



ST. MARY'S  
UNIVERSITY

Digital Commons at St. Mary's University

---

Theses & Dissertations

University Archives

---

8-2017

## The Impact of Faculty Academic Mentoring on First-Generation Undergraduate Students : A Mixed Method Design

Gustavo Salazar II

Follow this and additional works at: <https://commons.stmarytx.edu/dissertations>



Part of the [Psychiatry and Psychology Commons](#)

---

### Recommended Citation

Salazar, Gustavo II, "The Impact of Faculty Academic Mentoring on First-Generation Undergraduate Students : A Mixed Method Design" (2017). *Theses & Dissertations*. 23.  
<https://commons.stmarytx.edu/dissertations/23>

This Dissertation is brought to you for free and open access by the University Archives at Digital Commons at St. Mary's University. It has been accepted for inclusion in Theses & Dissertations by an authorized administrator of Digital Commons at St. Mary's University. For more information, please contact [sfowler@stmarytx.edu](mailto:sfowler@stmarytx.edu), [jcrane3@stmarytx.edu](mailto:jcrane3@stmarytx.edu).

THE IMPACT OF FACULTY ACADEMIC MENTORING ON FIRST-GENERATION  
UNDERGRADUATE STUDENTS: A MIXED METHOD DESIGN

A DISSERTATION

Presented to the Faculty of the Graduate School of  
St. Mary's University in Partial Fulfillment  
Of the Requirements  
For the Degree of

DOCTOR OF PHILOSOPHY

in

COUNSELOR EDUCATION AND SUPERVISION

by

Gustavo Salazar II, M.A., LPC

San Antonio, Texas

August 2017

ProQuest Number: 10846590

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



ProQuest 10846590

Published by ProQuest LLC (2018). Copyright of the Dissertation is held by the Author.

All rights reserved.

This work is protected against unauthorized copying under Title 17, United States Code  
Microform Edition © ProQuest LLC.

ProQuest LLC.  
789 East Eisenhower Parkway  
P.O. Box 1346  
Ann Arbor, MI 48106 – 1346

THE IMPACT OF FACULTY ACADEMIC MENTORING ON FIRST-GENERATION  
UNDERGRADUATE STUDENTS: A MIXED METHOD DESIGN

APPROVED:

---

Dana L. Comstock-Benzick, Ph.D.  
Dissertation Adviser

---

Rosalind V. Alderman, Ph.D.

---

Jacqueline C. Parsons, Ph.D.

---

H. Ray Wooten, Ph.D.

APPROVED:

---

Christopher Frost, Ph.D.  
Dean of the School of Humanities and Social Sciences

---

Date

## DEDICATION AND ACKNOWLEDGMENTS

*In memory of my father*

*Gustavo Salazar Martinez (December 19, 1935 – December 23, 2017)*

I dedicate this dissertation to all first-generation college students who struggle to navigate through their academic careers.

I would first like to thank Dr. Todd T. Russell, my mentor, who made me realize that I could go beyond what I thought I was capable of doing. I am appreciative of Dr. Dana L. Comstock-Benzick for her infinite patience, and her love for her work and her students is inspirational. I would also like to thank Dr. Jacqueline Parsons and her husband, Larry. I am deeply grateful for their love, friendship, and guidance, as well as their fantastic support. I would further like to thank Dr. Rosalind Alderman for granting me access and providing such excellent feedback.

To my beautiful wife, Lisa N. Salazar; my mother, Angelina Salazar; my sister, Giovanna Gutierrez; and her husband, Dario; thank you for your love and patience. To my new family, I would also like to thank my brother-in-law, Orlando Navarro, and his wife, Kathy Navarro, for granting me space, support, and love. I would also like to thank my sister-in-law, Patricia, and her husband, Jimmy Deliganis, for keeping me in their prayers. I hope that I can inspire my nieces and nephews: Natalia, Alejandra, Daniela, Angelica, Lauren, James, and Andrew. I hope that they, too, seek their Ph.D.'s in the future.

Finally, I also want to thank my academic family at Texas A&M International University. My new mentor, Dr. Marcus A. Ynalvez, who has encouraged me and created new research opportunities. I would also like to thank Dr. John Kilburn for his support and encouragement. Finally, I would like to thank my TRiO SSS family; Leticia Valle and Vanessa Almaraz.

## TABLE OF CONTENTS

Title Page .....	i
Approval Page.....	ii
Dedication and Acknowledgments .....	iii
List of Tables .....	vii
List of Figures .....	ix
Abstract.....	x
<b>CHAPTER 1: THE PROBLEM AND JUSTIFICATION FOR THE STUDY .....</b>	<b>1</b>
Background of the Research .....	2
Statement of the Problem.....	5
Theoretical Frameworks .....	6
Research Questions.....	17
Quantitative Research Questions .....	17
Qualitative Research Questions.....	18
Rationale for the Study .....	18
Limitations .....	25
Definition of Terms.....	26
<b>CHAPTER II: REVIEW OF LITERATURE .....</b>	<b>28</b>
Mentoring.....	28
Proliferation of First-Year Mentoring?.....	50
Methodological limitations .....	59
Definitions.....	59
Randomized Controlled Trials.....	61
Mixed Methods.....	61
Mentoring Procedures.....	62
Academic Measures.....	62
Mentoring Effectiveness with the Undergraduate Population .....	63
Quality of Relationship in Undergraduate Mentoring .....	71
Conclusion .....	77
<b>CHAPTER III: METHODS.....</b>	<b>79</b>
Rationale for Mixed Methods Design.....	79
Research Questions and Hypotheses .....	82
Quantitative research question.....	82
Qualitative research questions .....	82

Quantitative hypothesis.....	83
Research Design and Method .....	85
Data Collection .....	86
The FAM Program.....	86
Participants.....	87
Quantitative strand .....	88
Qualitative strand .....	91
Instruments.....	92
Quantitative strand.....	92
Qualitative Strand .....	93
Interviews.....	94
Implementation .....	95
Phase 1 .....	95
Phase 2 .....	97
Confidentiality and Records Management.....	99
Institutional Review Board (IRB).....	100
Analysis.....	100
Quantitative strand.....	100
Qualitative strand.....	107
Main analysis .....	110
Role of the Researcher .....	111
 CHAPTER IV: RESEARCH FINDINGS .....	 116
Quantitative Strand .....	117
Qualitative Strand .....	125
Participant Narratives.....	125
Aurora .....	125
Lucia .....	146
Sofia .....	156
Laura .....	160
Samuel.....	165
Gloria .....	173
Camila.....	176
Celeste.....	180
Emma .....	185
Themes and Subthemes.....	190
Theme One: Faculty and Peer Mentoring differences .....	190
Boundaries .....	191
Coaxing.....	194
Contact and accessibility.....	196
Negative and positive experiences.....	198
Theme Two: The Role of Relational Needs and the Influences on the Mentee's Experience.....	204
Social Support.....	205
Linking.....	207

Networking .....	208
Theme Three: Mentee’s Need for Resources and Information.....	209
Financial Information.....	210
Advice .....	210
Academic support .....	214
Social support and encouragement .....	215
Theme Four: The Mentee’s Need for a Purposeful Role and Finding Meaning .....	218
Epiphany .....	219
Service.....	220
Theme Five: The Influence of Role Modeling on the Mentee.....	221
Inspiration .....	222
Becoming a mentor .....	223
Synthesis of Quantitative and Qualitative Data .....	225
Quality of Relationship.....	228
 CHAPTER V: SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS .....	 233
Summary of the Study .....	233
Implications of the Study Findings.....	240
Recommendations for Mentoring Practice and Future Research .....	242
 REFERENCES .....	 245
 APPENDICES .....	 277
Appendix A.....	278
Appendix B.....	279
Appendix C.....	284
Appendix D.....	286
Appendix E.....	289
Appendix F.....	294
Appendix G.....	296
Appendix H.....	298
Appendix I .....	305
Appendix J.....	311
Appendix K.....	316
Appendix L.....	322
 Vita.....	 323



## LIST OF TABLES

Table 1	Summary of Data Collection and Analysis for Each Research Question	84
Table 2	Data Collection Phases	86
Table 3	Summary of Quantitative Participant Demographics	89
Table 4	Summary of Quantitative Participant Demographics, continued	90
Table 5	Summary of Qualitative Participant Demographics	91
Table 6	Multivariate analysis variables	102
Table 7	Multiple Regression Predictor and Outcome Variables	103
Table 8	Mann-Whitney U Nonparametric Mean Comparison of Fall 2013 Group and Spring 2014 Group	104
Table 9	Regression Predictor and Outcome Variables	106
Table 10	Ajjawi and Higgs' (2007) Data Analysis Process	114
Table 11	Mann-Whitney U Nonparametric Mean Comparison for High-Quality vs. Remaining.	119
Table 12	Regression Results for Predictor Variables of Cohort, Gender, High-Quality vs. Remainder, and RHI total Score on GPA and CSEI.	120
Table 13	Regression Results for Predictor Variables of Cohort, Gender, High-Quality vs. Remainder, and RHI total Score on PVDD IV and PVDD V.	120
Table 14	Regression Results for Predictor Variables of Cohort, Gender, and Authenticity Subscore on GPA and CSEI.	121
Table 15	Regression Results for Predictor Variables of Cohort, Gender, and Authenticity Subscore on PVDD IV and PVDD V.	121
Table 16	Regression Results for Predictor Variables of Cohort, Gender, and Empowerment Subscore on GPA and CSEI.	122
Table 17	Regression Results for Predictor Variables of Cohort, Gender, and Empowerment Subscore on PVDD IV and PVDD V.	122

Table 18	Regression Results for Predictor Variables of Cohort, Gender, and Engagement Subscore on GPA and CSEI.	123
Table 19	Regression Results for Predictor Variables of Cohort, Gender, and Engagement Subscore on PVDD IV and PVDD V.	123
Table 20	Descriptions of Subthemes for Faculty and Peer Mentoring Differences	191
Table 21	Descriptions of Subthemes for The Role of Forming Connections and the Influences on the Mentee’s Experience	204
Table 22	Descriptions of Subthemes for Mentee’s Need for Resources and Information	210
Table 23	Descriptions of Subthemes for The Mentee’s Need for a Purposeful Role and Finding Meaning	219
Table 24	Descriptions of Subthemes for The Influence of Role Modeling on the Mentee	222
Table 25	A Process Model of Quantitative and Qualitative Synthesis	226

## LIST OF FIGURES

Figure 1	Schematic Representation of Relational Mentoring Framework	16
Figure 2	Flowchart of the Basic Procedures in Implementing a Convergent Design	85

## **ABSTRACT**

### **THE IMPACT OF FACULTY ACADEMIC MENTORING ON FIRST-GENERATION UNDERGRADUATE STUDENTS: A MIXED METHOD DESIGN**

Gustavo Salazar II, M.A., LPC

St. Mary's University, 2017

Dissertation Adviser: Dana L. Comstock-Benzick, Ph.D.

The quality of the relationship between mentors and mentees has gained considerable research interest in business-related fields but little ground in the academic sphere. This study examined the effectiveness of an existing faculty mentoring program that had been underway for several years at a small, private, religiously affiliated university. A convergent, parallel, mixed methods design was used to collect quantitative and qualitative data. Current and former undergraduate participants of the mentoring program were invited to volunteer for online surveys assessing the quality of their mentoring relationship in the program. That same pool was also invited to volunteer for group interviews. A Mann-Whitney U test was used to examine differences in the quality of mentoring relationships, and regression analysis was conducted to determine how different qualities of the mentoring relationship predicted mentoring outcomes. Quantitative results indicated no statistical significance for quality differences and mentoring outcome. Relationship quality, as measured by concepts of authenticity, empowerment, and engagement, was not found to predict mentoring outcomes. The qualitative analyses revealed five themes: 1) faculty and peer mentoring differences, 2) the influences of networking on the mentee, 3) mentees' need for resources and information, 4) the mentees' need to be meaningful and purposeful, and 5) the influence of role modeling. The divergent result in the quantitative and

qualitative strands did not demonstrate an association between relationship quality and mentoring outcomes. Therefore, secondary qualitative analysis was conducted within the framework of the concepts of authenticity, empowerment, and engagement. These results revealed that the quality of the relationship between mentor and mentee lead to continued participation in the academic mentoring program or cessation of participation altogether. The results of this research demonstrated that careful academic mentor selection and rigorous mentor training do not mitigate mentees' negative experiences. Implications for academic mentoring programs include the recommendation that universities take a semi-structured approach to academic mentor selection and build in a trial period where mentees can opt-out or opt-in with a differently available mentor(s). A fluid path to mentor assignment can increase the likelihood of mentees having positive experiences, resulting in their continued participation in academic mentoring programs.

## CHAPTER I

### THE PROBLEM AND JUSTIFICATION FOR THE STUDY

U.S. businesses' research on the practice of mentoring has provided overwhelming evidence of its positive impact since the late 20th century (Kram, 1985, 1988; Levinson, Darrow, Klein, Levinson, & McKee, 1978; Noe, 1988a, 1988b). Evidence has shown that employees who are protégés in the business environment demonstrate improved job performance, tend to be more committed to their organizations, and achieve career successes, such as increased pay and more promotions (Allen, Eby, Poteet, Lentz, & Lima, 2004; Ghosh & Reio, 2013). Protégé benefits in the business sector are analogous to areas of higher education, such as academic performance, persistence, and persistence to graduation.

Mentors have also shown to benefit from mentoring (Eby, Durley, Evans, & Ragins, 2006; Terrion & Leonard, 2010). In the business environment, mentors benefit from improved job performance, recognition, loyalty from protégés, and a sense of having a rewarding experience (Eby et al., 2006). In the same manner, faculty mentors can also benefit by being involved with students, such as in research-based mentoring (Davis 2008, 2009; Eagan, Sharkness, Hurtado, Mosqueda, & Chang, 2011; Edwards et al., 2011). The interaction between faculty and students can help create meaningful relationships (Kostovich & Thurn, 2006). Furthermore, students who take on the role of peer mentor can also benefit by having a rewarding experience by assisting students, developing new friendships, and helping undergraduate mentees become better students (Colvin & Ashman, 2010; Terrion & Leonard, 2010).

Historically, undergraduate first-year students have struggled to maintain their GPAs, adjust to college, and persist to second-year enrollment, and they are less likely to persist until

their baccalaureate degrees (Tinto, 1987; Upcraft & Gardner, 1989). In order to provide the benefits of mentoring to first-year students, mentoring programs have been widely implemented in colleges and universities as an intervention to improve academic performance, retention, and graduation (T. A. Campbell & Campbell, 1997; Ferrari, 2004; L. M. Lee & Bush, 2003; Rodger & Tremblay, 2003).

The popularity of undergraduate mentoring programs has outpaced empirical studies (Colley, 2002), which have shown conflicting evidence regarding to the benefits of mentoring (T. A. Campbell & Campbell, 1997; Larose et al., 2011; Rodger & Tremblay, 2003; Salinitri, 2005; Sanchez, Bauer, & Paronto, 2006 ). Although it is not clear why these empirical studies have demonstrated conflicting results, qualitative studies have shed some light on these differences. The comprehensive data collected through interviews have demonstrated instances of mentees' negative mentoring experiences (Beyene, Anglin, Sanchez, & Ballou, 2002; Brittain, Sy, & Stokes, 2009; Cronan-Hillix, Gensheimer, Cronan-Hillix, & Davidson, 1986; Davis, 2009; Hu & Ma, 2010; Kerssen-Griep, Trees, & Hess, 2008; Shotton, Oosahwe, & Cintrón, , 2007; Storrs, Putsche, & Taylor, 2008; Wolfe, Retallick, Martin, & Steiner, 2008). However, the preponderance of undergraduate empirical studies has primarily focused on the positive outcomes (Jacobi, 1991) while neglecting negative outcomes. Therefore, the full range of relationship quality between mentor and mentee and the consequences of mentoring outcomes merit further investigation.

### **Background of the Research**

The relationship quality between a mentor and mentee has attracted interest in undergraduate mentoring research because of its potential benefit on academic outcomes, such as academic performance, persistence, and retention (T. A. Campbell & Campbell, 1997; Larose et

al., 2011; Mangold, Bean, Adams, Schwab, & Lynch, 2002). Mentoring is provided through the interaction between mentor and mentee. All relationships vary in quality, and mentoring is no exception (Ragins, 2010). The quality of the interaction can range from high to poor (Ragins, Cotton, & Miller, 2000). A high-quality interaction between mentor and mentee is associated with frequent mentoring contact, in which the mentee frequently returns to the mentor for emotional support, and the relationship is therefore viewed as highly satisfying (Hu & Ma, 2010; Phinney, Torres Campos, Padilla Kallemeyn, & Kim, 2011). Frequency of contact has been associated with improved academic performance and persistence (T. A. Campbell & Campbell, 1997; Ferrari, 2004). Infrequent interaction, on the other hand, has been assumed to be related to poor relationship quality (Hu & Ma, 2010), in which the effectiveness of mentoring has been described as wasteful and unhelpful (Brittian et al., 2009). Moreover, the lack of a high-quality relationship has been attributed to ineffective mentoring that failed to improve mentees' academic performance and persistence (Sanchez et al., 2006).

In contrast to the higher education setting, business mentoring research has been at the forefront of the investigations on the different quality of mentoring relationship, such as negative mentoring (Burk & Eby, 2010; Eby & Allen, 2002; Eby, Butts, Lockwood, & Simon, 2004; Eby, Durley, Evans, & Ragins, 2008; Eby & McManus, 2004; Eby, McManus, Simon, & Russell, 2000; Simon & Eby, 2003). In the academic environment, there is a lack of empirical studies on the full range of relationship quality (Jacobi, 1991), despite qualitative studies having reported on mentees' negative mentoring experiences (Davis, 2008; Davis, 2009; Langer, 2010; Pittman & Richmond, 2008; Storrs et al., 2008; Strayhorn & Saddler, 2008).

To date, few studies have focused on the interaction quality between mentor and mentee (Beyene et al., 2002; Liang, Tracy, Taylor, & Williams, 2002), and fewer have addressed the



impact of interaction quality on mentoring outcomes (Kerssen-Griep et al., 2008). The preponderance of investigations on quality has instead revolved around the control of mentoring characteristics on the assumption that they influence the quality of mentoring and, by default, relationship quality (Ragins et al., 2000; Salinitri, 2005; Sanchez et al., 2006). Although not exhaustive, mentor characteristics and program characteristics are controlled to increase the probability of quality mentoring (Bozeman & Feeney, 2007). One approach researchers have employed is matching based on gender and ethnicity to assess the impact on mentoring outcomes (T. A. Campbell & Campbell, 1997; Sanchez et al., 2006; Santos & Reigadas, 2002, 2004). Program characteristics have been manipulated as well, such as mentor training, frequency of contact, length of relationship, and extracurricular activities (Eby et al., 2013; Sanchez et al., 2006). Despite these control efforts, documentation has shown that mentors can, at times, fail to provide adequate support (Salinitri, 2005). Growing evidence has indicated that controlling characteristics is not as critical as the relationship quality (T. A. Campbell & Campbell, 1997; E. Cox, 2005; Hu & Ma 2010; Kerssen-Griep et al., 2008; Santos & Reigadas, 2002, 2004). However, the manipulation of characteristics is concrete, tangible, and measurable; therefore, a possible reason for the lack of exploration on relational qualities might be the "lack of validated tools expressly designed to reflect them" (Liang, Tracy, Taylor, & Williams, 2002, p. 275).

For the last 20 years, research in the business environment has shown supportive evidence that "relationship quality falls along a continuum of effectiveness" (Ragins et al., 2000, p. 1190). Ragins et al. (2000) proposed that the manner of interaction can be either positive or negative, and, depending on the quality of interaction, can determine the quality of mentoring outcomes. Ragins et al. (2000) concluded that merely having a mentor does not lead to positive outcomes, and the outcomes may depend on the quality of the mentor-protégé relationship.

To broaden the constructs of relational mentoring, Kram and Ragins (2007) relied on the Stone Center's Relational-Cultural Theory (RCT) (Miller & Stiver, 1997). Fletcher and Ragins (2007) indicated that RCT is a framework that can further describe the processes and outcomes of relationship quality and examine the conditions that are associated with high-quality mentoring.

### **Statement of the Problem**

In the current literature, highly effective mentoring is presumed to be associated with high-quality relationships between mentors and mentees (Fletcher & Ragins, 2007; Ragins, 2010; Ragins et al., 2000). For instance, P. Boyle and Boice (1998) found that pairs of mentors and protégés who shared research and personal interests and had effective mentoring outcomes had rated their own experiences as high quality. Based on these findings, the authors assumed that the relationship was also high quality (P. Boyle & Boice, 1998). Similarly, the lack of undergraduate mentoring effectiveness in one study also led the authors to assume that the mentor-mentee relationship was not high quality (Sanchez et al., 2006).

Eby et al. (2013) noted that individual characteristics could, but not necessarily, play a role in determining the quality of the relationship. Undergraduate mentoring studies have found conflicting evidence: Gender and ethnicity were found to be associated with highly effective mentoring in one study, while another study found no association to highly effective mentoring (T. A. Campbell & Campbell, 1997; Santos & Reigadas, 2004). Despite the finding that the same-gender and same-ethnic mentoring pairs had highly effective mentoring relationships, it has been found that the quality of the interaction stood out as the most important contributor to the effectiveness of mentoring (Santos & Reigadas, 2004).

Despite the implication that the quality of the relationship varies, investigations with undergraduate populations have primarily focused on the positive outcomes of mentoring (Jacobi, 1991). The evidence from the business environment has shown the quality of the relationship and effective mentoring outcomes are separate constructs that interact with each other (Ragins et al., 2000). Undergraduate mentoring studies using qualitative methodology have documented that despite the similarity in qualities between mentors, experiences of negative mentoring have been reported (Davis, 2008; Davis, 2009; Langer, 2010; Pittman & Richmond, 2008; Storrs et al., 2008; Strayhorn & Saddler, 2008). For instance, Salinitri (2005) indicated that despite training and on-going education on mentoring, some mentors failed to provide adequate support to their mentees.

Relationship quality and the influence it has on mentoring outcomes, such as academic performance, persistence, and graduation, has not been adequately explored. The research problem, therefore, seeks to bring a clear understanding of effective mentoring and how effectiveness is impacted by the quality of the relationship between the mentor and mentee. This study proposed using relational mentoring to reframe the efficacy of mentoring within the undergraduate population and RCT to delineate the different qualities of the relationship to examine the effectiveness of an existent faculty mentoring program that had been underway for several years at a small, private, religiously affiliated university.

### **Theoretical Frameworks**

To date, mentoring theories have put forward concepts that delineate mentoring from other activities and have identified functions that influence the quality of the relationship (Jacobi, 1991). For instance, Nora and Crisp (2007) proposed a conceptual framework of mentoring that integrates four constructs: psychological/emotional support (Kram, 1988; Levinson et al., 1978;

Schockett & Haring-Hidore, 1985), goal setting and career paths (Cohen, 1995; Galbraith & Cohen, 1995; Levinson et al., 1978; Roberts, 2000), academic subject knowledge support (Kram, 1988; Roberts, 2000; Schockett & Haring-Hidore, 1985), and role modeling (Galbraith & Cohen, 1995; Kram, 1988). These four constructs tap into psychosocial and instrumental support functions that frame the mentoring relationship and its effectiveness. Absent, however, is the conceptual framework that describes the interactional dynamics between mentor and mentee that influences the quality of the relationship. For this reason, this study applied the relational mentoring framework (Liang, Tracy, Taylor, Williams, Jordan, & Miller, 2002; Ragins, 2010), with functions including the foundation of high-quality mentoring and the Stone Center's relational-cultural theory (Jordan, Kaplan, Miller, Stiver, & Surrey, 1991).

**Relational Mentoring.** Ragins (2010) noted that relational mentoring arose out the need to clarify the functions of mentoring that are at the core of high-quality mentoring. The focus on high-quality relationships has received little research attention (Ragins). Ragins criticized traditional methods that obfuscate relationship qualities due to the reliance on analyzing aggregate data that results in the description of average mentoring relationship and average outcomes. Accordingly, findings "describe ordinary relationships of average quality, but by focusing on average relationships, our definition and measurement of mentoring become limited to these types of relationships" (Ragins, p. 5). Focusing on high-quality relationships sheds light on the limitations and process of average relationships as well as clarifying the processes and outcomes associated with high-quality mentoring relationships. The focus on high quality led to the proposal of relational mentoring, which Ragins stated

Represents the relational state of high-quality mentoring and is defined as an interdependent and generative developmental relationship that promotes mutual growth, learning, and development within the career context. ( p. 1)

Ragins (2010) indicated that relational mentoring challenges the traditional mentoring paradigm on the following points: (a) the use of a dyadic and reciprocal perspective, (b) relying on communal norms and generative processes, (c) “extending the range of dependent variables,” and (d) taking “a holistic approach” (p. 6-9). Specifically, these challenges address the types of interactional exchange qualities between mentor and protégé that have received little attention in research.

Relational mentoring involves dyadic and reciprocal perspectives (Ragins, 2010). Relational mentoring does not frame mutuality as a *quid-pro-quo*; instead, both mentor and mentee can be equal contributors to the relationship. In contrast, traditional mentoring frames the relationship as one in which the mentor is the sole source of influence on the mentee, with the mentee lacking anything to contribute (D. D. Anderson & Shore, 2008; Liang, Tracy, Taylor, Williams, et al., 2002). For instance, mentees have expressed desire to a mutual relationship with their mentors (Beyene, et al., 2002; Kostovich & Thurn, 2006; W. Y. Lee, 1999; Liang, Tracy, Taylor & Williams, 2002; Liang, Tracy, Taylor, Williams, et al., 2002; Packard, Walsh, & Seidenberg, 2004; Storrs et al., 2008; Zimmerman & Paul, 2007). Mentees have expressed a need to be genuinely be cared for by their mentors and not made to feel like they are a burden and an inconvenience (Zimmerman & Paul, 2007). Mentees have also expressed a desire to show care towards their mentors and demonstrate that they genuinely want to help their mentors (Kostovich & Thurn, 2006). Moreover, some mentees have indicated a need to be equal to the mentor because it would be easier to work with them; feeling comfortable fosters the confidence

to challenge the mentor's ideas that the mentee does not agree with (Beyene et al., 2002; Zimmerman & Paul, 2007).

Relational mentoring relies on communal norms and generative processes (Ragins, 2010). Communal norms mean providing help for the sake of support without the expectation of receiving something in return. Peer mentors have indicated a desire to make a difference, identified with the mentees' struggles, and demonstrated selflessness and willingness to motivate students (Terrion & Leonard, 2010). However, findings also have shown that mentors who are motivated to mentor for self-enhancement struggle to develop a relationship with their mentees (Pearl, 2013; Shotton et al., 2007; Terrion & Leonard, 2010). Generative process is developmental of mutual growth in which both mentor and mentee learn and develop within the context of their environment (Ragins, 2010). Salinitri (2005), for instance, purposely recruited preservice teachers enrolled in university courses as mentors. The goal of the mentoring program was to encourage mutual experiential learning in which the mentors applied their pedagogical skills and the mentees provided feedback, and both learned and developed in the education environment (Salinitri, 2005). Another outcome of the generative process is inspiring mentees to mentor others (Colvin & Ashman, 2010; Delgado Bernal, Alemán, & Garavito, 2009; Pearl, 2013; Terrion & Leonard, 2010).

Relational mentoring "expands the range of dependent variables used to capture the effectiveness of mentoring relationships" (Ragins, 2010, p. 7). Ragins (2010) argued that traditional mentoring measures rely on a narrow criteria that fails to capture outcomes that are related to high-quality relationships. In the undergraduate setting, the effectiveness of mentoring focuses on the outcomes of academic performance (GPA), persistence, and graduation (T. A. Campbell & Campbell, 1997). These measures fail to capture the outcomes that encompass high-

quality mentoring. Relational mentoring draws upon personal growth and development to expand the range of dependent variables, as well as identifying other variables of relational skills and competencies that can be employed in different roles and other organizations (Ragins). The scope of dependent variables explored is, directly and indirectly, related to the goals of academic performance, persistence, and graduation. These dependent variables have expanded to include areas of interpersonal issues, such as of anxiety (Rodger & Tremblay, 2003; Salinitri, 2005; Santos & Reigadas, 2002, 2004), depression (Phinney et al., 2011; Torres Campos et al., 2009), and stress (Brittain et al., 2009; Pfister, 2004; Phinney et al., 2011; Torres Campos et al., 2009). Other dependent variables include interpersonal skills, such as self-efficacy (Brittain et al., 2009; Ismail, Sharrif, Jui, & Hamid, 2012; Santos & Reigadas, 2002, 2004; Torres Campos et al., 2009) and self-confidence (Corella, 2010). Despite the broad range of variables, what has remained unexamined is how these gains in competencies are employed in roles outside the university context and in non-educational organizations.

Relational mentoring takes a holistic approach, meaning it “acknowledges the interactions between work and non-work domains” (Ragins, 2010, p. 8). The exclusive focus on the academic context limits our understanding of the influence of high-quality mentoring relationships in non-academic domains. The positive impact that mentoring has on mentees can indirectly have a positive effect on other aspects of the mentees’ lives, such as their families (Davis, 2008). Mentoring has shown to increase the mentee's desire to work with the local community, such as participating in community service (Davis, 2008; Shotton et al., 2007).

Finally, Fletcher and Ragins (2007) proposed that future research on academic mentoring should utilize relational-cultural theory (RCT) as the theoretical backdrop to understanding the dynamics of mentoring relationships. RCT addresses the systemic power and the institutional

context in which a mentoring relationship is situated (Fletcher & Ragins, 2007). Through the RCT lens, researchers are better able to explore the impact social, cultural, and gender differences have on the quality of interaction between mentor and mentee (Fletcher & Ragins, 2007). Specifically, Ragins (2010) explained that relational skills involve individual antecedents that are identified in RCT. The five critical tenets of RCT that demonstrate the impact of relational skills are "clarity about one's own experience and the other's; the capacity for creating meaningful action; an increased sense of vitality; and capacity for further connection" (Jordan, 1997, p. 21). The following section will address the pillars of a growth-fostering relationship.

**Relational-cultural theory.** Jean Baker Miller's (1976) groundbreaking work, *Toward a New Psychology of Women*, challenged the traditional theoretical models of psychotherapy. In Miller's clinical practice, she realized that conventional psychotherapy models were incompatible with the central role of relationships in women's lives. Miller was a traditionally trained psychiatrist. Miller wrote that, in her training, she was taught traditional models of human development theory that emphasized individuation, separation, and autonomy as markers of emotional and psychological health.

Miller (1976) stated that the traditional models of human development she learned in medical school did not fit with the life narratives shared with her by the female clients she saw in her clinical practice. In fact, the narrative of individuation, meaning growth in creating an identity of individual difference, plays into how we treat others who are different (Miller, 1976). Miller added that dominants and subordinates are borne out of a *permanent inequality* that factors to an extent in differences of inequality *vis-à-vis* power and dominance, in which those who are ascribed as lesser by birth are marginalized and oppressed because of their ascription as women of a different race, "nationality, religion or other characteristics" (1976, p. 6). The



difference in power, Miller explained, is absent from the discourse on traditional models of human development. Therefore, RCT is used to “analy[ze] the impact of dominance and subordination on groups and individuals including, but not limited to, women, [and it] is a key aspect of the social justice agenda” (Jordan, 2010, p. 6).

Jordan (2010) stated that the core belief emphasizing the value of "growth of the separate self" is a myth that serves as the basis of most Western models of human development and theories of clinical practice (p. 2). In contrast, Jordan (1997) explained the principle of the self-in-relation framework as the basis of RCT, which places human development as growth in relation to others. As a result, "RCT sees the ideal psychological separation as illusory and defeating because the human condition is one of inevitable interdependence throughout the lifespan" (p. 3). RCT challenged the traditional theories of reframing relationships as central to a human being's psychological growth and emotional well-being (Jordan, 2000).

