinghouse/AdvisingIssues/Retention.htm>
- Ogletree, S. M. (1999). Improving career advising: Responding to alumni surveys. *Journal of Instructional Psychology*, 26, 42-45.
- Oja, M. (2011). Student satisfaction and student performance. *Journal of Applied*

- Research in the Community College*, 19(1), 50-56.
- O'Banion, T. (1972). An academic advising model. *Junior College Journal*, 42(6), 62–69.
- O'Banion, T. (Ed.). (2013). *Academic advising: The key to student success*. Lanham, MD. Rowan & Littlefield.
- O'Leary, P. F., & Quinlan, T. J., Jr. (2007). Learner–instructor telephone interaction: Effects on satisfaction and achievement of online students. *American Journal of Distance Education*, 21(3), 133-143.
- Oliver, R. L. (1974). Expectancy theory predictions of salesmen's performance. *Journal of Marketing Research*, 11(3), 243-253.
- Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17, 460-469.
- Oliver, R. L. (1999). Whence consumer loyalty? *Journal of Marketing*, 63, 33-44.
- Oliver R. L., & DeSarbo, W. S. (1988). Response determinants in satisfaction judgments. *Journal of Consumer Research*, 14, 495-507.
- Oliver, R. L., Rust, R., & Varki, S. (1997). Customer delight: Foundations, findings, and managerial insight. *Journal of Retailing*, 73(3), 311.
- Orpen, C. (1990). The measurement of student satisfaction: A consumer behavior perspective. *Journal of Human Behavior and Learning*, 7(1), 34-7.
- Pandit, K. (2007). The importance of international students on our campuses. *Yearbook of the Association of Pacific Coast Geographers*, 69, 156-159.

- Pardee, C. F. (1994). We profess developmental advising, but do we practice it? *NACADA Journal*, 14(2), 59-61.
- Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students: A third decade of research*. San Francisco, CA: Jossey-Bass.
- Pitman, T. (2000). Perceptions of academics and students as customers: a survey of administrative staff in higher education. *Journal of Higher Education Policy and Management*, 22(2), 165-75.
- Pizzolato, J. E. (2008). Advisor, teacher, partner: Using the learning partnerships model to reshape academic advising. *About Campus*, 13(1), 18-25.
- Porter, S. R., & Umbach, P. D. (2001). Analyzing faculty workload data using multilevel modeling. *Research in Higher Education*, 42, 171-196.
- Powers, K. L., Carlstrom, A. H., & Hughey, K. F. (2014). Academic advising assessment practices: Results of a national study. *NACADA Journal*, 34(1), 64-77.
- Propp, K. M., & Rhodes, S. C. (2006). Informing, apprising, guiding, and mentoring: Constructs underlying upperclassmen expectations for advising. *NACADA Journal*, 26(1), 46-55.
- Raushi, T.M. (1993). Developmental academic advising. In M. C. King (Ed.), *Academic advising: Organizing and delivering services for student success*. New Directions for Community Colleges, 82, 5-19.
- Reeves, C. A., & Rednar, D. A. (1994). Defining quality: Alternatives and implications. *Academy of Management Review*, 19(3), 419-445.
- Reinarz, A. G., & Ehrlich, N. J. (2002). Assessment of academic advising: A cross-

- sectional study. *NACADA Journal*, 22(2), 50-65.
- Ringle, C. M., Wende, S., & Becker, J. M. (2015). *SmartPLS 3, SmartPLS GmbH: Boenningstedt*. Retrieved from <http://www.smartpls.com>.
- Roberts, J., & Styron, R. (2010). Student satisfaction and persistence: Factors vital to student retention. *Research in Higher Education Journal*, 6(3), 1-18.
- Robbins, R. (2009). Evaluation and assessment of career advising. In K. Hughey, D. Burton Nelson, J. Damming, & B. McCalla-Wriggins (Eds), *Handbook of career advising* (pp. 262-292). San Francisco, CA: Jossey-Bass.
- Robbins, R. (2011). Assessment and accountability. In J. Joslin & N. Markee (Eds.), *Academic advising administration: Essential knowledge and skills for the 21st century* (pp. 53-64). Manhattan, KS: National Academic Advising Association.
- Robins, R., & Zarges, K. M. (2011). *Assessment of academic advising: A summary of the process*. Retrieved from <http://www.nacada.ksu.edu/Resources/Clearinghouse/View-Articles/Assessment-of-academic-advising.aspx>
- Rodriguez, R. B. (1999). *Expectation and satisfaction of freshmen and seniors in higher education*. (Unpublished doctoral dissertation). University of Central Florida, Orlando, FL.
- Rudolph, F. (1993). Consumerism in higher education. *Liberal Education*, 79(3), 1-4.
- Rupande, G. (2015). The need for a student affairs practitioner's society in Zimbabwe's institutions of higher learning: Themes and perspectives. *International Journal of Managerial Studies and Research*, 3(9), 25-34.

