UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

THE RELATIONSHIP AMONG SELF-ESTEEM, MENTORING, AND JOB

SATISFACTION: A COMPARATIVE STUDY OF U.S.-BORN AND FOREIGN-

BORN FACULTY

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

Degree of

DOCTOR OF PHILOSOPHY

By

TONY KIN SHIN LEE
Norman, Oklahoma
2014

THE RELATIONSHIP AMONG SELF-ESTEEM, MENTORING, AND JOB
SATISFACTION: A COMPARATIVE STUDY OF U.S.-BORN AND FOREIGN-
BORN FACULTY

A DISSERTATION APPROVED FOR THE
DEPARTMENT OF EDUCATIONAL LEADERSHIP AND POLICY STUDIES

BY

_____
Dr. Doo Hun Lim, Chair

_____
Dr. Penny Pasque

_____
Dr. Elon Dancy

_____
Dr. David Tan

_____
Dr. Ji Hong

Dedications

This dissertation is dedicated to my mom, Felicia Shak. Thank you for all the encouragement and support that you have provided me all my life. Your perseverance and hard work has been a model to me daily especially in my doctorate degree journey. You were always there to cheer me up and encourage me whenever I needed you. Most importantly, you allowed me to pursue my dreams.

Acknowledgements

I would like to take this opportunity to thank my dissertation chair Dr. Doo Hun Lim, for all the support, patience, and guidance that you have provided me. You have been a great mentor and advisor to me. I am grateful for your guidance, advice, and mentorship. In addition, I would like to thank Dr. David Tan, Dr. Elon Dancy, Dr. Penny Pasque, and Dr. Ji Hong for your commitment to serve as my committee members. The guidance and support that each of you have provided was priceless and I am very grateful to have each of you as my committee members in my doctorate program journey. In addition, I would like to thank Dr. Eric Snyder for all the support that you have provided me the last few months. Also, I would like to thank Trudy Rhodes, Geri Evans, and Shatora Diamond for being amazing colleagues for the past two years. I have enjoyed working and laughing with all of you.

Special thanks to my mom, Felicia Shak, for all the encouragement and support that you have provided me. You have been an amazing cheerleader to me, so thank you. Also, thanks to my brother (Richard Lee), and sister (Jenny Lee), for your continuous support for the few past years. Last but not least, I would like to thank all my friends (Bill Cadwell, Sam Keohavon, John Rippy, Will Sepangat, Jill Tran and family, and Dan Watson) who have supported me. Your friendship has been a huge support for me to finish my studies. I will always cherish the friendships and bonds that we have developed. Thank you.

Table of Contents

List of Tables

List of Figures

Abstract

Job satisfaction has been frequently studied in different types of work settings including higher education; however, there are limited studies that focus on foreign-born faculty members in the U.S. Also, studies that focus on using self-esteem and mentoring to predict faculty job satisfaction are limited. The purpose of this quantitative study was to compare U.S.-born and foreign-born faculty members' job satisfaction in 21 research universities based on their country of origin, marital status, faculty ranking, tenure, and mentoring status. Moreover, the study sought to explore the relationship among mentoring, self-esteem, and job satisfaction of U.S.-born and foreign-born faculty members. The instruments used in the study were the *Job Satisfaction Scale*, *Mentorship Effectiveness Scale*, and *Rosenberg Self-Esteem Scale*. The results showed that there was no significant difference in U.S.-born and foreign-born faculty members' job satisfaction. In addition, there was no significant difference in U.S.-born and foreign-born faculty members' job satisfaction based on marital status, faculty ranking, and tenure status. However, the results showed that job satisfaction of U.S.-born and foreign-born faculty members who were mentored was significantly different than those who were not mentored. The correlation between self-esteem and faculty job satisfaction was positively correlated, indicating one unit increase in self-esteem would lead to one unit increase in job satisfaction. Furthermore, multiple regression analysis revealed that mentoring and self-esteem as a set was a significant predictor for faculty job satisfaction, accounting for 15.4% of the variance in U.S.-born and foreign-born faculty job satisfaction. The results of this study can be a valuable resource to institutions and institutional administrators in recruiting and hiring quality U.S.-born

and foreign-born faculty members as well as developing mentoring programs that may

help to ease their career transition and improve their job satisfaction.

Chapter 1: Introduction

Despite the global economic downturn, the United States continues to host the largest numbers of international students compared to other developing countries. In 2010-11, a total of 723,277 international students enrolled in U.S. institutions, a 6% increase when compared to the previous year. Chinese, Indians, and South Koreans, the three largest groups of international students, represented 46% of the total international student population in the U.S. China superseded the rest of the countries by sending 157,558 students to the U.S. for higher education, which was a 23.5% increase compared to the previous year (Open Doors, 2011). As foreign countries' economies continue to grow, the numbers of international students who choose to pursue higher education in the U.S. will continue to rise especially for those who live in economically developed countries like China, Saudi Arabia, South Korea, and Canada. Altbach (2004) reported that research scholars predict the number of international students who will enroll in U.S. institutions will increase to 8 million by 2025.

The Open Doors (2011) report indicated that international students contributed over $20 billion to the U.S. economy in 2010-11 for higher education expenses, including living expenses for themselves and their dependents, tuition and fees, books, and other expenses. Additionally, Chinese students alone spent almost $4 billion in 2010-11 (Open Doors, 2011). This is why other developed countries like Australia, the United Kingdom, and Germany work hard to attract international students to attend their colleges and universities. Besides monetary contributions, international students also improve the quality and cultural composition of the student body (Altbach & Knight, 2007). The influx of international students in the U.S. has changed the campus

climate of many universities and colleges in the U.S. by shaping them to become more diverse. To reflect the racial diversity and thought process of international students, institutional administrators (e.g., Provost, Dean, or Department Chair) are pressured to recruit more diverse faculty members by hiring more foreign-born faculty members (Collins, 2008). China, India, and South Korea are the top three countries that produce the largest numbers of foreign-born faculty members in the U.S. In 2010-11, there were 30,094 Chinese faculty members in the U.S., a 2.1% increase from the previous year. India was in second place with 11,930 faculty members, followed by South Korea with 9,257 faculty members. According to the National Science Board, in 2003, foreign-born faculty members occupied 20.9% of all science and engineering faculty positions in the U.S. (Corely & Sabharwal, 2007). The continuous growth of science and engineering jobs in the U.S. has led more international students to consider this field of study (Corley & Sabharwal, 2007; Open Doors, 2011), which can also lead to an increase of foreign-born faculty members in this field.

Faculty members are defined as "any full-time employee of an accredited four-year college or university who spends at least part of his or her time teaching undergraduates" (DeAngelo, Hurtado, Pryor, Kelly, & Santos, 2009). Faculty members play an important role in U.S. higher education, such as meeting university missions, engaging in institutional issues and challenges, shaping the character of collegiate environments, and developing future generational leaders (Lindholm, 2003). Faculty members work with a broad range of people who need help in achieving their career goals and advancing professionally (Parson, Sands, & Duane, 1992). According to Forest (2002), faculty members are responsible for three major roles: institutional roles,

such as teaching, serving on committees, and advising students; disciplinary roles, such as serving as peer reviewers on scholarly journals that are related to their academic disciplines, serving as officers for regional or national professional associations, and preparing journal articles for publication; and external roles, such as speaking engagements for non-university affiliated organizations, civic participation in the community, and consulting for government or business.

According to *The Chronicle of Higher Education Almanac of Higher Education* (2010), 40,430 foreign-born faculty members were employed in the U.S. in 2007. By 2011, the number of foreign-born faculty members increased to 41,766. Similarly, the U.S. has seen steady growth in the number of native faculty members over the past few years. In 2007, a total of 1,263,752 U.S.-born faculty members were employed in U.S. higher education. By 2011, the total number of U.S.-born faculty members reached 1,381,263, which was a 9.2% increase over a 4-year period. Among all U.S.-born faculty members, White faculty members remained the majority, followed by African American, Asian American, Hispanic, and Native American faculty members. According to Antonio (2002), the status of faculty of color has been a concern in American higher education since the 1960s. The Civil Rights Movement led to a push for student and faculty diversity in higher education. In 1983, Whites composed approximately 91% of all full-time faculty members, and 10 years later, the number of White faculty members had dropped to 88% (Antonio, 2002; Carter & Wilson, 1997). *The Chronicle of Higher Education Almanac of Higher Education* (2012b) showed that in 2009, White faculty population dropped to 80.35%, a decrease of 7.65%. This reflects the slow yearly growth in the number of faculty members of color. According to

the *Higher Education Research Institute Faculty Norm Survey 2007-2008*, the majority of faculty believe that there is a greater need of hiring more women and faculty of color in higher education to support the racially/ethnically diverse student body. The results of the study showed that 73.2 percent of the participants think that their institutions should hire more faculty of color, and 57.1 percent of the participants state that need more female faculty (DeAngelo et al., 2009).

Statement of the Problem

U.S.-born faculty members that are perceived as the dominant group in U.S. institutions are employed by different types of institutions, ranging from master's colleges and universities to research universities with very high (RU/VH) or high (RU/H) research activity. Despite the fact that U.S.-born faculty members also face challenges such as transition issues with their academic career, those challenges and issues that they face are not comparable to their foreign-born colleagues. Foreign-born faculty members with the exception of those who come from Western Europe (e.g., England, Germany, Netherland) are often viewed as underrepresented in U.S. higher education. Unlike U.S.-born faculty members, foreign-born faculty members have more restrictions in finding a faculty position because of employment visa (H1B) issues (Foote, Li, Monk, & Theobald, 2008; Varma, 2010). In addition, Asian faculty members may experience frustration or job dissatisfaction because of the model minority stereotype that is commonly portrayed among Asian American students. For example, in Museus's (2008) study, a Korean American participant was upset and frustrated because of the model minority stereotype that her classmates imposed upon her. Her classmates held her to the standard that was commonly applied to other

successful Asian American students, such as being successful academically, exceling in math, having good work ethics, and remaining quiet in class. Even though the Asian Pacific Americans (APAs) population is very diverse and there are major differences among the different Asian ethnicities, the American racial majority who are not sensitive to those differences may view them as a homogenous group (Teranishi, 2002). The model minority stereotype can potentially affect Asian American and foreign-born Asian faculty members, especially those who are not in science or engineering, by adding pressure to their teaching and scholarly performance, which indirectly leads to stress and social isolation in the workplace.

Research shows that foreign-born faculty members are great assets to U.S. institutions because, aside from their teaching, research, and service responsibilities, they have also enriched the university campus and community with their cultures and world perspectives (Alberts, 2008; Mamiseishvili, 2010). The valuable knowledge and experience the foreign-born faculty members share with students, faculty, and staff will improve their global perspective and understanding. In addition, foreign-born faculty members help strengthen research collaboration initiatives between their native countries and the U.S., especially in science and technology (Corley & Sabharwal, 2007; Marvasti, 2005). Foreign-born faculty members who specialized in the science, technology, engineering, and mathematics (STEM) disciplines are also valuable additions to U.S. academic institutions because they can teach and prepare students for STEM careers. In addition, they can serve as mentors to other international students and junior faculty members with similar ethnic or cultural backgrounds.

Foreign-born faculty members from Asia are highly productive in their

academic career; many of them have even surpassed their U.S.-born colleagues in

scholarly work (Corley & Sabharwal, 2007; Mamiseishvili, 2010; Mamiseishvili &

Rosser, 2009; Marvasti, 2005). Despite their productivity and success, they still feel less

satisfied with their jobs than their U.S.-born colleagues (Corley & Sabharwal, 2007;

Mamiseishvili & Rosser, 2009). Some common factors that have affected foreign-born

Asian faculty job satisfaction include, but are not limited to, tenure, salary gap, job

autonomy, and promotion opportunity (Corley & Sabhawal, 2007; Marvasti, 2005) and

these factors also apply to non-Asian foreign-born faculty members in the U.S. This can

be problematic because research scholars have predicted that there will be a growth of

foreign-born faculty members in the U.S. (Corely & Sabharwal, 2007). Unfortunately,

only limited follow up study addresses that issue. Because U.S.-born and foreign-born

faculty members grew up with different educational and cultural backgrounds, they may

have very different work ethics and values in the workplace. Additionally, they may

view job satisfaction very differently compared to their U.S.-born colleagues. Having a

good understanding of faculty job satisfaction is important for performance and

productivity (Kim, Wolf-Wendel, & Twombly, 2011; Lin, Pearce, & Wang, 2009).

When faculty members are dissatisfied, they are less likely to commit to their institution,

which eventually leads to poor performance or high turnover. Notably, there is limited

research on foreign-born faculty members' job satisfaction. Furthermore, studies that

compare U.S.-born and foreign-born faculty members' perceived job satisfaction and

ways of improving their job satisfaction are rare. Therefore, research scholars should

pay more attention to this area so that institutions and institutional administrators (e.g.,

Provost, Dean, Department Chair) can improve U.S.-born and foreign-born faculty

members' job satisfaction and retain them in their respective institutions.

Tenure, faculty ranking, self-esteem, and mentoring can influence the overall job satisfaction of faculty members (Ahmed, 2012; Lucas & Murry, 2011; Mamiseishvili & Rosser, 2009; Rosser, 2004; Sinacore-Guinn, 1998; Trower, 2012). There is literature that focuses on foreign-born faculty members' job satisfaction by tenure and faculty ranking in the community college setting, but research on foreign-born faculty job satisfaction in research universities with very high or high research activity is limited.

Self-esteem has a direct effect on job satisfaction (Ahmed, 2012; Kuster, Orth, & Meier, 2013). Individuals with high self-esteem are more satisfied with their job than individuals who have low self-esteem. Also, individuals with high self-esteem are prone to take risks and challenges to satisfy their needs, which eventually will improve their job satisfaction (Korman, 1970). However, research scholars have often overlooked studies on faculty members' self-esteem on job satisfaction (Ahmed, 2012). Therefore, faculty members' self-esteem (global self-esteem) on job satisfaction is included in the study.

Mentoring has positive effects on job satisfaction (Bland, Taylor, Shollen, Weber-Main, & Mulcahy, 2009; Trower, 2012). Mentoring is mentioned in different studies pertaining to new faculty members and organizational entry (Cawyer, Simonds, & Davis, 2002; Collins, 2008; Lucas & Murry, 2011; Trower, 2012). Cawyer and colleagues (2002) shared that mentoring programs are helpful for all faculty members, especially new faculty members, because mentoring helps to combat new faculty members anxieties as they transition into their academic jobs. In addition, Griffin

(2012) stated that mentoring could foster positive impacts on faculty socialization, which improved their job satisfaction. She also found that faculty members that had positive mentorship experiences when they were in graduate school tended to have a positive experience socializing with their students. Mentoring does play a role in U.S.-born faculty job satisfaction; however, research that focuses on foreign-born faculty members on this subject matter is rare. In order to get a better understanding on the effects of mentoring on U.S.-born and foreign-born faculty members' job satisfaction, mentoring was included as an independent predicting variable for faculty job satisfaction.

Besides tenure, faculty ranking, self-esteem, and mentoring, marital status has been studied in different literature related to faculty job satisfaction; however, there is no concrete conclusion on the effect of marital status on faculty job satisfaction. Several studies showed that marital status can influence faculty job satisfaction positively (Cetin, 2006; Hagedorn, 2000; Leung, Siu & Spector, 2000; Sabharwal & Corley, 2009), whereas several other studies showed that marital status can influence faculty job satisfaction negatively (Bryson, Bryson, & Johnson, 1978; Verret, 2011). To get a better representation of the role of marital status on faculty job satisfaction, marital status was also included in this study as one of the independent variables in the study, in addition to tenure, faculty ranking, self-esteem, and mentoring variables.

Kalleberg's Job Satisfaction Theory that has been used in different job satisfaction research was utilized as the framework to guide this study. Kalleberg (1977) argued that job satisfaction is influenced by the work values and job rewards the individuals experience and perceive of their work. There are six dimensions that affect

individuals' work values and job rewards: intrinsic, convenience, financial, relations with co-workers, career opportunities, and resource adequacy. Kalleberg's theory is considered to be the best fitting framework for this study compared to Herzberg's (1966) and Quarstein's (1992) frameworks because it accommodates all the factors that were included in the study.

After a thorough review of the descriptions of all six dimensions provided by Kalleberg, Kalleberg has grouped all six dimensions into two categories: intrinsic (i.e., intrinsic dimension) and extrinsic (i.e., convenience, financial, relations with co-workers, career opportunities, and resource adequacy dimensions) factors. By examining the framework from an intrinsic and extrinsic perspective, the researcher in the study categorized self-esteem as an intrinsic factor and mentoring as an extrinsic factor.

Purpose and Research Questions

The purpose of this study was to compare U.S.-born and foreign-born faculty members' job satisfaction in research universities with very high (RU/VH) or high (RU/H) research activity based on the selected variables: country of origin, marital status, faculty ranking, tenure status, and mentoring status. In addition, the study sought to explore the relationship among mentoring, self-esteem, and job satisfaction of U.S.-born and foreign-born faculty members. To determine the relationship among self-esteem, mentoring, and job satisfaction of U.S.-born and foreign-born faculty members in U.S. institutions, the following questions were developed to guide the study:

1. Was there a difference between U.S.-born and foreign-born faculty members' perceived job satisfaction?

9

2. Was there a difference in job satisfaction between U.S.-born and foreign-born faculty members based on marital status, faculty ranking, and tenure status?

3. Was there a difference in job satisfaction between U.S.-born and foreign-born faculty members who were mentored and not mentored?

4. Was there a relationship between self-esteem and job satisfaction of U.S.-born and foreign-born faculty members in U.S. institutions?

5. Did self-esteem and mentoring affect job satisfaction of U.S.-born and foreign-born faculty members in the U.S. institutions?

6. How did mentoring affect U.S.-born and foreign-born faculty job satisfaction?

The following hypotheses were developed to answer research question 1, 2, 3, 4, and 5:

H_1: U.S.-born faculty members' perceived job satisfaction was different from that of the foreign-born faculty members.

H_{2a}: U.S.-born faculty members who were married and foreign-born faculty members who were married would have higher job satisfaction than either U.S.-born or foreign-born faculty members who were single.

H_{2b}: Higher-ranked U.S.-born faculty members and higher-ranked foreign-born faculty members would be more satisfied than either lower-ranked U.S.-born or foreign-born faculty members.

H_{2c}: U.S-born tenured faculty members and foreign-born tenured faculty members would have higher job satisfaction than either U.S.-born or foreign-born non-tenured faculty members.

H$_3$: U.S.-born and foreign-born faculty members who were mentored would possess a higher level of job satisfaction than non-mentored faculty members.

H$_4$: U.S.-born and foreign-born faculty members who had high self-esteem would have higher job satisfaction than those who had low self-esteem.

H$_5$: U.S.-born and foreign-born faculty members who had high self-esteem and were mentored would have a higher job satisfaction in U.S. institutions.

Significance of the Study

Job satisfaction has captured research scholars' interest since the 1960s, but the actual growth of job satisfaction research did not start until the 1990s. According to the PsycINFO database, there are over 22,000 studies on job satisfaction from 1990 to 2013 based on the key words "job satisfaction." The majority of the studies focused on employees' job satisfaction in private industries. Even though faculty members play a vital role in developing future leaders and meeting university or college missions, a limited number of studies focused on their job satisfaction, especially foreign-born faculty members. One possible explanation is that research scholars might have assumed that academic careers are paid well and that faculty members work in stress-free environments, therefore, assuming they must be satisfied with their jobs (Hagedorn, 2000; Pearson & Seiler, 1983). The existing research shows that many faculty members are less satisfied with their jobs, especially underrepresented faculty members (i.e., women faculty, faculty of color, and foreign-born faculty) (Aguirre, 2000; Laden & Hagedorn, 2000; Mamiseishvili, 2011). Factors such as tenure status, salary gap, achievement, the lack of job autonomy, recognition and advancement opportunity, and overloaded responsibilities are why some underrepresented faculty members are less

satisfied with their academic positions (Corley & Sabhawal, 2007; Herzberg, Mausner, & Snyderman, 1959; Hesli & Lee, 2013; Laden & Hagedorn, 2000). Furthermore, low job satisfaction negatively affects faculty members' performance and productivity. Subsequently, it can affect their willingness to commit to their respective institutions. Many successful and reputable universities around the world (e.g., in Australia, Canada, the United Kingdom, the Middle East, and Asia) that are also competing for highly qualified faculty members that are employed in U.S. institutions, especially foreign-born faculty members with diverse cultural and educational backgrounds will take advantage of this opportunity to recruit them (Altbach & Knight, 2007). If institutional administrators do not resolve the job satisfaction issue among the less satisfied faculty members, then U.S. institutions will begin to lose talented faculty members, both U.S.-born and foreign-born, to foreign universities. Past studies focused on faculty job satisfaction in higher education, but very little research focused on foreign-born faculty. This study may help research scholars and institutional administrators understand the relationship among self-esteem, mentoring, and job satisfaction of U.S.-born and foreign-born faculty members. In addition, institutional administrators can utilize the results of the findings to develop more concrete plans to improve U.S.-born and foreign-born faculty members' job satisfaction as well as strengthen their recruitment and hiring efforts, including foreign-born faculty members who are in the STEM field because of their contribution to U.S higher education (Kim et al., 2011; Lin et al., 2009). The enrollment of Americans in scientific and technological fields is dwindling; as a result, the United States has to rely on the contributions of foreign-born faculty members to meet the needs of the projected growing field in science and technology

(Sabharwal, 2011). The Pew Research Center also predicts that by 2050, one in five Americans will be foreign-born, yet there is very little research on their growth in academia (Passel & Cohn, 2008; Sabharwal, 2011).

Limitations

There were several limitations with the present study. First, the study was conducted at 21 public and private research universities with very high and high research activity based on their Carnegie Foundation classifications. The Carnegie Foundation is an independent policy and research center that was founded to improve teaching and learning. Its mission is to "develop networks of ideas, individuals, and institutions to advance teaching and learning" (http://www.carnegiefoundation.org/ about-us/about-carnegie) by working collaboratively with scholars, practitioners, and designers. The data collected may not be representative of all U.S.-born and foreign-born faculty in the U.S., which could affect the generalizability of the results. The majority (78.6%) of the participants were White faculty members and 60.5% were men, which showed that the results could be biased because of the lack of representation of the underrepresented faculty members as well as female faculty members. In addition, the random-convenient sampling might affect the generalizability of the results. Second, it was difficult to recruit more foreign-born faculty members to participate in the study because they were scattered all over the U.S. and there was not a standard resource channel or organization that could be used to reach out to all the foreign-born faculty members in the U.S. Third, the response rate of the study was dependent on participants' willingness to complete the survey. It was challenging to recruit faculty members who were willing to volunteer their time to complete a lengthy survey without any incentives.

Fourth, the findings of the study were based on self-reported data using an online survey with Likert-scale indicators that were displayed only at the beginning of each sub-survey. Participants could have responded to the questions with inaccurate perceptions of the Likert-scale indicators. Moreover, they could have shared how their individual perception of the roles of mentoring and self-esteem affected their perceived job satisfaction; therefore, the results could have been biased. Fifth, 78% of the participants in the study were predominately White faculty members, indicating the lack of faculty members of color participation in the study. As a result, the data of the study could be skewed and it should not be generalized because of the lack of faculty of color participation in the study. Sixth, the survey was sent out on the first week of December, which given the time of year may have indirectly affected the response rate.

Delimitations

This study was delimited to U.S.-born and foreign-born faculty members at 21 public and private research universities with very high (RU/VH) or high (RU/H) research activity based on their Carnegie Foundation classifications. In addition, the study was delimited to investigate the effects of U.S.-born and foreign-born faculty members' job satisfaction by country of origin, marital status, tenure status, faculty ranking, self-esteem, and mentoring.

Definition of Terms

The following terms were used consistently throughout this study. In order to maintain clear understandings of the meaning of the terms, they were defined as follow:

1. *Faculty of color*: Faculty members who identify themselves as Black, Asian American, Hispanic, or American Indian (Antonio, 2002).

2. *Foreign-born faculty*: Faculty that "residing in the United States who were not United States at birth" (The Migration Policy Institute, 2004). They are naturalized as legal residents or hold a legal working permit (e.g., H1B or OPT visa) in the U.S.

3. *Tenured faculty*: "An arrangement whereby faculty members, after successful completion of a period of probationary service, can be dismissed only for adequate cause or other possible circumstances and only after a hearing before a faculty committee" (http://www.aaup.org/ issues/tenure).

4. *Tenure-track faculty*: Full-time faculty members who carry the title of Assistant Professor, Associate Professor or Professor of the specific discipline and devote their full-time professional effort to direct University activities and who are compensated by the University of University-approved sources (Regent's Policy Manual for the University of Oklahoma, p. 21-22).

5. *Master's colleges and universities*: Institutions that awarded at least 50 master's degree and fewer than 20 doctoral degrees during the academic year (http://classifications.carnegiefoundation.org/descriptions/basic.php).

6. *Doctorate-granting universities*: Institutions that awarded at least 20 research doctoral degrees. They include the classifications of research universities with very high research activity, research universities with high research activity, and doctoral/research universities (http://classifications.carnegiefoundation.org/ descriptions/basic.php).

7. *Mentor*: "A person who serves as a guide or sponsor, that is a person who looks after, advises, protects, and takes a special interest in another's development" (Sands, Parson, & Duane, 1991, p. 175).

8. *Protégé*: "Originally a French verb, *proteger,* to protect" (Darwin, 2000, p. 198). For this study, *protégé* refers to new or junior faculty members who are being guided or coached by an educator, counselor, or coach who is typically older or more experienced.

9. *Mentoring relationship*: "One that varies along a continuum from informal/short-term to formal/long-term in which faculty with useful experience, knowledge, skills, and/or wisdom offers advice, information, guidance, support, or opportunity to another faculty member or student for that individual's professional development" (Berk, Berg, Mortimer, Walton-Moss, & Yeo, 2005, p. 67).

10. *Job Satisfaction*: "A pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (Locke, 1976, p.1304).

11. *Self-Esteem*: The overall value that one places on oneself as a person (Judge & Bono, 2001).

12. *Global Self-Esteem*: "A person's overall positive versus negative feelings about the self; it is explicitly not domain specific and conceptually unidimensional" (Robins, Hendin, & Trzesniewski, 2001, p.152).