***Empowerment, mutuality, authenticity, and growth-fostering relationships.***

Empowerment is defined as an “experience of feeling personally strengthened, encouraged, and inspired to take action” (Liang, Tracy, Taylor, & Williams, 2002, p. 26). Empowerment is fostered through relationships and is different from the concepts of self-empowerment and self-efficacy, which reflect the action that emerges out of oneself (Liang, Tracy, Taylor, & Williams, 2002). Mentors can empower mentees by challenging them academically (Davis, 2007; Giordana & Wedin, 2010; Pfister, 2004; Salinitri, 2005; Torres Campos et al., 2009). An academic challenge can be in the form of high academic expectations, which has shown to foster increased mentee competence, increased levels of critical thinking, and improved confidence (Davis, 2009; Strayhorn & Sadler, 2008). Role modeling can also be form of empowerment, in which the relationship fosters mentees' desire to give back to the community by sharing their new

experiences, knowledge, and skills gained through mentoring (Shotton et al., 2007). Moreover, mentees who are inspired by their relationships with their mentors participated in community service, encouraging younger members of their community to obtain their college degrees (Davis, 2008).

Mutuality, Miller and Stiver (1997) proposed, should be the foundation of a relationship, in which empathy serves as a "basic foundation of human connection" where both individuals share in the experience of the activity (p. 43). Relationship mutuality is not *quid pro quo*. Mutuality means that people contribute equally to the relationship regardless of the "level of empathy based on her/his age and experience, but each can be fully engaged in their shared activity, and [sic] this action advances each person's psychological development" (p. 44). When each is engaged in co-creating mutuality, what follows is mutual engagement (Miller & Stiver, 1997).

It is through mutual engagement that one learns about oneself and the other, a process that fosters the emergence of an authentic relationship (Jordan, 2000). Beyene et al. (2002) noted that faculty mentors realized that their relationships with their mentees were dynamic. As their relationship evolved, the mentors acknowledged that the mentees had influenced them, such that the mentor became comfortable in the role of being a mentor (Beyene et al., 2002). When faculty mentors were found to acknowledge the influence of the mentee, mutuality fostered an environment of authenticity and genuineness (Kostovich & Thurn, 2006). Authenticity is "the process of acquiring knowledge of self and other and feeling free to be genuine in the context of the relationship" (Liang, Tracy, Taylor, & Williams, 2002, p. 274). For instance, Shotton et al. (2007) indicated that mentors who showed a genuine interest in the mentoring relationship were highly successful. In contrast, mentors whose sole purpose for mentoring was for self-

enhancement and self-serving failed to develop a successful relationship with their mentees (Shotton et al., 2007). An example of an outcome of fostering authenticity in a mentoring relationship is an association with a decrease in depression and an increase in self-esteem for mentees (Wenzel & Lucas-Thompson, 2012).

The empowerment, mutuality, and authenticity that serve as the foundation for a relationship are characterized as connections in growth-fostering. In connection, Miller and Stiver (1997) described how one experiences “*The Five Good Things*” (p.117). These include “(1) an increase in energy; (2) increased knowledge and clarity about one’s own experience, the other person, and the relationship; (3) creativity and productivity; (4) a greater sense of worth; and (5) a desire for more connection” (Jordan, 2010, p. 4).

An increase in energy emerges when there is a real sense of emotional connection between people (Miller & Stiver, 1997). For instance, Shotton et al. (2007) noted that a vital element of a successful peer mentor is a demonstration of genuine care for the mentee, which involves demonstrating concern for the student, offering to help, showing interest in the student, and maintaining frequent contact. Miller and Stiver (1997) found that energy emerges out of demonstrating care and not merely making caring statements.

Increased knowledge and clarity about one’s own experience arises as people in relation learn about each other and have a “more accurate picture of themselves and each other” (Miller & Stiver, 1997, p. 32). Mentoring can be a collaborative process in which both the mentor and mentee have a mutual experience in learning from one another (Aderibigbe, 2013; Beyene et al., 2002; Salinitri, 2005). As indicated previously, Salinitri (2005) recruited preservice teachers as mentors for incoming first-year students to create a mutual learning experience. Mentors would

apply their teaching skills and learn from mentee feedback the effectiveness of their skills. Thus, both mentor and mentee learned from each other (Salinitri, 2005).

Creativity and productivity grow from the sense of empowerment. In effect, this helps those in the relationship enhance one another rather than diminish each other (Miller & Stiver, 1997). Mentors are effective role models who guide, demonstrate and care for their mentees and empower the mentees to become confident in embracing their professional roles (Giordana & Wedin, 2010).

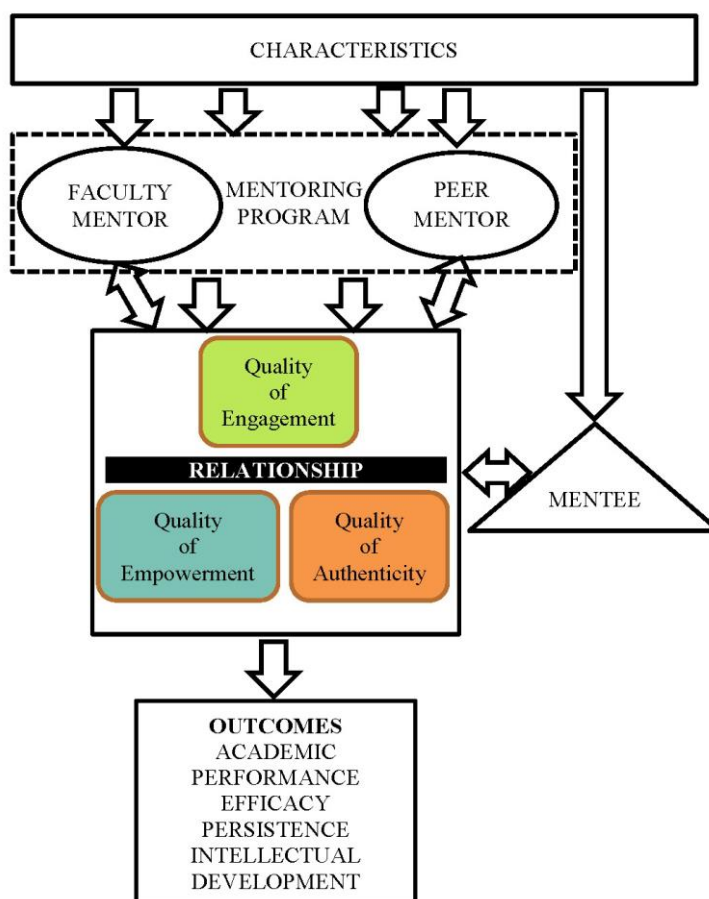
A more significant sense of worth emerges out of feeling valued or worthwhile to the other person (Miller & Stiver, 1997). Mentees, embraced like a family member by their mentors and not like an ordinary student, have indicated feeling a greater sense of self-worth (Wallace, Abel, & Ropers-Huilman, 2000).

A desire for more connections grows out of increased energy, increased knowledge, creativity, and self-worth (Miller & Stiver, 1997). The help that mentees received from their mentors empowers their desire to help others, which has inspired them to mentor others (Colvin & Ashman, 2010; Delgado Bernal et al., 2009; Pearl, 2013; Terrion & Leonard, 2010).

Relational mentoring is a framework that lays the foundation for understanding high-quality mentoring relationships that can, in turn, influence highly effective mentoring outcomes (Ragins, 2010). RCT is a lens through which high-quality relationships are examined, shedding light on the individual antecedents, which, if present, represent a state of high-quality relationships (Jordan, 1997; Ragins, 2010).

As shown in Figure 1, an amalgam of two different models employing relational mentoring and RCT will distinguish the different relationship qualities, which is essential for several reasons: (a) relational mentoring reframes the relationship quality along a continuum by

examining antecedents (characteristics) and consequences, (b) relational mentoring proposes the constructs that describe the relational dynamics between mentor and protégé that are essential to high quality mentoring, (c) RCT conceptually delineates microprocesses that impact relational mentoring outcomes, and (d) the focus on mentoring programs to describe differences of mentoring microprocesses that influence relational quality, and (e) how differences in quality is associated with mentoring outcomes.



*Figure 1.* Schematic representation of relational mentoring framework. Adapted from *Relational Mentoring: A Positive Approach to Mentoring at Work* by B. R. Ragins, 2010, In K. Cameron & G. Spreitzer (Eds.), *The Handbook of Positive Organizational Scholarship*, pp. 1-42. Copyright 2010 by Oxford University Press, New York, NY.

Quality of engagement, empowerment, and authenticity adapted from “The relational health indices: A study of women’s relationships” by B. Liang, A. Tracy, C. A. Taylor, L. M. Williams, J. V. Jordan and J. B. Miller, 2002, *Psychology of Women Quarterly*, 26, p. 25. Copyright 2002 by the American Psychological Association.

The purpose of this study was to investigate how the quality of the peer and faculty mentoring relationships influenced undergraduate students who participated in a Faculty Academic Mentor Program at a small, private, religiously affiliated university. A convergent parallel mixed methods design was used to collect quantitative and qualitative data from segmented, homogeneous cohort groups. The cohort groups consisted of students from 2010, who were the first group of students to participate in a mentoring program, as well as the 2011 and 2012 cohorts. The final cohort was from 2013. The 2010, 2011, and 2012 cohorts included self-identified peer mentors, who were grouped for comparison. Data from the respective groups was collected simultaneously (in parallel), analyzed separately, and then merged for final synthesis. As such, the researcher utilized a series of research questions to analyze the quantitative and qualitative data.

### **Research Questions**

Two questions from each of the quantitative and qualitative research were utilized. According to Creswell (2009), “Because a mixed methods study relies on neither quantitative or qualitative research alone, some combination of the two provides the best information for the research questions and hypotheses” (p. 138). Four research questions were examined during this study.

#### **Quantitative Research Questions**

1. Were there any differences in cohorts’ academic success as measured by GPA and (a) the quality of their relationships with peer mentors, faculty mentors, and the university community, (b) their perceptions of changes in self-efficacy, and (c) academic and intellectual development and institutional and goal commitments as measured by the

Relational Health Indices (RHI), the College Self-Efficacy Scale (CSES), and the Persistence/Voluntary Dropout Decision Scale (PVDDS)?

2. Which relational domains from the RHI (quality of the participants' relationships with a peer mentor, a faculty mentor, and/or the relationship with the university community) accounted for the variance of students' perceptions of changes in self-efficacy; academic and intellectual development; institutional and goal commitments; and academic success as measured by the CSES, the PVDDS, and self-reported GPA, respectively?

### **Qualitative Research Questions.**

1. What were the participants' overall experiences in the FAM program?
2. Which part of the FAM program helped participants the most academically and how?
3. Overall, what kinds of things, people, and experiences were most helpful to students during their time at the university?

The qualitative questions used in the focus groups were open-ended and included the following:

1. What prompted you to participate in the FAM program?
2. In what ways, if any, did your relationships with your peer mentor and your faculty mentor impact your academic experience?
3. What kinds of things, if any, would you change about the FAM program?
4. What kinds of things, people, experiences, or opportunities have been the most helpful to you during your time at the university?

### **Rationale for the Study**

To capitalize on the benefits of mentoring, mentoring programs have become prevalent in many colleges and universities (T. A. Campbell & Campbell, 1997; Larose et al., 2011; Rodger

& Tremblay, 2003; Salinitri, 2005; Sanchez et al., 2006 ). Specifically, mentoring programs have targeted first-year students to improve academic performance, retention, and graduation (T. A. Campbell & Campbell, 1997; Ferrari, 2004; L. M. Lee & Bush, 2003; Rodger & Tremblay, 2003). Colley (2002) stated that the popularity of implementing mentoring programs in college and universities had surpassed the progress of researchers to conceptualize mentoring.

When comparing definitions, four components frequently emerge in undergraduate mentoring: support, experience, development, and role modeling. The most frequent component was support. Mentors were described as providing two types of support, psychological and career (Alonso García, Sánchez-Ávila, & Calles Doñate, 2011; Behar-Horenstein, Roberts, & Dix, 2010; F. Boyle, Kwon, Ross, & Simpson, 2010; Colvin & Ashman, 2010; Larose et al., 2011; Terrion & Leonard, 2010; Page & Hanna, 2008; Pfister, 2004; Putsche, Storrs, Lewis, & Haylett, 2008; Smith-Jentsch, Scielzo, Yarbrough, & Rosopa, 2008; Strayhorn & Saddler, 2008). Psychological support can be in the form of friendship, acceptance, and emotional support (Page & Hanna, 2008; Pfister, 2004; Smith-Jentsch et al., 2008). Career support can include advice, networking, academic feedback, and general support within the organization (Alonso García et al., 2011; Smith-Jentsch et al., 2008).

The second most frequent component in undergraduate mentoring was that the mentor had more experience than the mentee (Behar-Horenstein et al., 2010; F. Boyle et al., 2010; Colvin & Ashman, 2010; Larose et al., 2011; Terrion & Leonard, 2010; Putsche et al., 2008; Smith-Jentsch et al., 2008; Strayhorn & Saddler, 2008). The more experienced mentor facilitates the development of the mentee and shares acquired educational experience with the less experienced mentee (Behar-Horenstein et al., 2010; Colvin & Ashman, 2010; Terrion & Leonard, 2010).



The third most common component was career and personal development (Alonso García et al., 2011; Behar-Horenstein et al., 2010; Griffin & Reddick, 2011; Kerssen-Griep et al., 2008; Larose et al., 2011; Pfister, 2004; Putsche et al., 2008; Smith-Jentsch et al., 2008; Strayhorn & Saddler, 2008). Personal development can include guiding students with reconciling conflict, developing personal goals, and help with navigating the mentee's college experience, improve self-confidence and locating resources (Corella, 2010; Shotton et al. 2007).

The final most frequent component described the mentor as a role model (Pfister, 2004; Putsche et al., 2008; Smith-Jentsch et al., 2008). A role model can actively demonstrate behaviors the mentees are inspired to emulate (Giordana & Wedin, 2010). Mentors can demonstrate effective professional practices that can inspire mentees to follow the same career path as their mentors (Davis, 2007).

Some undergraduate definitions can be expansive, encompassing most of these components. For instance, Smith-Jentsch et al. (2008) define a mentor as an individual who is advanced in experience and who is dedicated to and supportive of a developmental relationship with a mentee of less experience. It is through the relationship that the mentor provides psychosocial and career support. Larose et al. (2011) stated that a mentor is a more experienced person who is in a supportive and trusting relationship to facilitate the development and meet the needs of a less experienced mentee. It becomes difficult to encapsulate a formal role of mentoring because what matters most are the attributes and the purpose of the relationship between the mentor and mentee (Levinson et al., 1978). The success of a mentoring relationship, Langer (2001) noted, depends on the active participation of the mentee. The behavior between mentor and mentee is crucial to the success of mentoring (Langer).

A successful mentoring relationship is based on trust (Freeman, 1999; Phinney et al., 2011; Pitney & Ehlers, 2004; Reddick, 2011). Pitney and Ehlers (2004) indicated that trust is demonstrated when a prospective mentor is easily accessible, approachable, and reliable. To develop a mentoring relationship, accessibility has been suggested as a prerequisite to meet the student's needs (Pitney & Ehlers). Pitney and Ehlers also stated that approachability depended on the student's feeling of respect "and not being made to feel demoralized during a personal interaction," such as making a student feel stupid (2004, p. 345). Reliability also demonstrates that a mentor is supportive of the mentee, which fosters the mentee's confidence that the mentor has concern for them and is committed to their well-being and success (Pearl, 2013).

The establishment of a successful mentoring relationship has been considered a crucial part of development (Carden, 1990) that fosters many benefits for a young adult's experience (Eby et al., 2013). In the academic setting, first-year students can benefit in the areas of academic performance (G. N. Anderson, Dey, Gray, & Thomas, 1995; T. A. Campbell & Campbell, 1997; Ferrari, 2004; Pagan & Edwards-Wilson, 2003; Santos & Reigadas, 2002), academic persistence (T. A. Campbell & Campbell, 1997; Hu & Ma, 2010; Mangold et al., 2002; Salinitri, 2005; Santos & Reigadas, 2002), and degree completion (T. A. Campbell & Campbell, 1997; Mangold et al., 2002). Personal benefits related to academics can include university satisfaction (Sanchez et al., 2006; Strayhorn & Saddler, 2008; Strayhorn & Terrell, 2007), improved self-efficacy, and academic motivation (Ismail et al., 2012; Phinney et al., 2011; Salinitri, 2005; Santos & Reigadas, 2002, 2004; Smith-Jentsch et al., 2008). Other benefits of mentoring include socialization into professional circles (Davis, 2008). For instance, Davis (2008) described the benefit of research-based mentorship, leading to inspiring the mentee to attain academic degrees beyond an undergraduate degree and expand a professional network.

One principal component in a mentoring relationship is academic adjustment (Davis, 2009; Dennis, Phinney, & Chuateco, 2005; Larose et al., 2011; Santos & Reigadas, 2002, 2004). Academic and psychological adjustment is predicted by a sense of belonging (Pittman & Richmond, 2008). A greater sense of belonging has been reported to influence mentees' confidence to succeed and complete college (Phinney et al., 2011) and satisfaction with college (Bordes & Arredondo, 2005), as well as foster academic socialization and increased social support (Brittian et al., 2009; Davis, 2008). R. M. Lee and Robbins (1995) emphasized that social support "reflects an interaction between the self and social environment . . . [and] perceived social support focuses more on the lack of an appropriate social environment" (p. 234). Indeed, years later, Fletcher and Ragins (2007) proposed a method to distinguish how the different qualities of mentor-mentee interaction are mediated by the type of support given to the protégé.

Jacobi (1991) indicated that, from the framework of social support, mentoring relationships can provide, the appropriate social environment that could help to lessen the effects of stress, minimize the harm that stress can inflict on mentees, and increase the mentees' ability to cope with stress (p. 524). Cobb (1976) defined social support as, "Information leading the subject to believe that he is cared for and loved, esteemed, and a member of a network of mutual obligations" (p. 300). A mentor demonstrates care by expressing genuine interest in the mentee and showing concern for their academic success and well-being (Kerr, 2009; Pearl, 2013; Shotton et al., 2007; Wolfe et al., 2008). Mentees feel valued when mentors are respectful and non-judgmental. Positive social support is protective of good health (Cobb, 1976), and within this paradigm, social support can also be protective of relationship health (Liang, Tracy, Taylor, Williams, et al., 2002).

A supportive and healthy relationship is sustained through engagement, authenticity, and empowerment (Miller & Stiver, 1997). Mutual engagement within mentoring is demonstrated through mutual recognition of each other's feelings and emotions, fostering a sense of shared understanding, and mutual commitment towards each other (Johnson-Bailey & Cervero, 2004; Liang, Tracy, Taylor, & Williams, 2002; Pearl, 2013). Engagement can influence belief in academic competence, academic performance, self-worth, and ability to establish new relationships (Pittman & Richmond, 2008). Authenticity is fostered when each member of the relationship is genuine to each other, and as a result, they learn from each other. An outcome of authenticity is a decrease in depression and an increase in self-esteem for mentees (Wenzel & Lucas-Thompson, 2012). Empowerment grows from the relationship in which each member of the relationship is personally strengthened and as a result fosters a desire to take action (Liang, Tracy, Taylor, & Williams, 2002). Mentees who feel empowered are inspired to give back to their community (Shotton et al., 2007). Thus, a supportive and healthy relationship can be described as high quality (Miller & Stiver, 1997; Ragins, 2010). Fletcher and Ragins (2007) proposed that mentoring relationships fall along a continuum. At one end of the continuum is a high-quality mentoring relationship, and at the other end of the continuum is a poor-quality one (Fletcher & Ragins, 2007).

Social support can also be perceived as lacking or inappropriate (R. M. Lee & Robbins, 1995), which can foster an unhealthy, poor-quality relationship (Dooley & Fedele, 1999; Liang, Tracy, Taylor, Williams, et al., 2002). Evidence of a poor-quality relationship is demonstrated through a diminished sense of engagement, authenticity, and empowerment (Miller & Stiver, 1997). Mentors who were unengaged, who showed a lack of commitment, who were difficult to access, and who were unavailable had difficulty in establishing a relationship with their mentees

(Cronan-Hillix et al., 1986; Langer, 2010; W. Y. Lee, 1999; Shotton et al., 2007). Shotton et al. (2007) indicated that a lack of engagement was demonstrated when mentors failed to contact the mentee, did not participate in program events and did not follow program guidelines, and were therefore perceived as untrustworthy. Similarly, W. Y. Lee (1999) reported that mentors who demonstrated impatience and showed lack of interest violated the mentees' expectation of bonding with their mentors and undermined the effectiveness of the mentoring relationship. Mentors who were not authentic failed to establish a positive relationship with mentees (Shotton et al., 2007).

Lack of authentic discussions can also disempower students (G. N. Anderson et al., 1995). G. N. Anderson et al. (1995) noted that mentors who are not providing honest feedback about mentees' academic skills and abilities led to lower degree aspirations. Interactional quality of the relationship could mitigate the effectiveness of mentoring (Kerssen-Griep et al., 2008; Liang, Tracy, Taylor, & Williams, 2002; Phinney et al., 2011; Ragins, 2010). Presently, there is a shortage of undergraduate studies addressing the interactional relationship quality and its impact on mentoring outcomes.

The purpose of this study was to investigate how the quality of the mentoring relationship influenced undergraduate participants from a Faculty Academic Mentor (FAM) Program in a small, private, religiously affiliated university. The research examined the quality of the mentor-mentee relationship and its influence on the outcome of mentoring. Theorists have posited that the interactional dynamics can impact the outcomes of mentoring (Kerssen-Griep et al., 2008; Miller & Stiver, 1997; Ragins, 2010). This study examined quality differences in the mentoring relationship to ascertain if these differences influenced the outcome of mentoring.

## Limitations

Ethical and pragmatic constraints shape the course of any investigation, and this study was no different. The university's FAM program objectives were to improve persistence, retention, social skills, and academic integration in first-generation college student mentees. By employing an economical targeted approach, the FAM program offered assistance to those in high need. The participants of this study were first-generation college students who were at considerable academic risk; therefore, the sampling was limited to this population. Due to differences in the start time of the mentoring program and IRB approval, a comparison of newly admitted mentees' experiences with former mentee experiences was not possible. Current and former FAM participants were asked to volunteer for participation in the study at their convenience. The sampling approach led to a low-level of volunteers for the study and inadequate numbers within each cohort; therefore, a comparison between cohorts was not feasible.

A second limitation of this study was participation. At the start of the data collection, all current and former FAM participants were invited to take part in both the survey and interview. Overall, the amount of usable data were  $n = 23$ . The number of students was therefore not enough to achieve statistical power for both MANOVA and multiple regression analysis. Another problem was a skewed distribution of the data, which is non-normal. The analysis, as mentioned earlier, assumes a normal distribution. Skewness is a violation of the assumption of a normal distribution; therefore, these methods were not appropriate.

Due to the violation of assumptions, an alternative to the MANOVA was conducted. This alternative included non-parametric tests that were substituted for the primary analysis because they assumed a non-normal distribution. To discover any possible trends for future research,

therefore, non-parametric tests were used. The lack of statistical power in the quantitative data, however, led to a transformation within the focus of the study that primarily relied on its qualitative interpretation.

A third limitation pertained to the low level of participation for the qualitative strand of the study. The methods approved by the Institutional Review Board (IRB) were procedures that employed focus group interview protocols. It was anticipated that five to nine participants in four to five groups would materialize. Only one individual participant, however, participated in each of the nine group interviews. As a result, the interviews were analyzed using a phenomenological approach.

A fourth limitation was the self-selection bias. Larose et al., (2009) found that students who volunteered for mentoring tended to score higher in agreeableness and openness. In fact, self-selected students in this study were found to have positive regard towards mentoring. The participant's positive regard toward mentoring did not preclude the discussion of negative experiences in the interviews. In addition, the majority of the students who participated in the interviews for this study were female. The low-level of male participants placed a limit on the different gender perspectives in mentoring.

### **Definition of Terms**

*Protégé:* An employee being mentored in a professional or business environment.

*Mentee:* A student who is mentored in a non-professional or non-business environment.

*First-Generation College Student:* A student whose mother and father did not obtain a bachelor's degree.

*Faculty Academic Mentor (FAM) Program:* An academic intervention program for first-generation college students who are mentored by a faculty and peer mentor.

*Mutuality*: When both people contribute to the relationship regardless of the “level of empathy based on her/his age and experience, but each can be fully engaged in their shared activity [*sic*], and this action advances each person's psychological development" (Miller & Stiver, 1997, p. 44).

*Relational Mentoring*: A state of high-quality mentoring that is described as having a mutual dependence between the mentor and protégé, which promotes mutual growth, development, and learning (Ragins, 2010).

*Undergraduate Student*: A student enrolled in higher education who has not earned a bachelor's degree.

*Self-efficacy*: A person's initiation of coping behavior, the amount of effort or energy that is put into the coping behavior, and the length of time the coping behavior will be sustained when facing obstacles and unpleasant experiences (Bandura, 1977).



## CHAPTER II

### REVIEW OF LITERATURE

The purpose of this study was to investigate how the quality of peer and faculty mentoring relationships influenced undergraduate students who participated in a Faculty Academic Mentor (FAM) Program in a small, religiously affiliated university. This literature review will cover information pertinent to this research study on how the quality of the relationship influences mentoring outcomes. The first and largest section of this literature review includes the history of academic relevant terms, mentor functions, mentoring program outcomes, and limitations of the undergraduate research. The second section addresses the proliferation of first-year mentoring. The third section includes a discussion of the importance of mentoring effectiveness. The final section is a review of the quality of relationships in undergraduate higher education setting.

#### **Mentoring**

**Background.** Homer's epic poem *The Odyssey*, estimated to have been written in 700 B.C.E., is the second oldest work of western literature and has been cited in several studies as the earliest example of the concept of mentoring (Crisp & Cruz, 2009; Hallam, Chou, Hite, & Hite, 2012; Homer, trans. 1997; Ismail et al., 2012; Kostovich & Thurn, 2006). The main character, Odysseus, is summoned by the Spartan King, Menelaus, to battle against the Trojans. Before leaving, Odysseus entrusts his friend Mentor with the responsibility of guiding and advising his son, Telemachus (Homer, trans. 1997; Hall, 1997). However, it was the goddess Athena who took the shape of Mentor and, unbeknownst to Odysseus, performed the duties that were requested (Hall, 1997).

In Greek mythology, Athena is the goddess of wisdom, courage, inspiration, civilization, law, justice, just warfare, strength, and strategy (Grant & Hazel, 1973; Hall, 1997). Athena's embodiment of Mentor characterizes the gender duality of nurturance (feminine) and guidance (masculine), which underlies some of the modern interpretation of mentoring (Corbett & Paquette, 2011; W.B. Johnson & Nelson, 1999; St-Jean & Audet, 2013). The duality of mentoring underscores the fact that, historically, mentoring has been an activity primarily dominated by males (Noe, 1988b). W. B. Johnson and Nelson (1999) noted that "This integration of male and female personas in the figure of Mentor reflects an androgynous quality that may be important in offering the multifaceted functions of mentoring" (p. 191), making it both rich and complex (Roberts, 2000).

The goddess Athena's incarnation of the character Mentor offers a framework of the male-female duality from which E. M. Anderson and Shannon (1988) identified four concepts from *The Odyssey's* account that embody the duality of both genders in mentoring. The first concept was that mentoring is an intentional process, in which the most experienced carries a responsibility for the less experienced in the relationship. The second was that mentoring is a nurturing process that provides an environment of growth and development for the less experienced. Third, mentoring is an insightful process in which the least experienced learns to apply knowledge from the most experienced person in the relationship. Lastly, the most experienced in the mentoring relationship is supportive and protective of the least experienced (E. M. Anderson & Shannon, 1988). Although not exhaustive of all the concepts that will be discussed further in the literature review, the inclusiveness of the different concepts demonstrate the complex contributions that both genders provide to mentoring.

Historically, however, mentoring was a predominantly male activity (Packard et al., 2004). The homogeneity of the mentoring participants imposed a view which has had a substantial influence on our understanding of mentoring and how it is typically structured (McGuire & Reger, 2003). Most of the earliest research on mentoring has been in the business field, in which upper management was mostly male (E. M. Anderson & Shannon, 1988; Noe, 1988b). Noe (1988b) explained that mentors consisted of those mostly male upper echelons of management. Since women in upper management were not as prevalent as men at that time, mentoring and its structure reflected a male worldview (Noe, 1988b).

Noe's (1988b) literature review of women and mentoring identified that women, up to that time, had been mostly excluded from upper management. Noe indicated that women had to contend with organizational factors, such as stereotypes and negative attitudes, that limited their reach to upper management. Noe also noted women had not been prevalent in the earliest research of mentoring; therefore, a female worldview of mentoring was largely absent. Since the 1980s, however, the body of research on mentoring and women has grown (Noe, 1988b; Riley & Wrench, 1985b). Women have added their voices to mentoring research, challenging and contributing to the concept of mentoring (Kram & Ragins, 2007; Liang, Tracy, Taylor, & Williams, 2002; McGuire & Reger, 2003; Ragins, 2010). The contribution of women has brought back the framework of duality that led to E. M. Anderson and Shannon's (1988) conclusion: Males and females have different experiences from each other, but together embody the complexity of mentoring (O'Brien, Biga, Kessler, & Allen, 2010).

The prototypical mentoring model, which has been primarily based on the male experience, is a hierarchical one, in which the mentor is the teacher and the protégé is the learner (McGuire & Reger, 2003). The relationship tends to be task-oriented, in which the mentor

intervenes on behalf of the protégé to meet the protégé's needs and help with his or her deficiencies (Liang, Tracy, Taylor, & Williams, 2002). Male and female protégés were found to have different experiences, a discrepancy that has been attributed to the structure of mentoring, which mostly favors men (Larose et al., 2011; Liang, Tracy, Taylor, & Williams, 2002; McGuire & Reger, 2003). In contrast to male protégés, female protégés were more responsive to a non-hierarchical mentoring structure (McGuire & Reger, 2003) in which they are “more likely to respond to a relationship that involves mutual exchange” (Liang, Tracy, Taylor, Williams, et al., 2002, p. 272).

As research has become more inclusive of gender differences in addition to the contributions from other fields, our understanding of how mentoring is conceptualized has expanded considerably (Colley, 2002; Lark & Croteau, 1998). Colley (2002) noted that the popularity of implementing mentoring programs had surpassed the progress of researchers on conceptualizing mentoring. Colley stated a “clear theoretical and practical framework” should have been achieved 20 years prior, and implied the lack of research resulting from inadequate definitions of mentoring (p. 2). Despite lacking an adequate definition of mentoring, contributions to research in this respective area have remained unabated (Colley, 2002), coming from varied fields, such as higher education (Lark & Croteau, 1998), youth mentoring (McQuillin, Smith, & Strait, 2011), and religion (Lanker & Issler, 2010). The varied contributions have expanded the concept of mentoring, but the many different definitions of conceptualization of mentoring have remained a challenge (Colley, 2002). What follows is an overview of the different ways mentoring is defined.

**Defining mentoring.** Traditional mentoring has been described as a naturally occurring, informal relationship between two white men in which the mentor is older and has had

considerably more experience than the protégé (Budge, 2006). The components in a traditional mentoring relationship are differences in experience, hierarchy, knowledge, and power, in which help is unidirectional to the benefit of the protégé (Liang, Tracy, Taylor, & Williams, 2002). The difference in experience is explained as “a deliberate pairing of a more skilled or experienced person with a less skilled or experienced one, with the agreed-on goal of having the lesser skilled person grow and develop specific competencies” (Godshalk & Sosik, 2000, pp. 299-300). The relationship between mentor and protégé has been described as hierarchical (McGuire & Reger, 2003). A hierarchical relationship means that mentoring is understood to be unidirectional, meaning knowledge and power is transmitted from the mentor to the benefit of the protégé (Liang, Tracy, Taylor, & Williams, 2002). The mentor, therefore, is assumed to have knowledge and power over the protégé (Darwin & Palmer, 2009).