- Saving, K., & Keim, M. C. (1998). Student and advisor perceptions of academic advising in two midwestern colleges of business. *College Student Journal, 32*(4), 511-521.
- Sayles, S., & Shelton, D. (2005). Student success strategies. *The Association of Black Nursing Faculty Journal, 16*(5), 98-101.
- Says, D. M. (1999). An experimental analysis of the effects of an intrusive academic advising package on academic performance, satisfaction, and retention. *Dissertation Abstracts International, 61* (2-B), 1067.
- Schee, B. (2007). Adding insight to intrusive advising and its effectiveness with students on probation. *NACADA Journal, 27*(2), 50-59.
- Schroeder, S. H. (2012). *Undergraduate business student satisfaction with academic advising*. (Unpublished doctoral dissertation). Edgewood College, Madison, WI.
- Schuh, J. M., Upcraft, M. L., & Associates. (2001). *Assessment practice in student affairs: An applications manual*. San Francisco, CA: Jossey-Bass.
- Schwarz, C., & Zhu, Z. (2015). The impact of student expectations in using instructional tools on student engagement: A look through the expectation disconfirmation theory lens. *Journal of Information Systems Education, 26*(1), 47-58.
- Scott, S. V. (1999). The academic as service provider: Is the customer 'always right'? *Journal of Higher Education, 21*(2), 193-202.
- Seidman, A. (1991). *Managing enrollment for student satisfaction: An integrated admissions and counseling process*. ERIC Document Ed 355 983
- Severy, L. J., Lee, N. L., Carodine, K., Powers, L., & Mason, G. R. (1994). Rating scales for the evaluation of academic advisors. *NACADA Journal, 14*(2), 121-29.

- Shaffer, L. S., Zalewski, J. M., & Leveille, J. (2010). The professionalization of academic advising: Where are we in 2010? *NACADA Journal*, 30(1), 66-77.
- Smith, J. S. (2002). First-year student perceptions of academic advisement: A qualitative study and reality check. *NACADA Journal*, 22(2), 39-49.
- Smith, C. L., & Allen, J. M. (2006). Essential functions of academic advising: What students want and get. *NACADA Journal*, 26(1), 56-66.
- Smith, C. L., & Allen, J. M. (2014). Does contact with advisors predict judgments and attitudes consistent with student success? A multi-institutional study. *NACADA Journal*, 34(1), 50-63.
- Smith, J. S., Szelest, B. P., & Downey, J. P. (2004). Implementing outcomes assessment in an academic affairs support unit. *Research in Higher Education*, 45(4), 405-427.
- Soria, K. M. (2012). *Advising satisfaction: Implications for first-year students' sense of belonging and student retention*. Retrieved from dus.psu.edu/mentor/2012/0/advising-satisfaction
- Southward, C. L. (2002). *Expectations and satisfaction among undergraduate students: A consumer behavior approach* (Unpublished doctoral dissertation). University of Tennessee, Knoxville, TN.
- Spreng, R. A., & Mackoy, R. D. (1996). An empirical examination of a model of perceived service quality and satisfaction. *Journal of Retailing*, 72(2), 201-214.
- Srebnik, D. S. (1988). Academic advising evaluation. A review of assessment instruments. *NACADA Journal*, 8(1), 52-62.