13. *Career support*: Instrumental support that helps the protégé advance in their profession (Sands et. al., 1991).

14. *Psychosocial support*: Support that fosters social and emotional well-being of the protégé (Sands et. al., 1991).

15. *Motivators*: Aspects of a job effective in motivating an individual to superior performance and superlative effort, these elements occur because of an individual's need for growth and self-actualization (Herzberg, 1966).

16. *Hygiene factors*: Major preventive and environmental aspects of an individual's vocation, factors that prevent a job from being unpleasant (Herzberg, 1966).

17. *Satisfiers*: Aspects of employment that describe an individual's relationship to his vocation in terms of personal and professional growth and self-actualization (Herzberg, 1966).

18. *Dissatisfiers*: Aspects of employment that describe an individual's relationship to the context or environment within which he works (Herzberg, 1966).

Summary

Faculty members play an important role in the growth and development of students and meeting the mission of the university or college. Previous studies showed that U.S.-born faculty members are generally more satisfied with their academic careers than foreign-born faculty members because they have fewer obstacles to overcome in order to be successful in their careers. Self-esteem (global self-esteem) and mentoring affect faculty members' job satisfaction. There is limited research that can provide institutional administrators more information about the roles of self-esteem and mentoring affecting U.S.-born and foreign-born faculty members' job satisfaction. This study will help bridge the gap of the existing literature by providing in-depth information about U.S.-born and foreign-born faculty members' job satisfaction and the impacts of self-esteem and mentoring on U.S.-born and foreign-born faculty members' job satisfaction.

Chapter 2: Literature Review

Three bodies of scholarship directly influenced this study and the proposed relationship between the variables, which included literature on job satisfaction, mentoring, and self-esteem. The literature review began with an overview of job satisfaction of U.S.-born faculty, faculty of color, and foreign-born faculty members in U.S. higher education institutions and was followed by mentoring and self-esteem.

Job Satisfaction

Employee job satisfaction has been studied since the 1960s; however, research scholars have not consistently defined job satisfaction. Kalleberg (1977) referred to it as "an overall affective orientation on the part of individuals toward work roles which they are presently occupying" (p.126). For this particular study, job satisfaction is defined as "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (Locke, 1976, p. 1304).

Job satisfaction has been studied for decades, especially in the fields of labor relations, industrial/organizational psychology, organizational behavior, and human resource development. Research shows that employees are important assets to their organizations, and business leaders on their talented employees to be competitive and successful in the market (Chen, Ployhart, Thomas, Anderson, & Bliese, 2011). When employees are satisfied with their jobs and they are more productive and engaged at work and they are more likely to stay in their organization and produce quality works in their job (Lee & del Carmen Montiel, 2010; Modica & Mamiseishvili, 2010; Verret, 2011). On the other hand, theories of employee turnover indicate that job satisfaction plays a role in the process of leading to turnover, decreased employee morale, and low

productivity (Boswell, Boundreau, & Tichy, 2005; Chen et al., 2011; Herzberg, Mausner, & Snyderman, 1959; Steel, 2002). Subsequently, organizations end up spending large sums of money in recruiting, hiring, and training new employees. This explains why human resource specialists and research scholars are interested in learning more about employees' job satisfaction and retention. Unfortunately, the majority of the job satisfaction studies focused on private industries or organizations and many research scholars have overlooked the importance of studying faculty job satisfaction because they viewed faculty positions as high paying jobs with low-pressure and short working hours and assumed that faculty members must be satisfied with their job (Hagedorn, 2000; Pearson & Seiler, 1983).

U.S.-Born Faculty

Higher education plays an important role in developing and shaping future leaders. The growth of student populations in U.S. institutions has directly affected the growth of U.S. faculty members (i.e., U.S.-born and foreign-born). Table 1 displays the number of U.S.-born and foreign-born faculty members in the U.S.

Table 1. Full-Time U.S.-Born and Foreign-Born Faculty Members for Fall 2007, 2009, and 2011

Year	U.S.-born	Foreign-born
2007[a]	1,263,752	40,430
2009[b]	1,324,064	40,950
2011[c]	1,381,263	41,766

[a]*Source: The Chronicle of Higher Education Almanac of Higher Education, 2010.*
[b]*Source: The Chronicle of Higher Education Almanac of Higher Education, 2012.*
[c]*Source: The Chronicle of Higher Education Almanac of Higher Education, 2013.*

Based on the faculty demographic breakdown in U.S. higher education shown in Table 1, U.S.-born faculty members are the majority in U.S. higher education. In fall

2003, White faculty consisted of 80.3% of the total faculty population, followed by Asian/Pacific Islander (8.7%), Black (5.5%), Hispanic (3.5%), and other races (e.g., American Indian/Alaska Natives) (2.1 %) (Inside Higher Ed., 2005). In fall 2011, Whites remained the dominant group (84%), followed by Asian/Pacific Islander (8%), Black (4%), Hispanic (3%), and American Indian/Alaska Native (< 1%) (National Center for Education Statistics, 2011). Despite that the underrepresented student populations have increased proportionally over the years, the number of underrepresented faculty members (e.g., women faculty, faculty of color, and foreign-born faculty) has not grown to the level it needs to support the growth of the underrepresented students (The Chronicle of Higher Education, 2012a; National Center for Education Statistics, 2011). Studies show that the lack of diversity on the search committee has made a difference in the hiring process (Conklin & Robbins-McNeish, 2006; Smith, Turner, Osei-Kofi, & Richards, 2004). According to Conklin and Robbins-McNeish (2006), the tendency of White male faculty to recruit and hire candidates that are similar to them when they are in senior leadership positions has created gaps between White male faculty and other underrepresented faculty members. White male faculty members are not only paid more than faculty of color and women faculty (Antecol & Bedard, 2004; Toutkoushian, Bellas, & Moore, 2007), but they are also often exempted from external commitments, such as serving on campus-wide diversity committees or mentoring underrepresented students that are often expected of the faculty of color or foreign-born faculty members. This allows White male faculty to spend more time on research (Allen, Epps, Guillory, Suh, & Bonous-Hammarth, 2000; Antonio, 2002; Modica & Mamiseishvili, 2010), which resulted in a higher proportion

of White male faculty to receiving tenure and promotion.

Research scholars often include sex as a factor that influences job satisfaction (e.g., Aguirre, 2000; Conklin & Robbins-McNeish, 2006; Samble, 2008; Toutkoushian et al., 2007). According to the American Association of University Professors (AAUP)(n.d.), female faculty members still face a salary gap issue in the 21st century. The AAUP 2010-11 average salaries report showed that female faculty members still receive lower salaries than their male counterparts even though female faculty possess comparable characteristics, such as qualifications, experience, responsibilities, and research output. Studies also showed that the salary gap between male and female faculty increases as their faculty rank increases (Samble, 2008; The Chronicle of Higher Education Almanac of Higher Education, 2011). For example, a male assistant professor earned an average of $67,575 in 2010-11, whereas a female assistant professor earned an average of $62,922. The salary difference between the male and female assistant professors was $4,653. On the other hand, in the same year, a male full professor earned an average of $114,421, whereas a female full professor only earned $100,231. The salary gap between the male and female full professor has increased to $14,190 (The Chronicle of Higher Education Almanac of Higher Education, 2011). According to the *HERI National Norms for 2007-2008*, female faculty were almost equally satisfied as their male counterparts at the assistant professor rank, but there were more female faculty reporting dissatisfaction as their faculty rank increased. For example, 50.6 percent of female faculty members versus 66.9 percent of male faculty members reported satisfaction of opportunity for scholarly pursuit. In addition, female faculty members were less satisfied with their teaching loads and opportunity for career

advancement (DeAngelo et al., 2009). Moreover, a greater percentage of female faculty members at full professor or associate professor rank would consider leaving their institutions for another institution because of the salary gap, as compared to their male counterparts (DeAngelo et al., 2009).

In addition to the salary gap issue, female faculty members also experience difficulty in achieving tenure and promotion, which affect their performance and job satisfaction (Conklin & Robbins-McNeish, 2006; Sabharwal & Corley, 2009). U.S.-born women faculty would like to think that their sex role was the reason why they were having difficulty achieving tenure and promotion. According to Parson and colleagues (1992), research universities determine faculty tenure, promotions, and merit pay increases based on the research productivity. In Mamiseishvili's (2010) study, she found that U.S.-born women faculty members were less engaged in research than their male counterparts and foreign-born female faculty members because of their commitment to teaching responsibilities. On average, they spent 4.86 hours per week on classroom teaching.

Marital status was included in most job satisfaction studies as a predictor for faculty job satisfaction; however, the results were inconclusive (Parson et al., 1992). Several studies indicated that marriage has a positive influence on faculty job satisfaction (Hagedorn, 2000; Leung et al., 2000), whereas other studies indicate that marriage has a negative influence on faculty job satisfaction (Bryson et al., 1978; Verret, 2011). In Gupta's (2004) study, he found that marriage had no significant impact on U.S.-born faculty members; however, he did find that U.S.-born faculty members with children, especially male faculty members, were significantly more satisfied than

22

foreign-born faculty members with children. The findings aligned to Hodson's (1989) study. In Gupta's (2004) study, he also found that female faculty members with children under the age of six are more likely to be dissatisfied with their job because of the responsibility to take care of their children.

Besides sex, tenure, faculty ranking, and salary, the discipline that faculty members have chosen to specialize in and teach also affect their job satisfaction. Sabharwal and Corley (2009) found that female faculty members in health fields and social sciences are more satisfied with the intellectual challenge component of their job than those in the engineering discipline, whereas men are more satisfied with the intellectual challenge of the engineering discipline instead of the natural sciences. The rationale for why men find the engineering discipline to be more satisfying is that they view themselves as problem solvers and the engineering discipline challenges them in that capacity.

Lastly, the types of institutions where U.S.-born faculty members have chosen to pursue their career in academia also affect their job satisfaction. White faculty members and foreign-born faculty members prefer to work in public or private research universities with very high research activity (RU/VH) or high activity (RU/H) because of their interest in research as well as their publishing record. In addition, they hold higher academic ranks than underrepresented faculty members (Antonio, 2002). On the other hand, the underrepresented faculty members, with the exception of Asian American faculty members, are mostly employed in private 4-year institutions or public 2-year institutions (community colleges) (Antonio, 2002; The Chronicle of Higher Education Almanac of Higher Education, 2010). Table 2 displays the number of U.S.-

born and foreign-born faculty members in public 4-year, private 4-year, and public 2-year institutions.

Table 2. U.S.-Born and Foreign-Born Faculty Members in Public 4-Year, Private 4-Year, and Public 2-Year Institutions for Fall 2007

	White	Black	Hispanic	Asian American	American Indian	Foreign-Born
Public 4-Year	391,451	27,205	19,648	39,800	3,022	23,174
Private 4-Year	352,231	30,342	14,071	26,384	1,759	15,390
Public 2-Year	279,365	27,189	16,653	11,895	2,379	2,379

Source: The Chronicle of Higher Education Almanac of Higher Education, 2010. The U.S. Education Department considers someone Hispanic if that person is of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race. Foreign-born faculty is not reported in any of the ethnic or racial categories.

Faculty of Color

In the U.S., faculty of color remains an underrepresented group among the faculty population. Despite the fact that faculty of color in U.S. higher education increased from 6% in 1970 to 18.7% in 2011, the number of faculty of color is still underrepresented in U.S. institutions (Bernal & Villalpando, 2013; Modica & Mamiseishvili, 2010; Smith et al., 2004). Statistics have shown that the total number of faculty of color in higher education is not proportionate to the number of diverse groups of students that are enrolled in U.S. higher education (The Association of American Colleges and Universities, 2012; National Center for Education Statistics, 2013). Research shows that there are different factors that contribute to a lower number of faculty of color in U.S. higher education, such as: smaller pools of people of color holding doctorates, perception of racism in higher education, disproportionate tenure rates for faculty of color, perception of devaluing doctorate degree, disproportionate

tenure rates among faculty of color, and early departure pre-tenure (Antonio, 2002; Dancy & Brown, 2011; Turner & Myers, 2000). According to *the Chronicle of Higher Education Almanac of Higher Education* (2013), in 2011, faculty members of color made up only 18.6% of the total full-time faculty members in the U.S. and Blacks (6.7%) were the majority, followed by Asian Americans (6.2%), Hispanics (5%), American Indians (0.5%), and Pacific Islanders (0.2%). The demographic breakdown for Blacks and Asian Americans are slightly different. Studies showed that Asian Americans are more likely to be hired in public- and private-4 year institutions, whereas Blacks are more likely to be hired in private 4-year institutions and community colleges (Antonio, 2002; Astin, Antonio, Cress, & Astin, 1997; The Chronicle of Higher Education Almanac of Higher Education, 2013). For example, in fall 2011, the faculty population in public 4-year institutions consisted of 8.3% Asian American faculty members and 5.3% Black faculty members. In the same year, 7.0% of Black faculty members and 5.9% of Asian American faculty members were hired in private 4-year institutions (The Chronicle of Higher Education Almanac of Higher Education, 2013).

Faculty members of color are less satisfied with their job compared to White faculty members due to factors such as tenure, promotions, salary gaps, isolation, lack of mentoring, higher teaching load, and lack of scholarly recognition (Allen, Epps, Guillory, Suh, & Bonous-Hammarth, 2000; Antonio, 2002; Modica & Mamiseishvili, 2010). In Modica and Mamiseishvili's (2010) study, they found that Black faculty members who work at community colleges are more satisfied than their peers who work in four-year institutions. However, one-third of the Black faculty members from community colleges and four-year institutions complained about dissatisfaction with

their job because of the lack of career growth opportunity and salary gap (Modica &

Mamiseishvili, 2010). Over half of the participants (*N*=64) in Turner, Myers, and

Creswell's (1999) study were bypassed the promotion opportunity because they did not

fit the promotion 'profile.' Moreover, they were advised to seek promotion at another

institution. Black faculty members not only are committed to their academic career,

many Black faculty members have even inherited more responsibilities than their White

counterparts (Allen et al., 2000; Antonio, 2002; Bernal & Villalpando, 2010). Besides

teaching and research responsibilities, Black faculty members also opted for external

commitments, such as leading a diversity council, resolving diversity issues on campus,

and recruiting underrepresented students and faculty of color (Allen et al., 2000). In

addition, many Black faculty members feel obligated to guide, counsel, and mentor

racially, ethnically, and culturally diverse student population on campus (Allen et al.,

2000; Antonio, 2002; Modica & Mamiseishvili, 2010). Unfortunately, all these

additional commitments and services Black faculty members have provided to the

university and students are not highly valued in research universities with very high or

high research activity. In addition, studies showed that Black faculty members' research

on racial or ethnic issues are often devalued and demised as self-serving and out-of-the-

mainstream (Allen et al., 2000; Bourguignon, Blanshan, Chiteji, MacLean, Meckling,

Sagaria, Shuman, & Taris, 1987; Turner, Myers, & Creswell, 1999). Furthermore, the

lack of mentor, tenure, and promotion opportunity for Black faculty members at

research institutions and shortage of mentors have added pressure and dissatisfaction to

their job. These explain why the low numbers of Black faculty members in public 4-

year institutions are lower than that of Asian faculty members. Besides, many Black

faculty members have opted to work in smaller and more prestigious private 4-year institutions because of their commitment to teaching and service (Allen et al., 2000).

Unlike Black faculty members, Asian American faculty members, the second largest group of faculty of color, are centered in public- and private-4 year institutions (Antonio, 2002; Astin et al., 1997) and the majority of them are hired as faculty members for the science and business disciplines (Smith et al., 2004). Asian American faculty members acknowledge the importance of research productivity on tenure and promotion; as a result, most Asian American faculty members focus their time in producing research work (Lee, 2002; Mamiseishvili & Rosser, 2011). Despite their success in research productivity, many Asian American faculty members still experience discrimination and job dissatisfaction. Besides, they also have to deal with the pipeline problem and/or glass ceiling issue (Smith et al., 2004; Turner et al., 1999). Even though Asian American faculty members are highly represented among all faculty members of color, research scholars argued that Asian Americans still face pipeline issue at all levels of higher education and disciplines (Cho, 1996; Hune & Chan, 1997; Smith et al., 2004; Turner et al., 1999). In Lee's (2002) study, she found that the perception of Asian Americans facing a glass ceiling in higher education was not fully supported through her findings. She found that Asian Americans faculty members in higher education are rewarded about the same as White faculty members; however, White faculty members have more opportunities of increasing their incomes than Asian American faculty members (Lee, 2002). In addition, she found that Asian Americans are less likely to enter the academe upon graduation because of the possibility of dealing with the glass ceiling in academia.

The numbers of female faculty of color in U.S. higher education have also increased over the years (Allen et al., 2000; Bernal & Villalpando, 2002; The Chronicle of Higher Education Almanac of Education, 2010, 2012b). Table 3 reflects the breakdown of female faculty members of color in U.S. higher education.

Table 3. Full-Time Female Faculty by Race and Ethnicity for Fall 2007 and 2009

Year	White	Black	Asian American	Hispanic	America Indian
2007[a]	472,054	48,872	31,549	24,406	3,571
2009[b]	503,841	55,197	35,942	28,240	3,851

[a]*Source: The Chronicle of Higher Education Almanac of Higher Education, 2010.*
[b]*Source: The Chronicle of Higher Education Almanac of Higher Education, 2012.*

Female faculty members of color have also played an important role in higher education. Similar to male faculty members of color, they have experienced discrimination in the workplace. Besides dealing with sex bias and racial stereotype issues, female faculty members of color face challenges involving their credibility, expertise, and authority (Conklin & Robbins-McNeish, 2006). Turner's (2007) study showed that women faculty of color often feel isolated and underrespected; underemployed and overused by the departments and/or institutions; and torn between family, community, and career. As Conklin and Robbins-McNeish (2006) put it, "As young women and students of color watch their professors suffocate under the burden of producing research while meeting the expectations of their institutions, they begin to reconsider a career in academia" (p. 31). For female faculty members of color who are determined and reluctant to give up, they have to work extremely hard to earn the respect of their colleagues and students and be satisfied with their job.

Overall, faculty members of color still experience issues and challenges in U.S.

higher education, such as discrimination, social isolation, lack of mentoring, occupational stress, devaluation of their research, and lack of promotion opportunities (Allen et al., 2000; Conklin & Robbins-McNeish, 2006; Turner et al., 1999; Turner, 2007). In addition, faculty members of color are expected to work harder than their White colleagues to secure their job at research universities (Turner et al., 1999).

Foreign-Born Faculty

The growth of international graduate students pursuing their doctorate degree in the U.S. has led to an increase of foreign-born faculty members in U.S. institutions. Many international graduate students end up staying in the U.S. looking for a faculty position upon graduation due to more teaching and/or research opportunities in the U.S. than their home countries (Lin et al., 2009; Marvasti, 2005). Based on *The Chronicle of Higher Education Almanac Higher Education 2010, 2012, and 2013,* the demographic breakdown of foreign-born faculty members in U.S. higher education indicates that the numbers of foreign-born faculty members are increasing by a small percentage annually (see Table 4).

Table 4. Full-Time Foreign-Born Faculty Members for Fall 2007, 2009, and 2011

Year	Overall	Men	Women	Public-4	Private-4
2007[a]	40,430	26,229	14,882	23,174	15,390
2009[b]	40,950	25,311	14,762	22,896	14,887
2011[c]	41,766	N/A	N/A	25,215	15,690

[a]*Source: The Chronicle of Higher Education Almanac of Higher Education, 2010.*
[b]*Source: The Chronicle of Higher Education Almanac of Higher Education, 2012.*
[c]*Source: The Chronicle of Higher Education Almanac of Higher Education, 2013.*

One factor that has drawn foreign-born faculty members to pursue a faculty position in the U.S. is the teaching and research opportunities that are available in the

institutions, especially in the science and engineering field (Sabharwal, 2011). The number of international students pursuing science and engineering degrees is increasing every year (Corley and Sabharwal, 2007). According to *the National Science Board 2012*, in 2007, China was the world leader in the number of doctoral degrees awarded in natural science and engineering. From 2002 to 2009, China, South Korea, Japan, and Taiwan have also been very consistent with their growth of research scholars in science and engineering (National Science Board, 2012). On the other hand, the U.S. struggles in this area; the number of research scholars in science and engineering has declined tremendously from 2002-09 (National Science Board, 2012). The science and engineering indicator report also indicated that U.S. engineering doctorates earned by temporary visa holders (i.e., international students) have risen from 51% to as high as 63% from 2005-07 (National Science Board, 2012). Since there is a shortage of U.S.-born science and engineering research scholars, university administrators are forced to consider hiring more foreign-born science and engineering faculty members to resolve the faculty shortage issue (Lin et al., 2009).

Despite that foreign-born faculty members graduated from U.S. higher education institutions, many of these non-European foreign-born faculty members still face challenges transitioning and adapting to their faculty position in the U.S. (Alberts, 2008; Collins, 2008; Howe, 2008; Marvasti, 2005). Foreign-born faculty members from Western Europe who share similar language and cultural background, and maintain high level of contact with the American students tend to adapt well with the adjustment (Howe, 2008; Turner, 2007). On the contrary, foreign-born faculty members who are not from Western Europe tend to face greater challenges with their faculty positions due

to language barriers, and cultural and values differences, such as cultural shock, poor faculty-student working relationships, lack of collegiality, and issues of isolation (Howe, 2008; Thomas & Johnson, 2004). As new faculty members in U.S. institutions, faculty members are expected to learn the policies and procedures (e.g., classroom cultures, research expectations, and tenure and promotion procedures) that are practiced in their institutions (Howe, 2008; Thomas & Johnson, 2004). With all other job responsibilities, foreign-born faculty members are often overwhelmed and frustrated for not being able to cope with the adjustment in a timely manner. Subsequently, it has affected their performance as professors and research scholars (Collins, 2008; Zafar et al., 2012). In addition, undergraduate students often complain they are having difficulties in understanding and communicating with their foreign-born faculty members because they are not used to the faculty members' accents. Also, foreign-born faculty members have trouble with cross-cultural communication (Alberts, 2008; Marvasti, 2005; Neves & Sanyal, 1991). On the other hand, foreign-born faculty members are surprised with the expectations of their students. In Alberts's (2008) qualitative study, she found that foreign-born faculty members were shocked whenever they learned that students felt entitled to receive good grades with minimal work and expected extra credit assignments when they had not done as well in a class as they had expected. All these differences have added extra pressure and stress to foreign-born faculty members.

Outside the classroom setting, foreign-born faculty members also have to deal with their legal working status, which is to obtain permanent residency rights. Many foreign-born graduates struggle in finding a full-time faculty position after graduation; as a result, some of them have to consider pursuing a post-doctoral fellowship (Corley

& Sabharwal, 2007). This explains why in Collin's (2008) study, 28 out of 30 foreign-born faculty members in her study stressed that obtaining a Green Card to stay in the U.S. had always been on their mind after they were hired. They shared that without valid legal documentation (i.e. Green Card) in hand; they would not feel secure in their job. This can be difficult for new faculty members as they try to juggle everything all at once in the first two years of their employment. In addition, even if foreign-born faculty members are dissatisfied with their job, they are likely going to stay with their employer until they have received their Green Card because of the substantial legal expenses for their Green Card application (Collins, 2008). In addition, they are required to get a new sponsorship from their new employer if they were to change jobs in the middle of the Green Card application process (Collin, 2008; Varma, 2010).

Besides language, cultural, and employment barriers, other factors also have affected foreign-born faculty members' job satisfaction: their personal lives (e.g., marital and family status), departmental and/or institutional support, and salary gaps (Collins, 2008; Corley & Sabharwal, 2007; Howe, 2008; Marvasti, 2005). Foreign-born faculty members who are born and raised with collective society values are used to spending time with their family and friends, whereas people in the U.S. value their personal space and independence more than in other countries and view their relationships informally (Collins, 2008). Foreign-born faculty members who are not used to that cultural difference have difficulty relating to the locals and begin to experience loneliness (Collins, 2008; Zafar et al., 2012). Past studies have shown mixed results of the relationship between marriage and faculty job satisfaction. Several studies showed that faculty members who are married are more satisfied with their jobs (Cetin,

2006; Hagedorn, 2000; Leung, Siu, & Spector, 2000; Sabharwal & Corley, 2009). Their spouse may have provided them the emotional support that they missed from their family and friends in their home countries (Toutkoushian et al., 2007). On the other hand, in Verret's (2011) study, she found that marriage has no significant impact on faculty job satisfaction. In terms of the status of their spouse, Kim et al. (2011) found out that married foreign-born faculty members with spouses working full-time are more satisfied than those who are not working or working only part-time jobs. Furthermore, foreign-born faculty members, especially men who have younger children tend to be happier and more satisfied with their job. In contrast, female faculty members who have younger children tend to struggle with job satisfaction (Sabharwal, 2011). In many foreign countries like China and India, women are often perceived as the motherly figures in their family, so they are expected to stay at home to rear their children and support their husbands instead of spending long hours in higher education teaching and working on their research (Sabharwal, 2011).

Many foreign-born faculty members also share similar experiences as other faculty members of color in the U.S., feeling socially isolated and helpless due to the lack of mentoring support from the departments or institutions, and mentoring support is nonexistent for them (Alberts, 2008; Mamiseishvili, 2011; Moody, 2004). They feel as if they are on their own and they have to figure everything out about their new career by themselves (Zafar et al., 2012). Faculty members who are passive or shy may even have a harder time adapting to their jobs. University administrators admitted that they could have done a better job in providing mentoring and networking support to foreign-born faculty members, easing their transition to the academic career (Alberts, 2008).