Due to the growth of mentoring research, multiple definitions have emerged (Crisp & Cruz, 2009; Jacobi, 1991). One reason for so many definitions is the context in which mentoring is practiced. Mentoring has been conducted in various settings, such as in business, academia, medicine, religious environments, and after-school programs (Crisp & Cruz, 2009; Dimitriadis et al., 2012; DuBois, Portillo, Rhodes, Silverthorn, & Valentine, 2011; Frels & Onwuegbuzie, 2012; Ghosh & Reio, 2013; Lanker & Issler, 2010). In essence, mentoring can be practiced in any setting. Therefore, the environment shapes the definition of mentoring. For example, Kerssen-Griep et al.'s (2008) communication study on attentive face work described mentoring as an individualized and mutually respectful relationship in which an expert guides a "student's professional and personal development" (p. 312). The study by Kerssen-Griep et al. (2008) was conducted in the higher education setting. In contrast, the mentoring of adolescents in a school

setting was defined as "matching of caring, responsible adults with young people who may benefit from such one-on-one relationship" (Pryce, 2012, p. 288).

The different fields of studies have caused further diversification for the mentoring definition. Although not exhaustive, research has come from the fields of business, communication, psychology, sociology, educational, and medicine (Crisp & Cruz, 2009; Jacobi, 1991). These and other fields contribute to mentoring research, and these definitions are reflective of their interests (Zimmerman & Paul, 2007). For instance, business is interested in how mentoring can influence the areas of job performance, organizational commitment, and career success, to name a few (Ghosh & Reio, 2013). The areas mentioned above are similar to the interest in higher education in the areas of academic performance, retention, and integration (Crisp & Cruz, 2009).

The diverse definitions of mentoring also extend within specific fields, meaning that there is no agreement, even in the example of a college setting. For instance, T. A. Campbell and Campbell (1997) defined mentoring as,

A situation in which a more-experienced member of an organization maintains a relationship with a less-experienced, often new member of the organization and provides information, support, and guidance so as to enhance the less-experienced member's chances of success in the organization and beyond. (p. 727)

In another college setting, Strayhorn and Saddler (2008), in contrast, stated, "Generally speaking, mentoring refers to a formal and informal process whereby knowledgeable and experienced persons engage in supportive ways with a less experienced person or protégé to facilitate his/her development" (p. 477).

Although the literature reveals that there is no standardized mentoring definition within undergraduate students, the examples above demonstrate that the definitions use similar concepts. Although this list is not exhaustive, the concepts frequently included are experience, support, development, modeling, and friendship (Behar-Horenstein et al., 2010; Colvin & Ashman, 2010; Larose et al., 2011; Luna & Prieto, 2009; Kerssen-Griep et al., 2008; Smith-Jentsch et al., 2008; Strayhorn & Sadler, 2008). The aspect in which definitions might differ, as the two previous definitions have shown, is the inclusion of goals. For instance, T. A. Campbell and Campbell (1997) included the phrase "success in the organization and beyond" in their definition of mentoring (p. 727). In contrast, Strayhorn and Sadler (2008) did not address success in their definition but stated that mentoring would "facilitate his/her development" (p. 477). Undergraduate definitions can also vary by the inclusion or exclusion of mentor requirement (friendliness, commitment, expertise, and knowledge) and required mentor behaviors (e.g., guiding, role modeling, encouraging, and showing interest) (Behar-Horenstein et al., 2010; Colvin & Ashman, 2010; Larose et al., 2011; Luna & Prieto, 2009; Kerssen-Griep et al., 2008; Smith-Jentsch et al., 2008; Strayhorn & Sadler, 2008).

The difficulty of establishing a unified definition, even within a given field such as higher education, is a cause of considerable concern for researchers (Jacobi, 1991). Bozeman and Feeney (2007) suggested efforts for a unified mentoring definition are attempts to limit the impact of how a difference in the meaning can result in inconsistent outcomes. Differences in undergraduate mentoring definitions are a cause for concern for researchers, and will be discussed in a later section entitled mentoring effectiveness.

**Informal Mentoring.** In informal mentoring (also called natural mentoring), the relationship has occurred naturally, and it is spontaneous (Crisp & Cruz, 2009; Higgins & Kram,

2001). A common attraction in similarity and liking between interested parties is assumed to underlie the components of informal mentoring (Allen & Eby, 2003; Lankau, Riordan, & Thomas, 2005). Bozeman and Feeney (2007) attempted to clarify the purpose of a natural occurring mentoring relationship and, thus, defined mentoring as "a process for the informal transmission of knowledge . . . between a person who is perceived to have greater relevant knowledge, wisdom, or experience (the mentor) and a person who is perceived to have less (the protégé)" (p. 731). Bozeman and Feeney asserted that the critical element of the definition is the informal transmission of knowledge. Anyone who has relevant knowledge, therefore, can potentially fulfill the role of a mentor. For example, teachers, counselors, and family members can take the role of a mentor (Zalaquett & Lopez, 2006).

A limitation of informal mentoring is that the mentor might lack the benefit of institutional support (P. Boyle & Boice, 1998; Chao, Walz, & Gardner, 1992). Without institutional support, Schwiebert (2000) indicated that informal mentoring lacks a structure and, therefore, relies on formalized agreements or contracts that are only established through negotiation between the mentor and protégé. Therefore, the interested parties that enter into a mentoring relationship are free to choose the time of mentoring, place, and frequency of contact (P. Boyle & Boice, 1998; Schwiebert, 2000). Importantly, both mentor and protégé bear the responsibility to take "the initiative to pursue and cultivate the relationship" (Zalaquett & Lopez, 2006, p. 342).

Natural mentoring is spontaneous, and it is not surprising that research is less prevalent in the literature (Jacobi, 1991). One reason why is the lack of visibility of the natural mentoring relationships that have occurred within an organization (Chao et al., 1992). Zimmerman and Paul (2007) noted that if an organization, such as those in higher education, is unaware of a mentoring



relationship, it becomes difficult to assess how frequent informal mentoring occurs and is, therefore, difficult to track. In an undergraduate survey conducted of 573 English majors, 86% indicated no experience with any mentoring at all (Zimmerman & Paul).

In a broader national sample in the U.S. on the occurrence of mentoring, G. N. Anderson et al. (1995) investigated the impact of faculty mentoring on first-year students. The study surveyed 5,615 undergraduate students from 172 institutions. Findings showed that nearly 44% of the students surveyed indicated having a lack of access to faculty mentoring. The authors emphasized that the lack of access is substantial because their other findings showed that mentoring was positively associated with academic achievement (G. N. Anderson et al.). Given the 44% percent of students indicating a lack access to mentoring, conducting mentoring in a formal manner, such as a mentoring program, can increase the opportunity for mentoring and its benefits.

**Formal mentoring.** One way of increasing access to mentoring to students is to formalize it in the form of a mentoring program (Budge, 2006; Girves, Zepeda, & Gwathmey, 2005). Formalizing mentoring is the attempt to replicate the benefits of informal mentoring (Weinberg & Lankau, 2011). Formal mentoring is initiated by an organization and is programmatic, highly structured, and managed in a manner in which the mentor and protégé are assigned to each other (Chao et al., 1992; Ghosh, Dierkes, & Falletta, 2011; Ragins & Cotton, 1999). In contrast to informal mentoring, formal mentoring is established to achieve institutional goals, such as improving academic performance, persistence, and graduation rate (T. A. Campbell & Campbell, 1997; Crisp & Cruz, 2009; Gloria, 1993; Jacobi, 1991; Mangold et al., 2002; Phinney et al., 2011; Weinberg & Lankau, 2011). In order to provide the benefits of mentoring, institutions can target specific populations, such as underrepresented minorities,

women, or at-risk students (Brittian et al., 2009; Gardiner, Tiggemann, Kearns, & Marshall, 2007; Pagan & Edwards-Wilson, 2003; Shotton et al., 2007; Smith, 2007).

To maximize the benefits of mentoring, institutions can control the characteristics of the formal mentoring program. Institutions that implement mentoring have a choice in formulating the goals of mentoring, the criteria, selection of mentors, training, and policies of program requirements. In regard to the goals of mentoring, for instance, in the study by Phinney et al. (2011), the mentoring of first-year students solely focused on emotional support and did not provide academic support. In contrast, T. A. Campbell and Campbell (1997) also focused on first-year students that had a mentoring goal of focusing on academic support.

Formal mentoring programs typically set a premium on the quality of the mentor to increase the likelihood of positive outcomes in mentoring (Bozeman & Feeney, 2007). There are, however, no clear guidelines for mentor selection; therefore, institutions can recruit "from advanced undergraduate students, graduate students, staff, and faculty" (Putsche et al., 2008, p. 517). The choice of mentors can reflect the particular goals of the mentoring program. In the previous example, the study by Phinney et al. (2011) had the intention of focusing on emotional support. Mentors, therefore, were recruited from a graduate counseling program and from undergraduate senior-level psychology students. In contrast, for T. A. Campbell and Campbell's (1997) study, which focused on academics, mentors were only recruited among faculty members (T.A. Campbell & Campbell). Although not exhaustive, these two examples illustrate two different types of attributes that are desirable to achieve the goals of the mentoring program.

Mentoring programs have a choice of implementing policies that might improve the effectiveness, such as mentor training, its length, duration, depth, and breadth of the content. For instance, Larose et al.'s (2011) study had indicated that the program mentors were trained in a

two-day seminar, two one-hour individual training, and three two-hour small group meetings. In contrast, Colvin and Ashman's (2010) study recruited peer mentors who had enrolled in a mentoring course elective, in which the student received an elective credit. Students who completed the course on mentoring were invited to apply to become a peer mentor (Colvin & Ashman). Other policies can include conducting supplemental training, such as on-going supervision of the mentor (Pagan & Edwards-Wilson, 2003), or in some cases where faculty and students are recruited as mentors, the faculty mentor can take on the role of a supervisor to the peer mentor (Larose et al., 2011).

Institutions also have a choice of the types of policies that a mentoring program should follow. For example, institutions have an option on the number of mentors to assign a mentee and the frequency of mentoring. Studies have shown a variation in the number of mentors assigned to a mentee (Pagan & Edwards-Wilson, 2003; Pfister, 2004; Putsche et al., 2008). For instance, Pfister's (2004) study had both a faculty mentor and a peer mentor assigned to a mentee. In contrast, Darwin and Palmer (2009) introduced the term *mentoring circles*, which involves a mentor with a group of protégés or a group of people that mentor each other. Although there is no set number of mentors assigned to a mentee, the ratio might be influenced by pragmatic reasons. One possibility might depend on the size of the target population (W. B. Johnson, 2002; Kostovich & Thurn, 2006). If the target population is large, such as all first-year students, it becomes impractical to implement a traditional one-on-one mentoring relationship (Kostovich & Thurn, 2006).

Other policies that institutions can implement revolve around program requirements. Programs can specify the frequency of mentoring contact and also implement supplemental activities for both mentors and mentees (T.A. Campbell & Campbell, 1997; Chao et al., 1992;

Putsche et al., 2008). For instance, in D. E. Campbell and Campbell's (2000) study, participants were required to meet a minimum number of times during the semester. In contrast, Quinn, Muldoon and Hollingworth's (2002) study did not set any requirement of contact between the mentor and mentee. Mentoring programs can supplement the frequency of contact between mentor and mentee by encouraging activities that enhance the mentoring experience outside mentoring (Chao et al., 1992; Putsche et al., 2008). External events can take the form of organized activities, such as luncheons, entertainment, or a stipend for both mentor and mentee to engage in research or attend professional conferences (T.A. Campbell & Campbell, 1997).

In comparison to informal mentoring, institutions implementing formal mentoring programs have a wide array of choices in which they can control the characteristics of mentoring. The literature reveals no clear criteria or guidelines for the implementation and the policies that govern a mentoring program. The goal, however, is the effort that is made to replicate the benefits of informal mentoring as best as possible (Weinberg & Lankau, 2011). In both formal and informal mentoring, characteristics have been identified that occur within the relationship. These characteristics or components are the essential elements that differentiate mentoring from other types of relationships (Zimmerman & Paul, 2007). What follows will be a brief explanation of the contents of mentoring.

**Contents of mentoring.** In an interdisciplinary meta-analysis of 173 studies on mentoring from the fields of business, youth, and academic, Eby et al. (2013) indicated that the contents of mentoring associated with positive and effective outcomes were broadly categorized into three areas: Psychosocial support, instrumental support, and relationship quality. Eby et al. noted that psychosocial support includes the type of mentor behaviors "that enhance[s] a protégé's perception of competence and facilitate[s] both personal and emotional development"

(2013, p. 443). Instrumental support "refers to mentor behaviors that are geared toward facilitating protégé goal attainment" (Eby et al., 2013, p. 443). Psychosocial support and instrumental support are general categories that describe the types of functions that mentors provide to the mentees (Crisp & Cruz, 2009; Eby et al., 2013; Zimmerman & Paul, 2007). The third area, relationship quality, does not denote distinct mentor functions, but it is an area that will be addressed later in this review. What follows is a brief review of psychosocial and instrumental support.

**Psychosocial Support.** Psychosocial support includes mentor behaviors that improve the quality of the protégé's perception of competence while promoting and aiding in emotional and personal development (Eby et al., 2013). Psychosocial support has been associated with positive outcomes, such as the mentee's decision to persist in college, improvement in self-efficacy, increased academic motivation, enhanced academic performance, and facilitating the transition from high school to college (Corella, 2010; Morton, Mergler, & Boman, 2014; Santos & Reigadas, 2002, 2004; Torres Campos et al., 2009). As mentioned earlier, the provision of psychosocial support to mentees constitutes the different types of behaviors that serve as specific functions that differentiate mentoring from other types of relationships (Crisp & Cruz, 2009; Eby et al., 2013; Zimmerman & Paul, 2007).

**Emotional support.** Mentors who provide emotional support demonstrate different behaviors, which Jacobi (1991) listed as listening to the mentee, showing concern for the mentee, and providing affirmative feedback, such as encouragement. An essential element of effective emotional support is empathy towards the mentee (Yim & Waters, 2013). Mentors who demonstrated empathy towards their mentees, such as showing genuine care for them, had mentees who were better able to relate to their mentors personally and felt encouraged in their

social and academic endeavors (Pearl, 2013). Mentors who provide emotional support to their mentees have found it allows the mentee to feel genuine in expressing their fears and anxieties (Davis, 2008; Schockett & Haring-Hidore, 1985). Regarding emotional support, Pearl (2013) concluded that “mentor empathy guided students’ belief in their own potential” and that “the mentors’ desire and capacity to understand and care about what their students were experiencing promoted student persistence” (p. 105).

***Friendship.*** The function of friendship can be crucial to the mentoring relationship as it has been shown to be strongly associated with effective mentors (Colvin & Ashman, 2010; Packard et al., 2004; Shotton et al., 2007; Smith, 2007). Friendship can be described as a mentor's behavior to build "rapport, camaraderie, friendship, and support" (Torres Campos et al., 2009, p. 169). Colvin and Ashman (2010) explained that mentors who failed to befriend the mentee would find the mentoring relationship suffer (Colvin & Ashman, 2010).

Building a friendship with a mentee has been shown to lead to highly effective mentoring, because both mentor and mentee desire to spend more time together (Phinney et al., 2011; Smith, 2007; Storrs et al., 2008). Mentees have indicated that they value their connection with a mentor (Davis, 2009). The benefits of friendship in the mentoring relationship can include caring, genuineness, and facilitating the transition to college (Davis, 2009; Torres Campos et al., 2009; Salinitri, 2005; Shotton et al., 2007). The benefit of increased contact time is the mentees’ perception that they are being cared for by their mentors (Shotton et al., 2007). Mentors can demonstrate caring behaviors by actively keeping the mentees on track and encouraging them to improve academically (Davis, 2009; Torres Campos et al., 2009). Salinitri (2005) explained that first-year students attributed their persisting and adjusting to their college environment to their friendship with their mentors.

***Acceptance and confirmation.*** Acceptance and confirmation are qualities that facilitate the relationship between mentor and mentee (Eby et al., 2013). For a mentoring relationship to develop, mentees must feel that their mentors are trustworthy (Terrion & Leonard, 2007). Beyene et al. (2002) reported that successful mentors were characterized by their listening skills, open-mindedness, approachability, respectfulness, and encouragement of students. According to Pearl (2013), mentors who were respectful and non-judgmental were able to have a profound impact on the mentees' sense that they matter. The sense that they mattered to their mentors fostered the mentees' continued interest in the relationship (Pearl, 2013).

A mentor who demonstrates acceptance and confirmation creates a safe space that facilitates the mentee's genuine self-exploration of issues and decisions (Hamlin & Sage, 2011). A safe area facilitates discussions that a mentee might otherwise be too afraid to disclose (Schockett & Haring-Hidore, 1985). "Safe environments where thoughts, feelings, ideas, hunches, mistakes, and intuitions may be shared are crucial to the mentoring relationships" (Reilly & D'Amico, 2011, p. 419). Moreover, having a safe space was ranked highly by mentees who indicated having poor self-confidence, experienced social isolation, and felt thwarted by their academic progress (Langer, 2010).

***Counseling.*** Distinct from the psychotherapeutic definition, a mentor who counsels provides feedback and problem-solving advice to foster the mentee's development so they can better understand themselves (Packard et al., 2004; Ragins & Cotton, 1999). Mentors who are skilled counselors have been shown to improve their mentee's motivation, increase self-efficacy, facilitate a decrease in levels of depression, and influence the mentees' perception of having fewer obstacles that interfered with their academic progress (Torres Campos et al., 2009).

Davis (2007) noted that counseling could be provided when mentees question their academic potential, skills, and performance. Mentors who provided feedback, advice, and information helped to inspire and clarify the mentees' career goals (Davis, 2007). Davis (2009) concluded, "By providing constructive feedback mentors challenge their students to think critically, thereby enhancing their academic and professional development" (p. 151).

**Role modeling.** Nora and Crisp (2007) defined role modeling as the "ability of the mentee to learn from the mentor's present and past actions and achievements/failures" (p. 343). One way in which mentors have been role models is by sharing their own academic experiences, in which vicarious learning helped the mentees' understanding of what to do and what not to do as students (Salinitri, 2005; Torres Campos et al., 2009).

Role modeling, although not extensive, was found to influence mentees' confidence, self-assurance, professional and interpersonal skills, and scholarly interest (Davis, 2007, 2008; Giordana & Wedin, 2010; Pearl, 2013). Another way in which mentors have been role models is through active demonstration, which can inspire mentees. For instance, Giordana and Wedin (2010) explained that when upper-level nursing mentors actively demonstrated their skills, beginning nursing mentees felt inspired and confident that they too will reach the same level of competence as their mentor one day. Similarly, Davis (2007) found that faculty mentors' effective professionalism inspired their mentees to emulate them. Furthermore, mentees who admire their mentors for their achievements have also been inspired to pursue a career in their mentors' field (Davis, 2007, 2008; Pearl, 2013). Davis (2008) also noted that African American mentees who were mentored by African Americans became inspired by their mentors' achievements because they were examples of success. The success of their mentors influenced the mentees to follow in their mentors' occupation (Davis, 2008).



**Instrumental Support.** Instrumental support includes mentor behaviors that help their mentees achieve their goals (Eby et al., 2013). Instrumental support in the academic setting has been primarily about academics (Page & Hanna, 2008) and other related issues, including but not limited to administrative help, such as "cutting through campus 'red-tape'" (G. N. Anderson, et al., 1995, p. 9; Pfister, 2004). The provision of instrumental support has been shown to improve the mentees' study skills and help their development of career goals (F. Boyle et al., 2010; Ensher & Murphy, 1997).

**Sponsorship.** A mentor who has provided sponsorship of the mentee is recommending the mentee for any opportunity that would be of help (Packard et al., 2004). Sponsorship can facilitate gaining access to resources that can improve professional success (Allen et al., 2004). Resources could include internships or financial scholarship. One form of sponsorship is letters of recommendation to help their mentees attain desirable positions (Davis, 2007; Packard, 2004; Packard et al., 2004). Davis (2007) noted that faculty mentors might have knowledge of financial resources and sponsorship can involve finding and allocating financial funding for mentees to attend conferences. Faculty mentors can also sponsor mentees by providing access to their professional network (Zalaquett & Lopez, 2006).

Sponsorship has shown to benefit students in their academic persistence (Packard, 2004; Zalaquett & Lopez, 2006). For instance, Packard (2004) found that students who persisted in their majors reported receiving more sponsorship from their mentors than students who did not persist in their majors. In a later study by Zalaquett and Lopez (2006), qualitative research of 13 Latino undergraduate scholarship recipients from a southwestern metropolitan university found that sponsorship took the form of financial support and networking opportunities. The students in

the study indicated that sponsorship played an important role in influencing student persistence (Zalaquett & Lopez, 2006).

**Coaching.** A mentor who coaches a mentee provides instructions or strategies to help the mentee achieve goals (Packard, 2004). Coaching can be thought of as a directive, a "how-to," for achieving specific outcomes (Crisp & Cruz, 2009; Roberts, 2000). Coaching can be in the form of academic or personal help. For instance, coaching has been linked to mentee learning (Pitney & Ehlers, 2004). Mentors can coach mentees to identify their academic strengths and weaknesses (Colvin & Ashman, 2010), and have also helped their mentees with study strategies and other techniques that can improve their academic performance (Salinitri, 2005).

Mentors can also coach mentees through challenging transitions in life and personal problems, such as providing strategies in life skills and better organization (Budny, Paul, & Newborg, 2010; Colvin & Ashman, 2010; Johnson-Bailey & Cervero, 2004). For instance, Budny, Paul, and Newborg (2010) noted that mentors helped their mentees to develop realistic expectations of their academic year to minimize their frustration. Mentors also helped their mentees to establish productive exchanges with their parents to facilitate family support for their mentees (Budny et al., 2010).

**Exposure and visibility.** Mentors can promote a protégé's exposure and visibility to the organization by bringing the mentees' accomplishments to the attention of important people within an organization (Ragins & McFarlin, 1990). Mentors can introduce mentees to other professionals within their fields to broaden the mentees' professional network (Pearl, 2013; Tolar, 2012). Exposing the mentee to the mentor's professional network has been shown to facilitate the mentee's adjustment to a new environment and foster persistence (Colvin & Ashman, 2010; Pearl, 2013; Shotton et al., 2007).

Discussing their mentees' skills with other scholars within the organization can increase the exposure and visibility of the mentees, which has been shown to facilitate new opportunities, such as internships and invitations to apply to graduate school (Davis, 2007; Pearl, 2013).

Students who had increased exposure to other scholars reported valuing the interactions with their mentors and other professionals within their academic fields (Edwards et al., 2011).

***Protection.*** Mentors protect and shield their mentees from damaging relationships with persons of influence within the organization and guard them against negative publicity (Smith-Jentsch et al., 2008; Schocket & Haring-Hidore, 1985). Protection can entail mentors' efforts to prevent their mentees from making a mistake (Pitney & Ehlers, 2004). Protection can also mean to shield, or to do things on the protégé's behalf (Ragins & McFarlin, 1990), as well as to advocate for the mentee (Colvin & Ashman, 2010).

Colvin and Ashman (2010) reported that protection came in the form of advocating. A mentor who advocates for their mentee has provided help with their personal and academic needs. In some instances, students might have a difficult time communicating with faculty, and a mentor can be a liaison on behalf of the mentee (F. Boyle et al., 2010; Colvin & Ashman, 2010). Colvin and Ashman acknowledged that mentees' problems could create obstacles in their communication with faculty. For instance, one interviewee indicated that the mentor not only helped with problems, but also went out of the way to talk to the mentee's professors and even take notes for the classes that the mentee missed (Colvin & Ashman).

***Challenging assignments.*** Challenging mentees can mean having and demanding a higher level of academic expectation from the mentee. For instance, mentors can require expertise attainment, encourage a higher level of competence, and assign difficult material (Davis, 2009; Packard et al., 2004; Strayhorn & Sadler, 2008). In an undergraduate research

setting, Davis (2009) noted that mentors expected their mentees to publish research and challenged their mentees to become experts. To maintain a high-level of expectation, mentors demonstrated confidence in their mentees' abilities (Davis). Strayhorn and Sadler (2008) indicated that for mentoring to be effective, mentors should have high levels of expectations to challenge the mentees to achieve higher levels of competence and critical thinking while fostering the necessary support to help the mentees achieve their goals.

Challenging students academically has been shown to influence mentees positively in their competence, skills, and academic performance while fostering an increased sense of self-efficacy (G. N. Anderson et al., 1995; Davis, 2009; Packard et al., 2004; Pitney & Ehlers, 2004). Another way that challenging can improve a mentee's competence and skills is by holding the mentee accountable for academic work by asking the difficult questions and providing intellectual challenges, which fosters the mentee's critical thinking skills, advances problem-solving skills, and increases degree aspiration (G. N. Anderson et al., 1995; Davis, 2009; Pitney & Ehlers, 2004).

***Information sharing.*** Kram and Isabella (1985) characterized information sharing as an exchange that can help the beginner with the inner workings of the organization and the technical knowledge that can help the beginner complete work. Information provided can include campus resources, social networks, career experience, and other general information (Corella, 2010; Pearl, 2013; Putsch et al., 2008; Smith-Jentsch et al., 2008; Torres Campos et al., 2009). Providing information about campus resources can show the mentee “how to navigate university systems and where to go get questions answered” and can make the mentee feel comfortable in a new environment and facilitate the transition to college (Colvin & Ashman, 2010; Santos & Reigadas, 2002; Torres Campos et al., 2009, p. 173). The provision of information regarding

clubs and organizations has been shown to facilitate the building of social support for the mentee (Salinitri, 2005; Smith-Jentsch et al., 2008). Brittain et al. (2009) concluded that an increase in connection to the university community would more than likely improve persistence and increase the likelihood of the mentee seeking academic help.

Other forms of information are the mentor's professional insight, which can assist the mentee in understanding the process of embarking on a new profession, such as providing the requirements to enroll in graduate school (Luna & Prieto, 2009; Pitney & Ehlers, 2004). For instance, faculty mentors who shared their perspectives on different occupations within a career field helped the mentees understand the professions related to their interests (Pitney & Ehlers, 2004). Similarly, peer mentors have also shared their insights about their majors and the classes the mentees desire to enroll in (Shotton et al., 2007). Mentors can also provide information about the inner workings of the university (Smith, 2007). Pfister (2004) found that other general information had included interpersonal relationship problems, homesickness, alcohol abuse, nutrition, and problems dealing with a roommate.

***Career strategizing.*** Career strategizing involves the discussion of career options and the dilemmas in achieving their career goals, in which mentors explore with the mentees the realistic options that can help them advance (Kram & Isabella, 1985). In the academic setting, mentors have explored practical options for attainable academic goals and career objectives for the mentees (Salinitri, 2005). Mentors can strategize about the mentees' goals, in which the mentor can offer suggestions regarding the mentee's career plans and help to monitor academic progress so that the mentee can enter graduate studies or a career in the workforce (D. E. Campbell & Campbell, 2000; Crisp & Cruz, 2009).

One way in which mentors have provided career strategizing is providing guidance in refining academics strategies, improving leadership, and learning conflict resolution (Shotton et al., 2007). For instance, Shotton et al. (2007) indicated that mentees would ask their mentors for their perspectives on the degree. The mentees had indicated being unsure whether or not their degrees were applicable in their career choices (Shotton et al., 2007). For instance, Davis (2007, 2009) reported that African American undergraduates who were mentored in a summer research program benefited from the development of academic plans that increased their interest in the field of study and laid out a clear career trajectory. Mentees also benefitted from expanding their occupational alternatives, which led to increased levels of degree aspiration, interest in seeking a doctorate, and pursuit of becoming a professor (Davis, 2007, 2009).

**Feedback.** Kram and Isabella (1985) described feedback as personal work-related matters that allow the mentee to reflect on leadership style, impact on others in the organization, and balance between family and work commitments. In the academic setting, feedback can pertain to academic behaviors and other academic related matters (Quinn et al., 2002). For instance, Quinn et al. (2002) emphasized the importance of early feedback on the mentees' academic behavior. Quinn et al. noticed that students were frustrated with their poor academic performance when in fact the students believed that they had worked hard. By providing early and accurate feedback, the mentors helped the mentees reflect on the effectiveness of their study strategies (Quinn et al.). A benefit of providing a student with honest feedback about academic skills and abilities was an improvement in the mentee's GPA (G. N. Anderson et al., 1995).

Feedback can also be provided about academic projects and helping the mentee balance school and responsibilities in private life (Corella, 2010; Davis, 2009; Putsch, 2008). One way in which mentors have helped their mentees is providing objective feedback by encouraging the

mentees to reflect on and explore their solutions, which allows the mentees to examine the ramifications of their choices (Wolfe et al., 2008). Also, the benefits of providing feedback have helped mentees become better competitors for opportunities, such as awards and fellowships (Davis, 2007).

### **Proliferation of First-Year Mentoring?**

One type of intervention that has proliferated across many institutions of higher education has been mentoring (Myers, 2003; Rodger & Tremblay, 2003). Two reasons worth noting for the popularity of mentoring has been economics and the target population that is the most vulnerable to attrition, the first-year students. Economics has been a growing concern for addressing academic performance, persistence/retention, and graduation rate. These issues had gained considerable importance, especially in 2008, when the recession was believed to have had an impact on academic enrollment (Hoover, 2011). Schneider (2010) reported that state governments appropriated \$6.2 billion through subsidies for institutions of higher education to pay tuition for students who did not return a second year. State grants awarded \$1.4 billion, and the federal government awarded \$1.5 billion of grant money to first-year students who did not return for a second year (Schneider).

Federal and state governments are not the only ones that bear the economic cost. Individual students are also burdened with a financial loss as well, primarily when they must depend on student loans to pay tuition. Schneider (2010) reported that tuition cost increased by 15%—up from \$1.2 billion in 2003 to \$1.35 billion in 2007. Mui and Khimm (2012) found the dropout rate for students who borrowed money went up from 23% in 2001 to 29%. The authors indicated that students who borrowed to pay for college and dropped out were more likely to default on their loans. As a result, the report showed that student loans for all borrowers have

ballooned to \$1.2 trillion, which is a substantial burden for students and their parents, as well as the national economy (Denhart, 2013).

The risk of financial burden might disproportionately affect ethnic minorities and first-generation students. Wohlgemuth et al. (2007) argued that college students with higher ACT scores were more likely to be retained. Findings of the study revealed that ethnic minorities were significantly less likely to be retained in the first year, such that “the magnitude of the difference in retention rates between minority and non-minority students grew over time” (Wohlgemuth et al., p. 467). The authors indicated that first-generation students had lower retention at the fourth year of college. First-generation students tended to persist at lower rates than non-first generation students (Nunez & Cuccaro-Alamin, 1998). It has been estimated that first-generation students were at a 71% higher risk of attrition than non-first generation students (Ishitani, 2003). Overall, this suggested that these at-risk groups are at an increased risk of incurring debt without having a college degree to show for it.

The period that has presented the highest risk of dropping out of college is the student's first year of college (Barefoot, 2000; Tinto, 1987). The ACT 2013 reports of student retention and degree completion at four-year public institutions have indicated that 72.2% of first-year students returned a second year (ACT, 2013). Why first-year students continue to drop after their first year of college has been the topic of numerous books and research (Astin, 1975; Barefoot, 2000; Erickson & Stone, 2012; Hoffman, Richmond, Morrow, & Salomone, 2002; Pascarella & Terenzini, 1978, 1979, 1980; Tinto, 1987; Upcraft & Gardner, 1989; Upcraft, Gardner, & Barefoot, 2004). A common factor in the topic of first-year attrition is the transition from high school to college.



First-year students face the daunting task of transitioning from high school to college, which puts them at risk for attrition (Upcraft & Gardner, 1989). The transition represents more than just a geographical change of location. The emergence of adulthood is another aspect of the transition process. High school graduates are transitioning from adolescence to adulthood (Jacobi, 1991). Arnett (1994) noted that the most important criterion for marking the transition to adulthood is student acceptance of responsibility for their actions, in which students do not view themselves as adults and perceive the attainment of adulthood over an extended period. Transition also means leaving the familiarity of high school, home, and friends and care from adults and entering a new world that is unfamiliar (Wittenberg, 2001). Coming into college means that first-year students accept the responsibility for their education or assume the role of employee and search to meet their personal needs, such as a support network (Dyson & Renk, 2006). Overall, the transition to college is a stressful and very emotional experience for the first year student (Dyson & Renk, 2006; McMillan, 2013).