- Steingass, S. J., & Sykes, S. (2008). Centralizing to improve student outcomes. *Peer Review, 10*(1), 18-20.
- Stolar, S. M. (1996). *Student satisfaction with academic achievement*. ERIC document ED 400 904.
- Sullivan-Vance, K. (2008). Reenvisioning and revitalizing academic advising at Western Oregon University. *AAC&U Peer Review, 10*(1), 15-17.
- Sutton, K. L., & Sankar, C. S. (2011). Student satisfaction with information provided by academic advisors. *Journal of STEM Education: Innovations and Research, 12*(7), 71-85.
- Swecker, H. K., Fifolt, M., & Searby, L. (2013). Academic advising and first-generation college students: A quantitative study on student retention. *NACADA Journal, 33*(1), 46-53.
- Swenson, C. (1998). Customers and markets. *Change, 30*(5), 34-40.
- Sybesma, L. J. (2007). *Student perception of advising at a small Midwestern Christian college*. (Unpublished doctoral dissertation). University of South Dakota, Vermillion, SD.
- Teague, G. V. (1977). Community college student satisfaction with four types of academic advisement. *Journal of College Student Personnel, 18*(4), 281-284.
- Teasley, M. L., & Buchanan, E. M. (2013). Capturing the student perspective: A new instrument for measuring advising satisfaction. *NACADA Journal, 33*(2), 4-15.
- Tincu, M. D. (2008). *A journey of advising: Experiences of doctoral international students and faculty advisors in the College of Education at a Midwestern*

- university*. (Unpublished doctoral dissertation). University of Northern Iowa, Cedar Falls, IA.
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition*. (2nd ed.). Chicago, IL: University of Chicago.
- Tuttle, K. (2000). Academic advising. *New Directions for Higher Education*, 111, 15-24.
- Upcraft, M. L., & Schuh, J. H. (2000). Assessment in student affairs. In M. J. Barr, M. K. Desler, & Associates (Eds.), *The handbook of student affairs* (pp. 249-264). San Francisco, CA: Jossey-Bass.
- Upcraft, M. L., & Stephens, P. S. (2000). Academic advising and today's changing students. In V. N. Gordon, W. R. Habley, & Associates (Eds.), *Academic advising: A comprehensive handbook* (pp. 73-83). San Francisco, CA: Jossey-Bass.
- Walleser, D. K. (2014). *Associate degree student satisfaction with academic advising*. (Unpublished doctoral dissertation). Edgewood College, Madison, WI.
- Walker, P. (2010). Guests and hosts—the global market in international higher education: Reflections on the Japan-UK axis in study abroad. *Journal of Research in International Higher Education*, 9, 168-184.
- Weir, S. B., Dickman, M. M., & Fuqua, D. R. (2005). Preferences for academic advising styles. *National Academic Advisement Association Journal*, 25(1), 74-80.
- White, E., & Schulenberg, J. (2012). Academic advising—a focus on learning. *About Campus*, 16(6), 11-17.

- Wildavsky, B. (2010). *Great brain race: How global universities are reshaping the world*. Princeton, NJ: Princeton.
- Winston, R. B. Jr. (1989). Counseling and advising. In U. Delworth, G. R. Hanson, & Associates (Eds.), *Student services: A handbook for the profession* (pp. 371- 400). San Francisco, CA: Jossey-Bass.
- Winston, R. B., Ender, S. C., & Miller, T. K. (Eds.). (1982). *Developmental approaches to academic advising*. (New Directions for Student Services, No. 17). San Francisco, CA: Jossey- Bass.
- Winston, R. B., & Sandor, J. A. (1984). *Evaluating academic advising: Manual for the academic advising inventory*. Retrieved from <http://www.nacada.ksu.edu/Portals/0/Clearinghouse/links/documents/AAI-Manual-02.pdf>
- Winston, R. B., & Sandor, J. A. (2002). *Evaluating academic advising: Manual for the Academic Advising Inventory*. Retrieved from <http://www.nacada.ksu.edu/Portals/0/Clearinghouse/links/documents/AAI-Manual-02.pdf>
- U.S. Department of State. (2016). *Education USA*. Retrieved from <https://educationusa.state.gov/your-5-steps-us-study/research-your-options/community-college>
- Young-Jones, A. D., Burt, T. D., Dixon, S., & Hawthorne, M. J. (2013). Academic advising: Does it really impact student success? *Quality Assurance in Education*, 21(1), 7-19.

- Yuksel, A., & Yuksel, F. (2001). The expectancy-disconfirmation paradigm: A critique. *Journal of Hospitality & Tourism Research*, 25, 107-131.
- Zevallos, Z. (2012). Context and outcomes of intercultural education amongst international students in Australia. *Intercultural Education*, 23(1), 41-49.
- Zhang, Y. (2015). Intercultural communication competence: Advising international students in a Texas community college. *NACADA Journal*, 35(2), 48-59.
- Zhang, Y. (2016). An overlooked population in community college: International students' (in)validation experiences with academic advising. *Community College Review*, 44(2), 153-170.
- Zimmerman, A., & Mokma, A. (2004). Developing a student evaluation of advising survey instrument. *NACTA Journal*, 48(3), 2-6.