Despite all the challenges that foreign-born faculty members have to overcome, foreign-born faculty members spend longer hours at their faculty jobs than their U.S.-born counterparts because they acknowledge that they need to be more competitive to secure their academic position (Marvasti, 2005; Varma, 2010). For example, in 1993, foreign-born faculty members spent an average 25.6% of their time in research work as compared to their U.S.-born colleagues who only spent 12.7% of their time in research work (Marvasti, 2005). Studies also showed that many foreign-born faculty members of Asian descent, both male and female, have committed long hours to their research and outperformed their White counterparts in research outcome (Corley & Sabharwal, 2007; Lee, 2004) even if they were dissatisfied with their job because they understand that research output at research institutions reflects their status and reputation in higher education as well as the institutional reward structures (Zafar et al., 2012). That means that their tenure review process relies heavily on their scholarly production. Furthermore, students, faculty, and administrators often question and treat foreign-born female faculty differently. To earn their respect, foreign-born female faculty feel obligated to work hard and be productive to establish their credibility by achieving tenure (Mamiseishvili, 2010). "Tenure in academia means academic freedom guarded by job security" (Lin et al., 2009, p.707). Foreign-born faculty members are less likely to achieve tenure than their native-born colleagues. Even in science and engineering, foreign-born faculty members who are known as experts in the field still have a tough time achieving associate or full professor status (Collins, 2008; Corley & Sabharwal, 2007). Hence, some foreign-born faculty members continue to be persistent and productive in their scholarly work, hoping to achieve tenure and promotion, whereas

other foreign-born faculty members are more likely to leave the institutions to take on a research role for corporations (Lin et al., 2009).

U.S.-born and foreign-born faculty members play an important role in U.S. higher education. There are studies that focus on the job satisfaction of female faculty and faculty members of color; however, there is still a lack of research on foreign-born faculty members' job satisfaction. This research not only helps to bridge the gap concerning foreign-born faculty members' job satisfaction but also allows the researcher scholars to better understand the relationship among self-esteem, mentoring, and job satisfaction of the U.S.-born and foreign-born faculty members.

Mentoring

Mentoring is a topic that has been discussed and studied for decades, but a standard definition for the words "mentor" and "mentoring" has yet to be developed. These terms still have various meanings to people (Berk et al., 2005; Kram, 1985). In addition, faculty members and practitioners have a tough time clarifying the concept of mentoring and the relationship between mentors and protégés (Sands et al., 1991). Kogler Hill, Bahniuk, and Dobos (1989) defined mentoring as "a communication relationship in which a senior person supports, tutors, guides, and facilitates a junior person's career development" (p. 15). Bryant-Shanklin and Brumage (2011) described it as "a process involving two or more individuals working together to develop the careers and abilities of all participants" (p. 43). Alleman defined mentoring as "a relationship between two people in which one person with greater rank, experience, and/or expertise teaches, counsels, guides, and helps the other to develop both professionally and personally" (as cited in Brown, 1999, p. 48). Haggard, Dougherty, Turban, and

Wilbanks (2010) identified three major attributes that define a mentoring relationship: reciprocal relationship, developmental benefits, and regular/consistent interaction over some period of time. With a reciprocal relationship, the mentor and protégé develop a mutual relationship with one another instead of a one-way relationship. The relationship is developed through face-to-face, online or phone communication. Developmental benefits are referred to the "learning partnership" between the mentor and the protégé (Eby, Allen, Evans, Ng, & DuBois, 2008). For example, the mentor who is usually older, more experienced, and higher in rank would learn from the protégé about the different types of technology that are important and useful to improve their job performance. Last, the regular and consistent interactions between the mentor and protégé also shape the mentoring relationship. Unlike the other types of coaching or advising relationships, a mentor and protégé who are in a mentoring relationship tend to have a stronger bond with one another. For this study, the researcher in the study has adopted the definition of a mentoring relationship from Berk et al. (2005), which is

> one that may vary along a continuum from informal/short-term to formal/long-term in which faculty with useful experience, knowledge, skills, and/or wisdom offers advice, information, guidance, support, or opportunity to another faculty member or student for that individuals' professional development (p. 67).

Despite that research scholars and practitioners have a tough time finding a consensus definition for these terms, mentors and mentoring relationships play a significant role in increasing an employee's job satisfaction (Allen & Eby, 2008). Higher education administrators also believe that mentoring plays a vital role in the growth and development of faculty members (Alberts, 2008; Bryant-Shanklin &

Brumage, 2011; Collins, 2008; Conklin & Robbins-McNeish, 2006; Turner, 2007; Turner et al., 1999). This explains why there is a continuous growth of faculty mentoring programs in U.S. higher education, including health professional programs. However, Sands, Parson, and Duane's (1991) study showed that only one third of their 347 faculty participants had a mentor at their university. Seventy-two percent of their participants claimed that they had had a mentor in their previous academic, teaching, or professional careers. Many of them also claimed that they had their last mentoring experiences when they were in graduate school. It is still a challenge for universities to provide mentoring support to faculty members, yet there is limited research that can provide insights into the trends of current faculty mentoring programs in the U.S. This study is designed to bridge the gap in the literature by investigating the faculty members' mentoring experience in the U.S.

Mentors not only help faculty members to acclimate to their organizations, but they also provide advice to faculty members in making wise decisions for their teaching, research, and service roles (Barker & Cohoon, 2007). For example, nursing colleges across the U.S. are facing faculty shortages due to aging faculty members, inadequate or noncompetitive salaries, and fewer nurses trained and prepared for teaching positions. Through mentoring programs, senior faculty members can teach and prepare the incoming nurses to be more oriented, knowledgeable, and comfortable assuming faculty positions in the nursing profession (Brown, 1999).

Past research also reveals that junior faculty members tend to feel isolated (Olsen, 1993), uncertain about their performance expectations (Cawyer et al., 2002), dissatisfied with their new environment (Cawyer & Friedrich, 1998), experience high

stress, have low satisfaction, and have a lack of role definition (Olsen, 1993) when they started their new faculty position in U.S. higher education. According to Schrodt, Cawyer, and Sanders (2003), mentoring is an avenue for improving the quality of work life for organizational members. Mentoring enables faculty members to overcome their job transition by networking and socializing with other faculty members. In addition, institutions may utilize mentoring programs to boost faculty morale and job satisfaction (Lee & del Carmen Montiel, 2011). As Acker shared, "employees who are satisfied with their jobs are more likely to stay and continue their positions" (as cited in Lee & del Carmen Montiel, 2011, p. 482).

Mentoring programs can be divided into two different categories: formal and informal mentoring. Since the structure of these two types of mentoring programs is very different, faculty members and administrators need to identify whether there is one that works better for them or there is a need to incorporate both types of mentoring programs to make it more effective. In a mentoring relationship, the experienced faculty member typically serves as a trusted counselor, teacher, or guide to the inexperienced protégé (i.e. the new or junior faculty member). The mentoring relationship does not take off overnight; it develops on a personal level after a period of time, therefore, mentor and protégé need to spend time to develop the mentoring relationship (Haggard et al., 2010; Santo, Engstrom, Reetz, Schweinle, & Reed, 2009; Zafar et al., 2012). Barker and Cohoon (2007) firmly believe that quality and successful mentoring programs require planning and structure.

Formal Mentoring

A formal or institutionalized mentoring program is a top-down mentorship

program organized and overseen by the top management of the institution. Generally, the top management designates a committee that consists of a group of faculty members (i.e., senior and junior faculty) and administrators to plan and structure the mentoring program and the committee will report to the top management sporadically about the progress of the mentoring program. Corporations such as Johnson and Johnson, General Motors, Procter and Gamble, and other Fortune 500 companies commonly use this type of mentoring program (Carden, 1990; Ehrich & Hansford, 1999). Institutions that set up formal mentoring programs usually require their constituents (i.e., faculty members) to participate in it. In most cases, the senior faculty members are designated as the mentors or role models to new or junior faculty members (Zafar et al., 2012). Senior faculty members may be assigned to one or multiple new/junior faculty members depending on the total number of mentors and protégés that need to be matched. It is common that the assigned mentor and protégé may have nothing in common besides their roles as faculty members in the institution because most formal mentoring programs are tailored to meet specific institutional or departmental needs instead of individual needs (Carden, 1990; Zafar et al., 2012).

According to the existing research, research scholars have mixed feeling about formal and informal mentoring programs. Despite that the majority of the research indicates that informal mentoring programs are more effective than formal mentoring programs, the formal mentoring programs still provide values and benefits to underrepresented faculty members, such as female faculty members, faculty members of color, and foreign-born faculty members (Cawyer et al., 2002; Digg, Garrison-Wade, Estrada, & Galindo, 2009; Sands et al., 1991; Zafar, 2012). Research shows that faculty

members are more comfortable relating to people of the same sex and ethnicity (Sands et al., 1991). Since the majority of the faculty members are White males, female faculty members, faculty members of color, and foreign-born faculty members are clearly at a disadvantage in finding mentors who are of the same sex (Sands, Parson, & Duane, 1991) or ethnicity (Griffin, 2012). Many foreign-born faculty members were born and reared in a different culture. As they enter U.S. institutions as new faculty members, they may be reluctant to seek mentoring relationships due to different social norms, cultures, and language barriers (Zafar, Roberts, & Behar-Horenstein, 2012). With formal mentoring, female faculty members, faculty members of color, and foreign-born faculty members are extended the mentoring opportunities that would not have been considered previously in their institution due to differences in sex or nationality. In addition, a formal mentoring program ensures mentors and protégés are committed to the program and that mentors are compatible to the protégés (Ehrich & Hansford, 1999).

Informal Mentoring

An informal mentoring relationship, also known as the traditional mentoring relationship, is the oldest mentoring relationship developed between mentor and protégé (Ehrich & Hansford, 1999). According to Byrne, this type of mentoring relationship is highly selective and elitist in nature (cited in Ehrich & Hansford, 1999, p. 94). The mentor, who is usually the senior and more experienced faculty member, takes up the advisor, counselor, or teacher role to develop the junior faculty member, or protégé (Brown, 1999). Historically, the mentor's selection process could be biased. Instead of solely focusing on the protégé's talents and potential, the mentor would select their protégé based on personal aspects, such as their religious background, cultural

background, ethnicity, or even their sex (Sands et al., 1991). Consequently, many

qualified protégés were not given mentoring opportunities (Ehrich & Hansford, 1999).

With the growth of formal mentoring, the informal mentoring program has changed

drastically. Levinson argued that mentoring is not a sponsorship between the mentor

and the protégé, but it is an important development process to adulthood (cited in

Ehrich & Hansford, 1999, p. 92). The mentor-protégé relationship is often pursued

voluntarily and it is influenced by the personal and/or working relationship of the

mentor and the protégé (Sands et al., 1991). In addition, most mentors and protégés

share some commonalities between them outside the work setting. Brown (1999) shared

that mentoring tends to work best when there are mutual benefits for both the mentor

and protégé. The mutual connection between the mentor and protégé will lead them to

be more committed to their mentoring relationship.

Characteristics of a Mentor

The mentoring relationship is about developing new or junior faculty members.

A common challenge that a protégé may face in seeking a mentor-protégé relationship

is to identify a qualified mentor who can be there to guide, support, and counsel him or

her as he or she begins to build a new faculty career. The other issue that may occur

with a senior faculty member is to understand the roles and qualifications that he or she

needs to serve as a faculty mentor. Berk et al. (2005) shared that a mentor should be

responsible and committed in providing resources and expertise in the field; offering

guidance and direction regarding professional issues; providing constructive feedback

or critiques of the protégé's work; challenging the protégé to expand his or her abilities,

and answering the protégé's questions. In addition, a mentor should also be able to

share ideas with his or her protégé, provide him or her ideas on how to manage time, and help integrate the protégé's teaching and research interests (Bryant-Shanklin & Brumage, 2011; Johnston & McCormack, 1997). Nonetheless, the key to be a successful mentor is still the mentor's ability and willingness to spend time to meet with the protégé on a regular basis. Protégés who meet with their mentors more frequently tend to have higher satisfaction in their career or academic experience (Ehrich & Hansford, 1999; Karcher, 2005; Waters, McCabe, Kiellerup, & Kiellerup, 2002).

Benefits of Mentoring

Mentoring provides benefits and positive outcomes to faculty members in the higher education setting. According to Kram (1985), protégés who are mentored are more likely to receive psychosocial support and career-related support than those who are not mentored. Psychosocial support includes role modeling, acceptance, confirmation, counseling, and friendship. Career-related support that promotes career advancement includes providing sponsorship, promoting exposure and visibility, coaching, protecting, and offering challenging assignments (Borders, Young, Wester, Murray, Villalba, Lewis, & Mobley, 2011; Lee & del Carmen Montiel, 2011). Many foreign-born faculty members who are new to U.S. higher education do not have clear expectations and direction on how to achieve tenure (Zafar et al., 2012). In addition, they have issues acclimating due to cultural, social norm, and language differences. Mentoring may be a way to provide assistance and support for adjustment to the higher education system in the U.S (Zafar et al., 2012; Brown, 1999). For example, the psychosocial support that they receive may serve as a confidence booster to strengthen their social and emotional well-being (Albrecht & Adelman, 1987) and career-related

support may provide them specific guidance and support that they need to move toward the tenure process. Protégés may use small talk and surface-level self-disclosures with their mentors as ways to strengthen their mentoring relationship to help them feel more comfortable in reaching out to their mentors for questions, assistance, and support. Over a period of time, protégés may begin to develop a better social support network with other faculty members. Studies have consistently shown that mentoring assists new or junior faculty members in socializing into the institution (Alberts, 2008; Collins, 2008; Lee & del Carmen Montiel, 2011). Haynes and Petrosko (2009) found that senior faculty members who were mentored previously are more socialized in their organization than those senior faculty members who were not mentored.

The mentor-protégé relationship provides protégés benefits that enable them to excel professionally and academically, such as interpersonal bonding, social support, professional advice, learning about the history and culture of the institution, and access to different resources that are related to their jobs, such as answering questions in regards to research grants, publication outlets, or the tenure review process (Cawyer et al., 2002). Most importantly, a mentoring relationship also allows protégés to acquire research and writing skills requesting grants and disseminate research with their mentor (Bryant-Shanklin & Brumage, 2011). Moreover, Allen found that protégés who are involved in mentoring relationships are more optimistic about their promotion opportunities (as cited in Lee & del Carmen Montiel, 2011). Lee and del Carmen Montiel (2011) recognize that individuals who perceive that they are involved in a mentoring relationship are more satisfied with their jobs than those who are not in any mentoring relationship. Both findings support the results of Schrodt's et al. (2003) study.

Self-Esteem

Self-esteem is a measure of self-worth (Pierce, Gardner, Cummings, & Dunham, 1989). Judge and Bono (2001) defined self-esteem as the overall value that an individual places on himself or herself as a person. Kundu and Rani (2007) described it as a person's subjective appraisal of oneself intrinsically from a positive or negative perspective. Self-esteem involves the thoughts, feelings, emotions, and experiences of an individual throughout his or her life (Alavi & Askaripur, 2003). This construct has been frequently looked at in job satisfaction and job performance research. Social sciences have categorized self-esteem differently, and comparisons in types of self-esteem that have been studied included implicit vs. explicit self-esteem, stable vs. fragile self-esteem, authentic vs. defensive self-esteem, and global vs. task-specific self-esteem. Among all the different types of self-esteem, the global and task-specific self-esteem are frequently used to examine job satisfaction and performance.

Self-esteem has been studied as a trait of core self-evaluations. Besides self-esteem, locus of control, generalized self-efficacy, and neuroticism are other traits that affect core self-evaluations (Judge, Bono, Erez, & Locke, 2005), the fundamental evaluations that people hold to about themselves, the world, and others (Bono & Judge, 2003). Research scholars use core self-evaluations to understand and predict employees' workplace attitudes and behaviors.

In Bono and Judge's (2003) study, they found that self-esteem has the highest factor loading (0.91) among all four traits, followed by generalized self-efficacy (0.81), locus of control (0.73), and neuroticism (-0.74). This indicates that self-esteem carries the most amount of weight on individual core self-evaluations, whereas neuroticism has

the least amount of weight on core self-evaluations. In addition, the study shows that core self-evaluation has a 0.41 correlation to job satisfaction, indicating that core self-evaluation has a significant effect on job satisfaction. As suggested by other research scholars, core self-evaluations represent the intrinsic characteristics that could affect job satisfaction. Studies revealed that approximately 37% of the influence of core self-evaluations on job satisfaction was mediated by the perception of intrinsic job characteristics (Judge, Van Vianen, & De Pater, 2004). Therefore, individuals who score high on core self-evaluations reported greater job satisfaction (Judge, Locke, Durham, & Kluger, 1998).

Rosenberg, Schooler, and Schoenbach (1995) shared that self-esteem could also be studied through global self-esteem or task-specific self-esteem. Global self-esteem is one's acceptance of or respect for oneself and has a direct effect on performance. On the other hand, task-specific self-esteem, which is similar to self-efficacy, focuses on the confidence level that individuals can attain for a specified performance level (Rosenberg et al., 1995). Global self-esteem is a good predictor for the psychological well-being of an individual (e.g., job satisfaction), whereas task-specific self-esteem is a good predictor for the behavior of an individual (e.g., academic performance) (Rosenberg et al., 1995).

Research scholars have different perspectives on self-esteem. Although some scholars view self-esteem as a subsequent effect of job satisfaction and job success (Crocker & Wolfe, 2001; Tafarodi & Swann, 1995), most scholars agree that self-esteem is a good predictor for life outcomes (e.g., work-related well-being, relationship satisfaction, health, and depression) and job satisfaction (Ahmed, 2012; Alavi &

Askaripur, 2003; DeConinck & Brock, 2011; Kuster, Orth, & Meier, 2013; Orth, Robins, & Widaman, 2012). Salmela-Aro and Nurmi (2007) even argued that a person's level of self-esteem during their college years predicts his or her career characteristics 10 years later. People with high self-esteem not only have higher self-confidence levels and clearer self-concepts (Kundu & Rani, 2007), but they are also more optimistic and determined than people with low self-esteem. Moreover, they are willing to take risks and challenges to excel and be successful in life (Kuster et al., 2013; Locke, McClear, & Knight, 1996). According to Alavi & Askaripur (2003), several studies indicated that men are more satisfied in their job because they possess a high self-esteem; on the other hand, other research showed that women have a higher level of self-esteem than men, which makes them even more satisfied with the jobs. In contrast, individuals with low self-esteem tend to have negative viewpoints about themselves. They are easily anxious, more vulnerable with negative feedback, reluctant to take risks (Kuster et al., 2013; Locke et al., 1996), and have higher need for social approval (Vermunt, Van Knippenberg, Van Knippenberg, & Blaauw, 2001). This can affect every area of their lives, such as personal life, work life, and social life (Kundu & Rani, 2007). Empirical studies showed that self-esteem can help employees up to 60 years old achieve job satisfaction. Once employees have exceeded the age of 60, their self-esteem will begin to decrease, and it will eventually affect their job satisfaction levels (Alavi & Askaripur, 2003). In conclusion, employees with high self-esteem are more satisfied with their job than employees with low self-esteem (DeConinck & Brock, 2011; Korman, 1970; Kundu & Rani, 2007; Pierce et al., 1989).

In self-consistency theory (Korman, 1970), individuals are motivated to behave

46

in a manner that represents their self-image. Individuals with high self-esteem are prone to choose occupations that aligned with their interests, which would result in job satisfaction (Korman, 1970). Additionally, individuals choose tasks that not only meet their competency level but also challenge them because being successful at their tasks only reinforces their self-concept. Self-esteem is positively correlated to promotion and the nature of work, which eventually lead to job satisfaction (Ahmed, 2012). Kundu and Rani (2007) found that employees with high self-esteem tend to excel in their careers and earn promotion or develop their careers within their companies. On the other hand, individuals with low self-esteem tend to lack of self-confidence (Robbins, Tracy, Trzesniewski, Potter, & Gosling, 2001), and they view challenging tasks as a plan for failure. Therefore, they would rather choose a task or occupation that is below their competency level to avoid failure and criticism.

The Relationship among Mentoring, Self-Esteem, and Job Satisfaction

The existing literature shows that mentoring and self-esteem can affect faculty job satisfaction respectively (Allen & Eby, 2008; Crocker & Wolfe, 2001; Lee & del Carmen Montiel, 2011; Tafarodi & Swann, 1995). Several studies also explained the relationship between mentoring and self-esteem in different work settings (e.g., Higgins, 1998; Karcher, 2005; Waters, McCabe, Kiellerup, & Kiellerup, 2002). Because plenty of studies have shown the correlation between mentoring and job satisfaction as well as self-esteem and job satisfaction, the researcher in the study argues that if mentoring and self-esteem are correlated, then job satisfaction should also be correlated to mentoring and self-esteem.

Mentors have positively impacted protégés' careers and psychosocial well-being

(Waters et al., 2002). For example, the participants (protégés) of the new business start-up program in Water's et al. (2002) reported significantly higher levels of career-related and psychosocial functions after being mentored. Their findings aligned with Kram's (1985) proposal about the benefits of mentoring. Instead of meeting informally on a regular basis, the protégés and mentors would meet on a set schedule following a structured mentoring program. Formal mentoring should provide greater career-related support to the protégés (Kram, 1985), but the result was the opposite of what was expected. Instead, the protégés received higher levels of psychosocial support, which indicated that mentoring contributes significantly to protégés' self-esteem.

Higgins (1998) conducted a study about the impacts of mentoring on the self-esteem of college-age women. The participants of her study were college-age women who struggled with eating disorders. She tried to investigate how mentoring might have affected college-age women's self-esteem. The results showed that the participants who went through the formal mentoring program did experience an increase in their global self-esteem compared to those who were in the control group. At the end of the study, the participants rediscovered their sense of worthiness, saying for example, "I don't think I will have trouble succeeding in life" (p. 61). Also, they were pleased with who they were, they knew what they wanted out of their life, and also felt competent and capable of going after their goals (Higgins, 1998).

Karcher (2005) conducted a study on the effects of high school mentors on younger protégés. He found that younger protégés experienced similar results as other protégés in business or academia. The mentoring program that was organized by the school helped to develop the protégés' self-esteem, social skills, and self-management.

Subsequently, the protégés became more connected and successful in school. Nonetheless, the mentor's commitment to participate in the program was the key to the success of the mentoring program. Poor attendance of the mentor could have affected the protégés's self-esteem (Karcher, 2005; Waters et al., 2003) and social skills (Karcher, 2005). Mentoring correlates with self-esteem; therefore, the researcher in the study argues that job satisfaction is also correlated to mentoring and self-esteem.

Theoretical Framework: Job Satisfaction Theory

Job satisfaction, defined as "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (Locke, 1976, p. 1304), is frequently studied in industries and higher education. Though job satisfaction has been looked at for a long period of time, there are still limited theories and models that research scholars can utilize for their studies.

Abraham Maslow developed the Maslow's hierarchy of needs theory to explain human behaviors (Benson & Dundis, 2003; Maslow, 1954). The model has been used in different disciplines to learn more about human motivation and human needs (Benson & Dundis, 2003). Maslow believes that individuals have the ability to reach their highest potential when they have met all five tiers of human needs proposed in the Maslow's hierarchy of needs theory; they include: physiological, safety, love/belonging, esteem, and self-actualization (Benson & Dundis, 2003; Sadri & Clarke Bowen, 2003; Simons, Irwin, & Drinnin, 1987). The physiological needs are the basic needs that individuals desire and need to be satisfied before seeking other needs and some examples of physiological needs include salaries and health benefits (Sadri & Clarke Bowen, 2003). When individuals are satisfied with their physiological needs, they begin to pursue the

safety needs, which generally refer to a safe working environment, protection from crime or rioting, and/or a retirement plan. Whenever individuals have reached their safety satisfaction level, they want to be loved and have a sense of belonging to eliminate loneliness and alienation. This explains why individuals socialize and join social or professional organizations for the sake of belonging. Then, individuals begin to seek the needs for esteem. Maslow believes that when individuals have a high self-respect for themselves and others, they tend to have more self-confidence and feel valued by the society. Lastly, Maslow believes that for any individuals to become the best they can be, they must reach the self-actualization stage. Based on Maslow's hierarchy of needs theory, it shows that intrinsic motivators (e.g., self-esteem and self-actualization) have stronger influences on individual's motivation and satisfaction than extrinsic motivators (e.g., physiological, safety, and love/belonging). This study on the other hand views intrinsic and extrinsic motivators equally contribute to faculty job satisfaction. Therefore, the Maslow's hierarchy of needs theory does not fit the design of the study.

Herzberg et al. (1959) developed the dual-factor theory of job satisfaction. According to Herzberg and his colleagues, job satisfaction and job dissatisfaction were the two groups of factors that determine job satisfaction. Job characteristics that are important to job satisfaction but not to dissatisfaction are considered "satisfiers." Other characteristics that contribute to job dissatisfaction and not job satisfaction are considered "dissatisfiers." Although this theory has been commonly used by research scholars for job satisfaction studies, the theory has also received criticism from other scholars for the lack of clarity in interpreting the theory (House & Wigdor, 1967).

Quarstein et al. (1992) also developed a job satisfaction theory, known as the situational occurrences theory of job satisfaction. Similar to the dual-factor theory by Herzberg and his colleagues, the situational occurrences theory also consists of two factor groups: situational occurrences and situational characteristics. However, unlike the dual-factor theory, the factors are not tied to job content-related or job context-related aspects. According to Quarstein et al., job satisfaction is a function of the situational occurrences (e.g., coffee/tea break, having lunch together), situational characteristics (e.g., pay, work environment), and other factors such as bonuses and appraisals that can result in job satisfaction or job dissatisfaction. Other research scholars noted that the theory has neglected the role of personal factors such as age, education, and years of work experience, which can be a crucial element in determining job satisfaction (Oshagbemi, 1997).

Kalleberg (1977) posited that job satisfaction was influenced by the work values and job rewards that individuals experienced and perceived of their work. Six dimensions affect work values and job rewards: intrinsic, convenience, financial, relations with co-workers, career opportunities, and resource adequacy. With the exception of the first dimension (intrinsic), the rest of the dimensions are classified as extrinsic dimensions. An intrinsic dimension refers to the characteristics that actually stimulate workers' interest in the task itself. When workers are intrinsically motivated, they are prone to work harder so that they can be challenged. The convenience dimension, which refers to job characteristics that promote workers' comfort levels, such as the amount of commute time, the work environment itself, or the working hours can affect workers' job satisfaction. Third, the financial dimension, which refers to the

pay, fringe benefits and job security, is an important element that shapes job satisfaction.

Fourth, relations with co-workers, which refer to the socializations within the

organization, and the friendliness and helpfulness of co-workers, may affect workers'

social activity in the organization. Fifth, the career opportunities dimension reflects the

advancement or promotion opportunities that workers may find within the organization.