A critical factor for a student in transition has been shown to be engagement with faculty and peers (Kuh, Cruce, Shoup, Kinzie, & Gonyea, 2008). Being new, students might feel insecure, confused, and lost, leaving a high school environment that was highly structured with set schedules and adult supervision (Wittenberg, 2001). First-year students face the fear of alienation or, instead, "being an outsider without friends" (McMillan, 2013, p. 174). The impact of student engagement or disengagement was found to influence a student's belief in academic competence, academic performance, self-worth, and ability to establish new relationships (Pittman & Richmond, 2008). First-year students who are disengaged from their friends and peers find it challenging to transition to college, which has shown to negatively impact their academic performance (DeBerard, Spielmans, & Julka, 2004; Pittman & Richmond, 2008;

Wintre & Bowers, 2007) and negatively impact their enrollment for the following year (Kuh et al., 2008).

**At-Risk Populations.** In addition to the challenges of transitioning from high school to college, at-risk populations are a subset of the student population that have been described as more likely to underperform academically and to leave college before they graduate (Brost & Payne, 2011; Carini, Kuh, & Klein, 2006). According to Berkner and Choy (2008), underrepresented minorities, such as African American, Hispanic, Pacific Islander, and Native American students, have been considered at-risk for their high levels of non-degree completion. Compared to White students, minority students are at an increased risk of dropping out college and are less likely to graduate with a bachelor's degree (Berkner & Choy, 2008; Wohlgemuth et al., 2007).

Underrepresented minorities in a predominantly White university or college might be at higher risk of alienation or feeling like an outsider (McMillan, 2013). The difficulty of finding social support within the same culture might influence the perception that they lack adequate peer support, which can affect their adjustment in college and influence their GPAs (Dennis et al., 2005). In several studies, the stress of being an underrepresented minority in a predominantly White university has shown to impact academic performance (Oseguera, 2005; Palacios & Alvarez, 2016; Witkow, Huynh, & Fuligni, 2015). For instance, in a national survey, Woo, Green, and Morgan (2012) reported that the White student population had more students with a higher GPA and fewer students with lower GPAs than minority students, whose student population consisted of more students with a low GPA and less students with higher GPAs than White students. (Woo et al., 2012).

Another group of college students who are considered at-risk is first-generation college students (Pascarella, Pierson, Wolniak, & Terenzini, 2004; Pike & Kuh, 2005; Terenzini, Springer, Yaeger, Pascarella, & Nora, 1996). Nunez and Cuccaro-Alamin (1998) defined first-generation college students as “undergraduates whose parents never enrolled in postsecondary education” (p. 2). First-generation students are not of a specific race, ethnicity, or gender (Nunez & Cuccaro-Alamin, 1998). Numerous studies and reports have shown that first-generation students are at a considerable academic disadvantage in comparison to students who are not first-generation (Chen & Carroll, 2005; Gardner & Holley, 2011; A. L. Jenkins, Miyazaki, & Janosik, 2009; Mehta, Newbold, & O’Rourke, 2011; Nunez & Cuccaro-Alamin, 1998; Padgett et al., 2012; Pascarella et al., 2004; Pike & Kuh, 2005; Ramos-Sánchez & Nichols, 2007; Soria & Stebleton, 2012; Terenzini et al., 1996; Woosley & Shepler, 2011).

First-generation college students have distinct shared characteristics that place them at-risk. In a national study comprising of 825 first-generation college students, Terenzini et al. (1996) found that first-generation students were predominantly low-income, had lower critical thinking skills, and remained less likely to receive family encouragement to attend college. Compared to non-first generation students, first-generation college students were also found to socialize less with their academic peers and teachers, were more likely to have lower aspirations for a degree, took a long time to decide their majors, and took longer to graduate from college (Terenzini et al., 1996).

First-generation college students are also distinct in features of their college experience (Kim & Sax, 2009). Kim and Sax (2009) wrote that "first-generation college students tend to less frequently assist faculty with research for course credit, communicate with faculty outside of class, and interact with faculty during lecture class sessions than non-first generation students"

(p. 452). Compared to non-first generation, first-generation college students have fewer interactions with their peers (A. L. Jenkins et al., 2009) and have frequently reported feeling less social support from friends and families (S. R. Jenkins, Belanger, Connally, Boals, & Durón, 2013).

Terenzini et al. (1996) reported academic behaviors that were characteristic of first-generation students. Compared to non-first generation, first-generation students were less likely to be involved in the honors program, were less likely to be involved academically, and were more likely to reflect a confusion about academic expectations and in-class assignments, and underestimate the demands of the academic workload (Collier & Morgan, 2008). Terenzini et al. found that first-generation students were more likely to perceive their instructors as less interested in their academic development, and instructors were also perceived as disinterested in teaching them. First generation students also demonstrated poor academic habits, such as spending fewer hours studying and more hours working. First-generation students were likely to be employed and, for the most part, worked more employment hours compared to employed non-first generation students (Terenzini et al.).

Overall, the characteristics that distinguish first-generation from non-first generation result in the risk of poor academic performance (Chen & Carroll, 2005). Chen and Carroll's (2005) report followed a cohort of first-generation and non-first generation students when they first enrolled in college from 1992 to 2000. Findings showed that first-generation college students who had persisted through graduation had a 2.6 GPA average, compared to the non-first generation students, who had an average of 2.99 GPA for the same time (Chen & Carroll). Chen and Carroll's report also indicated by 2000, 43% of first-generation students had dropped out of college without graduating. In contrast, 20% of non-first generation students also did not

graduate by 2000. The low percentage of non-graduating students who are not first-generation shows a 68% graduation rate, which is considerably higher than the 24% graduation rate of first generation students (Chen & Carroll). Similarly, other studies have found that at least 71% of first-generation students dropped out of college without achieving a baccalaureate degree (Ishitani, 2003; Soria & Stebleton, 2012).

The first year of college has shown to be challenging. First-year students face a period of transition and adjustment that can be stressful (McMillan, 2013). Students are changing from being an adolescent to an adult as they take on the new role of a college student (Jacobi, 1991; Upcraft & Gardner, 1989). Students physically leave the familiarity of their high school and enter a new and unfamiliar environment (Dyson & Renk, 2006). Moreover, at-risk students face an additional layer of stress on top of the pressure they face as first-year students. Specifically, students that are at-risk, such as first-generation students, face stressful compounding challenges that are not characteristic of non-first generation students (Mehta et al., 2011; Nunez & Cuccaro-Alamin, 1998). Taken together, the difficulties faced by first-year students can facilitate student attrition (Ishitani, 2003; Kuh et al., 2008; Woo et al., 2012). Kuh et al. (2008), therefore, suggested that institutions of higher education can become more effective at engaging students, especially those who are at-risk for dropping out, such as underprepared, first-generation students or underrepresented students.

**Influences on Student Persistence.** Students who are disengaged from their peers, faculty, and university community are at a higher risk of non-persistence than students who are engaged early and often in their first year of college (Kuh et al., 2008). An analysis of 6,193 completed by Kuh et al. (2008) for the National Survey of Student Engagement (NSSE) was conducted to assess the relationships between first-year students' success, students' behaviors,

institutional practices, and conditions. Based on the findings, Kuh et al. concluded, “Student engagement in educationally purposeful activities is positively related to academic outcomes as represented by first-year student grades and by persistence between the first and second year of college” (2008, p. 555).

What kind of activities can institutions of higher education use to become more effective in engaging first-year students? It has been shown that academic, personal, and social support can make the transition from high school to college easier for first-year students (P. L. Cox, Schmitt, Bobrowski, & Graham, 2005). First-year students who are engaged early in their first semester by faculty, staff, and peers have demonstrated a positive benefit (Al-Hussami, Saleh, Hayajneh, Abdalkader, & Mahadeen, 2011; Bjorklund, Parente, & Sathianathan, 2002; P. L. Cox et al., 2005; Delaney, 2008; Keup, 2005; Kuh & Hu, 2001; Pascarella & Terenzini, 1978, 1979, 1980; Umbach & Wawrzynski, 2005). Students showed benefits in improved class grades, improved overall GPA, higher persistence, growth in knowledge, improved academic adjustment in college, improved student satisfaction with courses, an increase in student engagement and learning, and also higher degree aspiration (Al-Hussami et al., 2011; Bjorklund et al., 2002; Delaney, 2008; Kim & Sax, 2009; Umbach & Wawrzynski, 2005).

The impact of early and frequent engagement of first-year students has been also shown to benefit their socialization skills, which also facilitated the student’s transition into college (Keup, 2005). Students who have a smoother transition to college perceive themselves to be integrated with their new academic environment, and therefore, have reported a higher likelihood of participating in campus organizations, which also facilitated relationship building with other students (Keup, 2005). The integration of first-year students increases their involvement with

peers through learning opportunities and has also been shown to improve interaction with faculty (P. L. Cox et al., 2005; Garrett & Zabriskie, 2003; Keup, 2005; Purdie & Rosser, 2011).

Faculty can actively engage students in the classroom by providing academic feedback, which has been shown to benefit students' problem-solving skills (Bjorklund et al., 2002). Engaging students in class activities and challenging students academically has been shown to help the higher level of cognitive skills (Umbach & Wawrzynski, 2005). Active engagement has benefited students in improved academic success and retention when the faculty were clear about their expectations and academic requirements (P. L. Cox et al., 2005; Erickson & Stone, 2012). In contrast, first-year students who are unaware of their class work-load expectations and academic requirements were less likely to persist (Kinnunen & Malmi, 2006).

Faculty can also engage first-year students outside the classroom, which has also been shown to be beneficial to students (Al-Hussami et al., 2011; Cotten & Wilson, 2006; Delaney, 2008; Pascarella, 1980; Pascarella & Terenzini, 1978, 1979; Umbach & Wawrzynski, 2005). Students were shown to benefit from a higher GPA, improved academic performance, and achievement (Al-Hussami et al., 2011; Pascarella & Terenzini, 1978). Other added benefits were students' perceived growth in knowledge, satisfaction with their courses, and facilitated academic integration (Delaney, 2008).

In sum, to address these issues, one strategy that has been popular with institutions of higher education has been faculty and peer mentoring for first-year students (Myers, 2003). The proliferation of mentoring was primarily fueled by the earlier studies in business mentoring showing effectiveness (Strayhorn & Terrell, 2007). However, the rising popularity has raised some serious concerns as the implementation of mentoring has outpaced empirical studies of the

undergraduate population (Colley, 2002, Crisp & Cruz, 2009; Jacobi, 1991). Therefore, in regard to the goals of the academic institutions, the effectiveness of mentoring is in question.

### **Methodological limitations**

**Definition.** As previously discussed, definitional issues have plagued researchers because there has been no agreement on a single definition (Jacobi, 1991). The merits of a definition have been discussed extensively among researchers. Jones and Corner (2012) stated that establishing a precise definition of mentoring might be undesirable and unrealistic. The authors pointed out that it might be undesirable because the context in which mentoring occurs shapes the concept of the definition (Jones & Corner, 2012). For instance, a definition in an organizational setting, such as the previous definition cited by Ismail et al. (2012), cannot be easily interchangeable with the definition based on an academic setting by Kerssen-Griep et al. (2008). Jones and Corner also stated that having a standardized definition is unrealistic. Researchers typically do not share the same theoretical conceptualization of mentoring. For instance, Kerssen-Griep et al. used communication theory to explain mentoring, whereas Smith (2007) employed a sociological conceptualization of mentoring. In sum, a different theoretical basis leads to a different definition.

One possible conclusion that can be drawn from Jones and Corner (2012) is the possibility for consistency of mentoring definitions used by researchers within the same context and with the same theoretical base. The previous discussion on the mentoring definition, however, reveals that definitions vary even within the same field. The study by Riley and Wrench (1985) illustrated how the use of different meanings can have an impact, leading to different results. The authors used a narrow definition of mentoring and a broad definition of



mentoring in two separate surveys. Riley and Wrench (1985) found that the criteria of the definition used influenced how participants reported their perceptions of themselves.

The use of an operational definition is vital in quantitative research to demonstrate how the outcomes are measured. Crisp and Cruz (2009) noted in their literature review the lack of consistent use of a mentoring definition, the use of an ambiguous definition, and a preponderance of researchers omitting a definition. Very few quantitative studies in undergraduate mentoring apply a definition (Alonso García et al., 2011; Chun, Sosik, & Yun, 2012; Corbett & Paquette, 2011). Instead of defining mentoring, most studies described the roles of mentoring (Corbett & Paquette, 2011; Ismail et al., 2012), its outcomes (Eagan et al., 2011), its processes (Phinney et al., 2011), and its functions (e.g. Yim & Waters, 2013). Qualitative studies, on the other hand, pointed to the relevance of letting the definition emerge from the participants to "not preclude important elements of mentoring that have been previously unrecognized" (Zimmerman & Paul, 2007, p. 177).

**Randomized Controlled Trials.** Differences in the methods used can weaken the interpretation of the research results (Crisp & Cruz, 2009; Jacobi, 1991). The literature has shown that few researchers have included randomized sampling and randomized assignments, a control group, and a comparison group. Lange, Sauerland, Lauterberg, and Windeler (2017) explained that the randomized controlled trial is the gold standard methodology for scientific evidence because it is the best way to determine causal efficacy. Several researchers have indicated having difficulty implementing randomization in their studies. For instance, Mangold et al. (2002) stated the different schedules of their participants undermined the attempt to conduct a randomized assignment. Robinson and Niemer's (2010) goal for their study was to improve the academic performance of their nursing students; therefore it was inclusive of all

students because they did not want to exclude students who could potentially benefit from mentoring.

To date, only two studies in undergraduate mentoring approximate a rigorous scientific methodology (Rodger & Tremblay, 2003; Sanchez et al., 2006). Several studies have employed control groups; however, no randomization of sampling or assignment was used in the majority of the studies (Alonso García et al., 2011; Alonso, Castaño, Calles, & Sánchez-Herrero, 2010; F. Boyle et al., 2010; T. A. Campbell & Campbell, 1997, 2007; Larose et al., 2011; Mangold et al., 2002; Rhodes, 2007; Robinson & Niemer, 2010; Salinitri, 2005). Lange et al. (2017) further explained that the lack of randomization can also weaken the study because other potential variables that are unaccounted can bias the results. The strength of the relationship between mentoring and its academic outcomes weakens the interpretation of the mentoring outcomes, such as academic performance, retention, and graduation (T. A. Campbell & Campbell, 1997; Crisp & Cruz, 2009; Jacobi, 1991).

**Mixed methods.** Another methodological critique is the lack of mixed method studies that combine both quantitative and qualitative analysis (Creswell, 2009). Qualitative studies, however, lack the causal efficacy of randomized control trials (Lange et al., 2017). Furthermore, Spillane et al. (2010) explained that there are strong advocates, who influence U.S. policy, for the use of randomized controlled trial methodology and that national funding sources have been secured to evaluate the efficacy of education programs. Although qualitative research and mixed method research have gained popularity in education and other applied fields, an outcome of elevating the value of the randomized controlled trial methodology is that qualitative methodology has a lower status (Spillane et al., 2010). A mixed methods design combines the strength of the two data collection approaches, bringing greater insight into data that would

otherwise be obtained and analyzed using a single method (Creswell & Plano Clark, 2011). For instance, as previously discussed, qualitative studies have shown some cases of negative mentoring, whereas quantitative studies have not.

**Mentoring Procedures.** Despite the problems with the definition of mentoring and methodological differences, the differences in procedures used for the mentoring programs further complicates the evaluation of studies and its effectiveness to mentoring outcomes. As it was also previously discussed, formal mentoring programs, which constitute the majority of studies, can control different characteristics. There are no clear guidelines, and therefore, no consistency in the selection and training of mentors or policies regarding the frequency of contact or extracurricular activities. This approach varies from study to study (T. A. Campbell & Campbell, 1997; Rodger & Tremblay, 2003).

**Academic Measures.** Hagedorn (2005) stated that *attrition* and *retention* are institutional measures. Attrition has been defined as a decline in student enrollment that is the result of weaker student retention. Retention is defined as students who persist, and thus, the institution retains. Hagedorn clarified that *persistence* is a student measure and not an institutional measure. However, persistence and retention have often been used interchangeably; thus persistence is defined as academic re-enrollment until the student has graduated. *The graduation rate* is the number of students who finish their undergraduate degrees, and clearly, they are students who persisted (Hagedorn). Hagedorn also points out the limitations of the academic measures. An institution of higher education can claim a graduate only once, regardless of where they initially enrolled. A student who transfers from one institution to another becomes part of the graduation rate of the institution that confers the student's degree. By default, the institution from which a student transfers notes this as a part of their respective attrition rate (Hagedorn). It is, therefore,

not surprising that multiple studies have relied on these measures to assess student success (Bordes-Edgar, Arredondo, Kurpius, & Rund, 2011; Davig & Spain, 2003; Hawley & Harris, 2005; Hu & Ma, 2010; Kuh et al., 2008; Nicpon, Huser, Blanks, Sollenberger, Befort, & Kurpius, 2006; Salinas & Llanes, 2003; Wilson & Kittleson, 2013; Wintre & Bowers, 2007; Witkow et al., 2015).

The measurement of student academic performance can vary. Graduating high school students' performances have often been measured by achievement tests, such as the American College Testing (ACT) and Scholastic Aptitude Test (SAT), as well as the high school grade point average (GPA) (ACT, 2013d; Wright, Jenkins-Guarnieri, & Murdock, 2013). In college, academic performance is measured by students' grades or GPA (Caison, 2005; DeBerard et al., 2004; Hawley & Harris, 2005).

### **Mentoring Effectiveness with the Undergraduate Population**

The effectiveness of first-year mentoring is assessed by the prevalence of positive outcomes, such performance and retention, of first-year students (T.A. Campbell & Campbell, 1997). Jacobi (1991) noted that the proliferation of mentoring programs in colleges and universities, in an effort to improve academic retention, presumed that mentoring would have a positive impact on first-year students. However, studies demonstrating the beneficial impact on first-year students were lacking at the time of Jacobi's literature review. The impact that mentoring can have on the mentee was primarily based on the evidence from the area business mentoring research (Budge, 2006; W. B. Johnson, 2003; Strayhorn & Terrell, 2007).

Subsequent follow-up literature reviews on undergraduate mentoring, such as that of Crisp and Cruz (2009), have found weaknesses that have continued to plague studies, such as definition, theoretical conceptualization, and methodological problems (Crisp & Cruz, 2009;

Jacobi, 1991). These problems limit the evaluation of available studies, calling into question the effectiveness of mentoring (Crisp, 2010; Nora & Crisp, 2007). However, what follows is a review of studies worth noting for their strong methodological integrity of the quantitative type. The studies included are those of Rodger and Tremblay (2003); Sanchez et al. (2006); Larose et al. (2011); T. A. Campbell and Campbell (1997); and Salinitri (2005).

The studies by Rodger and Tremblay (2003), Sanchez et al. (2006), and Larose et al. (2011) investigated the impact on first-year students' academic performances, as measured by their GPAs and persistence while employing a peer mentoring scheme. All three studies applied an experimental design in which students were randomly assigned to a mentored group and a non-mentored group.

In a sample consisting of Canadian undergraduate students, Rodger and Tremblay (2003) investigated the effects of mentoring on students' academic performance, as measured by their GPAs, retention, and motivation. From a pool of participants who applied to the mentoring program, a group of students was randomly assigned to two groups: mentored and non-mentored groups. Remaining applicants that were non-assigned were randomly assigned to a second control group. A one-way analysis of variance results showed that there was no difference between the three groups in end-of-the-year grade (GPA), retention, and motivation. Student anxiety was also analyzed in which mentoring was found to have a mediating effect on student anxiety, such that it might have an indirect impact on academic performance (Rodger & Tremblay, 2003).

Three years later, in a study conducted in the United States, Sanchez et al. (2006) conducted a four-year longitudinal study to investigate the impact of a mentoring program on students' satisfaction with the university, GPA, persistence, and persistence to graduation. First-

year undergraduate business students from a Midwestern university were randomly assigned to the experimental and control group. The results of a *t* test showed that the mentored group had higher levels of satisfaction than the non-mentored groups, but there was no difference in student GPA, persistence, and graduation (Sanchez et al., 2006).

In a second Canadian study of first-year students, Larose et al. (2011) examined the effect of mentoring on students' GPAs, motivation to persist in science, persistence, adjustment to college, and course completion. Students who had applied and were accepted to a science and engineering program were invited to participate in mentoring. From a pool of applicants, students were randomly assigned the experimental and control group. Multivariate analysis of covariance results indicated no differences in persistence, academic, and social adjustment between mentored and control groups. Results did show that mentoring had a positive impact on mentee intrinsic motivation, and mentees had a higher level of course completion (Larose et al., 2011).

The studies by Rodger and Tremblay (2003), Sanchez et al. (2006), and Larose et al. (2011) failed to show that peer mentoring is effective in improving student GPA, persistence, and persistence to graduation rate. However, this interpretation is limited by the fact that only one of the three studies defined mentoring. Despite the strength of their experimental design, only the study by Sanchez et al. relied on the conceptual definition by Kram (1985). Kram's definition stipulates a difference in expertise that is gained through experience, which is consistent with the selection criteria of senior-level students with a GPA above a 3.5 (Sanchez et al., 2006). In contrast, Larose et al.'s (2011) mentor selection relied on experience only, and Rodger and Tremblay (2003) had not indicated expertise or experience as a requirement for peer mentor.

Despite the limitations within studies conducted by Rodger and Tremblay (2003) and Larose et al. (2011), all three studies have shown that peer mentors were effective in mediating psychosocial issues, such as feeling satisfied with the university, reducing anxiety, and improving motivation. The positive impact of psychosocial support from peer mentoring is one aspect that had emerged in several non-experimental studies (Alonso et al., 2010; Budny et al., 2010; Pagan & Edwards-Wilson, 2003; Robinson & Niemer, 2010). Although the implication showed that peer mentoring is not effective in improving students' academic performance, persistence, and graduation, as previously noted, other studies have investigated the impact of a faculty mentor (T. A. Campbell & Campbell, 1997; Salinitri, 2005)

In the following two studies, faculty and preservice teachers who were working towards their bachelor and master's degrees were chosen as mentors (T. A. Campbell & Campbell, 1997; Salinitri, 2005). The comparison of two studies in which the mentors vary by their education degrees is based on the reasonable assumption that both faculty and preservice teachers teach students. Both T. A. Campbell and Campbell (1997) and Salinitri (2005) employed a rigorous experimental design. Salinitri also applied a qualitative component.

T. A. Campbell and Campbell's (1997) study investigated the impact of faculty mentoring on student GPA and retention rates using an experimental design. Underrepresented first-year and transfer students from a large state university were randomly assigned to two conditions. The mentored group was the experimental condition, and the non-mentored group was the control. The results of a *t* test showed that in comparison to the non-mentored group, the mentored group scored higher GPAs, completed more academic hours, and had a higher rate of persistence ( $p < .001$ ). Additional analysis also revealed that the amount of contact time with the mentor had a

positive relationship, resulting in higher GPA, more hours completed, and greater persistence (T. A. Campbell & Campbell, 1997).

Salinitri (2005) investigated the impact of mentoring on low-performing students, identified by a lower limit of 70% on their high school GPA, on those students' university GPAs and overall retention rate. Low-performing students from a large metropolitan Canadian university were randomly assigned to one of two groups, an experimental and a control group. Students in the experimental group were then invited to participate in mentoring, while those assigned to the control group were not contacted but were tracked anonymously. Multivariate analysis of covariance results showed that the mentored group had higher GPAs and higher retention ( $p < .001$ ). The mentored were also less likely to fail courses and had a higher rate of students in good standing. The qualitative results expanded on the mentors and mentees' satisfaction with their participation in the program, in which participants noted developing friendships as a result of mentoring (Salinitri, 2005).

As in previous cases, both of these studies failed to include a definition of mentoring, limiting the interpretations of the findings. T. A. Campbell and Campbell (1997) did not indicate what qualifications the faculty needed to be a mentor. The authors selected any faculty who were willing to participate (T. A. Campbell & Campbell, 1997). Similarly, Salinitri (2005) did not indicate what qualifications were needed to be a mentor. However, their choice of mentors was predicated on the capacity to teach, and the authors hoped that the relationship between mentor and mentee would be mutually beneficial. The authors expected that teachers would teach the mentees to improve study skills and the mentors would benefit from mentee feedback in regard to the quality of the mentor's teaching skills. Regardless of the studies' limitations, both demonstrated that mentoring had an impact on student GPA and retention. T. A. Campbell's and



Campbell's and Salinitri's findings are consistent with previous and subsequent research on the impact of faculty-student interaction (Kuh & Hu, 2001, Pascarella & Terenzini, 1978, 1979).

Evaluating the overall effectiveness of mentoring based on these six studies presented a series of obstacles that would prohibit a proper evaluation. One concern is the differences in procedures, regarding mentor training, and the different population of first-year students served. All peer mentors in the three studies received training; however, the training differed in length and depth (Rodger & Tremblay, 2003; Sanchez et al., 2006; Larose et al., 2011). In sharp contrast, T. A. Campbell and Campbell (1997) did not indicate the faculty mentors received any training. Salinitri (2005), on the other hand, recruited preservice teachers who were required to attend workshops for their training. A common feature among the studies that did conduct training was the lack of details about the content of the training.

Another difference between the peer and faculty studies was the target population. Although all the participants in the six investigations were first-year students, the participant population was different. The studies with faculty and teacher mentoring targeted at-risk students, while participants in the peer studies self-selected. The three peer mentoring studies did not indicate the reasons for student self-selection. Students could have volunteered for any number of reasons (Larose et al., 2011; Rodger & Tremblay, 2003; Sanchez et al., 2006). Larose et al. (2009) found that students might participate because of their willingness to have a new experience; they might have a positive attitude towards help-seeking. Students might also anticipate test anxiety and failure, seek to improve their academic performance, gain security in anticipation of low academic performance and perceive less support as they transition from high school to college (Larose et al., 2009). Therefore, it is reasonable to assume that there might be

any number of reasons why students chose to participate in mentoring. An insufficient number of students with academic needs participated in the three studies.

Targeting academically at-risk students, who might be self-aware of their need for academic help (Larose et al., 2009), has shown to benefit substantially from faculty academic support (Al-Hussami et al., 2011; Carini et al., 2006; Delaney, 2008; Kim & Sax, 2009; Ullah & Wilson, 2007). However, students do not necessarily have to be at-risk to benefit from the faculty-student interaction. Pascarella and Terenzini (1978) had previously demonstrated that the educational outcomes of faculty-student interaction were independent of the students' academic aptitude, which has been supported in subsequent studies (Carini et al., 2006; Delaney, 2008; Kim & Sax, 2009). Therefore, it is not unreasonable to assume that if participants in the faculty and teacher studies were not academically at-risk, there might still be a noticeable impact in mentee academic performance.

One likely conclusion that can be drawn from the overall effectiveness of mentoring from the five studies is a difference of pedagogical skills. Peer mentors, in contrast to faculty and teacher mentors, lack pedagogical skills. Rodger and Tremblay (2003) acknowledged that peer mentors did not have the skills to teach, but that mentoring was not tutoring. The authors assumed that the mentees would get tutoring somewhere else; thus, the lack of impact on academic performance was not surprising (Rodger & Tremblay, 2003). Larose et al. (2011), in contrast, assumed that mentors would provide academic help, centered around the fact that the mentors were selected based on their previous tutoring experience. There was no indication how many of the mentors had tutoring experiences (Larose et al.). Perhaps a comparison of mentors with tutoring experience, and those without, might have suggested if pedagogical skills play a role in mentoring outcomes.

Sanchez et al. (2006), on the other hand, had a definition that set clear guidelines for their mentor selection. Peer mentors were selected based on having a GPA above a 3.5, and the researchers reasonably expected that their high academic performance might make them suitable to help the students with academics. The unsatisfactory academic results led the authors to suggest that a lack of mentor training was at fault (Sanchez et al.). Training in pedagogical skills might play a role in mentoring outcomes (Pagan & Edwards-Wilson, 2003). Pagan and Edwards-Wilson (2003) demonstrated that undergraduate mentors trained in pedagogical skills had a positive impact on the mentees' GPAs. The goal of the mentoring program was to help academically at-risk students improve; therefore, pedagogical skills were an integral component of training (Pagan & Edwards-Wilson). Although the focus of the study did not test the link between mentor training and mentoring outcomes, subsequent studies have demonstrated that training helps mentors become more effective than untrained mentors (Hamilton, Stevens, & Girdler, 2016; Pfund, Pribbenow, Branchaw, Miller Lauffer, & Handelsman, 2006).

In regard to mentor training, Sanchez et al.'s (2006) assertion that training mentors would lead to effective mentoring is not necessarily guaranteed (Salinitri, 2005). Salinitri's (2005) qualitative findings revealed that mentor effectiveness was mixed. In regard to mentor teaching skills, 80% of mentees reported that mentors were effective in helping with skill development, resource availability, and strategies for academic improvement. Overall, mentees said that their mentors were 50% effective in all areas of mentoring functions. Despite mentor training, at least 19% of the mentors were not effective in providing emotional support, and their mentees were not given the opportunity to discuss their feelings of anger, anxiety, and self-doubt even though these types of discussions were mandated by the program requirements (Salinitri, 2005). Salinitri

did not provide any explanation of why some mentors failed to be effective in some mentoring areas.

As will be discussed in the following section on the quality of mentoring, an aspect of mentoring effectiveness depends on how well the mentor can be emotionally supportive (Salinitri, 2005). As previously indicated, Salinitri (2005) found that 19% of the mentors, despite the requirement of emotional support, failed to provide an opportunity for the mentees to discuss their feelings. Emotional support (or lack thereof) can be a critical component that has been shown to influence mentoring effectiveness (E. Cox, 2005; Hu & Ma, 2010). In addition, the frequency of contact between mentor and mentee has been associated with mentor effectiveness (T. A. Campbell & Campbell, 1997; Rodger & Trembley, 2003). The studies by Rodger and Trembley (2003) and T. A. Campbell and Campbell (1997) found that mentees who had high academic performance had frequent contact with their mentors. T. A. Campbell and Campbell (1997) were unsure if frequent mentoring led to an increase in academic performance or if highly capable students frequently attended mentoring to take advantage of any resources available to them. Similarly, Rodger and Trembley (2003) were also unsure if the mentor influenced the student or if a highly capable mentee frequented the mentor meetings on a regular basis to take advantage of their help. Subsequent studies have shown that mentors who provide emotional support increase the mentees' satisfaction with mentoring; in turn, highly satisfied mentees seek out their mentors frequently (E. Cox, 2005; Hu & Ma, 2010). Overall, mentee satisfaction with mentoring is a marker of relationship quality (Eby et al., 2013).

### **Quality of Relationship in Undergraduate Mentoring**

The literature review conducted by Eby et al. (2013) showed when dealing with youth, adolescents, and emerging adults, such as first-year college students, evidence indicated that

psychosocial support is an important component. Psychosocial support is critical to the perception of mentoring effectiveness and overall the quality of the relationship (Eby et al., 2013). Tinto (1987) emphasized that the underpinning from his model of student departure was the quality of the interaction. How a student perceives interaction with others can have a strong influence on the decision to persist or drop out of college (Tinto, 1987). Ragins (2010) noted that mentoring, like any other type of relationship interaction, varies from poor quality, mediocre, to high quality. The quality of the relationship is defined as the “protégé’s evaluative feelings towards the mentor or the relationship as a whole. It includes protégé’s satisfaction with the mentoring relationship, satisfaction with the mentor, overall perception of relationship quality and liking” (Eby et al., 2013, p. 443).