Last, the resource adequacy dimension refers to any additional resources such as

mentoring, professional development opportunities, or site supports that workers may

find in their organization to improve their performance (Kalleberg, 1977). Kalleberg's

Job Satisfaction Theory (1977) is summarized and shown as Figure 1.
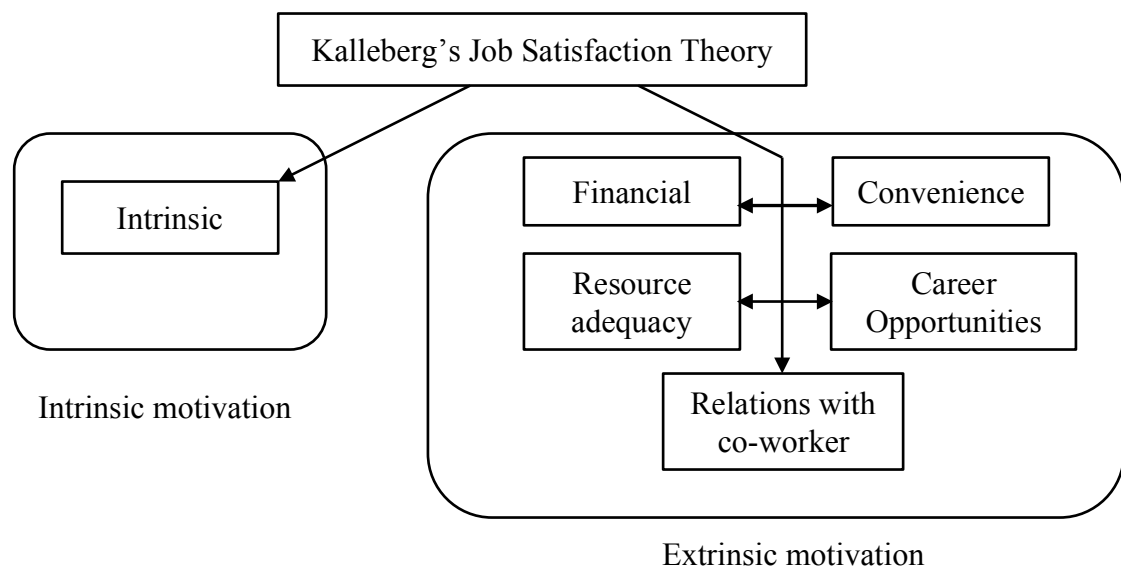
Figure 1. Kalleberg's Job Satisfaction Theory

Both intrinsic and extrinsic motivation are key factors that affect job satisfaction

of workers regardless of the work setting (O'Reilly & Caldwell, 1980). Among the four

job satisfaction theories that are mentioned, the present study is most aligned with

Kalleberg's Job Satisfaction Theory. According to Rosenberg, Schooler, and

Schoenbach (1995), self-esteem (i.e., global self-esteem) is a person's acceptance of or

respect for himself or herself, which is an intrinsic factor under Kalleberg's Job

Satisfaction Theory. On the other hand, mentoring, as Alleman defined it as "a

relationship between two people in which one person with greater rank, experience,

and/or expertise teaches, counsels, guides, and helps the other to develop both

professionally and personally" (as cited in Brown, 1999, p. 48) is an extrinsic factor

under Kalleberg's Job Satisfaction Theory. Among all four frameworks, the Kalleberg's

Job Satisfaction Theory is the best-fit framework to guide this particular study.

Therefore, this study will use the Kalleberg's Job Satisfaction Theory as a framework.

Summary

There is a continuous growth of U.S.-born and foreign-born faculty members in

U.S. institutions. Faculty members who are married and have young children living

with them are more satisfied with their jobs, with the exception of foreign-born female

faculty members because women are perceived as homemakers in their countries of

origin. In addition, faculty ranking and tenure have also affected the job satisfaction of

faculty members of color and foreign-born faculty members.

Mentoring and self-esteem can directly influence job satisfaction. Faculty

members who have high self-esteem tend to be more satisfied and successful in their

jobs than faculty members who have low self-esteem. Mentoring positively influences

faculty members' job satisfaction. Therefore, institutional administrators should utilize

mentoring programs to improve faculty members who have low self-esteem to

ultimately increase their job satisfaction.

Chapter 3: Methodology

The purpose of this study was to compare U.S.-born and foreign-born faculty members' perceived job satisfaction at research universities with very high (RU/VH) and high (RU/H) research activity. In addition, the research sought to explore the relationship between U.S.-born and foreign-born faculty members' perceived job satisfaction with marital status, faculty ranking, and tenure status as well as the relationship among self-esteem, mentoring, and job satisfaction of U.S.-born and foreign-born faculty members. A causal-relational study was conducted to support the research study. The following sections describe the population, sample size, instrumentation, data collection, data analysis, and human subject's research approval.

Population

The targeted population for this study was U.S.-born and foreign-born faculty members who were employed full-time at public or private doctorate-granting institutions classified by the Carnegie Classification of Institutions of Higher Education as RU/VH: research university with very high research activity or RU/H: research university with high research activity. To be classified as doctorate-granting institutions, the selected institutions must award at least 20 research doctoral degrees during the current year. The researcher in the study compiled a list of all public and private doctorate-granting institutions that were listed on the Carnegie Classification of Institutions of Higher Education's website (http://classifications.carnegiefoundation. org/descriptions/ basic.php) and later the list was divided into four regions: Northeast, Midwest, West, and South (Appendix D). A random-convenient selection was drawn from the population using Urbaniak and Plous's (1997) Research Randomizer. A total

of 21 institutions representing all four regions were selected and participants were recruited from four specific colleges across the selected institutions. The rational for choosing those four colleges was because they existed in all 21 institutions, which would allow comparison to be made among U.S.-born and foreign-born faculty members. The accessible population was identified by university and department websites.

Sample Size

Olejnik (1984) revealed that sample size not only affected the statistical power of a study, but it also influenced the choice of instrumentation, design, and analysis that were used for research studies. According to Olejnik (1984), there were four factors that determined the sample size of a study: criterion for statistical significance, level of statistical power, statistical analysis strategy, and size of an effect. To achieve the statistical power for this study, the researcher in the study utilized two power analysis tools – the G*Power 3.1 and *a priori* calculator – to determine the sample size for the study.

According to G* Power 3.1, the minimum sample size required to utilize one-tailed *t*-test to measure and compare mean difference of two independent groups with an effect size, d = .5, alpha level, α = .05, and power = .8 was 102 participants, whereas for a two-tailed *t*-test with the same effect size, alpha level, and power, it required 128 participants. Further, the statistical power analysis tool required at least 180 participants to utilize one-way analysis of variance (ANOVA) to measure the mean difference of four different groups of faculty members with an effect size, f = .25, alpha level, α = .05, and power = .8. The statistical power analysis tool required at least 179 participants to

utilize two-way analysis of variance to measure the mean difference of two groups of faculty members (U.S.-born and foreign-born) with two groups of independent variable (i.e., marital status, tenure status, and mentoring status) at effect size, f = .25, alpha level, α = .05, and power = .8. A minimum of 76 participants were required to utilize one-tail Pearson product moment correlation coefficient, *Pearson r,* to determine the magnitude of the relationship between self-esteem and job satisfaction, with an effect size, q = .6, alpha level, α = .05, and power = .8. Last, *a priori* calculator for multiple regression indicated that with a medium effect size, f^2 = .15, alpha level, α = .05, and power = .8, a minimum of 67 participants were required to determine the regression for 2 predictors. In order to satisfy the sample size requirements for the different statistical tests, the researcher in the study had to use the common denominator among all required sample sizes to decide the final sample size of the study and the result showed that at least 180 participants (*n* = 180) were required for the study. The final sample size selected was 800, which exceeded the minimum required sample size of 180. Half of the sample size would be U.S.-born faculty members (*n*= 400) and the other half would be foreign-born faculty members (*n*= 400).

This study was conducted at 21 public and private research universities with very high or high research activity in different regions of the U.S. (i.e., West, Midwest, Northeast, and South) (see Appendix D). A total of 481 participants (10%) volunteered to participate in the study. The participants were full-time U.S.-born or foreign-born faculty members representing four colleges (i.e., Business, Engineering, Education, and Communication) at those 21 institutions and they either received their academic graduate or doctorate degree from the U.S. or foreign countries. Also, the participants

represented different martial status (i.e., single, married or domestic partnership, windowed, separated, and divorced), races (i.e. White, Asian, Black, Non-White Hispanic or Latino, and American Indian), faculty rankings (i.e., Professor, Associate Professor, Assistant Professor, and Instructor), and faculty positions (i.e., tenured, tenure track, renewable term, or clinical or research position without tenure).

Instrumentation

Based on a review of previous research on job satisfaction, mentoring, and self-esteem, there was not a standard instrument that would measure all three variables. All the instruments focused on an individual variable. As a result, the researcher in the study developed an instrument for this study by creating a demographic survey and incorporating three different survey instruments to answer the research questions. The selected survey instruments were used in similar type of studies, but with different populations and in different work settings. The instrumentation consisted of four sections and it was hosted online by Qualtrics© (http://qualtrics.com). The first part of the survey consisted of 12-item demographic questions. The second part of the survey consisted of Spector's (1985) 36-item *Job Satisfaction Scale.* The third part of the survey consisted of Rosenberg's (1965) 10-item *Rosenberg Self-Esteem Scale*. The fourth part of the survey consisted of Berk, Berg, Mortimer, Walton-Moss, and Yeo's (2005) 12-item *Mentorship Effectiveness Scale* and two additional mentoring related questions. The final part of the survey consisted of one Likert-scale question and one open-ended question that surveyed participants' perspective on mentoring. The mentoring variable would determine the total number of questions that participants needed to complete. Participants who were mentored in the last five years would fill out

a survey that consisted of 74 items (i.e., demographics, job satisfaction, self-esteem, and mentoring), whereas participants who were not mentored in the last five years would fill out a survey that consisted of 61 items (i.e., demographics, job satisfaction, and self-esteem). The instrument can be found in Appendix F.

Demographic

The demographic survey, which included but were not limited to, country of origin, age, sex, race, marital status, number of children, country where they received their academic doctorate degree, the type of institution where they taught, the position that they held, and the duration they had been in that position, was developed to obtain personal information about the participants. The data was used for descriptive and analyses purposes.

Job Satisfaction

The *Job Satisfaction Scale* (JSS) designed by Spector (1985) was selected for this study. The survey scale consists of 36 Likert-scale items on a six point scale with responses ranging from "1 = Disagree Very Much" to "6 = Agree Very Much." The survey covers nine facets of job satisfaction: pay, promotion, supervision, fringe benefits, contingent rewards (performance based rewards), operating procedures (required rules and procedures), coworkers, nature of work, and communication. Questions are written in both directions (e.g., "I feel I am being paid a fair amount for the work I do" and "I sometimes feel my job is meaningless"), so questions that are worded negatively (i.e., 2, 4, 6, 8, 10, 12, 14, 16, 18, 19, 21, 23, 24, 26, 29, 31, 32, 34, and 36) must be reverse scored. Each item is scored from 1 to 6 and the mean score of each subscale can be interpreted: 1.00 – 2.99 = Dissatisfied, 3.00 – 3.99 = Ambivalent,

and 4.00 – 6.00 = Satisfied.

Spector's (1985) *Job Satisfaction Scale (JSS)* was selected among all the different job satisfaction scales because it had an acceptable length (36 items) and the sub-scales covered key components that could be used to measure U.S.-born and foreign-born faculty members' attitudes about their job and aspects of their job. In addition, the survey was free to administer. The other job satisfaction scales that the researcher in the study had considered included *Job Descriptive Index* (Smith, Kendall, & Hulin, 1969), *Job Satisfaction/Dissatisfaction Scale* (Wood, 1973), *Minnesota Satisfaction Index* (Weiss, Dawis, Lofquist, & England, 1966), and *Higher Education Research Institute (HERI)* Faculty Survey (http://www.heri.ucla.edu/researchers/ instruments/FACULTY/2013FAC.pdf). The *Job Descriptive Index* (72-item), *Job Satisfaction/Dissatisfaction Scale* (76-item) and *Minnesota Satisfaction Scale* (100-item) were not selected because of the length of the survey, which could be problematic for this study given there were two other surveys (i.e., self-esteem and mentoring) that would be incorporated in the study. The *HERI Faculty Survey* (50-item) was not selected because of the cost involved to administer the study. The Higher Education Research Institute would charge $825 to utilize the survey and an addition $3.25 per survey for processing. The estimated total cost for 800 participants is $3,425.

Mentoring

The *Mentorship Effectiveness Scale* (Berk et al., 2005) developed by John Hopkins University School of Nursing Ad Hoc Faculty Mentoring Committee was adopted for this study. The formal rating scale was developed to provide an efficient, comprehensive, and standardized tool to rate faculty's mentorship experience such as

59

the effectiveness of the mentor (e.g., My mentor motivates me to improve my work product; My mentor is accessible). The original scale consisted of 12 items and was structured using a 7-point Likert-scale format, ranging from "0 = Strongly Disagree" to "5 = Strongly Agree" as well as scale "6 = Not Applicable" to reflect a characteristic that was not appropriate for a mentor-protégé relationship. To meet the needs of this study as well as maintaining consistency of the survey, the researcher in the study modified the survey items by renumbering all the Likert-scale format, ranging from "1 = Strongly Disagree" to "6 = Strongly Agree." In addition, the researcher in the study removed the "7 = Not Applicable" options to require participants to select an answer that best described their mentoring experience. The new total score range from 12 to 72. A higher total score indicates more positive faculty relationships.

Self-Esteem

The *Rosenberg Self-Esteem Scale* (*RES*) was developed by Morris Rosenberg in 1965 (Rosenberg, 1965). The scale contains two components (i.e., self-confidence and self-deprecation) and it has been widely used in different social science research such as psychology, psychiatry, and sociology. *Rosenberg Self-Esteem Scale* (1965) consists of 10 Likert-scale items answered in a four point scale, ranging from "0 = Strongly Disagree" to "3 = Strongly Agree." The questions are structured in both directions; half of them are worded positively (e.g., "On the whole, I am satisfied with myself.") and the other half are worded negatively (e.g., "I feel I do not have much to be proud of.") The researcher in the study modified the Likert-scale format to "1 = Strongly Disagree" to "4 = Strongly Agree" to match the other two scales (*Job Satisfaction Scale* and *Mentorship Effectiveness Scale*). Half of the items (i.e., 2, 5, 6, 8, and 9) need to be

reverse scored to reflect accuracy of the total score. Each item is scored from 1 point to 4 points and the total score ranges from 10 to 40. A score between 20 to 30 is within normal range and a score below 15 suggests low self-esteem.

Validity and Reliability

The instrumentation was used to explore the relationship among job satisfaction, mentoring, and self-esteem of U.S.-born and foreign-born faculty members. To ensure the instrumentation achieved its purpose, it was important to examine the psychometric properties of the three survey scales.

Job Satisfaction

The *Job Satisfaction Scale* (*JSS*) is commonly used among job satisfaction research due to its validity and reliability. The reliabilities of the nine facets based on a sample of 2,870 are: pay (r = .75), promotion (r = .73), supervision (r = .82), fringe benefits (r = .73), contingent rewards (r = .76), operating procedures (rules and regulations) (r = .62), coworkers (r = .60), nature of work (r = .78), and communication (r = .71). The overall reliability of the scale is r = .91. The internal consistency reliability (coefficient alpha) for each subscale is above the .50 minimum with the exception of two subscales that have achieved over .70. Also, the test-retest reliability for the subscales ranges from .37 to .74 and .71 for the entire scale (Spector, 1985). Based on the multitrait-multimethod analysis of *Job Satisfaction Scale* (*JSS*) and *Job Descriptive Index* (*JDI*) focusing on the sub-scales, JSS has a convergent validity of .61 - .81 and a discriminant validity of .19 - .59 (Spector, 1985).

Mentoring

The *Mentorship Effectiveness Scale* (*MES*) written items were initially obtained

through qualitative research methods, then reviewed by a five-member faculty committee for their psychometric form as well as the mentor-characteristic substance to achieve content-related validity. The item revisions required several iterations until unanimity by the committee was attained (Berk et al., 2005, p.68). In Beverly's (2011) study, he reported a *MES* Cronbach's alpha coefficient of .99, which has provided evidence that the *MES* is a very reliable instrument to measure mentoring effectiveness.

Self-Esteem

The *Rosenberg Self-Esteem Scale* (*RSE*) that has been used and tested in different languages has a correlation of at least .80 for one type of reliability; however, the standard reliability ranges from .50 to .90 depending on the intended use and context for the instrument. In addition, the scale has an internal consistency ranges from .77 to .88 and a test-retest reliability that ranges from .82 to .85. Also, the scale has a criterion validity of .55 and construct validity of -.64 (with anxiety), -.54 (with depression), and -.43 (with anomie) (Rosenberg, 1965).

The researcher in the study also recruited faculty members who were familiar with the purpose of the instrumentation to help with quality control by examining the items on the surveys. The faculty members validated all the items listed on the surveys and proposed few minor changes to the wordings of the *Job Satisfaction Scale* to meet the context of the study, for example, the word "supervisor" was replaced with "department chair", "people" was replaced with "faculty", and "coworkers" was replaced with "colleagues." The researcher in the study revised the survey items and made changes based on faculty members' feedback.

Data Collection

The researcher in the study began the study by obtaining approval from the University of Oklahoma Institutional Review Board (IRB) for research involving human subjects and the study was granted exempt status approval (see Appendix A). Data was collected within a five-week period during the months of December and January. An initial recruitment email (see Appendix B) was sent to all faculty members that were on the list compiled from university and departmental websites. In the email, they were informed about the purpose and importance of the study, estimated length of the study, contact information of the researcher in the study and his faculty advisor as well as the link to the survey. Informed consent was obtained on the first page of the web-based survey (see Appendix E). On the consent form, faculty members were again notified about the purpose of the study, confidentiality of their personal information, voluntary nature of their participation, and contact information of the researcher in the study, his advisor as well as University of Oklahoma Institutional Review Board. Faculty members' participation was completely voluntary. They were not eligible for any benefits or rewards. No sanctions were applied to faculty members who declined to participate in the study. A second email (see Appendix C) was sent four weeks later as a reminder to faculty members who had not completed the survey.

The recruitment emails were sent to 4,861 faculty members from four colleges in twenty-one institutions. Twenty institutions were randomly selected and they were either public or private doctorate-granting research universities with very high (RU/VH) or high (RU/H) research activity. Five hundred and sixty participants responded to the survey; 553 participants volunteered to take part in the study and 7 participants declined

to participate in the study. Seventy-two participants either did not complete their survey or had missing data; as a result, their responses were removed from the data analysis, which left only 481 responses (10%) that were usable for data analysis.

Job Satisfaction Scale Scoring

The *Job Satisfaction Scale* (*JSS*) used a Likert-scale format: 1 = Disagree Very Much, 2 = Disagree Moderately, 3 = Disagree Slightly, 4 = Agree Slightly, 5 = Agree Moderately, and 6 = Agree Very Much. There were 36 items total. Out of the 36 items, 17 items were written in positive direction and 19 items were written in negative direction. Each item was scored from 1 to 6 points. The items that were written in the positive direction were scored according to the Likert-scale format, for example, response for Disagree Very Much would receive 1 point and response for Agree Very much would receive 6 points, whereas half of the items (18-item) were written in the negative direction. Each item is scored from 1 to 6 points and the mean score for each subscale can be interpreted: 1.00 – 2.99 = Dissatisfied, 3.00 – 3.99 = Ambivalent, and 4.00 – 6.00 = Satisfied.

Mentorship Effectiveness Scale Scoring

The *Mentorship Effectiveness Scale* used a Likert-scale response format: 1 = Strongly Disagree, 2 = Disagree, 3 = Slightly Disagree, 4 = Slightly Agree, 5 = Agree, and 6 = Strongly Agree. The scale consisted of 12 items. Each item was scored from 1 to 6 points. Response for Strongly Disagree would receive 1 point whereas response for Strongly Agree would receive 6 points. The sum of the individual items would reflect participants' mentoring experience. The overall score ranged from 12 to 72 points. A higher total score would indicate a more positive mentoring experience.

Rosenberg Self-Esteem Scale Scoring

The *Rosenberg Self-Esteem Scale* used a Likert-scale response format: 1 = Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree. Overall, there were 10 items. Five items were written in positive direction and the other 5 were written in negative direction. Each item was scored from 1 to 4 points. An item that was rated "Strongly Disagree" would receive 1 point and an item that was rated "Strongly Agree" would receive 4 points. The negative items (i.e., 2, 5, 6, 8, and 9) were reverse scored to reflect the accuracy of the total score. The total score ranged from 10 to 40 points. Score that ranged from 20 to 30 points would be considered the normal range and scores below 15 points would be suggested as low self-esteem.

<div align="center">

Data Analysis

</div>

Data was imported into IBM Statistical Package for the Social Sciences (SPSS) version 21 for analysis. Items that needed to be reverse scored were altered using the SPSS software before any analysis. Descriptive statistics (Means, Standard Deviations, Frequencies, and Percentages), independent sample *t*-test, one-way analysis of variance (ANOVA), two-way analysis of variance, Pearson product-moment correlation coefficient, and multiple regression were used to analyze the data. The alpha level for all statistical tests was set at .05 and the confidence interval was set to 95%.

Descriptive statistics were analyzed and reported to provide an overview of the characteristics of the sample such as sex, birth place, marital status, number of children, number of years resided in the U.S., country where they received their academic doctorate or graduate degree, the type of institution they were employed, their faculty position, rank, and the number of years in the position. Frequencies and percentages

were calculated for all nominal data.

For research question 1, the independent sample *t*-test was conducted to measure if a statistically significant difference existed between U.S.-born and foreign-born faculty members' perceived job satisfaction. The effect size for a statistically significant *t*-test was interpreted using Cohen's (1988) *d*: .20 is considered small effect size, .50 is considered medium effect size, and .80 is considered large effect size.

For research question 2, two-way ANOVA was used to measure if a statistically significant difference existed in faculty perceived job satisfaction between U.S.-born and foreign-born faculty members who were married and those who were single (hypothesis 2a). Also, two-way ANOVA was used to measure if a statistically significant difference existed in faculty perceived job satisfaction between U.S.-born and foreign-born tenured faculty versus those non-tenured faculty (hypothesis 2c). This allowed the researcher in the study to test the effect of each individual factor and the effect of both factors collectively. The latter effect, which is also known as the interaction effect, provided information on whether the two individual factors were operating independently of one another or collectively as a group to produce addition information about their impact (Lomax, 2007). In addition, two-way ANOVA helped to reduce the error variation that was not explained by the first factor. By using the second factor, it provided a more precise estimate of error variance (Lomax, 2007). The effect size for any statistically significant two-way ANOVAs was interpreted using Cohen's (1988) eta-squared, η^2 scales: .01 is small effect size, .06 is medium effect size, and .14 is large effect size.

One-way analysis of variance (ANOVA) was conducted to determine if

statistically significant differences existed in U.S.-born and foreign-born faculty members' perceived job satisfaction broken down by faculty ranking (i.e., professor, associate, assistant, and instructor) (hypothesis 2b). Independent *t*-test could be utilized to answer this question; however, the researcher in the study was aware that by conducting four different independent *t*-tests, there would be a likelihood of increasing Type I errors, which eventually leads the researcher in the study to incorrectly reject a true null hypothesis. To minimize Type I error rates, the researcher in the study has selected one-way ANOVA to analyze the data. The effect size for a statistically significant one-way ANOVA was interpreted using Cohen's (1988) eta-squared, η^2 scales: .01 is small effect size, .06 is medium effect size, and .14 is large effect size.

For research question 3, a two-way ANOVA was conducted to measure if a statistically significant difference existed in faculty perceived job satisfaction between U.S.-born and foreign-born faculty members who were mentored and those who were not mentored. This allowed the researcher in the study to test the effect of each individual factor and both factors collectively. Two-way ANOVA allowed the researcher in the study to identify whether the two individual factors were operating independently of one another or collectively as a group to produce additional information about the impact of the individual factors (Lomax, 2007). Also, two-way ANOVA helped to reduce the error variation that was not explained by the first factor. By using the second factor, it provided a more precise estimate of error variance (Lomax, 2007). The effect size for a statistically significant two-way ANOVA was interpreted using Cohen's (1988) eta-squared, η^2 scales: .01 is small effect size, .06 is medium effect size, and .14 is large effect size.

For research question 4, the Pearson product-moment correlation coefficient, also known as *Pearson r*, was conducted to determine if a relationship existed between self-esteem and job satisfaction of U.S.-born and foreign-born faculty. The effect size for any statistically significant Pearson product-moment correlation coefficients was interpreted by Cohen's (1988) *q* scales: .10 as a weak effect, .30 as a moderate effect, and .50 as a strong effect.

For research question 5, multiple regression was used to analyze the data. Previous research shows that self-esteem and mentoring have an impact on faculty job satisfaction (Ahmed, 2012; Bland, Taylor, Shollen, Weber-Main, & Mulcahy, 2009; Kuster, Orth, & Meier, 2013; Trower, 2012); however, there is a lack of research that identifies which predictor variable (self-esteem and mentoring) has a stronger effect on the criterion variable. Therefore, the researcher in the study entered all predictor variables simultaneously to the SPSS Statistical program to determine the effects of the predictor variables to the multiple regression equation (Field, 2009; Gall et al., 2007). Effect size for any statistically significant multiple regression was interpreted by Cohen's (1988) R^2 scale: .01 is small effect size, .06 is medium effect size, and .14 is large effect size.

For research question 6, the responses of the participants were organized and exported to an Excel document for data analysis. The initial step of the analysis process was to read the participants' responses several times to become familiar with the data. Then, the researcher in the study tried to capture the most representative statements that described the participants' perceptions of mentoring. An inductive content analysis was used to analyze the data (Lincoln & Guba, 1985). In the comparing and contrasting

process of the inductive content analysis, four themes were identified from the data. The researcher in the study reviewed to make sure they were consistent to the themes and he has exhausted all data reduction process. In the end, the researcher managed to reduce the responses to three major themes. The researcher in the study reviewed the inductive content analysis process again to make sure those three themes truly represented the responses of the participants.

Chapter 4: Results

Introduction

This chapter presents the results of the study. The purpose of this quantitative study was to explore the relationship among self-esteem, mentoring, and job satisfaction of U.S.-born and foreign-born faculty. In addition, the study also sought to identify the mean differences in faculty members' job satisfaction based on country of origin, marital status, faculty ranking, and tenure status. To achieve these purposes, six research questions and five hypotheses were formulated to guide the study. Analytical techniques including independent sample t-test, one-way analysis of variance, two-way analysis of variance, Pearson product-moment correlation coefficient, and multiple regression were used to investigate the different hypotheses and the results are presented in tabular and narrative form in this chapter. The first part of the chapter describes the demographic characteristics of the participants using descriptive statistics (frequency and percentage). The second part of the chapter provides results and information related to the variables associated with the study.

Descriptive Statistics

In the first section of the survey, 12 questions were administered to gather the participants' demographic information. A total of 4,641 surveys were sent out to the prospective participants; 553 participants volunteered to participate in the study and 7 participants declined to participate in the study. However, due to missing data issue, 72 surveys were removed from the study. In the end, a total of 481 survey responses were used for data analysis, which was a 10% response rate of the total surveys that were sent out.

The participant sample (*n* = 481) consisted of 291 males (60.5%) and 190 females (39.5 %); 352 (73.2%) of them were born in the U.S. and 127 (26.4%) of them were born outside the U.S. A total of 378 (78.6%) participants classified themselves as White, followed by 62 (12.9%) Asian or Pacific Islander, 16 (3.3%) Black or African American, 9 (1.9%) Non-White, Hispanic or Latino, 2 (0.4%) American Indian or Alaska Native, and 12 (2.5%) participants classified as other races.

In terms of marital status, 43 (8.9%) participants reported to be single, 406 (84.4%) were married or in domestic partnership, 6 (1.2%) were widowed, 1 (0.2%) was separated, and 24 (5%) were divorced. When participants were asked about the number of children that they had. Out of the 481 participants, 124 (25.8%) did not have any children, 69 (14.3%) had a child, 188 (37.4%) had two children, 60 (12.5%) had three children, 25 (5.2%) had four children, 10 (2.1%) had five children, 3 (0.6%) had six children, and 2 (0.4%) had seven children.

Participants were asked to identify the country where they received their academic doctorate or graduate degree. A total of 455 (94.6%) reported that they received their academic doctorate or graduate degree from the U.S. and 26 (5.4%) received their doctorate or graduate degree from other countries.

Participants were asked to identify the type of institution where they were employed. Out of the 481 participants, 216 (44.9%) were employed in public research universities with very high research activity, 128 (26.6%) were employed in public research universities with high research activity, 87 (18.1%) were employed in private research universities with very high research activity, and 49 (10.2%) were employed in private research universities with high research activity. A total of 148 (30.8%)

participants reported that they were on the tenure-track position, 276 (57.4%) were

tenured, 33 (6.9%) were on renewable term position, and 24 (5%) were holding clinical

or research position without tenure. Out of 481 participants, 190 (39.5%) identified as

professor, 147 (30.6%) were identified as associate professor, 130 (27%) identified as

assistant professor, and 12 (2.5%) identified as instructor. A summary of the

demographic data is presented in Table 5.

Table 5. Descriptive Statistics for the Demographic and Characteristics of U.S.-Born
and Foreign-Born Faculty in U.S. Institutions

Variable	*n*	%
Sex		
Male	291	60.5
Female	190	39.5
Birth place		
United States	352	73.2
Outside the U.S.	127	26.4
Race		
White	378	78.6
Asian or Pacific Islander	62	12.9
Black or African American	16	3.3
Non-White, Hispanic or Latino	9	1.9
American Indian or Alaska Native	2	0.4
Other	12	2.5
Marital status		
Single	43	8.9
Married or Domestic Partnership	406	84.4
Widowed	6	1.2
Separated	1	0.2
Divorced	24	5.0
Children		
0	124	25.8
1	69	14.3
2	180	37.4
3	60	12.5
4	25	5.2

Table 5. continued

Variable	*n*	%
5	10	2.1
6	3	0.6
7	2	0.4
Country received academic doctorate/graduate degree		
United States	455	94.6
Other country	26	5.4
Type of institution employed		
Public – Research university with very high research activity	216	44.9
Public – Research university with high research activity	128	26.6
Private – Research university with very high research activity	87	18.1
Private – Research university with high research activity	49	10.2
Other	1	0.5
Faculty position		
Tenure track	148	30.8
Tenured	276	57.4
Renewable term	33	6.9
Clinical or research position without tenure	24	5.0
Academic rank		
Professor	190	39.5
Associate professor	147	30.6
Assistant professor	130	27.0
Instructor	12	2.5

Note. *n* = 481.

Prior to analysis, Cronbach's alpha was calculated for the *Job Satisfaction Scale*, *Mentorship Effectiveness Scale*, and *Rosenberg Self-Esteem Scale*. Table 6 shows the Cronbach's alpha values for all three scales and the subscales of *Job Satisfaction Scale*. Previous research has suggested the following rules of thumb for Cronbach's alpha values: > .90 = Excellent, .81 - .90 = Good, .71 - .80 = Acceptable, .61 - .70 = Questionable, .50 - .60 = Poor, and < .50 = Unacceptable (George & Mallery, 2003; Gliem & Gliem, 2003). The alpha coefficients for *Job Satisfaction Scale* (.944), *Rosenberg Self-Esteem Scale* (.855), and *Mentorship Effectiveness Scale* (.957)

suggest that the items that were used to measure the three different constructs have relatively high internal consistency. Among all alpha coefficients for job satisfaction subscales, the Cronbach's alpha value for supervision (.908) shows that the 4 items that were used to measure supervision have relatively high internal consistency. On the other hand, the Cronbach's alpha value for operating procedures (.658) shows that the 4 items used to measure operating procedures have relatively a week internal consistency.

Table 6. Cronbach's Alpha for Job Satisfaction Scale, Rosenberg Self-Esteem Scale, and Mentorship Effectiveness Scale

Scale/Subscale	Number of items	Cronbach's alpha
Job Satisfaction Scale	36	.944
Pay	4	.833
Promotion	4	.721
Supervision	4	.908
Operating procedures	4	.658
Contingent rewards	4	.817
Fringe benefits	4	.813
Co-workers	4	.798
Nature of work	4	.827
Communication	4	.767
Rosenberg Self-Esteem	10	.855
Mentorship Effectiveness	12	.957

Note. Crobach's alpha values were examined based on the following: > .90 = Excellent, .81 - .90 = Good, .71 - .80 = Acceptable, .61 - .70 = Questionable, .50 - .60 = Poor, and < .50 = Unacceptable (George & Mallery, 2003; Gliem & Gliem, 2003)

Study Findings

The following section provides the results of the data analysis. The findings of the study are presented based on six research questions and five hypotheses.

1. **Was there a difference between U.S.-born and foreign-born faculty members' perceived job satisfaction?**

H_1: U.S.-born faculty members' perceived job satisfaction was different from

that of the foreign-born faculty members.

Prior to the analysis, a summary of the means, standard deviations, and

satisfaction level for the Job Satisfaction Scale and subscales are presented in Table 7.

Table 7. Means and Standard Deviations of the Subscales and Overall Job Satisfaction for All Participants

Subscale/Scale	n	Mean	SD	Satisfaction
Pay	481	3.81	1.23	Ambivalent
Promotion	481	4.19	1.08	Satisfied
Supervision	481	4.90	1.27	Satisfied
Operating Procedures	481	3.93	1.03	Ambivalent
Contingent Rewards	481	4.09	1.21	Satisfied
Fringe Benefits	481	3.90	1.26	Ambivalent
Co-workers	481	4.63	1.06	Satisfied
Nature of Work	481	5.04	0.90	Satisfied
Communication	481	4.39	1.11	Satisfied
Job Satisfaction Scale	481	4.32	0.83	Satisfied

Note. The *Job Satisfaction Scale* and subscales' scores can be interpreted using the scales: 1.00 – 2.99 = Dissatisfied, 3.00 – 3.99 = Ambivalent, and 4.00 – 6.00 = Satisfied.

Job Satisfaction Subscales and Scale

The Job Satisfaction Scale and subscales' scores can be interpreted using the

following scales: 1.00 – 2.99 = Dissatisfied, 3.00 – 3.99 = Ambivalent, and 4.00 – 6.00

= Satisfied. The results showed that 6 out of the 9 subscales had achieved "satisfied"

level whereas the other 3 subscales (i.e., pay, operating procedures, and fringe benefits)

were ambivalent. Among all 9 subscales, the nature of work of a faculty position had

the highest satisfactory level ($M = 5.04$, $SD = .90$), followed by supervision ($M = 4.90$,

$SD = 1.27$), and co-workers ($M = 4.63$, $SD = 1.06$). On the other hand, the pay subscale

($M = 3.81$, $SD = 1.23$), fringe benefits ($M = 3.90$, $SD = 1.26$), and operating procedures ($M = 3.93$, $SD = 1.03$) were all in ambivalent status. The overall Job Satisfaction Scale achieved a satisfactory status ($M = 4.32$, $SD = 0.80$), indicating that the U.S.-born and foreign-born faculty members were satisfied with their job.

An independent sample t-test was used to test hypothesis 1. Prior to analysis, the assumptions of independent sample t-test were examined and the assumptions were met. The homogeneity of variance was examined with Levene's test and was found not significant for U.S.-born and foreign-born faculty members; therefore, equal variances were assumed for U.S.-born and foreign-born faculty members. The result showed that there was not a statistically significant difference between U.S.-born and foreign-born faculty members' perceived job satisfaction, $t(477) = -.186$, $p = .853$ (see Table 8). The effect size was interpreted using Cohen's d (1988) with the following scale: .20 is a small effect size, .50 is a medium effect size, and .80 is a large effect size. An effect size of - .0189 indicated a very small effect size.

Table 8. Independent Sample t-Test for U.S.-Born and Foreign-Born Faculty Members' Job Satisfaction

	U.S.- Born		Foreign-Born			
Variable	M	SD	M	SD	$t(477)$	p
Job Satisfaction	4.3149	.81569	4.3309	.87283	- .186	.853

Note. Equal variances assumed are reported.

2. **Was there a difference in job satisfaction between U.S.-born and foreign-born faculty members based on marital status, faculty ranking, and tenure status?**

H_{2a}: U.S.-born faculty members who were married and foreign-born faculty members who were married will have higher job satisfaction than either U.S.-

born faculty members who were single or foreign-born faculty members who were single.

Prior to the analysis, the means and standard deviations for the marital status and overall job satisfaction of faculty members are presented in Table 9.

Table 9. Means and Standard Deviations for the Marital Status and Overall Job Satisfaction of U.S.-Born and Foreign-Born Faculty Members

Variable	n	M	SD
Single			
U.S.-born	31	4.0311	.82117
Foreign-born	12	4.2778	.84079
Married or Domestic Partnership			
U.S.-born	293	4.3507	.80614
Foreign-born	111	4.3277	.88877
Widowed			
U.S.-born	5	3.5671	.95871
Foreign-born	1	3.8333	-
Separated			
U.S.-born	1	3.4444	-
Divorced			
U.S.-born	21	4.4175	.79614
Foreign-born	3	4.8241	.39512

Note. n = 478

A two-way ANOVA was used to test hypothesis 2a. The assumptions of two-way ANOVA analysis and the Levene's test of homogeneity of variance were met. The result showed that the interaction between the U.S.-born and foreign-born faculty members' marital status on job satisfaction was not statistically significant, F (3, 469) = .504, p = .680. In addition, the perceived job satisfaction by faculty members' country of origin (U.S.-born or foreign-born) was not statistically significant, F (1, 469) = .686, p = .408, indicating there was no difference in job satisfaction by faculty members'

country of origin. Also, the job satisfaction by marital status was not statistically

significant, $F(4, 469) = 1.378$, $p = .240$. This indicated that there was no difference in

job satisfaction by marital status. Effect size for any statistically significant two-way

ANOVAs was interpreted using Cohen's (1988) eta-squared, η^2 scales: .01 is small

effect size, .06 is medium effect size, and .14 is large effect size. An eta-squared, η^2

of .023 indicated that it was a small effect size. A summary of two-way ANOVA for the

interaction between faculty members' country of origin, marital status, and job

satisfaction are presented in Table 10.

Table 10. Summary of Two-way ANOVA Results for the Interaction between Faculty
Members' Country of Origin, Marital Status and Job Satisfaction

Source	df	F	p
Country of origin [a]	1	.686	.408
Marital status	4	1.378	.240
Country of origin x Marital status	3	.504	.680

[a]Country of origin refers to U.S.-born and foreign-born faculty members.

In conclusion, no difference was found between U.S.-born faculty members who

were married and U.S.-born faculty members who were single. Also, there was not a

statistically significant difference between foreign-born faculty members who were

married and foreign-born faculty members who were single. As a result, the hypothesis

was rejected.

H$_{2b}$: Higher-ranked U.S.-born faculty members and higher-ranked foreign-born

faculty members would be more satisfied than either lower-ranked U.S.-born or

foreign-born faculty members.

Prior to the analysis, a summary of the means and standard deviations for faculty

ranking and overall job satisfaction of faculty members are presented in Table 11.

Table 11. Means and Standard Deviations for Faculty Ranking and Overall Job Satisfaction of U.S.-Born and Foreign-Born Faculty Members

Variable	n	M	SD
Professor	190	4.3498	.81363
Associate Professor	147	4.1840	.84291
Assistant Professor	130	4.4220	.81057
Instructor	12	4.3699	.82410

Note. n = 479

A two-way ANOVA was used to test hypothesis 2b. The assumptions of two-way ANOVA analysis and the Levene's test of homogeneity of variances were met. The result showed that there was not a statistically significant difference on the interaction between faculty members' country of origin (U.S.-born or foreign-born) and faculty ranking, F (3, 469) = 1.342, p = .260. In addition, the result on job satisfaction by faculty members' country of origin was not statistically significant, F (1, 469) = 1.352, p = .245, which indicated that there was no difference on job satisfaction by U.S.-born and foreign-born faculty members. Also, the job satisfaction by faculty ranking, F (3, 469) = .944, p = .419, was not statistically significant, indicating there was no difference on job satisfaction by faculty ranking. Effect size for a statistically significant one-way ANOVA was interpreted using Cohen's (1988) eta-squared, η^2 scales: .01 is small effect size, .06 is medium effect size, and .14 is large effect size. An eta-squared, η^2 of .021 indicated that it was a small effect size. A summary of two-way ANOVA for the interaction between faculty members' country of origin, faculty ranking, and job satisfaction are presented in Table 12.

Table 12. Summary of Two-way ANOVA Results for the Interaction between Faculty Members' Country of Origin, Faculty Ranking and Job Satisfaction

Source	df	F	p
Country of origin [a]	1	1.352	.245
Faculty ranking	3	.944	.419
Country of origin x Faculty ranking	3	1.342	.260

[a]Country of origin refers to U.S.-born and foreign-born faculty members.

In summary, there was not a statistically significant difference between higher-ranked U.S.-born and foreign-born faculty members compared to lower-ranked U.S.-born or foreign-born faculty members. Therefore, the hypothesis was rejected.

H_{2c}: U.S.-born tenured faculty members and foreign-born tenured faculty members would have higher job satisfaction than either U.S.-born or foreign-born non-tenured faculty members.

Prior to the analysis, a summary of the means and standard deviations for tenure status and overall job satisfaction of faculty members are presented in Table 13.

Table 13. Means and Standard Deviations for Tenure Status and Overall Job Satisfaction of U.S.-Born and Foreign-Born Faculty Members

Variable	n	M	SD
U.S.-born			
Tenure track	97	4.3806	.76383
Tenured	209	4.2380	.83790
Renewable term	31	4.5132	.85369
Clinical/research position without tenure	15	4.5506	.65041
Foreign-born			
Tenure track	49	4.3503	1.01363
Tenured	67	4.4028	.77542
Renewable term	2	3.2361	.41248
Clinical/research position without tenure	9	3.9327	.57349

Note. n = 479.

A two-way ANOVA was used to test hypothesis 2c. The assumptions of two-way

ANOVA analysis and the Levene's statistic of homogeneity of variances were met.

The result showed that the interaction between faculty members' country of origin

(U.S.-born or foreign-born) and faculty tenure status was statistically significant, F (3,

471) = 3.219, p = .023. In addition, the two-way ANOVA analysis showed that there

was a statistically significant difference on faculty members' country of origin (U.S.-

born or foreign-born), F (1, 471) = 5.968, p = .015. However, the result also showed

that job satisfaction by faculty tenure status was not statistically significant, F (3, 471)

= .925, p = .428, which indicated that there was not a difference in job satisfaction by

faculty tenure status. Effect size for any statistically significant two-way ANOVAs was

interpreted using Cohen's (1988) eta-squared, η^2 scales: .01 is small effect size, .06 is

medium effect size, and .14 is large effect size. An eta-squared, η^2 of .024 indicated that

it was a small effect size.

The researcher in the study used the simple main effect analysis to identify if

there was any statistical mean difference in job satisfaction between faculty tenure

status (i.e., tenured and non-tenured) and faculty members' country of origin (U.S.-born

or foreign-born). The result showed that there was not a statistically significant mean

difference between tenured and non-tenured faculty members in their perceived job

satisfaction regardless they were U.S.-born (p > .05) or foreign-born (p > .05). However,

the result showed that the interaction between faculty members' country of origin (U.S.-

born or foreign-born) and faculty tenure status was statistically significant. A summary

of two-way ANOVA for the interaction between faculty members' country of origin,

tenure status, and job satisfaction are presented in Table 14.

Table 14. Summary of Two-way ANOVA results of the Interaction between Faculty Members' Country of Origin, Tenure Status, and Job Satisfaction

Source	df	F	p
Country of origin	1	5.968	.015*
Tenure status	3	.925	.428
Country of origin x Tenure status	3	3.219	.023*

Note. *$p < .05$.

In conclusion, there was not a statistically significant difference on job satisfaction between U.S.-born and foreign-born tenured faculty members and U.S.-born and foreign-born non-tenured faculty members. Therefore, the hypothesis was rejected.

3. **Was there a difference in job satisfaction between U.S.-born and foreign-born faculty members who were mentored and not mentored?**

H_3: U.S.-born faculty members who were mentored and foreign-born faculty member who were mentored would possess a higher level of job satisfaction than either non-mentored U.S.-born or foreign-born faculty members.

A two-way ANOVA was used to test hypothesis 3. The assumptions of two-way ANOVA analysis and the Levene's test of homogeneity of variances were met. The result showed that the interaction between faculty members' country of origin (U.S.-born or foreign-born) and mentoring status was not statistically significant, $F (1, 474) = .004$, $p = .950$. The result on job satisfaction by faculty members' country of origin was not statistically significant, $F (1, 474) = .000$, $p = .990$, which indicated that there was not a statistically significant difference on job satisfaction by faculty member's country of origin. However, the job satisfaction by faculty mentoring status was statistically significant, $F (1, 474) = 10.979$, $p = .001$, which indicated that there was a

statistically significant difference on job satisfaction by faculty mentoring status. Effect size for a statistically significant two-way ANOVA was interpreted using Cohen's (1988) eta-squared, η^2 scales: .01 is small effect size, .06 is medium effect size, and .14 is large effect size. An eta-squared, η^2 of .028 indicated that it was a small effect size. A summary of two-way ANOVA for the interaction between faculty members' country of origin, mentoring status, and job satisfaction are presented in Table 15.

Table 15. Summary of Two-way ANOVA results for the Interaction between Faculty Members' Country of Origin, Mentoring Status, and Job Satisfaction

Source	df	F	p
Country of origin	1	.000	.990
Mentoring status	1	10.979	.001*
Country of origin x Mentoring status	1	.004	.950

*Note. *p < .05.*

In conclusion, there was a statistically significant difference for U.S.-born and foreign-born faculty members who were mentored compared to U.S.-born and foreign-born faculty members who were not mentored. Therefore, the hypothesis was accepted.

4. Was there a relationship between self-esteem and job satisfaction of U.S.-born and foreign-born faculty members in U.S. institutions?

H4: U.S.-born faculty members who had high self-esteem and foreign-born faculty members who had high self-esteem would have higher job satisfaction than either U.S.-born or foreign-born faculty members who had low self-esteem.

Pearson product-moment correlation was conducted to determine if there was a statistically significant relationship between self-esteem and job satisfaction. Prior to analysis, the assumptions of a Pearson product-moment correlation were examined, but the assumptions were not met. The self-esteem variable was negatively skewed; as a

result, Spearman's rho correlation coefficient, instead of the Pearson product-moment correlation, was utilized to analyze the relationship between self-esteem and job satisfaction of U.S.-born and foreign-born faculty members. The correlation between self-esteem and job satisfaction was statistically significant, $r = .211$, $p < .001$ on a one-tailed test, indicating that as self-esteem increases, job satisfaction increases as well. The Davis's descriptors of effect size were used to interpret the effect size: .01 - .09 = negligible association, .10 - .29 = low association, .30 - .49 = moderate association, .50 - .69 = substantial association, and .70 or higher = very strong association (Davis, 1971; Verret, 2011). A correlation of .211 indicated a low association between self-esteem and job satisfaction variables.

5. **Did self-esteem and mentoring affect job satisfaction of U.S.-born and foreign-born faculty members in the U.S. institutions?**

H_5: U.S.-born and foreign-born faculty members who had high self-esteem and mentored would have a higher job satisfaction in U.S. institutions.

Multiple regression statistics was executed to determine the effect of self-esteem and mentoring on faculty members' job satisfaction. Self-esteem and mentoring were used as independent predictor variables while job satisfaction of faculty members served as the dependent criterion variable.

The result of the analysis showed that the self-esteem and mentoring variables as a set accounted for approximately 16.1% of the variance as noted by the regression coefficient ($R^2 = .161$) in faculty job satisfaction. The test of regression coefficient was statistically significant for the model, $F (2, 231) = 21.997$, $p < .001$. The results are presented in Table 16.

Table 16. Multiple Regression Model for Self-Esteem and Mentoring as Predictors of Faculty Members' Job Satisfaction

Model	R	R^2	Adjusted R^2	*SE* of estimate	R^2 change	F change	*df*1	*df*2	Sig F change
					Change statistics				
1	.401[a]	.161	.154	.70513	.161	21.997	2	229	.000*

Note. [a]Predictors: (Constant), Mentoring, Self-Esteem;
Dependent Variable: Overall Job Satisfaction
p < .05.

The relative contribution of the predictors can be determined by the size of the standard regression coefficients. The mentoring variable was a stronger predictor (β = .374, t (231) = 5.765, *p* < .001) compared to the self-esteem variable (β = .063, t (231) = .976, *p* = .330). In addition, mentoring has a stronger magnitude impact in predicting faculty members' job satisfaction. Based on the unstandardized coefficient, β value, it showed that as self-esteem increased by one unit, faculty members' job satisfaction increased by 0.104 units. Also, as mentoring increased by one unit, faculty members' job satisfaction increased by 0.280 units. A summary of the multiple regression results is presented in Table 17.

Table 17. Multiple Regression Results for Self-Esteem, Mentoring, and Job Satisfaction

Variable	Unstandardized Coefficients		Standardized Coefficients		
	β	*SE*	β	*t*	*p*
Constant	2.714	.374		7.258	.000*
Self-esteem	.104	.107	.063	.976	.330
Mentoring	.280	.049	.374	5.765	.000*

Note. Dependent Variable: Overall Job Satisfaction; *p* < .05.

A Spearman's rho correlation analysis was performed to examine the correlation of self-esteem and mentoring variables. According to Davis's (1971) effect size descriptors, the result showed that the self-esteem variable and mentoring variable were

moderately correlated, $r = .397$, $p < .001$ on a one-tailed test, indicating that as self-esteem increases, mentoring increases as well.

The overall conclusion regarding the influence of self-esteem and mentoring variables on faculty members' perceived job satisfaction that was based on the multiple regression results and observed p-value (t (231) = 7.258, $p < .001$) supported the hypothesis.

6. How did mentoring affect U.S.-born and foreign-born faculty job satisfaction?

A total of 235 participants expressed that they were mentored in the last five years and 254 participants expressed that they were not mentored in the last five years. Two hundred and eighteen participants out of 235 participants who were mentored in the last few years indicated that mentoring had little to a lot of influences on their job satisfaction and 13 participants shared that mentoring had no effect on their job satisfaction. In regards to the type of mentoring that the participants received in the last five years, 16 participants indicated that they had formal mentoring, 125 participants indicated that they had informal mentoring, and 87 participants indicated that they had a mixed of formal and informal mentoring. Then, the participants were asked an open-ended question: "How do you perceive that mentoring has influenced your job satisfaction?" One hundred and forty five responses were compiled and the data was analyzed to develop common themes. However, only 95 responses were used to answer the question. The other 50 responses were removed from the analysis due to broad and general responses. The participants who were mentored in the last five years had different experiences and perspectives about mentoring and the role of mentoring on

faculty job satisfaction. A few participants expressed that mentoring was not useful to them because their mentors were either too busy to meet with them or their mentors were not helpful to them. For example, a participant stated, "My mentor did not provide any advice and was largely inaccessible." Another participant shared "He is really really [*sic*] busy and doesn't have time to do much mentoring." Despite the negative experiences that some faculty members experienced with their mentors, the data showed positive benefits and outcomes with faculty mentoring. For example, a participant shared "… I feel very blessed and would love to pass on these experiences to other junior colleagues what I've benefited over the years." The data also showed that three themes emerged from the 95 responses: support, advice, and career growth. Table 18 is a summary of mentored faculty members' responses on the role of mentoring, followed by a description and narrative examples of each response.

Table 18. Summary of Mentored Faculty Members' Reponses on the Role of Mentoring

Category	*n*	%
Support	53	55.8
Advice	21	22.1
Career growth	21	22.1

Note. n = 95

Support

Faculty support was important and beneficial to many faculty members, especially new or junior faculty members. The majority of the participants felt that their mentors had done well in providing physical, mental, and emotional support to them. For example, a participant shared "I just recently gained my mentor. I was very lonely and lost in the department until then." The second participant shared "It were not for

this informal mentoring relationship I would have left my job." Another participant shared "Encourages me not to give up and to focus on what will get me tenure, how not to get distracted. Makes me feel like I can do this." Moreover, several participants felt that mentoring had played an important role with their transition to an academic career. For example, a participant shared "Mentoring can significantly assist new professors or those in a new position." Another participant shared "I have several mentor [*sic*] that have assisted me in making the transition from industry to academia." In addition, participants felt their mentors had helped them to network and socialize with other faculty members in their institution. For example, a participant shared " My mentor has greatly contributed to my satisfaction by helping me over the rough patched and helping me develop my network of teaching and research colleagues." The second participant shared that their mentor "Has helped me feel connected to the department."