Mentor-mentee similarity, although not essential, has shown to facilitate the quality of the relationship. Mentee satisfaction has been found to be higher when mentor and mentee share similar characteristics, such as gender, race, attitudes, beliefs, personality, and academic discipline (Cronan-Hillix et al., 1986; Davis, 2008; Kostovich & Thurn, 2006; Putsch, 2008; Shotton et al., 2007; Zimmerman & Paul, 2007). In a study of ethnic matching, Santos and Reigadas’s (2004) non-experimental design investigated the faculty mentor-mentee process and how the relationship between the mentor and mentee facilitated college adjustment of minority students and non-traditional students 40 years or older. A total of 200 surveys were emailed to mentees who were participating in the faculty mentoring program from a large metropolitan university. A total of  $n = 65$  returned completed questionnaires were analyzed in a hierarchical regression analysis to conduct a path analysis that tested the effect of same ethnic mentoring and frequency of contact to college adjustment, perceived mentor support, program satisfaction, and academic performance. Findings showed that ethnically matched mentor and mentee predicted

higher levels of frequent contact, personal and career development, and academic adjustment to college, which, in turn, impacted academic performance and mentoring satisfaction (Santos & Reigadas, 2004).

Santos and Reigadas's (2004) detailed analysis revealed that same-ethnic mentoring led the mentee to indirectly perceive the mentor as more supportive and helpful in fostering personal and career development, which led to increased contact. The frequency of contact between the same ethnic mentoring pair was noted for the emotional support given to the mentee that was found to foster academic adjustment, which is critical to student persistence (Santos & Reigadas, 2004). Santos and Reigadas concluded that same-ethnic mentoring facilitated the quality of the relationship. However, they suggested that the quality of the interaction, and not similarities, play a crucial role in student persistence (Santos & Reigadas).

Subsequent studies that have also employed matching to influence mentoring effectiveness have reported conflicting results from those of Santos and Reigadas (2004); however, the same conclusions were drawn that interaction, and not similarities, impacted student outcomes (T. A. Campbell & Campbell, 2007; Karcher, Nakkula, & Harris, 2005). Frequent contact has been shown to contribute positively to the satisfaction of the relationship (Allen, Poteet, & Burroughs, 1997; Ensher & Murphy, 1997). The frequency of contact is associated positively with academic performance (T. A. Campbell & Campbell, 1997; Rodger & Trembley, 2003). Hu and Ma's (2010) non-experimental design investigated how mentoring influenced engagement, the differences in relationship, and student persistence. A survey was conducted of 452 students from various academic institutions who were participating in a statewide program. A total of  $n = 334$  surveys returned and analyzed using multiple regression to examine how different variables, such as race, gender, and other student characteristics, related

to student involvement in various mentoring aspects. Findings showed that the frequency of contact between mentor and mentee was mediated by the quality of the relationship, meaning that the better relationship was associated with contact frequency (Hu & Ma, 2010).

Mentor behaviors, such as trust, empathy, and rapport, have shown to influence the quality of the relationship, which in turn, facilitates the effectiveness of mentoring (Kerr, 2009; Pearl, 2013; Shotton et al., 2007). Trust is established when mentors have demonstrated that they are reliable by maintaining a sustained commitment to their mentees and have a sense of reciprocity, in which both mentor and mentee can genuinely share their thoughts and feelings with one another (Kostovich & Thurn, 2006; W. Y. Lee, 1999; Reilly & D'Amico, 2011). Empathy has been described as understanding and identifying with the mentees' emotions and acting accordingly (Pearl, 2013). Empathy is demonstrated through caring, in which the mentor expresses a genuine belief in the mentee's ability to make a difference, demonstrates a commitment to the mentee's success, offers help and support on a regular basis, and conveys concern for the mentee's well-being (Kerr, 2009; Pearl, 2013; Shotton et al., 2007; Wolfe et al., 2008). Rapport is demonstrated through the mutual recognition of each other's moods and emotions, as well as the perception that the mentees felt understood by their mentors (Johnson-Bailey & Cervero, 2004; Pearl, 2013).

The quality of the relationship has been shown to be associated with overall satisfaction with mentoring and satisfaction with the mentor (Alonso García et al., 2011; Bernier, Larose, & Soucy, 2005; Brittan et al., 2009; Davis, 2009; Kerssen-Griep et al., 2008; Phinney et al., 2011; Putsche et al., 2008; Santos & Reigadas, 2002, 2004). Mentees indicating high levels of satisfaction have shown higher levels of academic motivation, improved self-efficacy, increased satisfaction with the university, transitional facilitation to college, and a sense of belonging in the

university (Phinney et al., 2011; Sanchez et al., 2006; Santos & Reigadas, 2002, 2004; Strayhorn & Terrell, 2007).

Relationship quality is also based on the mentees' overall evaluative feelings towards their mentor (Eby et al., 2013). Mentees placed a higher value in liking their mentor based on characteristics that make them suitable mentors, rather than their intellectual competence and professional resources (Cronan-Hillix et al., 1986). Characteristics of a good mentor include a sense of humor, compassion, or empathy (Cronan-Hillix et al., 1986). Attitude is another mentor characteristic, which is described as the belief whether something will work or not work, and which can also influence whether a mentoring relationship will work or not work (Davis, 2008; Griffin & Reddick, 2011).

In general, the quality of the relationship was based on the mentee's feelings of satisfaction toward the mentor and the overall mentoring relationship (Eby et al., 2013). A mentee, however, can also have low satisfaction with the mentoring relationship, in which it can be described as negative and possibly dysfunctional (Eby & McManus, 2004; Eby & Allen, 2002). Although not described as negative, the previously mentioned study of Salinitri (2005) showed that despite the fact the mentors were trained to provide psychosocial support, the "mentees reported that 19 percent of the mentors did not discuss feelings of anxiety, self-doubt, or anger, even though these topics were mandated in the mentor's program requirements" (p. 866). As previously emphasized, psychosocial support, such as emotional support provided to the mentee, plays a critical role in the quality of the relationship (Eby et al., 2013; Phinney et al., 2011). Therefore, Salinitri's findings suggest that 19% of the mentees in this study might have had poor relationship quality with their mentors.



Although negative mentoring has not been addressed directly with the undergraduate population, the literature reveals some documented instances of negative mentoring (Beyene, et al., 2002; Brittain et al., 2009; Cronan-Hillix et al., 1986; Davis, 2009; Hu & Ma, 2010; Kerssen-Griep et al., 2008; Shotton et al., 2007; Storrs et al., 2008; Wolfe et al., 2008). What follows includes identified factors that contribute to negative mentoring experiences.

Factors that have been shown to influence negative mentoring include poor matching, misunderstanding of mentoring, and mentor inaccessibility. While evidence has shown that same-ethnic mentoring influences high-quality mentoring (Santos & Reigadas, 2002, 2004), an ethnic mismatch has also shown to have a negative impact (Davis, 2009; Langer, 2010; Storrs et al., 2008). Mentees who do not understand the value of mentoring have also had negative experiences. Mentees who perceive their mentors as unavailable and difficult to contact have also expressed that their mentoring experiences were negative (Cronan-Hillix et al., 1986; Davis, 2008).

Mentor characteristics have also been described as contributing to a negative mentoring experience (Cronan-Hillix et al., 1986; Shotton et al., 2007). Mentees who perceived their mentors' involvement in mentoring as self-serving failed to develop a relationship with their mentors (Shotton et al., 2007). Other characteristics that can lead to negative mentoring include personality traits, in which poor mentors were described as prejudiced, egocentric, rigid, over critical, disorganized, and dishonest (Cronan-Hillix et al., 1986)

Lastly, the interactional quality might also influence the mentee's perception that the mentoring relationship is a negative one (Beyene et al., 2002; Kerssen-Griep et al., 2008). Mentors' behavioral cues, such as not demonstrating a friendly face, have been perceived as unfriendly, which can influence the mentee in viewing the relationship as a negative experience.

Other mentor behaviors towards the mentee that can lead to a negative perception of the relationship can occur when mentors have assumed a role of a responsible parent, asked impertinent private questions, and made sexual advances towards the mentee (Beyene et al., 2002).

### **Conclusion**

The study by Ragins et al. (2000) brought the quality of the relationship to the forefront of research as a factor that can influence the outcomes of mentoring. Interest in the interaction quality, albeit limited, has gained some attention for how it affects undergraduate mentoring outcomes (Kerssen-Griep et al., 2008; Liang, Tracy, Taylor, & Williams, 2002). Liang, Tracy, Taylor, and Williams (2002) suggested that the limited studies on the quality of the relationship are possibly due to the ease of measuring instrumental functions that are tangible, concrete, and measurable. Relationship quality, on the other hand, presents aspects that are less tangible and difficult to measure (Liang, Tracy, Taylor, & Williams). Consequently, the focus has remained on the elements that are tangible, such as the mentoring characteristics in formal mentoring, that can be controlled and modified to assure a high-quality relationship (Bozeman & Feeney, 2007). However, Salinitri's (2005) study demonstrated that although measures were taken to control the quality of mentoring, it still resulted in 19% of the trained mentors failing to provide adequate support. Controlling for characteristics, therefore, cannot assure the quality of the mentoring relationship.

Evidence has led to questioning the effort of mentor-mentee matching, which has been suggested to be unnecessary (E. Cox, 2005). The conflicting results by T. A. Campbell and Campbell (1997) and Santos and Reigadas (2004) illustrated the role of relationship quality, and found that homogeneity of the mentoring pair was helpful but not necessary for the effectiveness

of mentoring. Santos and Reigadas concluded that the quality of interaction, and not the homogeneity of the mentoring pair, was more critical for the effectiveness of mentoring. Surprisingly, very little has been done to understand how the quality of interaction between mentor and mentee plays a role in the quality of the relationship, which in turn might influence the outcome of mentoring.

## CHAPTER III

### METHODS

This study employed a convergent parallel mixed method design to investigate how the quality of the peer and faculty mentoring relationships impacted undergraduate students who participated in a Faculty Academic Mentor (FAM) Program from a small religiously affiliated university. Both questions and hypotheses for the study are presented. Quantitative and qualitative data were gathered simultaneously for this study. The section on research design will cover the methods and instruments used in this study, and the implementation section will address each strand of the study.

#### **Rationale for Mixed Methods Design**

Mixed methods research, described as the third methodology, is a practical and intellectual synthesis of quantitative and qualitative data. This methodology does not reject traditional quantitative and qualitative methods but provides data that are more holistically informed, balanced, and useful in ways that are not possible when one method or the other is used exclusively (R. B. Johnson, Onwuegbuzie, & Turner, 2007). Both quantitative and qualitative methods were employed to have a broader and system-level perspective of the mentees' experiences, as well as an interpersonal level interaction between individual participants or within a group(s) (Welton, Mansfield, Lee, & Young, 2015).

Creswell and Plano Clark (2011) indicated that mixed method research had gained considerable interest because integrating both quantitative and qualitative data draws upon the unique strengths of each. By employing these two methods simultaneously, new possibilities of understanding complex social problems will emerge (Creswell, 2009; Creswell & Plano Clark, 2011). Creswell and Plano Clark defined mixed method research by its core characteristics,

which are: (a) collect and analyze quantitative and qualitative data, (b) integrate both types of data concurrently or sequentially, (c) prioritize either data or both, (d) use single procedures or multiple phases, (e) frame within a theoretical orientation; and (f) combine the procedures into a design.

Theoretical and pragmatic considerations informed the implementation of a mixed method in this study. Relational mentoring reframes traditional mentoring from a feminist perspective, in which Ragins (2010) stated that relationship varies in quality and contended that research methodology is insufficient and narrow. Traditional quantitative methods rely on analyzing aggregate data, in which differences in quality often remains hidden (Ragins). Mixed method research is embraced by feminist scholars who critique social science research, as it often excludes aspects of the phenomena that are "likely to produce such a narrow and selective picture of human experience" (Stewart & Cole, 2012, p. 329). Ragins, therefore, invited researchers to explore beyond the traditional approach to gain greater insight into the complexities of mentoring. Mixed method design is an approach that incorporates all aspects of the research process (Brooks & Hesse-Biber, 2007; Ragins, 2010).

Pragmatic considerations enabled this researcher to adopt a pluralistic stance to gather multiple types of data to best answer the research questions (Creswell & Plano Clark, 2011). The nature of the topic of quality in mentor-mentee interaction has had little research. For the most part, research into quality has primarily focused on characteristics that influence the relationship and not the dynamics of the interaction (Liang, Tracy, Taylor, Williams, et al., 2000). Recent scale development to quantify the quality of interaction has had limited validation with both female and male populations (Frey, Beesley, & Newman, 2005). Given the newness of the area under investigation and scale development, a pluralistic stance that is suitable for this study is a

mixed method approach. Creswell and Plano Clark (2011) elaborated that employing a quantitative approach has inherent weaknesses regarding the number of participants, trends in participation, and generalizability. For this study, the implementation of a qualitative strategy brought greater depth and detail with a smaller sample that compliments the quantitative findings (Creswell & Plano Clark).

Practical considerations led to the employment of a convergent parallel mixed methods design (Creswell & Plano Clark, 2011). One reason was timing. The researcher was not a resident of the city in which the study subjects resided. Given the considerable distance between researcher and subjects, it was essential to capture quantitative and qualitative data simultaneously. Lastly, because the investigation of the dynamics of interaction quality is relatively recent, it was important that both data sets be given equal value (Creswell & Plano Clark, 2011).

Creswell and Plano Clark (2011) indicated that, in a convergent parallel design, both quantitative and qualitative methodologies are implemented concurrently and given equal importance. Each independent data strand was collected and analyzed separately during the same phase. The separate data collections have acquired information on the same topic, resulting in two data sets. At the convergence stage, both independently analyzed data sets were merged and examined together to compare and contrast the data in the interest of developing a complete understanding of the phenomena under investigation (Creswell & Plano Clark). All four research questions dealt with how the participants perceived their experiences of mentoring and, therefore, generated quantitative and qualitative data.

## **Research Questions and Hypotheses**

Five questions were examined in this study: two questions in the quantitative strand and three in the qualitative strand. The questions for each strand were necessary because each approach provided the data essential to a mixed methods inquiry (Creswell & Plano Clark, 2011).

### **Quantitative research question**

1. Are there any differences in cohorts' academic success as measured by GPA and (a) the quality of their relationships with peer mentors, faculty mentors, and the university community; (b) their perceptions of changes in self-efficacy; and (c) academic and intellectual development and institutional and goal commitments as measured by the Relational Health Indices (RHI), the College Self-Efficacy Scale (CSES), and the Persistence/Voluntary Dropout Decision Scale (PVDDS)?
2. Which relational domains from the RHI (quality of the participants' relationships with a peer mentor, a faculty mentor, and/or the relationship with the university community) account for the variance of students' perceptions of changes in self-efficacy; academic and intellectual development; institutional and goal commitments; and academic success as measured by the CSES, the PVDDS, and self-reported GPA, respectively?

### **Qualitative research questions**

1. What are the participants' overall experiences in the FAM program?
2. Which part of the FAM program helped participants the most academically and how?
3. Overall, what kinds of things, people, and experiences have been the most helpful to students during their time at the university?

### **Quantitative hypothesis.**

#### Hypothesis 1:

- a. Null: The quality of the interpersonal relationship between mentor and mentee will not affect college self-efficacy, academic, and intellectual development (PVDD 4); personal and institutional goal commitment (PVDD 5); and college grade point average.
- b. Alternative: The quality of the interpersonal relationship between mentor and mentee will affect college self-efficacy, academic, and intellectual development (PVDD 4); personal and institutional goal commitment (PVDD 5); and college grade point average.

#### Hypothesis 2:

- a. Null: There will be no impact of the relational domains (engagement, authenticity, and empowerment) on mentees' perceptions of changes in self-efficacy before and after mentoring, academic, and intellectual development; personal and institutional goals; and college grade point average.
- b. Alternative: Which relational domains of the RHI (engagement, authenticity, and empowerment) will impact the mentees' perceptions of changes in self-efficacy before and after mentoring, academic, and intellectual development; personal and institutional goals; and college grade point average.

Two methods of data collection and analysis were used in this study to answer the research questions. Participants were asked to complete a retrospective pretest and current posttest on the self-efficacy scale to gauge any change to compare the impact of mentoring on mentees' self-efficacy. Results from the quantitative and qualitative strands were then merged to provide support for the research questions (Creswell & Plano Clark, 2011). A summary of data collection and analysis for the research questions are shown in Table 1.



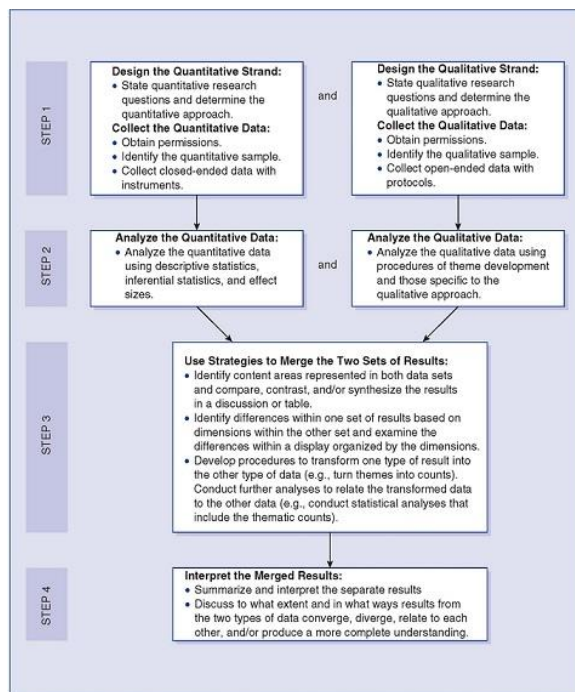
Table 1

*Summary of Data Collection and Analysis for Each Research Question*

Research Question		Data	
Number	Text	Collection	Analysis
QUAN 1	Are there any differences between the cohorts in the Relational Health Indices impact on College Self Efficacy, The Persistence/Voluntary Dropout Decision Scale, and college grade point average?	Web Survey Pre and Post CSEI	SPSS Descriptive Multivariate Analysis of Variance  Post-hoc analysis Mann-Whitney U
QUAN 2	What was the impact of the relational domains on mentees' perceptions of changes in self-efficacy before and after mentoring, academic, and intellectual development; personal and institutional goals; and college grade point average?		Hierarchical Multiple Regression  Post-hoc analysis Linear Regression
QUAL 1	Participants' overall experience in the FAM program.	Open-Ended questions of program experience Interviews	Dialectics hermeneutic phenomenology (Kafle, 2011).
QUAL 2	Which part of the FAM program academically helped them the most and how?	Interviews	Coding Nvivo Software
QUAL 3	Overall, what kinds of things/people/experiences have been the most helpful to the participant during their time at St. Mary's University?	Open-Ended questions of university community experience	Triangulation with dissertation chair

## Research Design and Method

As seen in Figure 2, the steps in a convergent parallel mixed methods design gave equal priority to both quantitative and qualitative strands (Creswell & Plano Clark, 2011). Both quantitative and qualitative data were collected concurrently (or at about the same time). The quantitative data were collected via web-based questionnaires and gathered independently of the qualitative data solicited via focus group interviews. The quantitative data were collected first because web-based data were easier to obtain. The qualitative data were received shortly afterwards because it involved coordinating focus group days/times with student participants' schedules. Each data set was analyzed separately but presented in an integrated fashion for the results, conclusion, and recommendation sections of the dissertation. In addition, the findings have an applied focus or utility for the FAM program.



*Figure 2.* Flowchart of the basic procedures in implementing a convergent design. Adapted from *Designing and Conducting Mixed Methods Research* (p. 79), by J. W. Creswell and V. L. Plano Clark, 2011, Thousand Oaks, California: Sage Publications. Copyright 2011 by Sage Publications. Printed with permission (Appendix A).

**Data Collection.** To have the broadest level of participation, data collection began two months after first-year students' first mentoring sessions to allow ample time to gain experience in the FAM program.

Data collection for the mixed method study was conducted in two phases (see Table 2). In the first phase, quantitative data were collected via a web-based survey that consisted of a demographic questionnaire, academic performance (GPA), a pre–post self-efficacy questionnaire, academic and intellectual development scale, and institutional and goal commitment scale. In the last phase, data were collected from interviews of former and current participants of the FAM program.

Table 2

*Data Collection Phases*

Phase	Type of Data	
	QUAN	QUAL
1	CSEI (Pre) CSEI (Post) RHI PVDD <i>scale 4</i> PVDD <i>scale 5</i>	
2		Interviews

**The FAM Program.** The FAM program, which is administered by the Office of Student Retention, identifies incoming first-year students and transfer students who are first-generation college (defined as neither parent graduating with an associate degree, baccalaureate degree, or higher). Students who qualify for the program are mailed a FAM information and application packet before the start of classes. Participation in the program is voluntary. The FAM mentoring

program traditionally serves between 66 and 115 first-generation freshmen students each year who are matched with faculty and peer mentors.

The first FAM cohort began in the fall of 2010, before the implementation of a peer mentor component. As a result, the first cohort was mentored in groups of four or five students by a single volunteer faculty mentor. With the introduction of a peer mentoring component in the fall of 2011, mentoring was conducted in groups of four or five students with one faculty member and one peer mentor. Since the fall of 2012, mentoring groups have been kept to a maximum of four mentees per faculty and one peer mentor per group. Before the start of the fall semester, students are encouraged to participate in an overnight retreat. During the semester, mentees are to meet several times with their mentors as well as to participate in scheduled group activities. Faculty who volunteer as mentors received a stipend for their support and participation in the program. Students who complete the mentoring program at the end of the fall semester receive a bookstore gift card that can be used in the spring semester.

Faculty mentors are recruited from the university at large, and participation is voluntary. Former FAM participants are recruited to participate as peer mentors. Both mentors and mentees submit a completed questionnaire to match the mentoring group for compatibility. Close to the beginning of the semester, mentors, mentees, and program administrators participate in an overnight retreat to accomplish the following: mentee group-building activities; faculty mentor training; peer mentor training; and group activities involving mentors, mentees, and administrators.

**Participants.** A convenience sample was used for both quantitative and qualitative strands. Convenience sampling was used for an adequate sample for analysis. The target population consisted of current and past participants of the FAM, and the sample was an

accumulation of case study (Ferber, 1977). The sampling was conducted via email for the target population. A low level of participation was noticed for both strands during the collection phase. To increase the level of participation, a snowball sampling method was also employed. Snowball sampling is a referral method in which participants share the information about the investigation with other participants who have the same characteristics that are of interest to the research (Biernacki & Waldorf, 1981). Participants in both quantitative and qualitative strand comprised of  $N = 51$  students. All students who had participated in either strand were asked to “pass the word” of the study to other FAM participants.

***Quantitative strand.*** Participants in the quantitative strand consisted of  $n = 42$  students, of which  $n = 7$  (16.6%) did not provide any data. Participants were composed of 64% females ( $n = 27$ ) and 19% males ( $n = 7$ ). The predominant ethnicity was 71% ( $n = 30$ ) Hispanic or Latino and 12% ( $n = 5$ ) Non-Hispanic or Non-Latino. Sixty-two percent ( $n = 26$ ) of the participants were single; 19% ( $n = 8$ ) had indicated being in a committed relationship, and one participant (2%) indicated being married at the time of the survey. Sixty-two percent of the students indicated having some employment ( $n = 30$ ), while 10% ( $n = 4$ ) indicated no employment (see Table 3).

Table 3

*Summary of Quantitative Participant Demographics*

Characteristic	Participants by cohorts (n = 42)			
	2010	2011	2012	2013
<b>Gender</b>				
Male	2	1	0	5
Female	3	3	7	14
Missing			7	
<b>Ethnicity</b>				
Non-Hispanic or Non-Latino	1	0	2	2
Missing			7	
<b>Relationship Status</b>				
Single	1	3	6	16
Married	1	0	0	0
In a Committed Relationship	3	1	1	3
Missing			7	
<b>Employment</b>				
Non-work study	1	1	2	0
Off-Campus	1	0	0	2
No Employment	1	0	0	3
Work study	2	2	5	14
Missing			7	

The participants were composed of 36% freshmen ( $n = 15$ ), 22% sophomores ( $n = 9$ ), 17% juniors ( $n = 7$ ), and 10% seniors ( $n = 4$ ). Fourteen percent ( $n = 6$ ) of the participants indicated that their faculty mentor was of the same degree as the mentee, while 64% of the participants ( $n = 27$ ) indicated that their mentor was not of the same degree as the mentee. Similarly, 69% ( $n = 29$ ) of the participants indicated that their peer mentor was not in the same major as them. Only two (5%) of the students indicated that their peer mentor had the same major as the mentee (see Table 4).

Table 4

*Summary of Quantitative Participant Demographics, continued*

Characteristic	Participants by cohorts (n = 42)			
	2010	2011	2012	2013
<b>Classification</b>				
Freshman	0	0	0	15
Sophomore	1	0	7	1
Junior	0	4	0	3
Senior	4	0	0	0
Missing			7	
<b>A faculty mentor of the same degree</b>				
Yes	0	1	2	3
No	4	3	5	15
I Don't Know	1	0	0	1
Missing			7	
<b>A peer mentor of the same major</b>				
Yes	0	0	1	1
No	1	4	6	18
I Don't Know	4	0	0	0
Missing			7	

*Qualitative strand.* Data collection of the qualitative strand was conducted independently of the quantitative strand. All current and former participants of the FAM program were invited to participate in interviews by email. A total of nine participants were interviewed. The protocol for group interview procedures did not allow for the collection of individual demographic information to maintain confidentiality between participants. Any demographic information that is presented in Table 5 was collected through self-disclosure during the interview. Out of the nine interviewees, only one was a male. Four students disclosed that they were from out of town. Three students indicated that they were peer mentors at the time of the interview. Three of the participants were sophomores, and one was a senior at the time of the interview. Lastly, three students stated their employment status at the time of the interview. All participants qualified for inclusion in the study have participated as a mentee in the Faculty Academic Mentor Program.

Table 5

*Summary of Qualitative Participant Demographics*

Characteristic	<i>N</i>
Gender	
Female	8
Male	1
Total	9
Academic Status	
Sophomore	3
Senior	1
Missing	5
Total	9
Students Participating as Peer Mentors	
Students	4
Missing	5
Total	9
Students who are Employed Other than Peer Mentoring	
Students	3
Missing	6
Total	9



## **Instruments**

The concept of this mixed method was to investigate how the quality of interaction between mentor and mentee influences mentoring outcomes. Because the same concept of interaction quality is addressed in the quantitative and qualitative data, a convergent parallel design was ideal for this type of research (Creswell & Plano Clark, 2011). This section, therefore, will describe the instruments and the rationale for their use in this study. Firstly, the instruments for the quantitative data will be described.

**Quantitative strand.** The measure of internal validity for all scales used in this study was Cronbach's alpha, which is a technique that tests a unique scale's estimate of reliability (Gliem & Gliem, 2003). Cronbach alpha's scores range from 0 to 1, in which scores above .7 indicated to be acceptable for social science (George & Mallery, 2003).

**Relational Health Indices (RHI)** by Liang, Tracy, Taylor, Williams, Jordan, and Miller (2002) measures the quality of the relationship between faculty mentor and mentee, peer mentor and mentee, and community and mentee. This scale also assesses three relational dimensions of engagement, authenticity, and empowerment (Liang, Tracy, Taylor, Williams, et al.). This assessment consists of 37-item, five-point, Likert-type questions with score ranging from zero to 148. Cronbach alpha reports for this study ranged from .89 to .98. Indicated items are reversed scored before calculating the mean score (Appendix B).

**College Self-Efficacy Instrument (CSEI)** by Solberg, O'Brien, Villareal, Kennel, and Davis (1993) measures a student's confidence to complete coursework demands, confidence with a roommate, and confidence in social engagement. Changes in self-efficacy have been shown to be influenced by mentoring; therefore, this scale was used as an outcome measure (Phinney et al., 2011). The CSEI consists of 20-item, Likert-type questions with scoring ranges from zero

(not at all confident) to eight (very confident). Scores are summed and totaled for all subscales in which a higher score indicates a greater sense of confidence. The Cronbach alpha for this study was .97 for the total scale (Appendix C).

**The Persistence/Voluntary Dropout Decisions Scale (PVDD)** developed by Pascarella and Terenzini (1980) assesses a student's decision to continue or drop out of college. Mentoring has shown to influence student persistence (T. A. Campbell & Campbell, 1997, 2007; Hu & Ma, 2010; Sanchez et al., 2006). Two of the subscales were used. Subscale 4 measures the mentee academic and intellectual development and consists of seven questions. Subscale 5 measures institutional and goal commitments and consists of five questions. The overall survey consists of 30-item, Likert-type questions with scores that are summed and averaged (Pascarella & Terenzini, 1980). The Cronbach alpha for PVDD 4 and 5 in this study ranged from .74 to .81 (Appendix D).

**Demographic Questionnaire** consists of items about gender, ethnicity, marital status, social, economic status, and questions regarding the demographic information on their faculty mentor and peer mentors. The questionnaire can be found in Appendix E.

**Qualitative Strand.** Open-ended questions were used to identify any and all aspects that could play a role in quality. Morgan (1997) indicated that useful interviews have a range allowing for a broader discussion, not only on the topic that researchers are familiar with but on the other issues the interviewer did not anticipate. An example of an open-ended interview question used is, "What kinds of things, people, experiences, and opportunities have been the most helpful to you during your time at the University?" Morgan also noted depth, emphasizing sharing a personal experience from the participants to avoid a vague and general discussion. The open-ended questions explored the broadest range of antecedents to the mentoring relationship,

and therefore, participants were asked, "What prompted you to participate in the FAM program?"

Lastly, personal context and specificity allow participants to add their perspective or worldview in a detailed and concrete manner, which can enrich the interaction of the participants (Morgan, 1997). Participants were presented with questions that would include any of their mentoring experience by asking, "In what ways, if any, did your relationships with your peer mentor and your faculty mentor impact your academic experience?" Furthermore, the researchers were also interested in exploring, based on their experiences, how they would improve mentoring by asking, "What kinds of things, if any, would you change about the FAM program?" Thus, quality was measured based on the responses of these open-ended questions.

*Interviews.* These interviews were semi-structured to obtain the broadest and richest detail of the phenomena. Participants were asked to elaborate, add examples, and prompted to provide as much detail as possible about their participation experiences in the FAM program. The nature of the semi-structured protocol allowed for changes during the interview sessions by prompting and asking follow-up questions in addition to the ones previously indicated (Seidman, 2006).

The interviewee was then asked questions in the following order: 1) What prompted you to participate in the FAM program? 2) In what ways, if any, did your relationships with your peer mentor and your faculty mentor impact your academic experience? 3) What kinds of things, if any, would you change about the FAM program? 4) What kinds of things, people, experiences, and opportunities have been the most helpful to you during your time at the university? Towards the end of the interview time, the researcher indicated to the interviewee that the session was ending. Afterward, each interviewee was prompted for a final summary statement.

## **Implementation**

Data were collected in two phases. The first phase, quantitative data collection, was facilitated due to the ease of distribution of a web-survey link. Because of the nature of conducting focus group interviews, the second phase, qualitative data collection, followed because it required scheduling between the researcher and the participants.

**Phase 1.** The university's Office of Student Retention, where the FAM program resides, held a list of all the mentees who had ever participated in the FAM program. To maintain the integrity of the Family Educational Rights and Privacy Act (FERPA), a U.S. federal student privacy law, initial recruitment was conducted through the Office of Student Retention via email. The email (Appendix F), written by the primary researcher, was an invitation to participate in the current study. In addition, a second email reminder was sent to students to invite them to participate in the study (Appendix G). The script for both emails included the researcher's contact information. The emails informed recipients about the research that was being conducted in the form of an anonymous web survey and interviews. Information also included the length of time for both survey and interview and a description of the links. Instructions in the emails emphasized the recipient's right to choose or not to choose to click the link. Furthermore, an attachment document included a "Cover Letter for Participation in a Research Project" (Appendix H) and two active links. The first link led to the web-based survey (Appendices B – E), and the other link led to the "Focus Group Contact Consent" form (Appendix I). A third link to the Office of Student Retention was also provided.

Current and former mentees who chose to click on the web-based survey link were directed to a web-based "Consent by Participant for Participation in a Research Project" form (Appendix J). Mentees had to check the "I agree to participate" box and then click the next

button to proceed to the demographic questionnaire and surveys. Mentees who chose not to participate had to click the "I do not agree to participate" box and then click the next button to exit the survey. Upon exit, mentees were thanked in a written statement by the researcher, in which an additional reminder informed them of the option to participate in the interviews by clicking the "Focus Group Contact Consent" link embedded in the text.

The web-survey electronic consent form stated that, even after consenting, the survey participant would have the right to withdraw at any time. Participants had the right to choose or not to choose to answer any or all questions. Participants who wished to withdraw at any point in the survey could click the exit button that was located on the top right-hand side of each screen of the survey. The participants were informed of the time needed to complete the questionnaires, which was approximately 15 to 20 minutes. Participants who wished to proceed were first requested to complete a demographic questionnaire fully.

After the completion of the demographic questionnaire, participants then continued to the various measures used in the study that consisted of the RHI, the CSEI, and the PVDD (Appendices A-D). At the start of each of these measures, a prompt with instructions described the purpose of the questionnaires. The CSEI was administered twice: The first CSEI measure was retrospective, in which volunteers were instructed to reflect on their experiences before FAM mentoring. The second CSEI measure instructed the participants to reflect on their current experiences and answer accordingly. The remainder of the surveys followed. Upon completion, participants were forwarded, as previously described, to a "thank you" screen in which they were thanked for their participation with a reminder for the option to participate in interviews.

At the end of phase 1 and phase 2, the researcher signed into "Qualtrics" and deactivated the links to both the web-based survey and registration for the interviews. Data for the web-based

survey was downloaded in an SPSS format file, which was in turn encrypted into a zip file. A zip file is an archiving program designed to reduce the overall size of the file. This file was then "unzipped" in the primary researcher's computer in an encrypted section of the hard drive. The unzipped file in SPSS format was then used to conduct the quantitative analysis.

**Phase 2.** A second link, as previously mentioned, led to the "Focus Group Contact Consent" form. Recipients who clicked the focus group link were directed to the "Focus Group Contact Consent" form only. The consent form included an explanation of the purpose of the study and a detailed description of the participants' rights as research participants. The consent form stated that by checking the "I agree to participate" box, participants were requested to register for the interview by providing their names, phone numbers, and email addresses. The researcher contacted prospective volunteers who signed up for the focus group interviews via email and cell phone to answer any and all questions that they had about the study. The researcher reminded the prospective participants that they were under no obligation to participate and could withdraw at any time. The researcher made every effort to maintain a flexible schedule to provide a convenient time for the prospective interviewee. At the time of the interview, participants were asked to sign an in-person "Consent for Participation" form (Appendix K), which covered interview participants' anonymity, duration of the interview session, permission for audio recording, and a request of confidentiality of the interview process.

Before the start of the interview, participants were verbally reminded of their obligation to maintain confidentiality and were asked to read and sign the consent form. After completion, a verbal reminder of the "Consent for Participation" was given by the researcher. Next, the researcher began with an ice-breaker and general "get to know you" questions to establish rapport with the participants. When 10 minutes had elapsed, the researcher used any of the

information generated in the "get to know" section to segue into the research questions (Morgan, 1997).

Towards the end of the interview session, participants were thanked. Before the end of the sessions, participants were reminded of the option to participate in the web surveys and were verbally reminded to maintain the confidentiality of the interview discussions. Afterwards, participants were asked to "spread the word" about the study to fellow FAM participants and were given free refreshments.

Consent forms were collected by the researcher and were placed in an envelope that was sealed, signed, and dated. The packet of consent forms was turned in within 48 hours to the researcher supervisor, Dr. Dana L. Comstock-Benzick, who placed them in a locked cabinet in a locked office at the Counselor Education and Family Life Center training facility.

The recordings were then transcribed and coded by the researcher. Nvivo 10 software was used to identify and label constructs. Triangulation was then conducted with the dissertation committee chair to ensure accuracy and achieve completeness of data. Triangulation is a form of data convergence that can be "drawn from several sources (e.g., transcripts and pictures) or from several individuals" (Creswell & Plano Clark, 2011, p. 211).

The researcher used the transcribed recordings to write a summary narrative of the interviews. To maintain the anonymity of the participants, the researcher changed the names, and accordingly, they were referenced throughout the summary and dissertation by their pseudonyms. Any unique identifying remarks were excluded from the summaries and dissertation. All data collected and generated by the researcher, such as transcripts and analysis files, were individually encrypted and password protected.

Each interview was summarized by the researcher and was reviewed separately as well as together, to identify common themes in the participant's experience as a mentee. The researcher paid particular attention to descriptions of how their experiences as mentees impacted them in broad terms and specific terms such as in their academics.

### **Confidentiality and Records Management**

The types of records generated by this project were electronic and paper data. Web-based survey data were collected and stored in the Qualtrics servers. The data collected from the surveys were anonymous. Gustavo Salazar II is the primary researcher and has the only password access to the data. Group interviews generated audio recordings. Digital audio recordings were downloaded from the recording devices in MP3 format. Notes produced by the researcher were scanned into Adobe Acrobat 9.0 file format and password protected, and the hard copies were shredded.

All digital data generated during the study were secured using two levels of digital encryption and two physical security measures. First, the digital audio recordings were password encrypted. The archived encrypted data were stored in two encrypted mediums: Compact Disc ROM and a laptop hard drive. Encrypted CD media has been stored in a safety box that requires a key for access. The safety box is located at the primary researcher's home. All passwords are 20 characters in length and employ a combination of upper and lower case letters, numbers, and symbols. Only the primary researcher and the dissertation committee chair of this study have access to the digital records. At no time will faculty mentors or peer mentors have access to these records.

All data generated in this study is confidential. Students were asked to type in their names, email addresses, and phone numbers. Volunteers who consented were contacted to



schedule participation in focus group interviews. Contact data collected were forwarded by the primary researcher to the Office of Student Retention in an encrypted and password protected Microsoft Word file. The recipient of the contact list was Dr. Rosalind Alderman, Assistant Vice President for Retention Management, or her designated alternate.

The signed consent forms were collected by the primary researcher and were turned in to the researcher supervisor. These documents will be stored for 5 years, after which they will be destroyed (shredded).

### **Institutional Review Board (IRB)**

Informed consent and approval of all instruments and methodology were sought from St. Mary's University's Institutional Review Board (IRB). St. Mary's University's IRB approved on October 7, 2013 (See Appendix L). Immediately following IRB approval, the researcher contacted the Office of Student Retention, which emailed all mentees who had ever participated in the FAM program beginning on October 7, 2013. A copy of the IRB approval letter and IRB-approved Informed Consent forms can be found in Appendices G through K.

### **Analysis**

**Quantitative strand.** In this study,  $n = 42$  participated in the survey. A total of  $n = 7$  failed to provide any information. Eighty-three percent ( $n = 35$ ) had various data omissions throughout the different surveys. Employing SPSS 20, three principal analyses were conducted. Missing data were handled using list-wise deletion before the three principal analyses. A transformation of questionnaire scores into Z-scores was then employed to standardize the difference in rating between the scales. After that, a preliminary analysis was conducted on outliers, normality, linearity, and homoscedasticity.

**Preliminary analysis.** Mertler and Vannatta (2005) indicated that a preliminary analysis was necessary to assess whether or not the data collected are appropriate for the primary analysis and to ensure their quality. A test for normality revealed that the data from the instruments were not distributed normally (Mertler & Vannatta, 2005). A log 10 transformation was conducted on the PVDD IV, PVDD V, and CSEI to normalize the distribution for the regression to address the non-normal distribution of the outcome variables (Keene, 1995).

**Main analysis.** For question 1, a MANOVA was chosen to test if differences existed between the cohorts (2010, 2011, 2012, and 2013) in regard to their academic success based on the quality of their relationships with their peer and faculty mentors (RHI), perceived changes in their self-efficacy (CSEI), academic and intellectual development, and institutional and goal commitment (PVDDS) (See Table 6). A priori for a MANOVA analysis required a minimum sample size that was computed to be  $n = 129$ . However, a much lower sample size ( $n = 42$ ), unequal sample sizes by class status (freshman, sophomore, junior, and senior), and non-normal distribution of scores would have led to erroneous results and interpretation if a MANOVA was conducted (Mertler & Vannatta, 2005). Therefore, the application of a MANOVA was not appropriate.

For question 2, a multiple hierarchical regression was chosen to address which RHI domains of empowerment, engagement, and authenticity account for the variances in the dependent variables (see Table 7). The four primary outcome measures were college GPA, change in college self-efficacy score, student academic and intellectual development, and the students' institutional and goal commitment. Student cohorts were examined separately due to changes that are implemented each new year. However, a priori  $n = 49$  was not met to achieve the proper statistical power to answer the second question. Thus, conducting a multiple

hierarchical regression would also lead to erroneous results and interpretation. Therefore, the application of a multiple hierarchical regression was also not appropriate.

Table 6

*Multivariate Analysis Variables*

Cohort	IV	Outcome Variables		
2010	X	O <sub>3</sub>	O <sub>4</sub>	O <sub>5</sub>
2011	X	O <sub>3</sub>	O <sub>4</sub>	O <sub>5</sub>
2012	X	O <sub>3</sub>	O <sub>4</sub>	O <sub>5</sub>
2013	X	O <sub>3</sub>	O <sub>4</sub>	O <sub>5</sub>
Peer Mentors	X	O <sub>3</sub>	O <sub>4</sub>	O <sub>5</sub>

X = Relationship quality (RHI)

X<sub>1</sub> = Authenticity

X<sub>2</sub> = Empowerment

X<sub>3</sub> = Engagement

O<sub>1</sub> = College Self-Efficacy Instrument (retrospective)

O<sub>2</sub> = College Self-Efficacy Instrument (current perspective)

O<sub>3</sub> = College Self-Efficacy Instrument (difference)

O<sub>4</sub> = Academic and Intellectual Development (PVDD, subscale 4)

O<sub>5</sub> = Institutional and Goal Commitments (PVDD, subscale 5)

Table 7

*Multiple Regression Predictor and Outcome Variables*

Predictor Variable	Outcomes
RHI k = 1	$Y_1 = \text{GPA}$
Authenticity j = 1	$Y_2 = \text{College Self-Efficacy}$
Empowerment j = 2	$Y_3 = \text{Academic \& Intellectual Development}$
Engagement j = 3	$Y_4 = \text{Institutional \& Goal Commitment}$
2010 Cohort i = 1	
2011 Cohort i = 2	
2012 Cohort i = 3	
2013 Cohort i = 4	
Regression Model:	
$Y_{ijk} = \alpha + \alpha_{jk} + \alpha_k + \beta X_{ijk} + \Sigma i$	

**Alternate Analysis.** The primary goal of question 1 was to explore how the quality of the relationship impacts mentoring outcomes; therefore, due to the inappropriateness of a MANOVA, a non-parametric test, known to be assumption-free, was used (Field, 2009). For question 2, the use of multiple hierarchical regressions was also deemed inappropriate due to the violation of assumptions, such as non-normal distribution (Field, 2009). Instead, to identify trends for future research, a linear regression analysis was conducted to determine which variable predicted mentoring outcomes. Due to a low  $n$ , all participant data were combined to ascertain the influence on overall student outcomes.

**Preliminary analysis.** Due to low initial participation in the fall semester of 2013, the survey was opened a second time in the spring semester of 2014. Before merging the data, a

Mann-Whitney U nonparametric equivalent to a *t* test was conducted between the fall of 2013 and the spring of 2014 group to assess for any differences between the groups. Nonparametric tests rely on fewer assumptions and appropriate for non-normally distributed data (Field, 2009). As presented in Table 8, a Mann-Whitney test indicated that there was a lack of statistical difference between the fall of 2013 group and the spring of 2014 group. Consequently, data from the two groups merged for analysis.

Table 8

*Mann-Whitney U Nonparametric Mean Comparison of Fall 2013 Group and Spring 2014 Group*

Scale	Group 1	Group 2	Mann-Whitney U	Exact Sig.
PVDD 4	Fall 2013	Spring 2014	103.0	$p = .974$
PVDD 5	Fall 2013	Spring 2014	94.5	$p = .681$
CSEI diff	Fall 2013	Spring 2014	75.0	$p = .477$
RHI Total	Fall 2013	Spring 2014	114.0	$p = .823$
RHI-Emp	Fall 2013	Spring 2014	101.5	$p = .476$
RHI-Eng	Fall 2013	Spring 2014	78.0	$p = .366$
RHI-Aut	Fall 2013	Spring 2014	96.5	$p = .181$

An additional analysis was also conducted before merging all the data. This analysis tested the differences between 2010, 2011, 2012, and 2013 cohorts on the overall RHI score and subscales scores. As data were not normally distributed, the most appropriate statistical test was the Kruskal-Wallis H test (Field, 2009). Results indicated a lack of significant difference between the cohorts in the total RHI scores,  $\chi^2(2) = 3.116$ ,  $p = .374$ , having a mean rank total RHI score of 21.50 for the 2010-2011 cohort, 13.5 for cohort 2011-2012, and 12.64 for cohort

2012-2013. Subscale scores were also found not to have significant differences between the cohorts: RHI empowerment  $\chi^2(2) = 3.186, p = .364$ , RHI engagement  $\chi^2(2) = 3.176, p = .365$ , and RHI authenticity  $\chi^2(2) = 3.835, p = .280$ . Consequently, all data were merged for primary analysis.

**Main analysis.** To address the quality of relationship on mentoring outcome measures for question 1, a Mann-Whitney U, a nonparametric version of a  $t$  test, was used (Field, 2009). The RHI total score for each participant was summed. Summed scores were then categorized into three levels of relationship quality to determine how differences in qualities influence student outcomes. The RHI summed scores ranged from 37 to a maximum of 185. The three categorized levels of quality were: high-quality relationship with scores ranging from 130 to 185, a low-quality relationship with scores ranging from 37 to 92, and finally, scores ranging from 93 to 129 were the medium-quality relationship. The categorization resulted in  $n = 1$  for low quality. As a result, low quality and medium quality were combined ( $n = 11$ ). High-quality categorization resulted in  $n = 24$ .

Despite the low  $n$ , linear regression has shown to be a robust model for analysis (Field, 2009). Therefore, to identify trends for future research, the combined data were used in a linear regression analysis to determine which of the variables predicted mentoring outcomes (see Table 9).

Table 9

*Regression Predictor and Outcome Variables*

Predictor Variable	Outcomes
$X_1 = \text{Cohort}$	$Y_1 = \text{GPA}$
$X_2 = \text{High Quality vs. remainder}$	$Y_2 = \text{College Self-Efficacy}$
$X_3 = \text{Mentee gender}$	$Y_3 = \text{Academic \& Intellectual Development}$
$X_4 = \text{RHI}$	$Y_4 = \text{Institutional \& Goal Commitment}$
$X_5 = \text{RHI Authenticity}$	
$X_6 = \text{RHI Empowerment}$	
$X_7 = \text{RHI Engagement}$	

As seen on Table 9, the predictor variables of cohort, high-quality vs. remainder, mentee gender (male  $X = 1$  and female  $X = 2$ ), and overall RHI scores were conducted in the following regression model:

$$Y_1 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \Sigma_i$$

$$Y_2 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \Sigma_i$$

$$Y_3 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \Sigma_i$$

$$Y_4 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \Sigma_i$$

RHI subscores of authenticity, empowerment, and engagement were entered separately in the regression model due to intercorrelation (Mertler & Vannatta, 2005). As a result, the following regression model was used:

$$X_5 = \text{Authenticity}$$

$$Y_1 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_5 + \Sigma_i$$

$$Y_2 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_5 + \Sigma_i$$

$$Y_3 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_5 + \Sigma_i$$

$$Y_4 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_5 + \Sigma_i$$

$X_6 =$  Empowerment

$$Y_1 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_6 + \Sigma_i$$

$$Y_2 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_6 + \Sigma_i$$

$$Y_3 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_6 + \Sigma_i$$

$$Y_4 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_6 + \Sigma_i$$

$X_7 =$  Engagement

$$Y_1 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_7 + \Sigma_i$$

$$Y_2 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_7 + \Sigma_i$$

$$Y_3 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_7 + \Sigma_i$$

$$Y_4 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_7 + \Sigma_i$$

### **Qualitative strand**

***Preliminary analysis procedures.*** The qualitative strand employed hermeneutical phenomenology protocol. Kafle (2011) explained that hermeneutic phenomenology is aimed at making explicit the substantive essence of the participant's lived experience. The qualitative strand involved in-depth interviews that were summarized to arrive at "the core essences as experienced by the participants" (Kafle, 2011, p. 196). Kafle cautioned, however, that it is imperative the intention of the interviewee remains true and states,

The everyday language cannot do justice to express what is intended by the participants.

That is why hermeneutic phenomenology demands typical rhetoric that best elicits the



true intention of the research participants. A language mode with the informal tone with idiographic expressions full of adages and maxims is considered suitable for reporting this type of research. (p.196)

The process, therefore, involved a broad or holistic view of the mentoring experience, providing, as much as possible, a complete picture as well as a detailed analysis of interviewee words and views. The qualitative research was conducted from a relational perspective; a feminist worldview espouses a broader inclusion of all the human experience (Stewart & Cole, 2012). The lack of agreement of a mentoring definition (Jacobi, 1991) further supported the use of a qualitative methodology, which is ideally suited for its inclusiveness and generating any possible variables that expand and complement data from the quantitative strand (Creswell & Plano Clark, 2011; Stewart & Cole, 2012).

This qualitative strand employed a feminist constructivism, which shares overlapping similarities with constructivism (Locher & Prügl, 2001). Locher and Prügl (2001) offered that feminist constructivists incorporate gender and power as fundamental components in the process of constructing meanings. Constructivism espouses that “people construct meanings from phenomena and make constructs, which are in turn treated like phenomena by others” (Halldórsdóttir, 2000, p. 47). The lived experience was the focus of this strand (Kafle, 2011). Interviewed FAM program participants constructed the meaning of their phenomena, which in turn, was treated as phenomena by the researcher.

The concept of dialectics and hermeneutics describes the processes in the qualitative strand of this study (Kafle, 2011; O’Connor, 2003). Kafle (2011) elucidated that hermeneutics, at its core, is the interpretative narration of one's lived experience. The effort of the approach is to “dig” past the subjective experience of the individual to discover “the genuine objective nature of

the things as realized" by the participant (Kafle, 2011, p. 186). The researcher's goal is to construct a descriptive narrative with the depth and breadth of the participant's behaviors, actions, intentions, and experiences (Ajjawi & Higgs, 2007). Dialectics is the subjective interpretation of the subject and the object. It is through the interaction and relation to others that the subject exists when it is acknowledged (O'Connor, 2003). The interview process was interactional, consisting of questions and an exchange of responses and ideas between the researcher and participant. The description phase was also interpretative and, therefore, was also dialectical.

Kafle (2011) indicated that the interpretative narration of the description is the process of phenomenological research, in which the researcher is an active participant who pursues the essence, the meanings, and the nature of the phenomena of the lived experience. This process aims to uncover rather than provide accuracy, and as such, the subjective engagement is from the researcher's perspective. Kafle (2011) stated that the researcher's view is one of "many possible perspectives on a phenomenon, like when we turn a prism, one part becomes hidden and another part opens" (p. 191). The subjective engagement is an accepted notion, in which it became imperative for this researcher to embrace a state of Epoche by bracketing presuppositions and biases to observe the phenomena with naïve eyes (Bednall, 2006; Kafle, 2011).

That which is bracketed is suspended to engage in a phenomenological reduction to uncover the essence of an individual's lived experience (Kafle, 2011). The task, therefore, is to describe it in rich detail by employing the five senses and cognitive process so that it becomes "a conscious and deliberate intention of opening ourselves to phenomena as phenomena, in their own right, with their textures and meanings" (Moustakas, 1994, p. 92).

*Main analysis.* The objective of the research was to identify the lived experiences of FAM program participants, the impact that it had on them academically or otherwise, and the involvements they had with the university community, such as with professors, administrators, students, organizations, or activities. Each of the nine summarized interviews was analyzed individually by the researcher investigating the overall impact from participation of the FAM program on mentees, which aspects of being a mentee helped their academics, and how the university community was helpful to the mentees.

The researcher applied hermeneutical phenomenology, which involved actively bracketing the researcher's presuppositions, biases, knowledge, values, beliefs, and experiences and setting them aside to avoid "contaminating" the lived experiences as described by the participants (Chan, Fung, & Chien, 2013; Kafle, 2011). It is acknowledged, however, that the knowledge that one has gained before bracketing cannot be fully eliminated such that perception and interpretation of the participants' lived experiences were maintained pristine (Chan et al., 2013). The researcher, therefore, maintained an active list of the researcher's potential "contaminants" as applied by Bednall (2006), to minimize researcher distortion and to render the most accurate interpretative synthesis of the mentee's experiences.

Before the start of the analysis, it was essential for the researcher to bracket (also used interchangeably with Epoche) to uncover any "prejudgment, biases and preconceived ideas about things" (Bednall, 2006; Moustakas, 1994, p. 85). Moustakas (1994) indicated Epoche means that the investigator will set aside any reference to the investigator's own experience and knowledge. In effect, the researcher should place the researcher's world out of action to gaze into the phenomena clear of any common thought with naïve and fresh "purified" consciousness (Moustakas, 1994, p. 85).

While researching, I, who continue to be in a mentoring relationship and was previously in charge of a freshman mentoring program at a public institution, had to be cognizant and aware of presuppositions about mentoring from my own personal and work experience to avoid superimposing any premature interpretations or directions during the analysis process. Following the example of Bednall's (2006) "Feelings Audit," I conducted a self-interview about my personal experience with mentoring, and the questions I reflected on were within the same boundaries as the questions used in the interview. The result was an autobiographical and historical narrative of my experience as a protégé and mentor supervisor, along with an explanation of my orientation as to theoretical underpinning of what I understand mentoring to be. As Bednall indicated, the areas of my narrative were labeled and treated as a list of items that could potentially be biased. Items that provoked my emotional reactions were also maintained as part of the list.

### **Role of the Researcher**

As the primary researcher, I was connected to the phenomenon under investigation. I am currently a protégé in a natural mentoring relationship of over 20 years and was also a supervisor and trainer for an undergraduate mentoring program at a public institution. I am also an academic coordinator for TRiO Student Support Services Grant, in which my job is to provide undergraduate students with academic advice, counseling, and mentoring. For that reason, my personal experiences and the literature review that I have conducted have further informed my understanding of the mentoring process. As a result, my own experiences and the knowledge that I have gained were part of the process in this dissertation investigation. I was cognizant, however, of the experiences as a protégé and as a mentor. The knowledge that I have gained, therefore, did not necessarily influence how I analyzed interviewee data.

I reflected on my experience of supervising a peer mentoring program has led me to wonder why some freshmen mentees had a different perceived experience than my own. As a supervisor, one of my peer mentors would inform me that some mentees loved them. In fact, some mentees continued the relationship with them long after mentoring was completed. The same peer mentor, however, also told me that other mentees were not into being mentored.

The lack of a positive experience, therefore, shaped my initial inquiry, in which I asked: Why do some students not have the same positive experience as I did? What was it about the experience of some mentees who continued to have a positive relationship with their peer mentor long after mentoring was conducted? Were mentees not "into mentoring" because they were required to be mentored? Each question stemmed from my personal experience and anecdotal evidence provided by the peer mentors. As a result, I asked: If mentees who were not "into mentoring" had a choice whether or not to participate in mentoring, what would encourage them to join? The subjective experience of the informal discussions with the mentees was mixed, and their thoughts and feelings that reflected an experience counter to a positive one in mentoring are not to be discounted. Thus, these interviewee experiences were to be reflected on from what was drawn from the interviews.

To maintain an attitude of *Epoche*, I made an effort to recollect personal experiences of mentoring and professional experiences as a supervisor of a mentoring program. At the core was an attempt to subject myself to an internal mental audit of experiences that I had as a protégé, supervisor, and mentor. Although not exhaustive, this consisted of a list of items that were frequently elicited in my mind and, as such, were regarded for their potential of imposing bias in the interviews (Bednall, 2006).

**Coding.** Saldaña (2009) summarized that the appropriate coding method would facilitate "new discoveries, insights, and connections about your participants, their processes, or the phenomenon under investigation" (p. 51). Ajjawi and Higgs (2007) provided six steps in the process of data analysis, which were employed by this researcher (see Table 10). The first stage is immersion, in which the researcher transcribed the interviews into text. Each interview and audio recording was repeatedly reviewed and reflected upon by the researcher. The repeated review allowed the researcher to get a "sense" of a preliminary interpretation of the participants' lived experiences. The process of deduction involved reading, reflective writing, and interpreting to arrive at the essence or elements of the participant's experience, which were then grouped and identified as themes (Ajjawi & Higgs, 2007).

Understanding is the second stage, and it involved identifying first-order constructs, in which the participants' expressed ideas are using their own words or phrases that capture the essence of what they meant. The researcher searched and analyzed for essential meanings in the students' experiences that were supportive of the relevant data. The identified text was then coded into Nvivo software, to label the constructs.

The third stage is an abstraction, which involved second-order constructs generated by the researcher's own theoretical and personal knowledge. The researcher searched for themes and patterns within and between interviews by being open-minded to the participants' experiences.

In the fourth stage, subthemes were grouped into themes within each participant and then across all participants. It was at this stage that themes and subthemes were further elaborated on by clarifying their relationships to the main themes.

In the fifth stage, illumination and illustration of the phenomena were achieved through the use of interview text that best highlighted vital findings and illuminated the essence of the

phenomena of the student's lived experience. The researcher introduced themes that represented aspects of the phenomena experienced by the participants by quoting passages of the text to bring to life the lived experiences of the interviewee(s) (Kafle, 2011).

The last stage consisted of conferring with the dissertation chair regarding the themes and subthemes to ensure validity, trustworthiness, and reliability of the research study. Qualitative validity is achieved through the accuracy of findings from the standpoint of the researcher or participants (Creswell, 2009). The qualitative strand employed triangulation, in which the dissertation chair member checked for accuracy of themes and subthemes found by the researcher for feedback. The feedback period was conducted after the dissertation chair reviewed participants' transcripts and the researcher's summary narratives. The dissertation chair and researcher were both responsible for analyzing the data and suggested strategies to assess for inter-coder congruency. Furthermore, these processes were carried out periodically to ensure integrity, such as throughout the coding process, to avoid deviating from the core essence during interpretation of final findings.

Table 10

*Ajjawi and Higgs' (2007) Data Analysis Process*

Stages	Tasks
1. Immersion	<ul style="list-style-type: none"> <li>• Transcription of interviews</li> <li>• Reading, reflection, and re-reading of the text</li> <li>• Create narrative summary</li> </ul>
2. Understanding	<ul style="list-style-type: none"> <li>• Identifying participant's first order constructs</li> <li>• Data coding using Nvivo software</li> </ul>

Table 10 (continued)

Stages	Tasks
3. Immersion	<ul style="list-style-type: none"> <li>• Transcription of interviews Reading, reflection, and re-reading of the text</li> <li>• Create narrative summary</li> </ul>
4. Understanding	<ul style="list-style-type: none"> <li>• Identifying participant's first order constructs</li> <li>• Data coding using Nvivo software</li> </ul>
5. Abstraction	<ul style="list-style-type: none"> <li>• The researcher identified second-order constructs</li> <li>• Group second-order constructs into subthemes</li> </ul>
6. Synthesis and theme development	<ul style="list-style-type: none"> <li>• Grouping of subthemes into themes</li> <li>• Further elaboration of themes</li> <li>• Comparison of themes across participants</li> </ul>
7. Illumination and illustration of phenomena	<ul style="list-style-type: none"> <li>• Linking themes to excerpts of participant narratives</li> <li>• Reconstruct interpretations into stories</li> </ul>
8. Integration	<ul style="list-style-type: none"> <li>• Critique of themes—validity, trustworthiness, and reliability</li> <li>• Report summary results of research findings</li> </ul>



## **CHAPTER IV**

### **RESEARCH FINDINGS**

This study utilized a convergent parallel mixed method design to investigate how the quality of the peer and faculty mentoring relationships impacted undergraduate students who participated in the Faculty Academic Mentor (FAM) Program. Mixed methods research, described as the third methodology, is a practical and intellectual synthesis of quantitative and qualitative data (R. B. Johnson et al., 2007), which were collected and analyzed independently.

Following the procedures for a convergent design, results will be presented in four sections. In the first section, data from the quantitative strand are explored and analyzed separately from the qualitative data. Consequently, results from the demographic questionnaire, Relational Health Indices (RHI), The Persistence/Voluntary Dropout Decision Scale (PVDD), and College Self-Efficacy Instrument (CSEI) are presented. Immediately following will be a discussion of the quantitative results.

The qualitative strand will consist of two sections; the second section includes of interview summaries. The third section will present the qualitative results consisting of findings and major themes from the group, as well as interviewee quotes that exemplify major themes.

In the fourth section, the convergence of the quantitative and qualitative findings is discussed for interpretation. By integrating both data sets, according to Creswell and Plano Clark (2011), the mixed method design will foster a deeper understanding and insight into the problem under study that would be possible by using either type of research design alone.

The design of this method is described as triangulation. Both quantitative and qualitative data were collected and analyzed separately. Results have been merged for a comprehensive interpretation. Employing a convergent parallel mixed methods design fosters a more in-depth

understanding and allows for better insight into the problem under study (Creswell & Plano Clark, 2011).

### **Quantitative Strand**

The quantitative data were obtained through Qualtrics, an online web-survey tool in which the RHI, CSEI, PVDD, and demographic questionnaires were transcribed into an online version to collect data electronically for this study. The analysis of the RHI, PVDD, CSEI, and demographics was conducted with IBM SPSS Version 22. A convenience sample of matriculated first-generation undergraduate college students who participated in the university Faculty Academic Mentor (FAM) Program was invited to join in the study. Of the overall 300 mentees who were asked to volunteer,  $n = 42$  participated in the online questionnaire. Several participants did not fully complete the surveys. As a result, the total number of valid cases available for analysis was  $n = 35$ . Within the 35 valid cases, students did not answer some questions within the survey. As a result, in several analyses, the number of valid cases dropped below 35, to  $n = 17$  (48.57%).

Preliminary analysis conducted to ensure the quality of the data showed violations of assumptions, indicating that the data were not appropriate for performing a MANOVA for question 1 and Multiple Hierarchical Regressions for question 2 (Mertler & Vannatta, 2005). To address how the quality of the relationship in mentoring influenced mentoring outcomes for question 1, a nonparametric Mann-Whitney U was used (Field, 2009). For question 2, a linear regression analysis was employed to identify trends for future research.

**Quantitative research questions and hypothesis.** The two research questions were: 1) Are there any differences in cohorts' academic success as measured by GPA and the a.) quality of their relationships with peer mentors, faculty mentors, and with the university community; b.)

their perceptions of changes in self-efficacy; and c.) academic and intellectual development and institutional and goal commitments as measured by the RHI, the CSES, and the PVDDS? and 2) Which relational domains from the RHI (quality of the participants relationship with a peer mentor, faculty mentor and/or the relationship with the university community) account for the variance of students' perceptions of changes in self-efficacy, academic and intellectual development, personal and institutional goals, and college grade point average?

The first hypothesis related to question 1 was: The quality of the interpersonal relationship between mentor and mentee will not affect college self-efficacy, academic and intellectual development (PVDD 4); personal and institutional goal commitment (PVDD 5); and college grade point average. The second hypothesis related to question 2 was: Which relational domains of the RHI (engagement, authenticity, and empowerment) will impact the mentees' perceptions of changes in self-efficacy before and after mentoring, academic, and intellectual development; personal and institutional goals; and college grade point average?

**Quantitative research questions 1.** Within the framework of research question 1, a nonparametric test explored how the quality of the relationship of all participants' RHI scores (high-quality versus remaining non-high quality) influenced outcomes in the CSEI, PVDD4, PVDD5, and GPA. The Mann-Whitney U nonparametric mean comparison results (see Table 11) indicated that quality was not a factor in student GPA, academic and intellectual development (PVDD 4), institutional and goal commitments (PVDD 5), and improvement in academic self-efficacy (CSEI).