Advice

Besides the support component, the participants found that their mentors had provided useful advice to them professionally. For example, the first participant shared "My mentor has helped me navigate some of the departmental and university policies that were a little unclear at first." The second participants shared "At my stage of career I continue to seek mentors (informal) [*sic*] We all can use them regardless of stage of career they provide great advice and inspiration." The third participant shared "Mentors have provided great career advice over the years." The last participant shared "Mentoring enable [*sic*] me to feel secure and to make decisions with confidence. It helped me to give me direction at times." In addition, the participants thought their mentors had also done well in providing scholarship and career advice to their protégés.

For example, a participant shared "My mentor suggests research studies I could do and experiences I should take advantage of." The second participant shared "Guidance by my mentor is very clear and there are a lot of opportunities here for research and administrative advancement due to her guidance." The last participant shared "I have a wonderful mentor who I can talk to and trust for advice in every area of my professional growth. He has contributed immensely to where I am as a scholar, which influences my satisfaction in feeling like I have a support system."

Career Growth

Twenty-one participants expressed that their mentors had provided them valuable guidance, support, and resources to excel and advance in their career. For example, "Mentoring during my doctorate program and currently as an assistant professor has provided me essential tools to succeed in my career, as well as provide appropriate mentoring and tutoring to my students." Another participant stated, "My mentor has trained me to succeed in the institution: she has asked me to assume roles and responsibilities necessary to succeed in a career in higher education." The third participant shared "Even as a senior faculty my mentor still looks for opportunities for me to excel and advance in the university. The last participant shared "My mentor helped me to strive to leave my first faculty job rather than become complacent. They were willing to review my CV and cover letters as well as write rec letters [*sic*] for me. They reminded me that I was not living up to my potential and that my formr [*sic*] institution would make my work mediocre."

A total of 197 (81.7%) out of 243 participants who had not been mentored in the last five years indicated that mentoring could have little to a lot of influences on their

job satisfaction. Participants were also asked a similar open-ended question: "How do you perceive that mentoring can influence your job satisfaction?" One hundred and seventy seven participants responded to the open-ended question. Data was compiled and categorized according to common themes. Seventy (39.59%) out of 177 responses indicated that mentoring did not influence their job satisfaction due to their faculty ranking or their disbelief in mentoring affecting job satisfaction. A total of 34 (19.2%) responses were unusable due to broad and general answers. Three themes emerged from 73 responses: "advice", "support", and "career growth." Table 19 is a summary of non-mentored faculty members' responses on the role of mentoring, followed by a description and narrative examples of each response.

Table 19. Summary of Non-Mentored Faculty Members' Reponses on the Role of Mentoring

Category	n	%
Advice	30	41.1
Support	27	37.0
Career growth	16	21.9

Note. $n = 73$

Advice

The majority of the non-mentored participants perceived that mentors could provide more professional advice to faculty members. For example, a participant shared "Mentoring comes from many different places: colleagues, friends, family. Each has a different perspective and provides valuable insight." The second participant expressed "Mentoring can give one a sense of how the system works, what is needed to get ahead, and who can be a help to hindrance to you." Another participant shared "I may learn some strategies for working more efficiently or incorporating new methods into

teaching." The last participant stated, "It would provide some fresh or alternate ideas to attack problems or move forward."

Support

Similar to the participants who were mentored, the non-mentored participants also identified mentoring could provide a support system to faculty members. For example, a participant stated, "For new faculty, understanding what is needed to obtain tenure is very helpful. Helping write grants, understand department politics, etc, [*sic*] is very important and a mentor can help with this." The second participant shared "Mentoring happens in many ways and it is often helpful… It is good to have helpful coworkers who help one another." The third participant, who was a mentor, shared "…I would say that mentoring can influence job satisfaction by giving the mentee more supportive guidance, which can contribute to productivity and confidence – to the ability to do research and teaching well." The last participant indicated "Mentoring would help affirm the choices I make and ensure I consider all possibilities, providing a greater sense of surety and hence satisfaction with what I do."

Career Growth

Besides receiving advice and support from the mentors, the participants believed that mentoring could also help them with academic career growth. For example, a participant shared "Real mentoring could help as I pursue tenure…what to focus on and how to divide my time…also how to plan research projects." Another participant shared "…having a mentor early on would have been a helpful foundation and likely would have saved me time and effort in duplicating work that has already been done." The third participant stated, "It would have been nice to have someone who REALLY [*sic*]

cared about my progress and helped me get ahead."

Summary

This chapter provided analyses of the survey data and presentation of the results. A summary of the demographic characteristics of the participants was presented at the beginning of the chapter. The data collected from 481 U.S.-born and foreign-born faculty members were used for data analysis and the result for each research question was presented in the latter part of the chapter. The results showed that there were not statistically significant differences between faculty members' job satisfaction by country of origin, marital status, faculty ranking, and tenure status; however, there was a statistical significant difference on U.S.-born and foreign-born faculty members' job satisfaction by mentoring status. The correlation between U.S.-born and foreign-born faculty members' self-esteem and job satisfaction was statistically significant despite the low association relationship between the self-esteem and job satisfaction variables. When mentoring and self-esteem variables were used as predicting variables for job satisfaction, the results showed that self-esteem and mentoring were strong predicting variables for job satisfaction.

Chapter 5: Discussion, Implications, and Recommendations

This chapter includes an overview of the purpose of the study, a review of the research questions and analysis techniques used to perform data analysis, a discussion of findings and relevant literature, a discussion of the limitations and implications of the study, followed by recommendations for future research.

The purpose of this study was to compare the U.S.-born and foreign-born faculty members' job satisfaction in research universities with very high (RU/VH) or high (RU/H) research activity based on the selected variables: country of origin, marital status, faculty ranking, tenure status, and mentoring status. In addition, the study sought to explore the relationship among mentoring, self-esteem, and job satisfaction of U.S.-born and foreign-born faculty members. To fulfill these goals, six research questions were constructed to guide the study and the research questions for the study were:

1. Was there a difference between U.S.-born and foreign-born faculty members' perceived job satisfaction?

2. Was there a difference in job satisfaction between U.S.-born and foreign-born faculty members based on marital status, faculty ranking, and tenure status?

3. Was there a difference in job satisfaction between U.S.-born and foreign-born faculty members who were mentored and not mentored?

4. Was there a relationship between self-esteem and job satisfaction of U.S.-born and foreign-born faculty members in U.S. institutions?

5. Did self-esteem and mentoring affect job satisfaction of U.S.-born and foreign-born faculty members in U.S. institutions?

6. How did mentoring affect U.S.-born and foreign-born faculty job

    satisfaction?

A quantitative study was designed using Spector's (1985) *Job Satisfaction Scale*,

Berk's et al. (2005) *Mentorship Effectiveness Scale*, and Rosenberg's (1965)

Rosenberg's Self-Esteem Scale. In addition, a demographic survey was incorporated in

the survey to understand the characteristics of the participants. Four types of statistical

techniques (i.e., independent *t*-test, two-way ANOVA, Spearman's rho correlation, and

multiple regression) were used with data analysis. Findings were also supported or

clarified by information collected from the open-ended questions in the survey.

Discussion

Research Question 1: Was there a difference between U.S.-born and foreign-

born faculty members' perceived job satisfaction?

H$_1$: U.S.-born faculty members' perceived job satisfaction was different from

that of the foreign-born faculty members.

The result from the independent *t*-test indicated that there was not a statistically

significant difference between U.S.-born and foreign-born faculty members in RU/VH

and RU/H. The literature has indicated that foreign-born faculty members tend to

encounter more challenges in climbing the academic ladder, such as obtaining a work

visa (H1B), communication barriers, and adjustment issues that could hinder their

performance and productivity (Alberts, 2008; Collins, 2008; Marvasti, 2005; Sabharwal

& Corley, 2009), and negatively affect their job satisfaction. However, the findings

showed that foreign-born faculty members in RU/VH and RU/H experienced a similar

level of job satisfaction as their U.S.-born colleagues despite all the obstacles they had

to go through climbing the academic ladder. The researcher in the study acknowledges that the result of the study could be skewed because of the demographic representation in the study. Ninety point six percent of the foreign-born faculty members that participated in the study had resided in the U.S. for 10 years or longer. This group of foreign-born faculty members would have a very different experience and level of job satisfaction compared to those foreign-born faculty members who were new to U.S. higher education because the initial group of foreign-born faculty members would have assimilated to the U.S. higher education cultures and norms, which could be key factors in determining faculty job satisfaction. The literature showed that the years of faculty experience could affect faculty job satisfaction (Gruneberg, 1979; Bedeian, Ferris, & Kacmar, 1992). In addition, having a large percentage of foreign-born faculty members who were tenured and held a higher faculty ranking (i.e., professor or associate professor) could have affected the results of the study. The literature indicated that tenured faculty members and faculty members with higher faculty rankings are more satisfied with their job (Adkins, Werbel, & Fahr, 2001; Bender & Heywood, 2006; Oshagbemi, 1997; Schuster & Finkelstein, 2006; Tack & Patitu, 1992).

The researcher in the study also acknowledges that 78.6% of the participants were White faculty members, followed by 12.9% Asian/Pacific Islander, 3.3% Black, 1.9% Non-White Hispanic/Latino, and 0.4% American Indian/Alaska Native. This shows that the job satisfaction results are more likely to be skewed because of the high percentage of White faculty members. Past studies revealed that White male faculty members are generally more satisfied than the other underrepresented faculty members (Antecol & Bedard, 2004; Toutkoushian, Bellas, & Moore, 2007).

Research Question 2: Was there a difference in job satisfaction between U.S.-born and foreign-born faculty members based on marital status, faculty ranking, and tenure status?

H_{2a}: U.S.-born faculty members who were married and foreign-born faculty members who were married would have higher job satisfaction than either U.S.-born faculty members who were single or foreign-born faculty members who were single.

The result of the two-way ANOVA indicated that there was not a statistically significant difference in U.S.-born and foreign-born faculty members' job satisfaction between faculty members who were married compared to faculty members who were single. Even with all the research that has been done with regard to the effect of marital status on faculty members' job satisfaction, no concrete agreement has been reached on this subject. However, most studies indicated that faculty members who are married are more satisfied with their job (Cetin, 2006; Hagedorn, 2000; Leung, Siu, & Spector, 2000). In Leung's et al. (2000) research, they found that marital status (single) remains a significant predictor for psychological distress. The two possible reasons that may explain why there was not a statistically significant difference in U.S.-born and foreign-born faculty members' job satisfaction between faculty members who were married and those who were single are: faculty work environment and their relationship with their colleagues. Lacy and Sheehan (1997) found that academic environment has a significant influence on self-rate job satisfaction of faculty members. In the same study, they also found that faculty members who have established a relationship with their colleagues are more satisfied with their job. It is possible that faculty members who participated in

the study had found a conducive work environment and supportive colleagues that they could work with effectively.

H$_{2b}$: Higher-ranked U.S.-born faculty members and higher-ranked foreign-born faculty members would be more satisfied than either lower-ranked U.S.-born or foreign-born faculty members.

Previous studies showed that higher-ranked faculty members (e.g. professor or associate professor) are more satisfied than their junior faculty members (Adkins, Werbel, & Fahr, 2001; Oshagbemi, 1997; Tack & Patitu, 1992); however, in Verret's (2011) study, she found that faculty ranking has no effect on job satisfaction of STEM faculty members. The result of this study also showed that there was not a statistically significant difference in U.S.-born and foreign-born faculty members' job satisfaction by faculty ranking. The possible explanation of such a result is that the lower-ranked U.S.-born and foreign-born faculty members enjoyed their faculty work as much as the higher-ranked colleagues. Moreover, past literature showed that faculty members, such as foreign-born faculty members, who have strong interest in research work, prefer to work in research universities with very high or high research activity (Kim et al., 2011; Mamiseishvili, 2010). It is likely that the junior faculty members that participated in the study were faculty members who had strong research interest and they enjoyed their faculty position.

H$_{2c}$: U.S.-born tenured faculty members and foreign-born tenured faculty members would have higher job satisfaction than either U.S.-born or foreign-born non-tenured faculty members.

Past studies indicated that tenured faculty members are more satisfied than non-

tenured faculty members (Bender & Heywood, 2006; Schuster & Finkelstein, 2006).

However, the result of this study showed that there was not a statistically significant

difference in U.S.-born and foreign-born faculty job satisfaction by tenure status, which

aligns to the findings of Springfield-Scott (2000) and Verret (2011). The possible

explanation why there was not a statistically significant difference in U.S.-born and

foreign-born faculty members' job satisfaction by tenure status is that non-tenured

faculty members might have achieved job satisfaction through other outlets, such as

receiving public recognition for their outstanding teaching or research outputs, being

mentored by senior faculty members or making impacts in students' learning and

development.

On the other hand, the result of the study did show a statistically significant

difference in the interaction of faculty members' country of origin and tenure status.

The result indicated that foreign-born faculty members that held a renewable term or

clinical/research position without tenure were less satisfied than their U.S.-born

colleagues who were in a similar position. The literature showed that foreign-born

faculty members are more interested in the research aspect of their job (Lin et al., 2009;

Marvasti, 2005). The possible explanation that most foreign-born faculty members are

interested in a tenure-track research faculty position is because they have more

opportunities to conduct research. Moreover, a tenure-track research position provides

better long-term career benefits. On the other hand, renewable term faculty positions

generally do not provide foreign-born faculty members the research opportunities that

they are seeking in a faculty position because most renewable term faculty positions

focus on the teaching aspect. Also, foreign-born faculty members could lose their job

easily if the institution chooses not to renew the foreign-born faculty members' contract after their term expires. The result of the study indicated that foreign-born faculty members in a clinical/research position without tenure were also less satisfied with their job compared to U.S.-born faculty members with a similar position. One possible explanation is foreign-born faculty members do not have the same amount of opportunities and resources available for them to conduct research compared to a tenure-track research position. The other possible explanation is foreign-born faculty members do not have the job security that a tenure-track position offers.

Research Question 3: Was there a difference in job satisfaction between U.S.-born and foreign-born faculty members who were mentored and not mentored?

H_3: U.S.-born faculty members who were mentored and foreign-born faculty member who were mentored would possess a higher level of job satisfaction than either non-mentored U.S.-born or foreign-born faculty members.

Previous studies showed that mentoring could have positive impacts on faculty members, such as boosting their job satisfaction (Lee & del Carmen Montiel, 2011) or preparing them for a successful academic career (Turner, Gonzalez & Wood, 2008). In Beverly's (2011) study, he found that mentoring also plays an important role on the success and job satisfaction of African American faculty members in U.S. institutions. Also, research showed that protégés who meet with their mentors regularly tend to have higher job satisfaction with their career and/or academic experience (Ehrich & Hansford, 1999; Karcher, 2005; Water et al., 2003). The result of this study showed that there was a statistically significant difference on mentoring and faculty job satisfaction, which aligned to the findings of previous studies.

Research Question 4: *Was there a relationship between self-esteem and job satisfaction of U.S.-born and foreign-born faculty members in U.S. institutions?*

H$_4$: U.S.-born faculty members who had high self-esteem and foreign-born faculty members who had high self-esteem would have higher job satisfaction than either U.S.-born or foreign-born faculty members who had low self-esteem.

The result of this study indicated that the relationship between U.S.-born and foreign-born faculty members' self-esteem and job satisfaction was statistically significant. Self-esteem had a low, positive relationship with job satisfaction, indicating that as U.S.-born and foreign-born faculty members' self-esteem increased, their job satisfaction increased as well. The findings support the self-esteem and job satisfaction research that other research scholars had conducted (Ahmed, 2012; Alavi & Askaripur 2003; DeConinck & Brock, 2011; Kuster, Orth, & Meier, 2013; Orth, Robins, & Widaman, 2012).

Research Question 5: Did self-esteem and mentoring affect job satisfaction of U.S.-born and foreign-born faculty members in U.S. institutions?

H$_5$: U.S.-born and foreign-born faculty members who had high self-esteem and were mentored would have a higher job satisfaction in U.S. institutions.

The result of the analysis indicated that self-esteem and mentoring as a set was a significant predictor for faculty job satisfaction, accounting for 15.4% of the variance in U.S.-born and foreign-born faculty job satisfaction. The result also indicated that mentoring was a stronger predictor for faculty job satisfaction compared to self-esteem. The findings are aligned with previous research that focuses on mentoring and job satisfaction. It is apparent that mentoring does have significant impacts on U.S.-born

and foreign-born faculty members' job satisfaction. Grosshans, Poczwardowski, Trunnell, and Ransdell (2003) also shared that by having "a better understanding of the various phases of mentoring and how they differ across one's academic career, senior faculty members can empower junior faculty members to be more productive careers and develop more fulfilling work relationship" (p. 147). Also, Bland and her colleagues (2009) found that when mentoring is used for ongoing faculty development, it can help institutions to maintain faculty members who are productive, satisfied, and committed for their profession (p. 13).

Research Question 6: How did mentoring affect U.S.-born and foreign-born faculty job satisfaction?

The two open-ended questions that were incorporated in the study were designed to help the researcher in the study gain a better understanding of the values of mentoring on faculty job satisfaction from the mentored and non-mentored faculty members perspectives. The mentored faculty members believed that mentoring played an important role in their professional and personal lives. The majority of the mentored faculty members who had informal mentoring did have good experiences with their mentors. The mentored faculty members agreed that having good faculty support from the institution or department was crucial for their development as a faculty member. The mentored faculty members believed that their mentors had provided valuable information, guidance, and feedback to prepare them to be successful in academia. Some areas that their mentors had done well included, but were not limited to, providing information on how to adapt to the pre-existing institutional and departmental culture, developing protégés' research skills, involving protégés in grant writing and

research projects, and seeking career growth opportunities for their protégés. This aligns with Grosshans's et al. (2003) research. In Grosshans's et al. (2003) study, they found that the mentors in their study provided necessary support, created learning and growing opportunities, developed their protégés' research skills, and guided them through their transition in academia. On the other hand, several mentored faculty members that went through formal mentoring had negative experiences with their mentors. The protégés complained that their mentors were too busy to meet with them; as a result, the protégés disconnected the mentor-protégé relationship with their mentors. Even though research has shown that the intentional formal mentoring approach is more beneficial and effective for the protégés, without committed senior faculty members serving as mentors, the mentoring program can be problematic. Therefore, institutional administrators need to ensure that senior faculty members that are assigned to a protégé for the mentoring program understand the purpose and importance of the formal mentoring program so that they can serve their protégés more effectively. The results of the qualitative data did reflect that mentoring is important to the development of faculty members and it could be a predictor for faculty members' job satisfaction. Faculty members that had positive mentoring experiences with their mentors were more satisfied with their job. As Bland and her colleagues (2009) put it, protégés that are positively influenced by their mentor are more satisfied with their job, productive with their research, effective at their teaching, better socialized in their profession, earned higher salary, and given more career advancement opportunities.

Implications of the Study

The findings of this study can benefit institutional practitioners and research

102

scholars in various ways. From the practical application standpoint, institutional administrators (i.e., Provost, Dean, or Department Chair) may utilize the findings of this study to help them make decisions with future faculty recruitments and developing faculty development programs. In this study, the results showed that the demographics of faculty members in research universities with very high (RU/VH) and high (RU/H) research activities are lacking of diversity. White faculty members still dominate the RU/VH and RU/H compared to the faculty members of color. To better support and meet the needs of the diverse student populations across U.S. institutions, institutional administrators need to look into hiring more underrepresented faculty members (i.e., female and faculty members of color) to bridge the gap.

Moreover, the data of this study indicated that the majority of the faculty members that participated in the study were senior faculty members that were close to their retirement. Institutional administrators need to be more proactive in seeking and preparing the junior faculty members to assume the senior faculty roles after they retire from their faculty position. Research showed that experienced mentors could help prepare junior faculty members for this challenge by first overcoming the different challenges that they face (e.g., transition issue, balancing time between teaching, research, and service, grant writing, mentoring) in academia (Bland et al., 2009).

Additionally, the findings of the study indicated that having a good support system from the institution or senior faculty members is crucial to both mentored and non-mentored faculty members; therefore, institutional administrators need to evaluate whether their institution or department has met the needs of their faculty members.

Furthermore, the responses of this study indicated that senior faculty members

were less enthusiastic about mentoring because of their faculty ranking and status;

however, many senior faculty members in the study saw the values of mentoring and

expressed their willingness to mentor new or junior faculty members. With the

assistance of senior faculty members, institutional administrators can develop more

concrete plans such as having an institutionally sponsored mentoring programs to

promote mentoring between senior and junior faculty members. Previous literature

showed that formal mentoring programs that are intentionally designed and developed

for junior faculty members are more likely to be successful (Bland et al., 2009). As

Bland and her colleagues (2009) have shared in their study, the three types of formal

mentoring models that are commonly used by institutions and organizations are:

traditional, peer, and group mentoring (p. 23). The traditional mentoring model is a

hierarchical model, with one protégé assigned to one mentor or a team of mentors. A

new or junior faculty member is the protégé and a mid or senior faculty member assume

the role of mentor. The purpose and goal of this mentoring relationship include: career

planning and advancement, socialization, acquisition of skills, and goal setting. The

mentor utilizes the project-centered approach to guide the mentoring relationship. The

protégé is expected to abide by the expectations and agreements that he/she has

developed with his/her mentor at the beginning of the mentoring process. The

challenges that institutions may face with this type of model are the time commitment

issue and recruiting and training enough mentors to fill the demand (Bland et al., 2009).

The traditional mentoring model can be very efficient for any institutions that value the

hierarchy system. The peer mentoring model is formed and organized by a small

collaborative group of individuals that have similar goals. The purpose and goals of the

mentoring relationship include: goal activity, skill learning, and life issues. This model

is relationship centered and it is typically led by a facilitator who can be an expert of the

subject matter. The challenges that institutions may face with this type of model are:

recruiting and providing training for peer mentoring, time commitment issue with peer

mentors, and the constant change of group memberships (Bland et al., 2009). The group

mentoring model that is also hierarchical based is organized by one or small number of

mentors with medium group of protégés. Mid or senior faculty members assume the

role as a mentor. The purpose and goals of the mentoring relationship include: career

advancement and socialization. The mentoring process is topic centered and guided by

facilitators. The challenges that institutions may face with this type of mentoring model

are: meeting the different needs of group members, managing group dynamics,

providing skill training for group interaction, time commitments, and changing group

membership (Bland et al., 2009). Furthermore, institutional administrators may also

consider a blended mentoring option to support senior faculty members who are

interested in mentoring but have difficulty scheduling face-to-face meetings on a

consistent basis. Prior to launching any mentoring programs, institutions should

organize structured mentoring training for mentors and protégés to clarify the goals and

expectations of the mentoring program as well as promote faculty socialization. In

addition, departments can develop a standard check list for the mentor to make sure the

basic information is covered, such as institutional or departmental norms, rules, and

taboos, tenure and promotion process, grant writing skills, research collaboration

opportunities, and resources (e.g., funding, technology, and teaching support) that are

available on campus.

From the research perspective, this study may provide scholars a better understanding of the roles and impacts of self-esteem and mentoring on U.S.-born and foreign-born faculty members' job satisfaction as well as the relationship among self-esteem, mentoring, and job satisfaction. To gain a better understanding of the effect of mentoring on underrepresented faculty members including faculty members of color, future research scholars may conduct a similar study that only focuses on underrepresented faculty members. Furthermore, this study may also prompt more ideas for other research scholars to continue in this type of research, such as researching faculty job satisfaction in community colleges or teaching institutions.

Recommendations for Future Research

In this study, faculty mentoring experience was found to be a strong predictor variable for faculty job satisfaction. For future study, research scholars could conduct follow up studies that focus on the impacts of mentoring affecting faculty's (i.e., Assistant and Associate professors) job satisfaction using qualitative research methods. From the open-ended questions, the data indicated that senior faculty members were interested and willing to take on the mentor role; however, many senior faculty members were never approached to serve as a mentor. Therefore, research scholars could focus their studies on the impacts of the mentoring role affecting senior faculty members' (i.e., full professors) job satisfaction. In addition, future research scholars could conduct a similar study but with the focus on Hispanic, American Indian or multi-racial faculty members that are tenured, on tenure-track, renewable term or clinical/research position without tenure.

Technology is important to the daily functions and operations of institutions and

faculty members' teaching and research responsibilities. Most faculty members are familiar and comfortable using technology (e.g., computer, tablet, web-based instructions, smartboard) to conduct their classes and research. Since one of the challenges that protégés face with their mentoring experience was that their mentors were too busy and could not meet with them because of work overload or schedule conflicts. Future research scholars could study the roles and effects of a blended mentoring approach (an incorporation of formal and informal mentoring with the addition of technology) and how it could change or improve mentors' and protégés' mentorship experience.

References

Adkins, C. L., Werbel, J. D., & Fahr, J. L. (2001). A field study of job insecurity during a financial crisis. *Group & Organization Management, 26*(4), 463-483.

Aguirre, A. Jr. (2000). Women and minority faculty in the academic workplace: Recruitment, retention, and academic culture. ERIC Digest. Retrieved from http://www.ericdigests.org/2001-3/women.htm.

Ahmed, M. A. (2012). The role of self-esteem and optimism in job satisfaction among teachers of private universities in Bangladesh. *Asian Business Review, 1*(1), 114-120.

Alavi, H. R., & Askaripur, M. R. (2003). The relationship between self-esteem and job satisfaction of personnel in government organizations. *Public Personnel Management, 32*(4), 591-600.

Alberts, H. C. (2008). The challenges and opportunities of foreign-born instructors in the classroom. *Journal of Geography in Higher Education, 32*(2), 189-203.

Albrecht, T. L., & Adelman, M. B. (1987). *Communicating social support.* Thousand Oaks, CA: Sage.

Allen, W. R., Epps, E. G., Guillory, E. A., Suh, S. A., & Bonous-Hammarth, M. (2000). The black academic: Faculty status among African American in U.S. higher education. *Journal of Negro Education, 69*(1/2), 112-127.

Allen, T. D., & Eby, L. T. (2008). Mentor commitment in formal mentoring relationships. *Journal of Vocational Behavior, 72*(3), 309-316.