Table 11

*Mann-Whitney U Nonparametric Mean Comparison for High-Quality vs. Remaining.*

Scale	Group 1 <i>n</i> = 24	Group 2 <i>n</i> = 11	Mann-Whitney U	Exact Sig.
GPA	High-Quality	Remaining	88.0	<i>p</i> = 1.000
PVDD 4	High-Quality	Remaining	81.5	<i>p</i> = 0.442
PVDD 5	High-Quality	Remaining	95.5	<i>p</i> = 0.881
CSEI diff	High-Quality	Remaining	64.0	<i>p</i> = 0.962

**Quantitative research questions 2.** Within the framework of question 2, do the variables of the student cohort, gender, relationship quality differences, and total RHI score predict student GPA, changes in CSEI, and the scores for PVDD 4 and 5? The regression analysis yielded no statistical significance for the predictor variables of the cohort, gender, high-quality vs. remainder, and RHI total score (see Table 12 & 13). Also, the RHI sub scores of authenticity, empowerment, and engagement were also entered individually to assess if any of these factors predicted outcomes in student GPA, changes in CSEI, and the scores for PVDD 4 and 5. When the RHI sub scores of authenticity, empowerment, and engagement were entered into the model, the analysis revealed no statistical significance (see Tables 14-19).

Table 12

*Regression Results for Predictor Variables of Cohort, Gender, High-Quality vs. Remainder, and RHI Total Score on GPA and CSEI*

Variable	GPA			CSEI		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Cohort	-.048	.094	-.116	-.028	.089	-.074
Gender	-.078	.297	-.063	-.303	.264	-.268
R. Qual	.156	.362	.160	.140	.356	.162
RHI Tot	-.003	.007	-.140	.000	.007	-.022
$R^2$		.022			.076	
<i>F</i>		.121			.371	

\* $p < .05$ . \*\* $p < .01$ .

Table 13

*Regression Results for Predictor Variables of Cohort, Gender, High-Quality vs. Remainder, and RHI Total Score on PVDD IV and PVDD V*

Variable	PVDD 4			PVDD 5		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Cohort	.012	.025	.093	-.001	.031	-.007
Gender	-.009	.070	-.027	.041	.086	.101
R. Qual	.052	.089	.182	-.011	.071	-.033
RHI Tot	-.003	.002	-.414	.030	.110	-.088
$R^2$		.890			.019	
<i>F</i>		.588			.119	

\* $p < .05$ . \*\* $p < .01$ .

Table 14

*Regression Results for Predictor Variables of the Cohort, Gender, and Authenticity Sub Score on GPA and CSEI*

Variable	GPA			CSEI		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Gender	-.042	.262	-.034	-.270	.251	-.238
Cohort	-.045	.088	-.109	-.025	.085	-.068
Authenticity	-.074	.153	-.100	-.105	.162	-.145
$R^2$		.023			.078	
$F$		.180			.533	

\* $p < .05$ . \*\* $p < .01$ .

Table 15

*Regression Results for Predictor Variables of the Cohort, Gender, and Authenticity Sub Score on PVDD IV and PVDD V*

Variable	PVDD 4			PVDD 5		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Gender	-.025	.065	-.072	.039	.075	.097
Cohort	.003	.023	.021	-.006	.027	-.039
Authenticity	-.078	.043	-.338	-.105	.050	-2.110
$R^2$		.122			.157	
$F$		1.162			1.555	

\* $p < .05$ . \*\* $p < .01$ .

Table 16

*Regression Results for Predictor Variables of the Cohort, Gender, and Empowerment Sub Score on GPA and CSEI*

Variable	GPA			CSEI		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Gender	-.056	.226	-.045	-.275	.245	-.242
Cohort	-.047	.090	-.113	.015	.085	.041
Empowerment	.009	.160	.012	.172	.145	.268
$R^2$		.013			.122	
<i>F</i>		.102			.833	

\* $p < .05$ . \*\* $p < .01$ .

Table 17

*Regression Results for Predictor Variables of the Cohort, Gender, and Empowerment Sub Score on PVDD IV and PVDD V*

Variable	PVDD 4			PVDD 5		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Gender	-.022	.068	-.063	.036	.082	.008
Cohort	-.004	.025	-.036	-.006	.030	-.041
Empowerment	-.051	.043	-.240	-.011	.053	-.045
$R^2$		.061			.010	
<i>F</i>		.542			.087	

\* $p < .05$ . \*\* $p < .01$ .

Table 18

*Regression Results for Predictor Variables of the Cohort, Gender, and Engagement Sub Score on GPA and CSEI*

Variable	GPA			CSEI		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Gender	-.055	.263	-.045	-.272	.254	-.240
Cohort	-.047	.090	-.112	-.013	.087	-.036
Engagement	.014	.161	.018	.009	.148	.015
$R^2$		.013			.057	
<i>F</i>		.103			.386	

\* $p < .05$ . \*\* $p < .01$ .

Table 19

*Regression Results for Predictor Variables of the Cohort, Gender, and Engagement Sub Score on PVDD IV and PVDD V*

Variable	PVDD 4			PVDD 5		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Gender	-.022	.066	-.064	.038	.081	.093
Cohort	-.005	.024	-.043	-.009	.030	-.061
Engagement	-.065	.042	-.302	-.034	.052	-.135
$R^2$		.094			.025	
<i>F</i>		.860			.218	

\* $p < .05$ . \*\* $p < .01$ .

**Discussion of quantitative results.** The quantitative strand of the mixed method study failed to show anything about the quality of the mentoring relationship as a whole or as a subset.



The fact that the Cronbach alphas of the RHI, PVDD 4, PVDD 4, and CSEI were above .7 suggests that a low number of participants might have led to the lack of findings. A .7 also indicates that perhaps a higher number of participants might have led to some substantial discoveries for question 1 and 2.

Overall, the low number of participants and the low level of usable data undermined the planned inferential statistics. Although attempts were made to lengthen the time to increase the number of participants, the additional responses continued to be small. A possible reason for the low participation might be due to the characteristics of the population. For instance, first-generation college students are less likely to participate (Collier & Morgan, 2008; Terenzini et al., 1996). This low level of participation, therefore, weakened the planned inferential statistics.

The employment of nonparametric analysis on the impact of relationship quality and mentoring outcomes as measured by GPA, PVDD 4, PVDD 5, and CSEI revealed non-statistical significance. It could be that the high number of first-year students who participated in the study might have led to the non-significance. One possibility is that first-year FAM participants might not have ample time to establish a relationship with either mentor. Another possibility is the timing of the assessments. In contrast to first-year students, sophomores, juniors, and seniors had adequate time to reflect on the impact of mentoring. First-year students, on the other hand, had just begun the mentoring process and might have been unsure of the effect mentoring had on them.

The regression analysis also failed to show any significance whatsoever. As with the nonparametric analysis, perhaps the high number of first-year students in the study led to the non-findings. The lack of predictability of the variables might suggest that other factors that were not taken into account might have influenced how students perceived who or what influenced

their outcomes. It could be that, although mentor and mentee might have established a positive relationship, the outcome measures might not necessarily be attributed to the mentors. For instance, the demographic data showed that a majority of participants had indicated that their faculty mentors and their peer mentors were not in the same major as the mentee. Perhaps relationships other than a mentoring one, such as having a tutor, might have influenced different mentee outcomes. It could be, therefore, that the mentee might not have necessarily attributed the outcomes that are measured to the mentors. As a result, the findings might indicate that non-mentoring relationships, which were not measured in the study, were influential in the mentee outcomes in GPA, PVDD 4, PVDD 5, and CSEI.

### **Qualitative Strand**

The qualitative results are presented in two sections. The first section includes the participant narratives that resulted from the interviews. The second section outlines the themes and subthemes that emerged. Through the process of coding, the researcher identified five themes and 15 subthemes. The five themes were: faculty and peer mentoring differences, the influences of networking on the mentee, the mentee's need for resources and information, the mentee's need to be meaningful and feel purposeful, and the influence of role modeling on the mentees.

### **Participant Narratives**

**Aurora.** At the time of the interview, Aurora was a sophomore biology major. She had participated as a FAM mentee during her freshman year and was volunteering as a peer mentor. She was not a resident of the state of Texas and was from a low-income family. Aurora was born in Asia, and her family had immigrated to the United States when she was a young child.

Aurora was asked what prompted her to participate in the FAM program. She revealed she had a naturally occurring mentoring relationship in high school, and she recounted her experiences, which fostered her decision to participate in the FAM program. She then disclosed her first experience with the assigned FAM mentor was negative, markedly different from her high school mentor. As a result, this almost led to a withdrawal that went unnoticed by the FAM program administrator. Through her relationship with other program mentees, however, a naturally-occurring mentoring relationship developed with a non-assigned FAM faculty mentor, whom Aurora labeled as her “unofficial faculty mentor.”

Aurora began by relating that she had received an invitation from the university to participate in a unique program that was designated for first-generation college students. She expressed feeling excited that the program would include her having a mentor. She then began to elaborate on some positive and negative experiences that shaped her decision to participate in the FAM program. She related how various antecedents played a role in her decision to join. Aurora began by describing negative experiences, which included a lack of support during high school. She explained how most teachers and administrators from her former high school expressed low expectations of her potential to be successful in higher education. She stated, "When I was in high school, my school was kind of small, and they really did not promote college as much." Aurora began to describe the attitude, low opinion, and low expectations that the counselors had of the students, including herself. She stated,

I really felt that my counselors at my high school were just like “community college is the best thing you guys can do.” And when we asked to take AP classes, cause, like, all our classes are usually AP or honors, they would [tell us], “Why are you, like, working so hard and striving so hard for something like that?” They just wanted us to go to a

community college, [as if] it was the best thing we could do, and that was not what we wanted.

Despite the fact that the counselors and high school teachers had low expectations of her, her parents expected her to go to college, in part because of the sacrifices they had made in coming to a new country. In many ways, Aurora felt she was expected to go to college because her parents expected as much from her, given all they had done to foster this opportunity. Aurora demonstrated this by stating,

My parents themselves promoted college for us. They wanted us to go to college, and that's why they came to the United States. I feel like in Asian families, especially, there's always been a kind of rivalry between me and my sister, or, like, me and anybody else. If my parents meet other parents, and [if the other family has] a daughter, then we are compared to each other, too. [They would boast], "Oh my god, [our daughter] won this competition. How come [your daughter] didn't win any competition?" And, there is always a rivalry between different families, in the families, [and with] friends. . . . It's like, 'If they can do it, then you can do it,' and therefore you should be able to motivate yourself and push yourself to go and accomplish those goals.

Aurora described how the constant comparison between her and her sister impacted her in a way that left her feeling less valued, regardless of what she could achieve. Feeling less valuable than her sister, Aurora sensed that, to be successful, she had to "catch up" and compete with her. Aurora described this as a real dilemma in that, should she go to college under these circumstances, she would be going as an "obligation" to please her parents.

Aurora expressed a fear that doing this would set her up to just "go through the motions." In "following in her sister's footsteps," she expressed the hope of eventually being seen as her

equal. She did not want this for herself and became animated during the interview when she spoke about the true reason she decided to go to college. Aurora stated, "In high school, I actually had one mentor, who, for like four years . . . pushed us to go to the university. He is literally the reason why I am actually in college and doing well."

Aurora was asked to elaborate on her experience with her mentor. She shared, "He was, like, one of the teachers who [told me], 'You're not your sister. I don't expect you to be your sister. You're going to do great things just by yourself.'" He pushed me by believing in me, like, leaving my sister's shadow. . . He motivated me by telling me, "Oh you can do it."

Aurora described being initially resistant to her teacher's confidence in her and shared that she would say things to him like, "Oh, I'm just going [to] become a doctor just, you know, because my sister is [going to be] a doctor. Whatever." Aurora went on to reveal that because of her mentor, she was able to see that she had her motivations for pursuing medical school. She described how she came to realize, "I want to be a doctor because I want to help [people], not because I wanted to be like my sister. [Medical school] is something I wanted to do."

Aurora was asked to elaborate on her relationship with her high school mentor and whether he was assigned to her. She revealed that they are very close to each other and that he had previously mentored her brother and sister. In fact, she explained that "I went to prom with his son and they paid for everything. I didn't have a dress either, and his wife made me a dress; it was really cool." She disclosed that he was not assigned and that the relationship was natural. In fact, she never thought of him as a mentor, explaining that he would just naturally help students. She stated,

I don't think we ever labeled him as a mentor. It's just in our minds; he is our mentor. I don't know if that make sense. I guess we can label him as my teacher too, but he is my mentor. The [label of] mentor just fits what he did. It's not what he labeled himself; it's just something I guess we try to define what a mentor means, he is what pops into our minds.

Aurora further explained that her mentor motivated and pushed them forward by setting higher expectations. He also helped her complete scholarship applications by reviewing her essays. Her mentor would provide information about opportunities, such as scholarships, and used his network to invite former students to talk during her college class. Besides, he would also use his contacts to help former students find jobs. She explained that he was there for everything. She elaborated that what he did for her was

Just not [about], "Oh let me help you with school, but let me hear about your problems, about your relationship problems, and everything." . . . [He] really went out of his way for me. He would go out of his way for a lot of us. . . . He does things like that. He knows if you need help, he will help you. . . . He was great! I'm still in touch with him.

Aurora was then asked in what ways, if any, her relationships with her peer mentor and her faculty mentor impacted her academic experience. She stated that she had two mentors in the program. She elaborated that the first assigned faculty mentor did not meet her expectations, which led her to stop attending the mentoring meetings. About her faculty mentor, she said,

We never actually did as much as I thought we would do. Like I think we went out to dinner once, and we went to the aquarium, but that's all we did. I did one thing with each mentor once and then after that; there was no follow-up with my mentor or anything. So,

my [faculty] mentor, the mentor they assigned me with, I guess it depends on the luck of the draw; I think I didn't have a connection with him at all.

Aurora noted that being assigned a mentor was no guarantee that a mentor and protégé would connect. Evidence from the interview showed that she did not request a second faculty mentor. Aurora indicated that "obviously, mentees talk to each other and we find [through] each other what others are doing with their group and stuff." She added that because of that, she met a new faculty mentor who was not assigned to her by program administrators. She revealed that this relationship was enjoyable and that it inspired her to become a peer mentor. She explained,

One of the reasons that I still really, really like FAM and decided to become a peer mentor for FAM, is [because of] my friend [who] is also in FAM. Her mentor actually took us everywhere and so they kind of just adopted me into the FAM program. And that's what made me really enjoy it.

Aurora then related her experiences with her new mentor and the extent of their relationship, which she ranked in comparison to all her mentoring relationships. She stated,

While I didn't have a connection with my [first] faculty mentor personally, I had a connection with a different FAM mentor. [The second faculty mentor] would invite us to go to lots of [activities]. We went biking [and] to this jazz concert. [In November, I was] unable to go home for Thanksgiving because I live far away. He actually invited us to Thanksgiving too, and we met his family, and his kids are adorable. He even follows up, [to see] how I am doing in classes [asking], "How are you doing now?" I just saw him yesterday. We were just sitting, and we talked over an hour before we realized, "Oh, an hour has gone by we need to go do stuff now." He is really cool. After my teacher from high school, he would be the next one.

I asked Aurora to describe the circumstances that led her to meet her second faculty mentor and whether the program administrators agreed that her new mentor would be assigned as her mentor. She indicated that this mentor was never assigned to her, adding that she was drawn to him and, as a result, she was relieved, stating, "It was not part of the program itself. He just opened his arms and invited me into his group. Actually, this Thanksgiving we are going to meet again . . . Like it's FAM family back again!"

I asked Aurora to elaborate on what she meant by "open arms," and she explained that assigning a mentor creates an obligatory relationship, in which they have the discretion to decide when and how to meet or which people to include. The mentors, she elaborated, are responsible for their assigned mentee, and she specified that while they do not necessarily refrain from helping other program participants, their primary focus is their assigned mentees. Aurora shared her surprise, saying, "The fact that, even though I was not assigned to him, I wasn't his responsibility at all, [and yet], he still reached out and invited me to go with them, I just personally feel like he didn't need to do that. The fact that he [did] do it is what really made an impact for me."

Aurora further explained that the shared experiences with her faculty mentor in social activities were unforced or not obligated, and she shared her surprise, regarding how genuine he was with her. She said,

One of the very first events we [did was] the haunted house. He met me, and I guess we connected. We all had a lot of fun doing the haunted house. I can't believe he went through the haunted house with us. That was interesting. He was [definitely] the whole reason I am still in FAM. [The program] works when the mentor really cares and extends his reach to people outside the group. That's really good; that's what happened.



Aurora added that after she met him, he emailed her friend so she could invite her again to participate in other activities.

I asked Aurora what her belief of a "connection" means to her. She revealed that she believes it is the mentor's personality and demeanor, explaining, "I just feel like sometimes there are just people that you can easily interact, and you meet them, and you can have a conversation, and everything is great." She explained that with her assigned mentor, she had poor communication because the mentor had an attitude of disappointment towards her. Aurora elaborated that her approach might have been fostered by the personality questionnaire that indicated to her mentor a need to improve communication skills. She added that she felt her mentor's attitude towards her was negative in the few meetings that they did have together, disclosing that she was made to feel inadequate. Aurora said,

I always felt she was expecting more and more of me. I don't know how to explain. It was just really [difficult to] talk to her. I felt like every time I talked to her; I felt that I was disappointing her. I didn't feel like a [disappointment] to myself. When we went through the results, she just made me feel I wasn't adequate enough. Based upon my results, it said that I had poor communication skills. But, I don't think I have poor communication. I mean, I understand that I might be at a loss [for] words, but I don't think that reflected who I am or what I am. So it was difficult communicating with her personally. With the other mentor that was my friend, it was very easy communicating with him.

Aurora also said that the personalities of her assigned mentor and her unofficial mentor were very different. She described her assigned mentor as distant, disinterested, and dismissive of her concerns, which contrasted with her unofficial mentor. She stated,

I think it was her personality. She didn't [have an] opening personality; she wasn't smiling; it wasn't inviting. Smiling, yes! She doesn't smile often. When we would talk about our problems and stuff, at one moment she was focusing on me and but then at the next, I would feel like my problem had [not been] adequately addressed. She would move on already to the other mentees. I just didn't feel like I was getting the attention. I didn't really appreciate how she would ask about how we are doing and if anything was wrong. [I would] tell her what's wrong, but [she would] brush it over and move on. [My] other mentor, if I tell him I was having a problem, we would talk about it, and we work through it and figure it out. [My unofficial mentor] was [a] much more happy, jolly fellow than [my assigned mentor].

Concerning her comment about not being able to meet her assigned mentor's expectations, I reminded her about her earlier statement, in which her own experience with her assigned mentor did not meet *her* expectations. Therefore, I asked her to elaborate on her expectations. She began to cry as she answered the questions, revealing,

When I applied for the program, I did not expect the family that we would create. Aside from the faculty mentor, we created a family ourselves. I wasn't expecting that. I guess since I am far from home, I expected a support system. If I was struggling, [I would want] for someone to be there, to be understanding—someone to talk about it [with]. I was looking for people I could be with, so I could feel like myself and not feel like I wasn't good enough to be there.

Aurora's self-worth or the idea of how she was valued was an issue that she previously raised, regarding how her family fostered competitiveness between family and non-family members, as well as being made to feel inadequate by her assigned mentor.

Regarding her peer mentor, Aurora also began to describe her experiences, in which she revealed emotional, social, and academic support. The closeness of living on campus housing, attending the same classes, and establishing relationships with people they commonly knew facilitated their contact. In fact, she shared that their relationship had transcended the peer mentor-mentee relationship. She explained,

I actually have a good relationship with my peer mentor because she was around. I think it was spring break and I hadn't gone home either. So we had this whole movie marathon going on. She is not in my major, but she is in my brother's major and so there is this whole weird connection thing going on there. We just talked a lot. She didn't really help me with, like, my school problems, really. But I don't have that many school problems. [I did have] one science class that I had problems with. She mostly helped me with [getting] over [it]. I think I was homesick and she really helped me get over that. She became my extended family.

Then I started playing soccer with some friends, and her boyfriend played soccer, and so we started having that connection there. So, even if we never met officially like peer mentor and mentee, we always met together as friends just playing on the soccer field. So it was no longer like an obligated relationship with each other because of the FAM program. We just integrated each other into our lives, and so we became friends not just [with] mentoring stuff.

Aurora explained that concerning academic support, her peer mentor would direct her to the tutoring center. She added that her peer mentor would also encourage her boyfriend to help Aurora with courses in her major because her peer mentor was not in the same major as she was. She also added that her peer mentor provided emotional support, especially when she would

"freak out" about her grades not meeting her standards, as she perceived a grade of B and below as failing. Her mentor also taught her study habits. Aurora expressed that, as a result of their close relationship, they learned to not only empathize with each other but also to be respectful of each other's point of view, stating, "We have to understand where each person is coming from and not get upset because they are not agreeing with you."

As an outcome of Aurora's experience, she indicated that she was inspired to become a peer mentor because of her relationship with her peer mentor. She detailed that her motivation is to help other students. She revealed,

I've always wanted to be in a situation where I could help others. It's so much easier if you talk to somebody who has done it recently. It's much easier to connect with them. I just want to [give] back to the future mentees. My peer mentors really motivated me to become a mentor. Despite the fact that I have assigned faculty mentors, [they] did not motivate me to do so.

Aurora elaborated that having a close relationship is a mutual support system between herself and her mentees, and that everyone uniquely contributes something different to the group; everyone learns from everyone. She explained,

We always hang out with each other outside [of mentoring]. When we see each other, we wave hi to each other and talk to each other. It's like a support system. It's not like me teaching them what I know, but they are also going to bring and teach me stuff that I didn't know, because of our different backgrounds and where we came from. It's a shared, give-take relationship; we each are giving each other something that we would have never have had without the other person.

Aurora was asked what kinds of things, if any, would she change about the FAM program, and she indicated that she would like to see a focus on the aspects that facilitate relationships, stating, "Similarity breeds friendship. [Having] friends in common makes it easier to talk about it." She reflected on her experiences with her mentors and stated that, for mentors to be successful, they are required to put in an effort, to understand the population they are mentoring, and must also understand their motivation to be a mentor. Furthermore, she added that mentors could foster mutual learning from their mentees, explaining,

I think one of the things that should definitely change is only having [a] faculty mentor [who is] willing to spend time and actually do it right, get to know the peer mentors, get to know the mentees, and to do [activities] with them. Because that's what I think the program is about, [learning] from each other and to gain insight and for them not to be so scared about being in college. It's a first-generation student [so] nobody has come to college before them. It's very daunting [for the mentee] because what if [they] don't succeed. Then what? The [mentors] should prioritize their time and focus on the mentees and not on everything else. Certainly, [if] they don't have the time then they should obviously not be a mentor.

Aurora further explained that mentors should be motivated primarily to help the mentee. She speculated that perhaps mentors might be motivated to participate in mentoring for monetary reasons, about which she flatly stated, "If faculty mentor was just doing it for the stipend then they should not be a mentor." She further elaborated that joining the FAM program to become a mentor for the stipend is the wrong reason to be a mentor and stated that mentoring is about helping and caring. She shared that, "I felt like the right reason would be because you really want

to mentor [a] younger mind and to help them develop and help them flourish. I felt like you would have to really care about them.”

Furthermore, Aurora said that "caring" also means that a mentor should be able to talk to their mentee genuinely to help them improve and reiterated that mentors should participate to help. She explained,

[Mentors should] also [be] able to detach [themselves]. [If] you guys are friends, then sometimes people think that friends say only nice things to each other. But I think a faculty mentor should be able to say the things that the mentee might not want to hear but needs to hear to improve themselves. They should be able to do that. They should not be in it for some personal gain or to make them feel better about themselves but because they really want to help that person. They really want to mentor that person and help them flourish to their best potential.

Aurora elaborated further that being a genuine mentor means being able to be upfront and proactive with their mentee. She explained that mentees perceive themselves to be doing better in their classes when, in reality, they are not. A mentor should be able to provide accurate feedback. Aurora stated, “[A] faculty mentor should be able to tell her straight to her face, ‘If you don't pick it up now, you won't be able to pick it up later.’ They have to; students should know exactly what's going to happen if they don't study and stuff.” She further added that her peer mentor made an effort to ensure her success when she was having a difficult time with her class, stating, "She really got on top of me for that class."

Aurora also indicated that the FAM program could expand on activities that are inclusive of all mentoring participants. She reflected on the retreat, which is held for all program participants at the start of the year as an activity where everyone gets to meet each other. She

explained that grouping mentees by their major made it easy to connect with one another but indicated the importance of building relationships outside her mentoring group, explaining,

I think we're missing a critical part [leaving] out are people [not] in our majors because we're so focused on our major, and we're not really learning about everything else [going on] around us and the world. It would [be] cool if we have more complete FAM events together.

Aurora further elaborated that activities should be conducted off campus and on campus, explaining that everyone in FAM has met everyone during the retreat but indicated that they don't know each other on a personal level and haven't had the opportunity to become acquainted with each other more. She further pointed out that, if everyone was in more frequent contact with each other, they could be mutually supportive of each other because of the similar background. She revealed,

[FAM participants] just say "Hi" when passing and that's about it. I just think if we had more contact it would be easier to build a relationship because these are the people you are going through college with. You are going to know them through your college life, [which] would be easier because they will make you feel [more] at home. It's the perfect place to find your support system—[having] those friends. It's hard to contact each other when you're in different majors; it's [the opportunity is] just not as available as it could be. We know they exist [and that] they are around, but we don't have a set time to meet them. So we actually never go meet them and get to know them and make those connections.

When prompted if she would like to add anything else, Aurora brought up a concern regarding the selection process for peer mentors. She explained that she understood the initial

process of hiring but indicated that most peer mentors are second-year students and that rarely are there third- and fourth-year peer mentors. She explained,

I'm just wondering if this is because the sophomores who used to be in FAM, [didn't] want to become mentors [again]. Or is it that [the program administrators] choose freshman to become mentors instead of juniors and seniors? I guess I'm confused about that. I want—if it doesn't exist yet—I want [FAM] to have something where you could still be a mentor, or be a part of FAM, or continue with FAM [in the] junior and senior year.

She revealed her intentions to re-apply to become a peer mentor again, stating that she really likes her mentees and her faculty mentors because of the activities that they do. She further elaborated that everyone, including herself, takes turns choosing the event, and she rather prefers building consensus about the group activities rather than imposing her own choices. She described the activity selection process:

Everybody gets to pick what they want to do once a month. It's not like I am dominating. Oh, I say we are going to do this, and so the whole group is going to do this—no. We're trying to make [it] where they pick and work it out because it's not going to be fun if one person is upset and doesn't want to go. It's going to ruin the mood. So [we] always try to find something that everyone wants to do.

Aurora was then asked what kinds of things, people, experiences, and opportunities have been the most helpful to her during her time at the university. She revealed that shared experiences and shared similarities had had an impact on how she perceives faculty and other relationships with adults, explaining, "It's very difficult for students to talk to teachers." She explained that roles have a way of limiting how she interacts with faculty, but that perceiving



them in different roles can make it easier to have a relationship. She explained that, at the time of the interview, her current faculty mentor "boss" fulfills different roles for her because she is also her teacher, and Aurora is her research assistant as well. She explained that, before her current roles, Aurora had taken a class with her, and she was surprised when she learned her teacher became a mentor. Aurora related,

So, she being my teacher, I didn't know how to approach her about [doing] research with her. As a peer mentor, we weren't notified who our faculty mentor was until three weeks into school. [When] I found out that she was my faculty mentor too, I was like "Woah!" Then we went to the retreat together. I guess the connection between us as a student and teacher was more. I guess [back then] I was more afraid to talk to her. [Our] relationship between me and her as a peer mentor and [her as a] faculty mentor [made] it easier to talk to her. I guess the connection made it easier to talk to each other. Being FAM helped me be able to get the research position right now because our relationship was no longer just student-teacher, but now it was peer mentor-faculty mentor.

Aurora further elaborated that, in her experience, she has been taught to respect adults, in which interacting with an adult meant behaving and acting differently. She explained that respecting authority is something that is reinforced while in high school. She added that that type of relationship makes it difficult to communicate with teachers. She explained,

I guess that is something that schools don't teach us to get over. As long as we have that mentality, that as long as they are teacher and I am student, it's hard to communicate with each other. In my head, there was a change about how our relationship is, and it made it easier to talk to her.

In contrast, Aurora explained that having a peer mentor that is similar in age and background makes it easier to build a relationship, saying, "We keep up with the same thing. We like the same fashion; we talked about guys. You would not talk to your faculty mentors about guys or fashion or anything like that . . . I guess it's been ingrained in our heads that you don't tell [them] this, but you can tell your friends this."

I asked Aurora about her relationship with her "unofficial" mentor in light of her perception of adults, and she explained her opinion of him changed as a result of shared experiences. She revealed,

With my [assigned] faculty mentor, we only met once. It was hard to break that wall as teacher and what their teacher [role] resembles. [My unofficial mentor] was a teacher and he slowly moved out of that teacher [role] and [became] someone as an adult friend. It's not like [a] close-knit friend, but adult friend. It's just the way he acts around us. I mean he went to the haunted house with us, with screaming 18-year-olds and he was screaming with us. It was no longer a student–teacher boundary or faculty–mentor student boundary. It was a human relationship where we are all screaming in this haunted house together. I guess when you go through stuff like that, it's so much easier to talk about things. [It's] the common connection. Now, we just laugh about the haunted house a lot.

Aurora was asked if anything else had helped her at the university, to which she responded that the size of the university made it more intimate for her and made it easier for her to build relationships. She expressed that, regarding a larger university, "I would be too easily distracted, and I would be a goner." She added that the small size of the class made it easier for teachers to provide more individual attention. She stated, "I think I would flourish under the direct influence. My biology teacher was another influence on me. We are still connected, and he

writes me a letter of recommendation and keeps up with the research.” As a result, a closer relationship with faculty was indicated by Aurora to be something that benefitted her. She said that the size makes it easy for teachers to talk to her and feel that she is cared for and welcomed at the university. She addressed how close her relationship with her professors was, sharing,

For me, I just see first-name-basis [as being] closer. She really keeps up. She really knows about my relationship problems, my grades and family problems. So she’s definitely someone I also have a connection [with].

Aurora elaborated that her teacher does not treat her indifferently. She asks Aurora about her well-being. Aurora revealed, “When I got sick, she was like, ‘are you going to be O.K? Do you want to go home and rest?’ I’m like ‘O.K.’ It gives me a sense of people who care. That is really nice.”

Aurora further added on the relationship, explaining that she has experienced "caring" from a financial aid administrator who has frequently traveled back to her home city. She explained that the administrator has come to know her family very well and that he is always helpful towards her. She described him fondly, stating,

He looks like Santa Claus! Before I came to [the university], my brother [who] is a year older [was already at this university]. [The administrator] would come to where I live; he would bring news [of] how my brother was doing. He would be like, “How’s your mother? Is there anything that your mom wants me to take to your brother?” And we would give him a huge package to bring back to my brother. He knows every time I see him around we would hug each other [and say], “Hey how have you been?” [It’s] like chatting with an old friend, but, that adult barrier is not there with him. He has a jolly

personality that doesn't make you afraid to ask him stuff. I [got] over it really fast . . .

“Can you take that package back to my brother?”, and he would say, “Yeah of course!”

Lastly, Aurora indicated that her biology teacher has been very helpful in helping her with information on scholarship programs and has also helped her with the application. She also explained that her biology teacher had also provided her with emotional support, such as when she became frustrated and angry with lab work that she was having difficulty performing. Aurora summarized her view that in her experience, a smaller university means more individual attention. She related,

I don't think I would have gotten that opportunity if I would have stayed in-state [university]. I would be one of 800 [students]. How would a teacher single me out for an opportunity? I think it would have been harder for me to do the research if I went [to a state university].