Altbach, P. G. (2004). Higher education crosses borders: Can the United States remain the top destination for foreign students? *Change: The Magazine of Higher Learning, 36*(2), 18-25.

Altbach, P. G., & Knight, J. (2007). The internationalization of higher education: Motivations and realities. *Journal of Studies in International Education, 1,* 290-305.

American Association of University Professors. (n.d.). Retrieved from http://www.aaup.org/issues/tenure.

Antecol, H., & Bedard, K. (2004). The racial wage gap: The importance of labor force attachment differences across black, Mexican, and white men. *Journal of Human Resources, 39*(2), 564-583.

Antonio, A. L. (2002). Faculty of color reconsidered: Reassessing contributions to scholarship. *The Journal of Higher Education, 73*(5), 582-602.

Astin, H. S., Antonio, A. L., Cress, C. M., & Astin, A. W. (1997). *Race and ethnicity in the American professoriate, 1995-96*. Los Angeles, LA: Higher Education Research Institute, UCLA.

Barker, L. & Cohoon J. M. (2007). Georgia Tech mentoring program for faculty advancement (case study 1): Mentoring faculty women. *National Center for Women & Information Technology Promising Practices.*

Benson, S. G., & Dundis, S. P. (2003). Understanding and motivating health care employees: Integrating Maslow's hierarchy of needs, training and technology. *Journal of Nursing Management, 11*, 315-320.

Berk, R. A., Berg, J., Mortimer, R., Walton-Moss, B., & Yeo, T.P. (2005). Measuring the effectiveness of faculty mentoring relationships. *Academic Medicine, 80*(1), 66-71.

Bernal, D. D., & Villalpando, O. (2010). An apartheid of knowledge in academia: The struggle over the "legitimate" knowledge of faculty of color. *Equity & Excellence in Education, 35*(2), 169-180.

Beverly, C. Jr. (2011). *African American faculty and administrator success in the Academy: Career mentoring and job satisfaction at predominantly White institutions*. Unpublished doctoral dissertation. Lehigh University, Bethlehem, PA.

Bland, C., J., Taylor, A. L., Shollen, S. L., Weber-Main, A. M., & Mulcahy, P. A. (2009). *Faculty success through mentoring*. Lanham, MD: Rowman & Littlefield Education.

Bono, J. E., & Judge, T. A. (2003). Core self-evaluations: A review of the trait and its role in job satisfaction and job performance. *European Journal of Personality, 17*(S1), S5-S18.

Borders, L. D., Young, J. S., Wester, K. L., Murray, C. E., Villalba, J. A., Lewis, T. F., & Mobley, A. K. (2011). Mentoring promotion/tenure-seeking faculty: Principles of good practice within a counselor education program. *Counselor Education & Supervision, 50*, 171-188.

Boswell, W. R., Boudreau, J. W., & Tichy, J. (2005). The relationship between employee job change and job satisfaction: The honeymoon-hangover effect. *Journal of Applied Psychology, 90*, 882-892.

Bourguignon, E., Blanshan, S. A., Chiteji, L., MacLean, K. J., Meckling, S. J., Sagaria,

M. A., Shuman, A. E., & Taris, M. T. (1987). *Junior faculty life at Ohio State: Insights on gender and race*. Columbus, OH: Ohio State University, Affirmative Active Grant Program.

Brown, H. N. (1999). Mentoring new faculty. *Nurse Educator, 24*(1), 48-51.

Bryant-Shanklin, M., & Brumage, N. W. (2011). Collaborative responsive education mentoring: Mentoring for professional development in Higher Education. *Florida Journal of Educational Administration & Policy, 5*(1), 42-53.

Bryson, R., Bryson, J. B., & Johnson, M. F. (1978). Family size, satisfaction, and productivity in dual-career couples. In J. B. Bryson & R Bryson (Eds.) *Dual-career couples (pp. 67-77).* New York, NY: Human Sciences Press.

Carden, A. D. (1990). Mentoring and adult career development: The evolution of a theory. *The Counseling Psychologist, 18*, 275-299.

Carnegie Classifications of Institutions of Higher Education (n.d.). Retrieved from http://classifications.carnegiefoundation.org/descriptions/basic.php.

Carter, D. J., & Wilson, R. (1997). *Fifteenth annual status report on minorities in higher education.* Washington, DC: American Council on Education.

Cawyer, C. S., & Friedrick, G. W. (1998). Organizational socialization: Processes for new communication faculty. *Communication Education, 47*(3), 234-245.

Cawyer, C. S., Simonds, C., & Davis, S. (2002). Mentoring to facilitate socialization: The case of the new faculty member. *International Journal of Qualitative Studies in Education, 15*(2), 225-242.

Cetin, M. O. (2006). The relationship between job satisfaction, occupational and organizational commitment of academics. *Journal of American Academy of Business Cambridge, 8*(1), 78-88.

Chen, G., Ployhart, R. E., Thomas, H. C., Anderson, N., & Bliese, P. D. (2011). The power of momentum: A new model of dynamic relationships between job satisfaction change and turnover intentions. *Academy of Management Journal, 54*(1), 159-181.

Cho, S. (1996). Confronting the myths: Asian Pacific American faculty in higher education. Ninth Annual APAHE Conference Proceedings, 31-56. San Francisco, CA.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.

Collins, J. M. (2008). Coming to America: Challenges for faculty coming to United States' Universities. *Journal of Geography in Higher Education, 32*(2), 179-188.

Conklin, W., & Robbins-McNeish, N. (2006). Four barriers to faculty diversity. *Diversity Factor, 14*(4), 26-33.

Corley, E. A., & Sabharwal, M. (2007). Foreign-born academic scientists and engineers: Producing more and getting less than their U.S.-born peers? *Research in Higher Education, 48*(8), 909-940.

Crocker, J., & Wolfe, C. T. (2001). Contingencies of self-worth. *Psychological Review, 108,* 593-623.

Dancy, T. E. Jr., & Brown, M. C. Jr. (2011). The mentoring and induction of educators of color: Addressing the impostor syndrome in academe. *Journal of School Leadership, 21*, 607-634.

Darwin, A. (2000). Critical reflections on mentoring in work settings. *Adult Education Quarterly, 50*(3), 197-211.

Davis, J. A. (1971). *Elementary survey analysis.* Englewood Cliffs, NJ: Prentice Hall.

DeAngelo, L., Hurtado, S., Pryor, J. H., Kelly, K. R., & Santos, J. L. (2009). *The American college teacher: National norms for the 2007-2008 HERI faculty survey.* Los Angeles, CA: Higher Education Research Institute, UCLA.

DeConinck, J. B., & Brock, B. A. (2011). The influence of real estate sales manager's supervisory behaviors on the role clarity and job satisfaction of real estate salesperson. *Journal of Applied Business Research, 9*(3), 119-128.

Diggs, G., Garrison-Wade, D., Estrada, D., & Galindo, R. (2009). Smiling faces and colored spaces: The experiences of faculty of color pursuing tenure in the academy. *Urban Review, 41*(4), 312-333.

Eby, L. T., Allen, T. D., Evans, S. C., Ng, T., & DuBois, D. L. (2008). Does mentoring matter? A multidisciplinary meta-analysis comparing mentored and non-mentored individuals. *Journal of Vocational Behavior, 72*, 254-267.

Ehrich, L. C., & Hansford, B. (1999). Mentoring: Pros and cons for HRM. *Asia Pacific Journal of Human Resources, 37*(3), 92-107.

Field, A. (2009). *Discovering Statistics Using SPSS* (3rd ed.). London, U.K.: Sage.

Foote, K. E., Li, W., Monk, J., & Theobald, R. (2008). Foreign-born scholars in US universities: Issues, concerns, and strategies. *Journal of Geography in Higher*

      Education, 32(2), 167-178.

Forest, J. J. (2002). *Higher education in the United States: An encyclopedia* (Vol. 1).
      Abc-Clio.

Gall, M. D., Gall, J. P., & Borg, W. R. (Eds.). (2007). *Educational Research: An*
      introduction. Boston, MA: Pearson.

George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and*
      reference. 11.0 update (4th ed.). Boston, MA: Allyn & Bacon.

Gliem, J. A., & Gliem, R. R. (2003). Calculating, interpreting, and reporting Cronbach's
      alpha reliability coefficient for Likert-type scales. Retrieved from
      https://scholarworks.iupui.edu/bitstream/handle/1805/344/Gliem%20%26%20Gl
      iem.pdf?sequence=1

Griffin, K. A. (2012). Learning to mentor: A mixed methods study of the nature and
      influence of Black professors' socialization into their roles as mentors. *The*
      *Journal of the Professoriate, (6)*2, 27-58.

Grosshans, O., Poczwardowski, A., Trunnell, E., & Ransdell, L. (2003). Senior faculty
      retrospectives on mentoring. *American Journal of Health Education, 34*(3), 146-
      153.

Gruneberg, M. M. (1979). *Understanding job satisfaction*. London: Macmillan.

Gupta, D. (2004). *The careers and return migration of foreign-born United States*
      PhDs. Retrieved from ProQuest Digital Dissertations. (AAT 3165392)

Hagedorn, L. S. (2000). Conceptualizing faculty job satisfaction: Components, theories,
      and outcomes. *New Directions for Institutional Research, 105*, 5-20.

Haggard, D. L., Dougherty, T. W., Turban, D. B., & Wilbanks, J. E. (2011). Who is a
      mentor? A review of evolving definitions and implications for research. *Journal*
      of Management, 37, 280-304.

Haynes, R. K., & Petrosko, J. M. (2009). An investigation of mentoring and
      socialization among law faculty. *Mentoring & Tutoring: Partnership in*
      Learning, 17(1), 41-52.

Herzberg, F., Mausner, B., & Snyderman, B. (1959). *The motivation to work,* (2nd ed.),
      New York, NY:Wiley.

Herzberg, F. (1966). *Work and the nature of man.* Cleveland, OH: World Publishing.

Hesli, V. L., & Lee, J. M. (2013). Job satisfaction in academia: Why are some faculty

members happier than others? *PS: Political Science & Politics, 46*(2), 339-354.

Higgins, L. K. B. (1998). The impact of a mentoring program on the self-esteem of college-age women. *Dissertation Abstracts International, 58*(7-A), p. 2559.

Higher Education Research Institute. (2009). The American college teacher: National norms for 2007-2008. Retrieved from http://www.heri.ucla.edu/PDFs/pubs/ briefs/brief-pr030508-08faculty.pdf.

Hodson, R. (1989). Gender differences in job satisfaction: Why aren't women more dissatisfied? *The Sociological Quarterly, 30*(3), 385-399.

House, R. J., & Wigdor, L. A. (1967). Herzberg's dual-factor theory of job satisfaction and motivation: a review of the evidence and criticism. *Personnel Psychology, 20*(4), 369-390.

Howe, J. M. (2008). A journey of a thousand miles. *New Directions for Higher Education, 143*, 73-79.

Hune, S., & Chan, K.S. (1997). Special focus: Asian Pacific Demographic and Educational Trends. *In 15th Annual Status Report on Minorities in Higher Education*. Washington, D.C.: American Council on Education.

Inside Higher Ed. (2005, May). Faculty demographics. Retrieved from http://www.insidehighered.com/news/2005/05/27/stats.

Johnston, S., & McCormack, C. (1997). Developing research potential through a structured mentoring program: Issue arising. *Higher Education, 33*(3), 251-264.

Judge, T. A., Locke, E. A., Durham, C. C., & Kluger, A. M. (1998). Dispositional effects on job and life satisfaction: The role of core evaluations. *Journal of Applied Psychology, 83*(1), 17-34.

Judge, T. A., & Bono, J. E. (2001). Relationship of core self-evaluations traits- self-esteem, generalized self-efficacy, locus of control, and emotional stability- with job satisfaction and job performance: A meta-analysis. *Journal of Applied Psychology, 86*(1), 80-92.

Judge, T. A., Van Vianen, A. E., & De Pater, I. E. (2004). Emotional stability, core self-evaluations, and job outcomes: A review of the evidence and an agenda for future research. *Human Performance, 17*(3), 325-346.

Judge, T. A., Bono, J. E., Erez, A., & Locke, E. A. (2005). Core self-evaluations and job and life satisfaction: The role of self-concordance and goal attainment. *Journal of Applied Psychology, 90*(20), 257-268.

Kalleberg, A. L. (1977). Work values and job rewards: A theory of job satisfaction. *American Sociological Review, 42*(1), 124-143.

Karcher, M. J. (2005). The effects of developmental mentoring and high school mentors' attendance on their younger mentees' self-esteem, social skills, and connectedness. *Psychology in the Schools, 42*(1), 65-77.

Kim, D., Wolf-Wendel, L., & Twombly, S. (2011). International faculty: Experiences of academic life and productivity in U.S. universities. *The Journal of Higher Education, 82*(6), 720-747.

Kogler Hill, S. E., Bahniuk, M. H., & Dobos, J. (1989). The impact of mentoring and collegial support on faculty success: An anlaysis of support behavior information adequacy, and communication apprehension. *Communication Education, 38*(1), 15-33.

Korman, A. K. (1970). Toward an hypothesis of work behavior. *Journal of Applied Psychology, 34*(1), 31-41.

Kram, K. E. (1985). *Mentoring at work: Developmental relationships in organizational life.* Glenview, IL: Scott Foresman.

Kundu, S. C., & Rani, S. (2007). Human resources' self-esteem across gender and categories: a study. *Industrial Management & Data Systems, 107*(9), 1366-1390.

Kuster, F., Orth, U., & Meier, L. L. (2013). High self-esteem prospectively predicts better work conditions and outcomes. *Social Psychology and Personality Science, 4*(6), 1-8.

Lacy, F. J., & Sheehan, B. A. (1997). Job satisfaction among academic staff: An international perspective. *Higher Education, 34*, 305-322.

Laden, B. V., & Hagedorn, L. S. (2000). Job satisfaction among faculty of color in academe: Individual survivors or institutional transformers? *New Directions for Institutional Research, 2000*(105), 57-66.

Lee, C. D., & del Carmen Montiel, E. (2011). The correlation of mentoring and job satisfaction: A pilot study of mental health professionals. *Community Mental Health Journal, 47*(4), 482-487.

Lee, S. M. (2002). Do Asian American faculty face a glass ceiling in higher education? *American Educational Research Journal, 39*(3), 695-724.

Lee, S. (2004). *Foreign-born scientists in the United States-do they perform differently than native-born scientists?* (Unpublished doctoral dissertation). Georgia Institute of Technology, Georgia.

Leung, T., Siu, O., & Spector, P. E. (2000). Faculty stressors, job satisfaction, and psychological distress among university teachers in Hong Kong: The role of locus of control. *International Journal of Stress Management, 7*, 121-138.

Lin, Z., Pearce, R. & Wang, W. (2009). Imported talents: Demographic characteristics, achievement and job satisfaction of foreign born full time faculty in four-year American colleges. *Higher Education, 57*(6), 703-721.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. Newbury Park, CA: Sage.

Lindholm, J. A. (2003). Perceived organizational fit: Nurturing the minds, hearts, and personal ambitions of university faculty. *The Review of Higher Education, 27*(1), 125-149.

Locke, E. A. (1976). The Nature and Causes of Job Satisfaction. In M.D. Dunnette (ed.), *Handbook of Industrial and Organizational Psychology.* Chicago: Rand McNally.

Locke, E. A., McClear, K., & Knight, D. (1996). Self-esteem and work. *International Review of Industrial and Organizational Psychology, 11*, 1-32.

Lomax, R. G. (2007). *An Introduction to Statistical Concepts* (2nd ed.). Mahwah, NJ: Lawrence Erlbaum.

Lucas, C. J., & Murry, J. W. Jr. (2011). *New faculty: A practical guide for academic beginners*. Palgrave Macmillan.

Mamiseishvili, K. (2010). Foreign-born women faculty work roles and productivity at research universities in the United States. *Higher Education, 60*(2), 139-156.

Mamiseishvili, K., & Rosser, V. J. (2009). International and citizen faculty in the United States: an examination of their productivity at research universities. *Research in Higher Education, 51*, 88-107.

Mamiseishvili, K., & Rosser, V. J. (2011). Examining the relationship between faculty productivity and job satisfaction. *The Journal of the Professoriate, 5*(2), 101-132.

Marvasti, A. (2005). U.S. Academic Institutions and Perceived Effectiveness of Foreign-Born Faculty. *Journal of Economic Issues, 39*(1), 151-176.

Maslow, A. H. (1954). *Motivation and Personality*. NY: Harper and Row.

Modica, J. L., & Mamiseishvili, K. (2010). Black faculty at research universities: Has significant progress occurred? *The Negro Educational Review, 61*(1-4), 107-122.

Moody, J. (2004). *Faculty Diversity: Problems and Solutions*. NY: Routledge.

Museus, S. D. (2008). The model minority and the inferior minority myths: Understanding stereotypes and their implications for student learning. *About Campus, 13*, 2-8.

National Center for Education Statistics. (2013). *Characteristics of postsecondary faculty.* Retrieved from https://nces.ed.gov/programs/coe/indicator_cuf.asp.

National Science Board. (2012). *Science and engineering indicators 2012*. Retrieved from http://www.nsf.gov/statistics/seind12/.

Neves, J. S., & Sanyal, R. N. (1991). Classroom communication and teaching effectiveness: The foreign-born instructor. *Journal of Education for Business, 66*(5), 304-308.

Olejnik, S. F. (1984). Planning educational research: Determining the necessary sample size. *Journal of Experimental Education, 53*(1), 40-48.

Olsen, D. (1993). Work satisfaction and stress in the first and third year of academic appointment. *Journal of Higher Education,* 453-471.

O'Reilly, C. A., & Caldwell, D. F. (1980). Job choice: The impact of intrinsic and extrinsic factors on subsequent satisfaction and commitment. *Journal of Applied Psychology, 65*(5), 559-565.

Open Doors (2011). *Institute for International Education*. Retrieved from http://opendoors.iienetwork.org/.

Orth, U., Robins, R. W., & Widaman, K. F. (2012). Life-span development of self-esteem and its effects on important life outcomes. *Journal of Personality and Social Psychology, 102*(6), 1271-1288.

Oshagbemi, T. (1997). Job satisfaction and dissatisfaction in higher education. *Education + Training, 39*(9), 354-359.

Quarstein, V. A., McAfee, R. B., & Glassman, M. (1992). The situational occurrences theory of job satisfaction. *Human Relations, 45*, 859-873.

Parson, L. A., Sands, R. G., & Duane, J. (1992). Sources of career support for university faculty. *Research in Higher Education, 33*(2), 161-176.

Passel, J.S., & Cohn, D. (2008). US population projection: 2005-2050. Retrieved from http://www.pewsocialtrends.org/2008/02/11/us-population-projections-2005-2050/.

Pearson, D. A., & Seiler, R. E. (1983). Environmental satisfiers in academics. *Higher Education, 42*(5), 35-47.

Pierce, J. L., Gardner, D. G., Cummings, L. L., & Dunham, R. B. (1989). Organization-based self-esteem: Construct definition, measurement, and validation. *Academy of Management Journal, 32*(3), 622-648.

Race and ethnicity of college administrators, faculty, and staff, Fall 2011. *The Chronicle of Higher Education Almanac of Higher Education*. Retrieved from http://chronicle.com/article/RaceEthnicity-of-College/140173/.

Robins, R. W., Hendin, H. M., & Trzesniewski, K. H. (2001). Measuring global self-esteem: Construct validation of a single-item measure and the Rosenberg Self-Esteem Scale. *Personality and Social Psychology Bulletin, 27*(2), 151-161.

Robbins, R. W., Tracy, J. L., Trzesniewski, K., Potter, J., & Gosling, S. D. (2001). Personality correlates of self-esteem. *Journal of Research in Personality, 35*(4), 463-482.

Rosenberg, M. (1965). *Society and the Adolescent Self-image*. Princeton, NJ: Princeton University Press.

Rosenberg, M., Schooler, C., Schoenbach, C., & Rosenberg, F. (1995). Global self-esteem and specific self-esteem: Different concepts, different outcomes. *American Sociological Review, 60*(1), 141-156.

Rosser, V. J. (2004). Faculty members' intentions to leave: A national study on their worklife and satisfaction. *Research in Higher Education, 45*(3), 285-309.

Sabharwal, M., & Corley, E. A. (2009). Faculty job satisfaction across gender and discipline. *The Social Science Journal, 46*, 539-556.

Sabharwal, M. (2011). Job satisfaction patterns of scientists and engineers by status of birth. *Research Policy, 40*(6), 853-863.

Sadri, G., & Clarke Bowen, R. (2011). Meeting employee requirements. *Industrial Engineer, 43*(10), 44-48.

Salmela-Aro, K., & Nurmi, J. (2007). Self-esteem during university studies predicts career characteristics 10 years later. *Journal of Vocational Behavior, 70*, 463-477.

Samble, J. N. (2008). Female faculty: Challenges and choices in the United States and beyond. *New Directions for Higher Education, 2008*(143), 55-62

Sands, R. G., Parson, L. A., & Duane, J. (1991). Faculty mentoring faculty in a public

university. *The Journal of Higher Education, 62*(2), 174-193.

Santo, S. A., Engstrom, M. E., Reetz, L., Schweinle, W. E., & Reed, K. (2009). Faculty productivity barriers and supports at a school of education. *Innovative Higher Education, 34*(2), 117-129.

Schrodt, P., Cawyer, C. S., & Sanders, R. (2003). An examination of academic mentoring behaviors and new faculty members' satisfaction with socialization and tenure and promotion processes. *Communication Education, 52*(1), 17-29.

Simons, J. A., Irwin, D. B., & Drinnin, B. A. (1987). *Psychology: The search for understanding*. New York City, NY: West Publishing Company.

Sinacore-Guinn, A. L. (1998). Employed mothers: Job satisfaction and self-esteem. *Canadian Journal of Counselling, 32*(3), 242-258.

Smith, D. G., Turner, C. S. V., Osei-Kofi, N., & Richards, S. (2004). Interrupting the usual: Successful strategies for hiring diverse faculty. *The Journal of Higher Education, 75* (2), 133-160.

Smith, P., Kendall, L., & Hulin, C. (1969). *Measurement of Satisfaction in Work and Retirement.* Chicago, IL: Rand McNally.

Spector, P. E. (1985). Measurement of human service staff satisfaction: Development of the job satisfaction survey. *American Journal of Community Psychology, 13*(6), 693-712.

Springfield-Scott, M. (2000). Faculty job satisfaction in a university work environment. *Thresholds in Education*, 25-32.

Steel, R. P. (2002). Turnover theory at the empirical interface: Problems of fit and function. *Academy of Management Review, 27*, 346-360.

Tack, M. W., & Patitu, C.L. (1992). Faculty job satisfaction: Women and minorities in peril. ASHE-ERIC Higher Education Report No. 4. Washington DC: The George Washington University, School of Education and Human Development.

Tafarodi, R. W., & Swann, W. B., Jr. (1995). Self-liking and self-competence as dimensions of global self-esteem: Initial validation of a measure. *Journal of Personality Assessment, 65*(2), 322-342.

Teranishi, R. T. (2002). Asian Pacific Americans and critical race theory: An examination of school racial climate. *Equity & Excellence in Education, 35*(2), 144-154.

The Chronicle of Higher Education Almanac of Higher Education (2010). *Employees in*

colleges and universities by racial and ethnic group, fall 2007. Retrieved from
http://chronicle.com/article/employees-in-colleges-and/123999/.

The Chronicle of Higher Education Almanac of Higher Education. (2011). *Average
faculty salaries for women still lag behind those of men*. Retrieved from
http://chronicle.com/article/Average-Faculty-Salaries-for/128520/.

The Chronicle of Higher Education Almanac of Higher Education. (2012a). *Percentage
of 18- to 24-year olds enrolled at degree-granting institutions, 1980-2010*.
Retrieved from http://chronicle.com/article/Percentage-of-18-to-24-Year-
Olds-Enrolled/133409/.

The Chronicle of Higher Education Almanac of Higher Education (2012b). *Race and
ethnicity of college administrators, faculty, and staff, fall 2009*. Retrieved from
http://chronicle.com/article/race-and-ethnicity-of-faculty-staff/128574.

The Chronicle of Higher Education Almanac of Higher Education (2013). *Race and
ethnicity of college administrators, faculty, and staff, fall 2011*. Retrieved from
http://chronicle.com/article/RaceEthnicity-of-College/140173/.

The Migration Policy Institute. (2004, January). The foreign born in the US labor force:
Numbers and trends. Retrieved from http://www.migrationpolicy.org/pubs/four_
foreign_born_in_labor_force.pdf.

The University of Oklahoma. (n.d.) *Regent's Policy Manual for the University of
Oklahoma*. Retrieved from http://www.ou.edu/regents/official_agenda/
CurrentPolicyManual.pdf.

Thomas, J. M., & Johnson, B. J. (2004) Perspectives of international faculty members:
Their experiences and stories. *Education and Society, 22*(3), 47-64

Tierney, W. G. (1988). Organizational culture in higher education: Defining the
essentials. *The Journal of Higher Education, 59*(1), 2-21.

Tierney, W. G. (1997). Organizational socialization in higher education. *The Journal of
Higher Education, 68*(1), 1-16.

Toutkoushian, R. K., Bellas, M. L., & Moore, J. V. (2007). The interaction effects of
gender, race, and marital status on faculty salaries. *Journal of Higher Education,
78*(5), 572-601.

Trower, C. A. (2012). *Success on the Tenure Track*. Baltimore, MD: The John Hopkins
University.

Turner, C. S. V., Myers, S. L. Jr., & Creswell, J. W. (1999). Exploring under-
representation: The case of faculty of color in the Midwest. *The Journal of*

119

Higher Education, 70(1), 27-59.

Turner, C. S., & Myers, S. (2000). *Faculty of color in academe: Bittersweet success*. Needham Heights, MA: Allyn & Bacon.

Turner, C. S. V. (2007). Pathways to the Presidency: Biographical sketches of women of color firsts. *Harvard Educational Review, 77*(1), 1-38.

Turner, C., Gonzalez, J. C., & Wood, J. L. (2008). Faculty of color in academe: What 20 years of literature tells us. *Journal of Diversity in Higher Education, 1*, 139-168.

Varma, R. (2010). India-born in the US science and engineering workforce. *American Behavioral Scientist, 53*(7), 1064-1078.

Vermunt, R., Van Knippenberg, D., Van Knippenberg, B., & Blaauw, E. (2001). Self-esteem and outcome fairness: Differential importance of procedural and outcome considerations. *Journal of Applied Psychology, 86*(4), 621- 628.

Verret, L. B. (2011). *Factors affecting university STEM faculty job satisfaction.* Retrieved from Louisiana State University Electronic Thesis & Dissertation Collection. (etd-01202012-195627)

Waters, L., McCabe, M., Kiellerup, D., & Kiellerup, S. (2002). The role of formal mentoring on business success and self-esteem in participants of a new business start-up program. *Journal of Business and Psychology, 17*(1), 107-121.

Weiss, D., Dawis, R., Lofquist, L., & England, G. (1966). *Instrumentation for the theory of work adjustment.* University of Minnesota, Minneapolis.

Wood, O. R. (1973). *An analysis of faculty motivation to work in the North Carolina community college system*. Unpublished doctoral dissertation, North Carolina State University, Raleigh.

Zafar, M. A., Roberts, K. W., & Behar-Horrenstein, L. S. (2012). Mentoring perceptions and experiences of culturally diverse tenure-accruing faculty. *Florida Journal of Educational Administration & Policy, 5*(2), 59-67.

Appendix A: Institutional Review Board's Approval

The UNIVERSITY of OKLAHOMA

Institutional Review Board for the Protection of Human Subjects
Approval of Initial Submission – Exempt from IRB Review – AP01

Date: December 02, 2013   **IRB#:** 3704

Principal   **Approval Date:** 12/02/2013
Investigator: Tony Kin-Shin Lee

Exempt Category: 2

Study Title: The Relationship Among Mentoring, Self-Esteem, and Job Satisfaction: A Comparative Study of U.S.-Born and Foreign-Born Faculty.

On behalf of the Institutional Review Board (IRB), I have reviewed the above-referenced research study and determined that it meets the criteria for exemption from IRB review. To view the documents approved for this submission, open this study from the *My Studies* option, go to *Submission History*, go to *Completed Submissions* tab and then click the *Details* icon.

As principal investigator of this research study, you are responsible to:
- Conduct the research study in a manner consistent with the requirements of the IRB and federal regulations 45 CFR 46.
- Request approval from the IRB prior to implementing any/all modifications as changes could affect the exempt status determination.
- Maintain accurate and complete study records for evaluation by the HRPP Quality Improvement Program and, if applicable, inspection by regulatory agencies and/or the study sponsor.
- Notify the IRB at the completion of the project.

If you have questions about this notification or using iRIS, contact the IRB @ 405-325-8110 or irb@ou.edu.

Cordially,

E. Laurette Taylor, Ph.D.
Chair, Institutional Review Board

Appendix B: Initial Recruitment Email

From: Tony Lee <noreply@qemailserver.com>
Reply-To: Tony Lee <tonylee23@ou.edu>|
Date: Thursday, December 5, 2013 at 6:53 PM
To: ███████████████████████
Subject: Faculty Job Satisfaction

My name is Tony Lee. I am a doctoral candidate in the Department of Educational Leadership & Policy Studies at the University of Oklahoma. I am working with my faculty advisor, Dr. Doo Hun Lim on a study titled "*The Relationship Among Mentoring, Self-Esteem, and Job Satisfaction: A Comparative Study of U.S.-Born and Foreign-Born Faculty.*"

Studies reveal there is a disparity on U.S.-born and foreign-born faculty job satisfaction. In addition, research also shows that self-esteem and mentoring can affect job satisfaction respectively. I am conducting a study to compare the U.S.-born and foreign-born faculty members' job satisfaction. To be specific, I am interested in investigating the relationship among mentoring, self-esteem, and job satisfaction of U.S.-born and foreign-born faculty members. In the survey, you will be asked questions pertaining to job satisfaction, mentoring, and self-esteem. The results of the study may provide beneficial information to university administrators in developing more effective faculty development programs or support services to improve faculty job satisfaction. Your input is important and greatly valued for this study; therefore, I would like to invite you to participate in this study.

This survey will take approximately 15 minutes to complete. If you have any questions about the study or the questions in the survey, please feel free to contact me at (405) 325-3604 or tonylee23@ou.edu, or my advisor, Dr. Doo Hun Lim at (405) 325-7941 or dhlim@ou.edu. Thank you for taking time out of your busy schedule to fill out the survey. Please click on the link below to participate in the study:

Follow this link to the Survey:
Take the Survey

Or copy and paste the URL below into your internet browser:
https://oueducation.co1.qualtrics.com/WRQualtricsSurveyEngine/?Q_SS=5q0tzQfVGIw9smF_7P2CWvzVv8dcglv&_=1

Follow the link to opt out of future emails:
Click here to unsubscribe

The University of Oklahoma is an Equal Opportunity Institution. The OU IRB has approved the content of this message, but not the method of distribution. The OU IRB has no authority to approve distribution by mass e-mail.

Sincerely,

Tony Lee
Ph.D. Candidate
University of Oklahoma
tonylee23@ou.edu

Appendix C: A Second Recruitment Email

From: Tony Lee [mailto:noreply@qemailserver.com]
Sent: Thursday, January 02, 2014 5:32 PM
To: ████
Subject: Faculty Job Satisfaction

If you have already taken part in this study, thank you for your participation. Please only complete the survey on you have been intending to participate in this study but have not had a chance to take the survey, this will be ano opportunity for you to participate. Thank you again to all who have participated and expressed interest in this stu **The survey is anonymous, no IP address will be collected.**

My name is Tony Lee. I am a doctoral candidate in the Department of Educational Leadership & Policy Studies University of Oklahoma and I am working with my faculty advisor, Dr. Doo Hun Lim on a study titled "***The Relationship Among Mentoring, Self-Esteem, and Job Satisfaction: A Comparative Study of U.S.-born and Foreign-Born Faculty.***" I understand that you have not had a chance to complete the survey; therefore, I would extend the invitation to you so that you can share your input for the study. Your input is important and greatly va for this study.

Studies reveal that there is a disparity on U.S.-born and foreign-born faculty job satisfaction. In addition, research shows that self-esteem and mentoring can affect job satisfaction respectively. I am conducting a study to compar U.S.-born and foreign-born faculty members' job satisfaction. To be specific, I am interested in investigating the relationship among mentoring, self-esteem, and job satisfaction of U.S.-born and foreign-born faculty members. survey, you will be asked questions pertaining to job satisfaction, mentoring, and self-esteem. The results of the s may provide beneficial information to university administrators in developing more effective faculty developmen programs or support services to improve faculty job satisfaction.

This survey will take approximately 15 minutes to complete. If you have any questions about the study or the qu in the survey, please feel free to contact me at (405) 249-8889 or tonylee23@ou.edu, or my advisor, Dr. Doo Hu at (405) 325-7941 or dhlim@ou.edu. Thank you for taking time out of your busy schedule to fill out the survey. click on the link below to participate in the study.

Follow this link to the Survey:
Take the Survey

Or copy and paste the URL below into your internet browser:
https://oueducation.co1.qualtrics.com/WRQualtricsSurveyEngine/?
Q_SS=73NmI16vtOJEA29_7P2CWvzVv8dcglv&_=1

Follow the link to opt out of future emails:
Click here to unsubscribe

The University of Oklahoma is an Equal Opportunity Institution. The OU IRB has approved the study and the c of this message, but not the method of distribution. The OU IRB has no authority to approve distribution by mas mail.

Sincerely,
Tony Lee
Ph.D. candidate
The University of Oklahoma
tonylee23@ou.edu

Appendix D: Research Universities with Very High and High Research Activity

Carnegie Classification of Institutions of Higher Education

Midwest	Bowlin Green State Unviersity-Main campus	OH	Public	II
Midwest	Case Western Reserve University	OH	Private not-for-profit	I
Midwest	Cleveland State University	OH	Public	II
Midwest	Illinois Institute of Technology	IL	Private not-for-profit	II
Midwest	Indiana University-Bloomington	IN	Public	I
Midwest	Indiana University-Purdue University-Indianapolis	IN	Public	II
Midwest	Iowa State University	IA	Public	I
Midwest	Kansas State University	KS	Public	II
Midwest	Kent State University Kent Campus	OH	Public	II
Midwest	Loyola University Chicago	IL	Private not-for-profit	II
Midwest	Miami University-Oxford	OH	Public	II
Midwest	Michigan State University	MI	Public	I
Midwest	Michigan Technological University	MI	Public	II
Midwest	Missouri University of Science and technology	MO	Public	II
Midwest	North Dakota State Unviersity- Main campus	ND	Public	I
Midwest	Northern Illinois University	IL	Public	II
Midwest	Northwestern University	IL	Private not-for-profit	I
Midwest	Ohio State University	OH	Public	I
Midwest	Ohio University-Main campus	OH	Public	II
Midwest	Purdue Unviersity- Main campus	IN	Public	I
Midwest	South Dakota State University	SD	Public	II
Midwest	Southern Illinois University Carbondale	IL	Public	II
Midwest	St. Louis University-Main campus	MO	Private not-for-profit	II
Midwest	University of Chicago	IL	Private not-for-profit	I
Midwest	University of Cincinnati-Main campus	OH	Public	I
Midwest	University of Illinois at Chicago	IL	Public	I
Midwest	University of Illinois at Urbana-Champaign	IL	Public	I
Midwest	University of Iowa	IA	Public	I
Midwest	University of Kansas	KS	Public	I
Midwest	University of Michigan-Ann Arbor	MI	Public	I
Midwest	University of Minnesota-Twin Cities	MN	Public	I
Midwest	University of Missouri-Columbia	MO	Public	I
Midwest	University of Nebraska-Lincoln	NE	Public	I
Midwest	University of Notre Dame	IN	Private not-for-profit	I
Midwest	University of Wisconsin Madison	WI	Public	I
Midwest	Washington University in St. Louis	MO	Private not-for-profit	I
Midwest	Wayne State University	MI	Public	I
Northeast	Boston College	MA	Private not-for-profit	II
Northeast	Boston University	MA	Private not-for-profit	I
Northeast	Brandeis University	MA	Private not-for-profit	I

Northeast	Brown University	RI	Private not-for-profit	I
Northeast	Carnegie Mellon University	PA	Private not-for-profit	I
Northeast	Catholic University of America	DC	Private not-for-profit	II
Northeast	Clark University	MA	Private not-for-profit	II
Northeast	Clarkson University	NY	Private not-for-profit	II
Northeast	Columbia University in the City of NY	NY	Private not-for-profit	I
Northeast	Cornell University	NY	Private not-for-profit	I
Northeast	CUNY Graduate College and University Center	NY	Public	I
Northeast	Dartmouth College	NH	Private not-for-profit	I
Northeast	Drexel University	PA	Private not-for-profit	II
Northeast	Duquesne University	PA	Private not-for-profit	II
Northeast	Fordham University	NY	Private not-for-profit	II
Northeast	George Washington University	DC	Private not-for-profit	I
Northeast	Georgetown Unviersity	DC	Private not-for-profit	I
Northeast	Harvard University	MA	Private not-for-profit	I
Northeast	Howard University	DC	Private not-for-profit	II
Northeast	John Hopkins University	MD	Private not-for-profit	I
Northeast	Lehigh University	PA	Private not-for-profit	II
Northeast	Massachusetts Institute of Technology	MA	Private not-for-profit	I
Northeast	New Jersey Institute of Technology	NJ	Public	II
Northeast	New York University	NY	Private not-for-profit	I
Northeast	Northeastern University	MA	Private not-for-profit	II
Northeast	Pennsylvania State University- Main campus	PA	Public	I
Northeast	Polytechnic Institute of New York University	NY	Private not-for-profit	II
Northeast	Princeton University	NJ	Private not-for-profit	I
Northeast	Rensselaer Polytechnic Institute	NY	Private not-for-profit	I
Northeast	Rockefeller University	NY	Private not-for-profit	I
Northeast	Rutgers University-Newark	NJ	Public	II
Northeast	Rutgers Unviersity- New Brunswick	NJ	Public	I
Northeast	Stony Brook University	NY	Public	I
Northeast	SUNY at Albany	NY	Public	I
Northeast	Tufts Unviersity	MA	Private not-for-profit	I
Northeast	University at Buffalo	NY	Public	I
Northeast	University of Connecticut	CT	Public	I
Northeast	University of Delaware	DE	Public	I
Northeast	University of Maryland-College Park	MD	Public	I
Northeast	University of Massachusetts Amherst	MA	Public	I
Northeast	University of Pennsylvania	PA	Private not-for-profit	I
Northeast	University of Pittsburgh-Pittsburgh campus	PA	Public	I
Northeast	University of Rochester	NY	Private not-for-profit	I
Northeast	Yale University	CT	Private not-for-profit	I
Northeast	Yeshiva University	NY	Private not-for-profit	I

South	Auburn University Main campus	AL	Public	II
South	Baylor Unviersity	TX	Private not-for-profit	II
South	Clemson University	SC	Public	II
South	College of William and Mary	VA	Public	II
South	Duke University	NC	Private not-for-profit	I
South	Emory University	GA	Private not-for-profit	I
South	Florida Atlantic University	FL	Public	II
South	Florida International University	FL	Public	II
South	Florida State University	FL	Public	I
South	George Mason University	VA	Public	II
South	Georgia Institute of Technology-Main Campus	GA	Public	I
South	Georgia State University	GA	Public	I
South	Jackson State University	MS	Public	II
South	Louisiana State University and Agricultural & Mechanical College	LA	Public	I
South	Louisiana Tech University	LA	Public	II
South	Mississippi State University	MS	Public	I
South	North Carolina State University at Raleigh	NC	Public	I
South	Nova Southeastern University	FL	Private not-for-profit	II
South	Oklahoma State University-Main campus	OK	Public	II
South	Old Dominion University	VA	Public	II
South	Rice University	TX	Private not-for-profit	I
South	Southern Methodist University	TX	Private not-for-profit	II
South	Texas A&M Unviersity	TX	Public	I
South	The University of Tennessee	TN	Public	I
South	The University of Texas at Austin	TX	Public	I
South	Tulane University of Louisiana	LA	Private not-for-profit	I
South	University of Alabama at Birmingham	AL	Public	I
South	University of Alabama in Huntsville	AL	Public	I
South	University of Arizona	AZ	Public	I
South	University of Arkansas	AR	Public	I
South	University of Central Florida	FL	Public	I
South	University of Florida	FL	Public	I
South	University of Georgia	GA	Public	I
South	University of Houston	TX	Public	I
South	University of Kentucky	KY	Public	I
South	University of Louisville	KY	Public	I
South	University of Miami	FL	Private not-for-profit	I
South	University of North Caroina at Chapel Hill	NC	Public	I
South	University of Oklahoma Norman Campus	OK	Public	I
South	University of South Carolina-Columbia	SC	Public	I
South	University of South Florida-Tampa	FL	Public	I

South	University of Virginia-Main campus	VA	Public	I
South	Vanderbilt Unviersity	TN	Private not-for-profit	I
South	Virginia Commonwealth University	VA	Public	I
South	Virginia Polytechnic Institute and State University	VA	Public	I
West	Arizona State University	AZ	Public	I
West	Ball State University	ID	Public	II
West	Brigham Young University	UT	Private not-for-profit	II
West	California Institute of Technology	CA	Private not-for-profit	I
West	Claremont Graduate University	CA	Private not-for-profit	II
West	Colorado School of Mines	CO	Public	II
West	Colorado State University	CO	Public	I
West	Idaho State University	ID	Public	II
West	Montana State University	MT	Public	I
West	New Mexico State University-Main campus	NM	Public	II
West	Northern Arizona University	AZ	Public	II
West	Oregon State University	OR	Public	I
West	Portland State University	OR	Public	II
West	San Diego State University	CA	Public	II
West	Stanford University	CA	Private not-for-profit	I
West	University of California-Berkeley	CA	Public	I
West	University of California-Davis	CA	Public	I
West	University of California-Irvine	CA	Public	I
West	University of California-Los Angeles	CA	Public	I
West	University of California-Riverside	CA	Public	I
West	University of California-San Diego	CA	Public	I
West	University of California-Santa Barbara	CA	Public	I
West	University of California-Santa Cruz	CA	Public	I
West	University of Colorado at Boulder	CO	Public	I
West	University of Hawaii at Manao	HI	Public	I
West	University of New Mexico-Main campus	NM	Public	I
West	University of Oregon	OR	Public	I
West	University of Southern California	CA	Private not-for-profit	I
West	University of Utah	UT	Public	I
West	University of Washington-Seattle campus	WA	Public	I
West	Washington State University	WA	Public	I

Appendix E: Informed Consent

Project Title:	The Relationship Among Mentoring, Self-Esteem, and Job Satisfaction: A Comparative Study of U.S.-Born and Foreign-Born Faculty
Principal Investigator:	Tony Lee
Department:	Educational Leadership & Policy Studies

You are being asked to volunteer for this research study. This study is being conducted online. You were selected as a possible participant because you have met the criteria of the targeted population: currently employed at a research university with very high or high research activity, U.S.-born or foreign-born, received a doctorate degree in the U.S. or in other country. Please read this form and ask any questions that you may have before agreeing to take part in this study.

Purpose of the Research Study
The purpose of this study is to compare the U.S.-born and foreign-born faculty members' job satisfaction. In addition, the research will also explore the relationship among mentoring, self-esteem, and job satisfaction of U.S.-born and foreign-born faculty members and compare the results. Last, the study also seeks to understand the relationship between faculty members' job satisfaction with marital status, faculty rank, and tenure status.

Number of Participants
About 800 people will take part in this study. Approximately half of the participants will be U.S.-born faculty members and the other half will be foreign-born faculty members.

Procedures
If you agree to be in this study, you will be asked to complete an online survey.

Length of Participation
The online survey may take approximately 15 minutes to complete. If you failed to complete the online survey, you will be terminated from the study without any penalties.

Risks of being in the study are
None

Compensation
You will not be reimbursed for your time and participation in this study.

Confidentiality
In published reports, there will be no information included that will make it possible to identify you. Research records will be stored securely and only approved resarchers will have access to the records. There are organizations that may inspect and/or copy your research records for quality assurance and data analysis. These organizations include the OU institutional Review Board.

Voluntary Nature of the Study
Participation in this study is voluntary. If you withdraw or decline participation, you will not be penalized or lose benefits or services unrelated to the study. If you decide to participate, you may decline to answer any question and may choose to withdraw at any time.

Contacts and Questions
If you have concerns or complaints about the research, the researcher(s) conducting this study can be contacted at (405) 249-8889 or tonylee23@ou.edu. You may also contact his faculty sponsor, Dr. Doo Hun Lim, (405) 325-7941 or dhlim@ou.edu. Contact the researcher(s) if you have questions, or if you have experienced a research-related injury. If you have any questions about your rights as a research participant, concerns, or complaints about the research and wish to talk to someone other than individuals on the research team or if you cannot reach the research team, you may contact the University of Oklahoma – Norman Campus Institutional Review Board (OU-NC IRB) at 405-325-8110 or irb@ou.edu.

Please keep this information for your records. By providing information to the researcher(s), I am agreeing to participate in this study.

This study has been approved by the University of Oklahoma, Norman Campus IRB.
IRB Number: 3704   **Approval date: 12/2/2013**

◯ I agree to participate

◯ I decline

Appendix F: Faculty Job Satisfaction Survey

Demographic Survey

1. What is your sex?
    a. Male
    b. Female

2. Where were you born?
    a. United States
    b. Outside the U.S.: _____

3. What is your race? (Please check the one option that best describes you)
    a. White
    b. Non-White, Hispanic or Latino
    c. Black or African American
    d. American Indian or Alaska Native
    e. Asian or Pacific Islander
    f. Other: _____

4. What is your marital status?
    a. Single
    b. Married or Domestic Partnership
    c. Widowed
    d. Separated
    e. Divorced

5. How many children do you have? _____

6. How long have you resided in the United States? (Please type your answer in "YEARS" (e.g., 5 years) or "Born in the U.S.") _____

7. Where did you receive your academic doctorate or graduate degree?
    a. U.S.
    b. Other country: _____

8. In which state are you currently employed? _____

9. What type of institution are you currently employed?
    a. Public – Research University with VERY HIGH research activity
    b. Public – Research University with HIGH research activity
    c. Private – Research University with VERY HIGH research activity
    d. Private – Research University with HIGH research activity
    e. Other: _____

10. What type of faculty position do you currently hold?
    a. Tenure track
    b. Tenured
    c. Renewable term
    d. Clinical or research position without tenure
    e. Institution has no tenure system

11. What is your rank at your current institution?
    a. Professor
    b. Associate professor
    c. Assistant professor
    d. Instructor

12. How many years have you been in this position? _____

_____

How much do you agree or disagree with each of the following statements? Select one that best represents your own experience.

1= Disagree Very Much   2= Disagree Moderately   3= Disagree Slightly
4= Agree Slightly   5= Agree Moderately   6= Agree Very Much

I feel I am being paid a fair amount for the work I do.

1   2   3   4   5   6

There is really too little chance for promotion on my job.

1   2   3   4   5   6

My department chair is quite competent in doing his/her job in furthering the causes of the department.

1   2   3   4   5   6

I am not satisfied with the benefits (monetary and nonmonetary) I receive.

1   2   3   4   5   6

When I excel in my job, I receive the recognition that I rightfully deserve.

1   2   3   4   5   6

Many of the rules and procedures in my department hinder me from doing a good job
difficult.

1   2   3   4   5   6

I like the faculty and/or staff I work with.

1   2   3   4   5   6

I sometimes feel my job is meaningless.

1   2   3   4   5   6

Communications among colleagues seem good within this department.

1   2   3   4   5   6

Salary raises are too few and far between.

1   2   3   4   5   6

Those who do well on the job are appropriately recognized.

1   2   3   4   5   6

My department chair is unfair to me.

1   2   3   4   5   6

The benefits (monetary and nonmonetary) I receive are as good as most peer institutions
offer.

1   2   3   4   5   6

I do not feel that the work I do is appreciated.

1   2   3   4   5   6

My efforts to do a good job are seldom blocked by administrative bureaucracy.

1   2   3   4   5   6

I find I have to work harder at my job because of the incompetence of faculty and/or staff I work with.

1   2   3   4   5   6

I like doing the tasks I do at work.

1   2   3   4   5   6

The goals of this department are not clear to me.

1   2   3   4   5   6

I feel unappreciated by the department when I think about what I am paid.

1   2   3   4   5   6

Faculty gets promoted as fast here as they do in other institutions.

1   2   3   4   5   6

My department chair shows too little interest in the feelings of faculty and/or staff.

1   2   3   4   5   6

The benefit (monetary and nonmonetary) package I have is equitable.

1   2   3   4   5   6

There are few rewards (monetary and nonmonetary) for those who work here.

1   2   3   4   5   6

I have too many responsibilities at work.

1   2   3   4   5   6

I enjoy my colleagues at work.

1   2   3   4   5   6

I often feel that I do not know what is going on with the department.

1   2   3   4   5   6

I feel a sense of pride in doing my job.

1   2   3   4   5   6

I feel satisfied with my chances for salary increases.

1   2   3   4   5   6

There are benefits (monetary and nonmonetary) I do not have which I should have.

1   2   3   4   5   6

I like my department chair.

1   2   3   4   5   6

I have too much paperwork to complete to do my job.

1   2   3   4   5   6

I don't feel my efforts are rewarded the way they should be.

1   2   3   4   5   6

I am satisfied with my chances for promotion.

1   2   3   4   5   6

There is too much bickering and fighting about work-related issues at work.

1   2   3   4   5   6

My job is enjoyable.

1   2   3   4   5   6

My work responsibilities are not fully described and explained to me.

1   2   3   4   5   6

How satisfied or dissatisfied are you with each of the following statements? Select one that best represents your own experience.

1= Strongly Disagree   2= Disagree   3= Agree   4= Strongly Agree

I feel that I am a person of worth, at least on an equal plan with others.

1   2   3   4

I feel that I have a number of good qualities.

1   2   3   4

All in all, I am inclined to feel that I am a failure.

1   2   3   4

I am able to do things as well as most other people.

1   2   3   4

I feel I do not have much to be proud of.

1   2   3   4

I take a positive attitude toward myself.

1   2   3   4

On the whole, I am satisfied with myself.

1   2   3   4

I wish I could have more respect for myself.

1   2   3   4

I certainly feel useless at times.

1   2   3   4

At times I think I am no good at all.

1   2   3   4

I have been mentored within the last five years.

Yes **

No*

** If the selected answer is yes, participant will move on to the next section.

*If the selected answer is no, participant will answer the following question.

How do you perceive that mentoring can influence your job satisfaction?

        1 = None   2 = Little   3 = Some   4 = A Lot

1   2   3   4

Please provide an explanation for the answer that you have selected on the previous question.

_____

_____

_____

I would consider my mentoring relationship as:

Formal

Informal

Both

How much do you agree or disagree with each of the following statements? Select one that best represents your own experience.

1= Strongly Disagree   2= Disagree   3= Slightly Disagree
4= Slightly Agree   5= Agree   6= Strongly Agree

My mentor is accessible.

1   2   3   4   5   6

My mentor demonstrates professional integrity.

1   2   3   4   5   6

My mentor demonstrates content expertise in my area of need.

1   2   3   4   5   6

My mentor is approachable whenever I need advice.

1   2   3   4   5   6

My mentor is supportive and encouraging to me.

1   2   3   4   5   6

My mentor provides constructive and useful critiques of my work.

1   2   3   4   5   6

My mentor motivates me to improve my work productivity.

1   2   3   4   5   6

My mentor is helpful in providing direction and guidance on professional issues (e.g., networking).

1   2   3   4   5   6

My mentor answers my questions satisfactorily (e.g., timely response, clear, comprehensive).

1   2   3   4   5   6

My mentor acknowledges my contributions appropriately (e.g., committee contributions, awards).

1   2   3   4   5   6

My mentor suggests appropriate resources (e.g., experts, electronic contracts, source materials).

1   2   3   4   5   6

My mentor challenges me to extend my abilities (e.g., risk taking, try a new professional activity, and draft a section of an article).

1   2   3   4   5   6

How do you perceive that mentoring has influenced your job satisfaction?

      1 = None   2 = Little   3 = Some   4 = A Lot

1   2   3   4

Please provide explanation for the answer that you have selected on the previous question.

_____

_____

_____