**Lucia.** At the time of the interview, Lucia was a senior and had been one of the first cohorts of students to participate with FAM in the fall of 2010, during her freshman year. She was an out-of-state student who, at the time of the interview, was volunteering as a peer mentor in the FAM Program. Lucia was also working as a resident assistant at the student dormitories.

Lucia was asked what prompted her to participate in the FAM program, to which she indicated that she was not notified about the program through the mail as was the case for other students. She stated that her English professor found out that she was a first-generation college student and referred her to the FAM program. Lucia shared that being referred to the FAM program by her English professor was an early act of caring that she experienced at her university. As a result, this act towards her fostered a passion within her that eventually led her to volunteer as a FAM peer mentor.

Lucia began by explaining that she had already enrolled in classes and was not aware of the FAM program. Her English instructor had told her about the FAM program, after having read one of Lucia's assignments, in which students were asked to write about what they were excited and nervous about being in college. Lucia wrote that she was nervous because she was the first in her family to attend college and that she had no idea what the university expected of her as a student and therefore she did not know what she was doing. Lucia described her genuine surprise that her instructor took care to inform her about the program. As a result, Lucia remarked that she jumped at the opportunity to join, stating,

The fact that she actually took the time to go out there and ask me to join was really nice, and the stuff that she told me [about] the program, I was really interested in [it]. I'm from out-of-state so any help would be good, and she told me about how I'm going to meet more students in my situation. I'm going to meet more faculty because I'm from [the first cohort], before the peer mentors [were part of FAM]. I was interested in [the program and] getting to know more students and faculty, and it could help me with that.

Lucia also began to explain that her motivations to join first came out of the fact that she was from out-of-state and that she was worried about how she was going to pay for college. She mentioned that her initial concern was to get into college first and then worry about paying for it later. Once admitted, she became concerned about money. She immediately sought financial aid resources and stated,

I was really worried about financial aid—how I was going to pay for next year and pretty much how things went. I had always told myself, "Just get into college, and you'll figure out the rest." Then I got into college. So, I was at the point where I had to figure out the rest. I was like, "Oh crap, what do I do now?" So I was looking for [information]. I kept

bugging financial aid and the other offices, and they kept just bouncing me back and forth. So when she [English professor] told me about this program, I [thought that] maybe they can help me, and it was really helpful.

Lucia was then asked in what ways, if any, her relationship with her peer mentor or faculty mentor impacted her academic experience. She immediately pointed out that she was not an academically weak student. She also reminded me that she did not have a peer mentor because she was from the first cohort that participated in the FAM program. She did acknowledge, however, getting help with academic information regarding registration, understanding her grades, and other related information. She then explained how faculty mentors and peer mentors can impact the mentoring relationship differently. She described her faculty mentor as very approachable and helpful with non-academic issues. She elaborated that she was able to ask her mentor about a personal problem, a private "drama," that she was having with her dorm roommate. She shared,

I had a really bad roommate my freshman year. She was awful and always lying about stuff. She faked three pregnancies. So I went to [my faculty mentor] to talk to her about all this, and it was just nice to have someone there to talk to someone who wasn't biased, who wasn't going to gossip because I didn't want to get my roommate in trouble. It was just nice having this person there, who was outside all of my [social] circles and I could just go to with all my questions and concerns. Either she could answer [my questions], or she never told [me that] she didn't know [an answer]. She was always [saying to me], "Let me ask this person or let me send you to this person." So any question I had, she [would] answer them.

At the time of the interview, Lucia was a senior student volunteering as a FAM peer mentor. Being from the first cohort of mentees in the program, she did not have a peer mentor. As a peer mentor, she spent a great deal of time talking to other FAM peer mentors, FAM participants, and volunteer FAM faculty mentors. She reflected on those conversations, stating that,

I have seen some faculty mentors that keep it [their relationships with their mentees] more distant. I do remember that. We'd be in our groups [groups of FAM peer mentor and mentees] and talking about what we did in our groups. [FAM peer mentors meeting with their mentees and their faculty mentors] and they [other FAM peer mentors] would tell me, "Oh no, we [other FAM peer mentors and their faculty mentors] never talk about these [personal] things, we never bring them up." [My faculty mentor] never had those boundaries so I could just go to her for whatever.

She commented, however, that if she had had a peer mentor her freshman year, she would have asked for their [peer mentor's] advice regarding the "drama" with her roommate instead of her FAM faculty mentor. She said that the reason she would have likely asked a "FAM peer mentor" was that, possibly, the peer mentor would have already faced a similar situation like hers. Lucia further explained,

I did notice that, talking with a lot of the other peer mentors, [I realized] that their [mentoring] experience was different. All these issues I had, I'd go to a peer mentor instead of [a faculty mentor], but I don't think not having a peer mentor impacted me badly. If I would have had any other faculty mentor, it would have been different. Had I had a peer mentor, I would have taken my [roommate] problems to them.

I told Lucia that she had no other choice than to discuss the "drama" with her FAM faculty mentor and invited her to explain how she was able to share things with a FAM faculty member that other FAM participants may not have been able to do. She promptly described herself, stating,

I wasn't very shy; I just went and asked her. But maybe for other students, it might be different. Because a lot of other groups [FAM faculty mentors, peer mentors and mentees] kept it very professional and just talked about academics. We [Lucia's FAM peers and faculty mentor] weren't like that at all, me and my group.

I asked Lucia to further elaborate on the impact of "professionalism" from what she saw with the other mentees. She clarified,

I guess it's not really professionalism. All the faculty mentors are all very professional and good mentors. It's just that they all do it differently. Some just want to keep it all about academics and [are] just going to [mentor] twice a semester. [The faculty mentors would tell their mentees] "These are the [scheduled] days that we meet and we talk about academics." Then there are other mentors [who say] "Hey! Let's go watch a movie this weekend." They're both good faculty mentors; they're just different personalities.

Depending on [which faculty mentor] ends up with [you], definitely impacts whether or not you like the [FAM] program.

Lucia commented that it is the "luck of the draw" as to which faculty mentor and peer mentor the mentee is assigned. As a result, she described the impact of different personalities, commenting on her mentoring relationship. She stated that her faculty mentor helped "me stay with it because I did see some students that didn't have that connection [with their faculty mentor] and they stopped coming to the events and just overall [mentoring]."



Lucia was then asked what kinds of things, if any, she would change about the FAM program. She became very animated and discussed her concern for the FAM program passionately. She pointed out that the size of the program and the difficulty of matching a mentor and a mentee were areas that she would want to see improved.

Regarding the size, Lucia said that the program initially had about 60 to 80 mentees, and when it expanded up to 120, it made it more difficult for mentees to connect with each other. She elaborated that one of the most critical activities for her in FAM was the retreat for all program participants. She stated,

We just had this really big retreat, and the retreat is where most of the connections are made. Usually, if the faculty mentors, peer mentors, and the students don't click at the retreat, it's really hard for them to find that connection outside of that retreat; and since we had so many people there, there was just no time for that. There was no time to really get to know each other. There was really no time or space for any of that, so we didn't really make that connection as well as we had the year before. [As a result], we made two smaller retreats, so the groups are only 60 people. Then those groups get really close, but we do bring the two groups together; it works really well. They have a lot more time to meet each other, to meet the other students that are with them, so it works out better when there is a smaller group.

Lucia stated that, ideally, mentoring groups should not be more than four mentees assigned to a FAM peer mentor because a more extensive group makes it more challenging to manage. As a result, the size of the group can have an impact on the mentees' experience. She explained,

Anything above four is too much. The year that we had 120, I had five mentees, and it was too much. We all couldn't fit in a car, so we couldn't all go out places. We were always stuck on campus. We couldn't [coordinate with] all those [different] schedules. Four students get to know each other better, and we get to manage things a little bit better than when it's five . . . If it's too big, you can't ever make that one-on-one connection that you need. The relationship just never forms.

Although Lucia indicated that group activities were convenient for mentoring, she explained that, in a group format, mentees might find it difficult to bring up questions of a personal nature. For this reason, she said that, in addition to group mentoring, she also meets with her mentees one-on-one. Lucia then began to discuss how her mentees were assigned and potential problems that can arise in the matching process.

Lucia explained that when FAM mentor and mentee are not appropriately matched, the mentee's experience can be potentially detrimental. She explained the matching process for mentor and mentee and described how mentoring participants completed information about themselves. Lucia stated, "We [FAM program] ask [students] about their interests, what they are they looking for, and we match them up as the responses come in. [Similarly,] we [also] match up the peer mentor and faculty mentor [in] the same way."

Lucia explained that what complicates the matching process is that, in many instances, students are accepted late into the program and are rushed through the process of assigning them mentors and never get appropriately matched. She stated,

We wanted to pair up the students with [FAM] faculty [mentors] that matched their expectations. But, there are always students that don't answer the questions well enough,

or they just put they'd be happy with any faculty mentor. So then we put them with any faculty mentor, and [they then tell us] they're not happy with just any faculty mentor.

Lucia further revealed her personal experience with mismatching, in which the meaning of [FAM peer] mentoring differed between her and her assigned FAM mentee. She said, "We pair up people based on what they want to do and with people that want to do that. [For instance,] I was really willing to do whatever and they paired me up with a student that just wanted to [only communicate through] email. [As a result,] we didn't ever really click, so I wanted to avoid doing stuff like that."

I asked Lucia to clarify what she meant by her mentee "just emailing." She explained that people could have different understandings of mentoring. Lucia further recounted her experiences with this specific mentee and stated,

[My assigned mentee's] definition of [mentoring] was different. All she wanted out of the program was someone who checked in on her about grades through email. That was it. She didn't really want to go out to the events. What she wanted out of the relationship and what I wanted were really different. So I kept trying to get her to come to our events and meet with me one-on-one, and she just wasn't having it, and that's fine. It's just, for me, that's not a mentoring relationship. For me, mentoring, it's going out, getting something to eat, you telling me what you're going through so I can help you, and that's just not what she wanted out of it.

For Lucia, mentoring was about building a relationship and feeling she was making a positive impact on her mentees' college experiences. Her mentoring had been about connecting with mentees, and because of this, she made every effort to stay in communication with her mentees, and stated,

For me, mentoring means that I am willing to be there for you no matter what. I told my students [mentees] that they have my numbers, my email, [and] my Facebook. No matter what happens, please call me I will answer, and I did get calls at three o'clock in the morning with them crying and I was okay with that. That's what I promised, and that's what I was willing to do.

Lucia was then asked what kinds of things, people, experiences, and opportunities have been the most helpful to her during her time at university. She revealed that the support she received, her willingness to be involved, and her passion were the reasons for her staying at her university. She explained,

The reason I'm still here is my family. Having that family support really did help me stay here. The reason I'm still here is that I got involved. I joined a lot of [organizations], and that helped me make friends. I see [that] students that don't join groups that just go to class and stay in their rooms. They don't stick around. Those are the freshmen that leave the second semester. They don't have a reason to stay at this school. I can get the education at any school I go to, but I'm not going to get FAM, I'm not going to get the groups, I'm not going to get the friends that I made here.

Lucia reported her involvement with the FAM program gave her a sense of belonging. Her experience as being a FAM mentee inspired her to become a FAM peer mentor. She claimed that participating in the FAM program gave her that opportunity to be involved. As a peer mentor, Lucia felt that having mentees holding her accountable was important, and stated, "I have to keep doing well in school because I have these four people looking up to me. They definitely helped me stay here."

Lucia had a vested interest in the success of the FAM program. She expressed,

I really, really, really, got hooked on FAM. When I joined it really helped me. All the things I was lacking, I was missing, it helped me with that. I had all these questions and [my faculty mentor] answered every single question I had, so, once I found the program, I stuck with it. Because it did so much for me, I want to make sure it stays an active program, and it can help others.

Lucia cringed at the thought of FAM mentees having a negative experience and expressed concern they may exit the program with the belief that "mentoring is a bad thing." She wanted the FAM mentees to understand that there's a point to mentoring. In fact, that is the reason why she stayed in close communication with her mentees, and that is why she was also close with her FAM faculty mentor because she understands that the support has played a crucial role for her decision to stay in college.

I asked her if there were any other experiences about which she wanted to elaborate. Lucia said that she was also involved in other organizations, such as the Prelaw Society and the President's Ambassadors, and she was also a resident assistant. She stated, "I can't pinpoint one experience, it was everything. Not once have I been serious about leaving my university." Furthermore, she added that university policy was accommodating, disclosing that this university "has always been very immigration friendly. They've helped me out with all my papers and all that stuff. Having that opportunity to be in a place where you can ask someone all that, it really helped me stay."

Immediately after describing her participation in other activities, Lucia returned enthusiastically to discuss the FAM program. She stated that she highly recommends mentoring for other universities but cautioned that a mentoring program should be done right. She specified

that participants have to be clear about why they want to participate in the program because it can influence their mentoring experience. She explained,

Unless you have the right people, [mentoring is] not going to work. They have good intentions; if it doesn't have proper structure or have people that are willing to put in the work, the students are not going to get anything out of mentoring. It isn't just assigning a faculty [mentor] member to a student. Mentoring is taking the time to make sure that faculty knows how [to] answer the questions, knows how to help that student out, [and have] students that are willing to do it. I have seen it where students don't want to be [mentored] and that's fine. It needs to have willing participation from both sides.

She stated that a mentoring program should have the right people and noted that the participants in the mentoring program share the responsibility of making the program work. She explained that everybody involved with the FAM program must be willing and motivated to participate. Lucia stated,

I ask them [prospective FAM mentees] why they want to join the FAM program, and they'll say "It'll look good on my resume" or because "My mom told me to." And those students don't last in the program. It doesn't matter how awesome FAM might be; if you don't want to be in it, you're not going to get anything out of it. [Moreover,] you can't force students into [a] mentoring relationship. They have to want or at least be willing to listen to the peer mentor or faculty mentor and [be willing] to get to know the people in the group. And if they don't have that attitude, they are not going to get anything out of it. They are just going to end up hating mentoring.

Lucia maintained that mentoring could also benefit the mentor in the same way the mentee benefits. She hypothesized that established faculty members might not perceive an

immediate benefit to mentoring, which may be one reason not all faculty members volunteer to participate in the FAM program. She explained,

It's hard to find 20 faculty mentors who have the time and interest to do this. A lot of [the faculty mentors] are newer faculty, so it's interesting to see how it's also a mentoring program for them. They get to see—they're new to the school—see how [this university] works. It's [not] just for the students but also for the faculty mentor and peer mentor as well.

**Sofia.** At the time of the interview, Sofia revealed that she was a sophomore biology major. She had participated as a FAM mentee during her freshman year. During the interview, she stated she was from out-of-state and that her family was low-income.

Sofia was initially asked what prompted her to participate in the FAM program. She explained that she had heard about the program and read the information on the website. She elaborated on her interest in participating in the program because of the financial difficulties she had paying for college, sharing, "My mom is a single parent, and we don't have enough money to fund college." What she found attractive about the program was the help she could get in receiving information and connecting. She explained,

You have mentors that can mentor you through your academic [career], and you [also] do some retreats with the FAM program. You also do volunteer activities, which are good [for] networking. [My mentors are available] just in case I'm having problems with my grades or finances. They can help me. I can talk to them and hopefully they can help, which they did help me, and also I have some friends in them. You just meet a bunch of students that you'd never meet just on campus. The professors in [the FAM program],

they understand, [and] they know you're low-income. Since they know you, they can help you more, so I think it's a good connection too.

Despite her enthusiasm for the program, Sofia related that before she joined the FAM program, she was concerned that she would not have enough time to participate. She described that, at the time, she did not live on campus and was commuting to school, and she also had a job which limited her time. Furthermore, adding to her concern was the fact that she was a biochemistry major, which she felt was a time-consuming major.

Sofia indicated being open minded and stated, "If it didn't benefit me, I could always get out of it." After being told about the program, Sofia did her research about FAM and stated, "I talked to the people in it to see if it's worth my time. They actually work around your schedule. They don't tell you that you have to go. They won't force you to go, and it's a good new experience . . . They're really flexible, which I like. College students have to plan everything. I really like the flexibility of it."

As a result, Sofia decided to join the program and was pleasantly surprised that her experience in the FAM program kept getting better and better. She described having received help with academics, networking, activities, and motivation for exploring her career choice. She elaborated,

[My peer mentor] told me [about] the school activities, [which is the] good part because it [kept] me in school. Since I'm a commuter, I don't know anyone. I actually work outside of school too, so I don't have time to socialize. With [my peer mentor] being there, I've met more people, and she gives me encouragement. I actually talk to [mentors] personally about how I failed my first bio test, and it was crazy. [The faculty and peer mentors] talked to me in a way, like, "Do you really want to major in biology?" They



made me think in a different way. They didn't force me, but they got me to open up. [My mentors told me that] "You have to be a doctor because you want [it], not because your parents want it," so they opened up for that part, so that's what I like about it. [The FAM program also conducts] activities, which I like because I can't afford to travel places, so they provide it for you. Going to the ranch and hanging with your friends, with the mentors, it's like a new experience for me and for other low-incomes who can't afford to travel.

Sofia was asked how her relationships with her faculty and peer mentor impacted her academic experience. She revealed receiving academic help, advice, and role modeling from her mentors, and as well as an awareness that she, too, is a role model. Sofia began to talk about the academic help she received from her mentors, stating that the demands of college are higher than high school, and therefore, she found it difficult to transition to higher standards. She revealed, "I mentioned that I wanted to be a biochem major and it scared me. Getting a 52 on my first bio test kind of tells you a lot." She described her mentor's help, stating,

They asked me how I studied, [and about] what I do in my free time, [and] what techniques I have to do. They walked me through a lot. "Just take it again," which I did better on the next one . . . They talked to me in detail, "What do you do for school? How long do you spend studying?" They told me to read my books, talk to my bio professors to see what I can do to raise my bio grade, [and they gave me] techniques on how to study more. Coming to [this university and] transitioning to higher standards was hard.

Sofia described the emotional toll of failing her first biochemistry test and stated this led her to second-guess her career choice. She revealed, "I cried that day. I don't want to be a doctor

anymore. Since I failed this first test, it shows I can't go to med school." She added that her mentors encouraged her and explained,

I talked to my sister and then talked to my mentor. They gave me more advice. They told me, "Talk to your professors," and that did help. It's just a major decision, and I have to try harder. It all depends on me. All they can do is give me advice, and I'm the person to take care of it.

Sofia, furthermore, reflected on the responsibility she had to take for her academic performance, career choice, and the responsibility she felt towards her family. Sofia began crying as she revealed the enormity of her decision to leave home and pursue her education in Texas, saying,

This is a major decision. Having a big family, everyone is at your house. . . Just having a [single] mom was so hard growing up. [My mom has] to take care of [my] little sisters and brothers while [I am] going to college. They want you to be successful. That's the moving part. I grew up with people who knew I could do this and succeed at life. It's a big change right now.

Sofia further elaborated that she followed the advice she was given by the mentors, such as going to the tutoring center, learning with other biology majors in the FAM program, and studying in groups, and she happily mentioned that she accomplished a B+ on her following exam. She stated,

My peer mentor isn't actually a bio major. They're English, and stuff, which kind of makes me see things in a different way. They make you think in a way where you have to make a decision, but they're options.

Sofia shared that her failing her first biochemistry test left her feeling guilty for leaving her family and fearful of disappointing them. Her discussion with her mentor led her to think differently about her motivation for her career choice, which seemed to be based on a family obligation rather than on her desires. She stated,

Since [the faculty mentors] are successful now, they told me how they used to be. One of my mentors, his parents [wanted] him to be a lawyer, but he's doing what he loves to do, which is English. He loves what he's doing, and he can work whatever hours he wants, so he made me think the way if I'm [either] doing it for my family or for me. This summer I found a reason to be a doctor. I should take [advice] from the [professionals] who have experienced it. I took their decision because look at how successful they are right now. I followed what [the faculty mentors] suggested.

I asked Sofia about her faculty mentors' experiences, and she revealed how closely they related to each other. Her mentor had also gone out-of-state to attend a university, and the mentor shared her conflicting feelings about leaving home. As it turned out, Sofia's peer mentor also had experienced many of Sofia's struggles. She stated,

[My] peer mentor [is] actually a [Resident Assistant], and she's from Arizona. Moving to a place that's far away is a big decision, so what she told me [was] that [moving] helps her grow up. That's the part I can relate to. She told me, 'Even though I live with my parents I don't really see them because of school, and [my family and mentors] are the people that actually keep me in school. You just make friends from there.'

Sofia's peer mentor relationship was impactful given the enormity of her decision to take the risk of moving out-of-state to attend a university. She said,

They're [FAM mentors] like, I have friends, but they are in school. It's hard to explain. It's a big decision [going to college out-of-state] because the scholarship, moneywise, they are more of a connection academically. If I need anything academically, they can help me and socially in school, too. It's kind of moving. I just don't know how to put it in words. When you feel something, it's hard to express it. Because [I have] never felt this way before.

Sofia was asked about the kinds of things, if any, she would change about the FAM program. Sofia indicated that having more activities that build connections with other people are essential for sharing experiences. She explained,

I'd say more trips. I love traveling and networking. We already have good networking here at our school. I kind of want to go beyond that; I would like to go to other campuses, get to know more people and make more connections. Have a convention [and] combine all these FAM people. It's like all first-generation self-employed [students]. I think that would be great [to] build up connections.

She elaborated that networking is about who you know that can facilitate job opportunities and internships. These relationships also open the possibilities of exploring what one wants in a career. She also added that sharing experiences and building new relationships with the people one meets can make one feel inspired and motivated and result in personal growth. She explained,

I think that it's like building friendships. I like the one [we did] in [the retreat] because we did some trail, which was fun. Just new experiences [and] knowing how it feels to be in new places with different people and working as a team [and] working with new

people. [It's] also [about] finding yourself. Is this a place I want to go? [At the retreat] you learn about more people [and] it's a good socializing event too.

Sofia was asked about what kinds of things, people, experiences, or opportunities were the most helpful during her time at the university. She reiterated that the FAM program had been beneficial in facilitating the majority of her experiences and opportunities. Through her participation, Sofia indicated that she connected with new people and the faculty as well. She emphasized that, in her FAM relationships, she was able to speak candidly about her concerns and received good academic advice. She pointed out that meeting new people created new opportunities for FAM participants to motivate each other by sharing their life stories. She also indicated that doing community service in a big group was a good way of motivating each other and facilitated communication. She stated, "People want to succeed, and you want to be part of that group, so being part of the FAM group means you want to succeed in life."

**Laura.** At the time of the interview, Laura had participated as a FAM mentee during her freshman year and was currently volunteering as a peer mentor. Laura was not a resident of the state of Texas and came from a low-income family.

When Laura was asked what prompted her to participate in the FAM program, her first response was about receiving an invitation to join. The letter included information about the program that she believed would help her transition from high school to college. She was also motivated to get involved with FAM because she was going to be an out-of-state student. She explained,

From [what] I did understand, it was going to help us with [our] first year out of high school. [That] was really important to me because my parents [didn't] really understand

loans or work–study, or how exactly everything was going to work. So, I thought it would help me a lot, especially, since I was an out-of-state student.

Laura expressed needing support because, being a first-generation college student, she was unsure and unfamiliar in trying to get through her first year of college.

Laura revealed she had been delighted about having two mentors and the opportunity to meet other students. She explained that at that time she couldn't understand how she was going to be mentored by both a faculty mentor and a peer mentor. She was content, having two people who would mentor her and said, “Okay, that was kind of neat, but I didn’t know how that would really work.”

Despite the fact that she was unsure about the peer mentor role, according to her understanding, mentoring was an “adult–child relationship.” She stated that a peer mentor “is like a student our age and we get a mentor, like a faculty mentor, which will help us in case we have extra questions or need support from an adult.”

Laura was then asked in what ways, if any, did her relationships with her peer mentor and faculty mentor impact her academic experience. She indicated that her mentors provided information, academic help, and social support. She revealed,

At first, it was hard because I was a little homesick. So it was hard for me to accommodate to the college life. So my peer mentor and my group was like having another little family in college. And then supporting each other, I think that was really nice.

Laura elaborated that both mentors would have social outings, such as going to the San Antonio River Walk, riding bikes, visiting different restaurants, and other activities.

Laura also indicated that her mentors helped her academically, such as by providing her with advice about which instructors to take. She explained,

For college students, we're always trying to know which teachers to take, who gives out more homework or if you're going to fall asleep in the class. So I would ask my peer mentor who [he] would recommend; he'd say that this teacher was good or whatever. So I think that was really helpful.

Laura revealed that her peer mentor provided practical help and that her faculty mentor was sought out for assurances with things about which she was unfamiliar. She explained that the mentors and mentees were a support system and likened them to a family. She stated,

My peer mentor was kind of like my older brother. It was okay that I could count on him if I didn't know how to do this. For my faculty mentor, he was kind of like a fatherly figure. So I could lean back [on] him if I wasn't sure about something. It was reassuring to know that they knew when to help me out.

Laura elaborated that the mentors were supportive of her when she would get stressed out, and when she would talk to them, they would suggest ways that she could deal with her stress, mainly by doing social outings as previously discussed. She described herself as feeling stressed when she was overwhelmed by her classes and that her mentors would talk to her about sleeping habits, activities, or learning and study strategies, as well as help her with time management. She added that being able to rely on them was very reassuring to her.

Laura was then asked what kinds of things, if any, she would change about the FAM program. She replied that she would like to connect with other mentees. She elaborated that she met other mentees randomly around campus and indicated wanting to get to know more people

outside her immediate mentoring group. She also wanted more large-group and small-group activities so that they could connect with one another. She explained,

I [would] like if we would have an opportunity, like a ball or a dance at the end of the semester and [where] everyone is invited, the whole FAM program. That would be more for us [to] have a sense of connection that we went through the same thing our first year.

When Laura was asked about what kinds of things, people, experiences, and opportunities have been the most helpful to her during her time at the university, she indicated that it was meeting people and becoming familiar with university resources. Meeting people meant getting involved. She was involved in cross country and stated that it was helpful to meet people that were not in the same major. Explaining the impact that it had on her, she said,

That helped me to bond with another group, not just my FAM group. That helped me meet people I wouldn't normally meet because they're not the same major [and] we didn't have the same classes. That helped a lot.

Laura explained that, over time, she joined other organizations, such as Civic Engagement. She described this program as one that helps students with resume writing, volunteer opportunities, mock interviews, and internships. She revealed that, as a peer mentor, she often discussed the value of resources with her mentees. She pointed out that it is important to get involved, which is something she encourages her mentees to do. She stated that most students are not aware of the type of help that they can get from these resources and said,

I think [it is good] knowing the resources that we have available here. [For instance,] some of my mentees don't know what the Civic Engagement is for. So I feel like knowing what resources are around is really, really helpful. Even at the library, most kids



just go to the first floor and chill, and it's more like a hangout place than [a place] to sit and study . . . it's more than just Starbucks.

Laura revealed that the relationships she has built with faculty and administrators have also helped with other types of resources. She related that she was having difficulty with her financial aid, and she turned to one of the administrators for help. She said,

I know at that beginning I had trouble with my loans [because I was going to be a little behind]. I got a little stressed at the beginning because I couldn't find a work-study [job and] that just got me really overwhelmed. But then, after going in and actually speaking to him, he [said,] "Oh, here are places you can find a job," and he [also] helped switching my loans around. So now I only have the loans that don't have interest right now until I graduate. So I feel that's a really big relief.

Laura also explained that she had the opportunity to work with her faculty mentor doing research. She said, "I had him as a teacher. We're doing a program for one of my classes—water sampling. So I guess doing different activities with my faculty mentor, I'm learning new things."

Finally, Laura indicated that practicing religious beliefs makes for an experience that one would not be able to get at a public university. She revealed that she is not religious. She explained, however,

I think having the chapel here helps a lot too, because even though I'm not that religious, sometimes just walking in there, I can pray for a little bit. No one will say anything. Or just having mass every Sunday. I feel like it's another sense of feeling that I got by coming here instead of staying in state and just going to a state school.

**Samuel.** At the time of the interview, Samuel had participated as a FAM mentee during his freshman year. Samuel was a resident of San Antonio, Texas, and he was from a low-income family.

When Samuel was asked what prompted him to participate in the FAM program, he stated that his friend played an influential role in motivating him to join the program. He elaborated that he was surprised to run into her in the university because he was unaware that she was a student there, too. He said that the two of them knew each other from high school and were very close. As a result of their encounter, she told Samuel that she was involved in the FAM program and said to him that it was for students who were the first in their family to go to college.

Samuel described becoming excited about the program and expressed his need to have some resources that would help him get him through college. Upon learning of the opportunities the FAM program would provide, Sam stated,

Perfect! I need something at least to get me through this college . . . Because we didn't know anything, we were first-time freshmen, we had no reference, [we didn't know] anybody. We didn't know who to talk to and so just talking to them gave us an opportunity to open up. I agreed with her.

Samuel shared what his friend told him about what they do in the program. She explained that they were excellent, and the people were good at asking questions out of concern for their experience at school, by asking the students how they were doing during the day or how they liked the university. He shared that his friend said that these types of questions made her feel comfortable around the school. He also shared that his friend introduced him to other program participants, and Samuel said that he immediately felt comfortable around them, stating, "I'm not

even going into the FAM yet [and] I already had people speaking to me as if I was part of [the university]." As a result of their experiences, his friend was becoming adamant that he too should join the program, telling him, "You know what? You are the only other person I know; I need you to join this [program]. I know you're the only person in your family to join it, so you're coming whether you like it or not."

Samuel was then asked in what ways, if any, did his relationships with his peer mentor and faculty mentor impact his academic experience. He began to explain that, in general, both his peer and faculty mentors were helpful but that his ability to access their support shaped how he related to each of them. He elaborated that, in contrast to the faculty mentor, the peer mentor had more time to see students. In fact, at one point Samuel and his peer mentor were both taking the same class. As a result, he had more frequent interaction with his peer mentor than with his faculty mentor. About his faculty mentor, Samuel explained,

I feel like I haven't talked to him much. It's partly because I have such a busy schedule now. I barely have time to make any extracurricular meetings anywhere. He has been contacting me and telling me, "Hey, here's these things going on." And, I'll be like "Okay, I'll try to make it," but I've only talked to him like five times out of this semester.

The difference in the amount of contact was also revealed in how his relationship differed between the mentors; Samuel explained that his peer mentor reassured him and understood him emotionally, explaining,

The only story I shared with my faculty mentor was about my work hours, how my whole family worked, and at the time, I had a full-time job. With my peer mentor, I told her the same story, but I also shared my financial situation. I had to pay off a debt for my family. That kind of left me moneyless and I had to build it back up. She knew exactly the

feeling when you lose out on something that you work hard for, but it was something that I did right, so we both agreed on that. [I told my peer mentor] just to feel good to know I did the right thing, [because] she just understood the feeling.

Samuel also revealed a difference in the way he interacted with his mentors, specifically with his peer mentor, in which he indicated that she held him accountable,

My peer mentor is very great; she's always there. One time, I came up, and we're going to the same class [and] she gave me this look, and I knew I already did something wrong. I missed a meeting. [She said to me,] "Why didn't you call me?" [I replied,] "I didn't have my phone." [Then she answered,] "There's an email, you could have emailed me." I was like, "You're right." [She also said,] "You should have told me you just got a new phone." I can say my peer mentor is always on me but in a good way. I love when I have someone like that backing me up, especially when I'm getting off track.

Despite the differing relationship with his mentors, Samuel described his faculty mentor positively, stating,

My faculty mentor [is a] very work-activity driven man who is always doing something, who is always encouraging people, always putting smiles on people's faces, so, I respect that. The man is very great, always helping people out. He's always going out of his way to encourage people to keep doing what they're doing.

He further elaborated that both mentors were very helpful. His peer mentor helped him with time management, which he indicated having had difficulty balancing his time between his classes and job. He explained that she helped him with scheduling and told him exactly what to do. As a result, he stated that he passed his first semester. His faculty mentor came up with an

idea to help everyone with their final exams. He also added that both mentors were encouraging and supportive of him. Explaining the impact that everyone's support had on Samuel, he shared,

If anything, it [everyone's support] raised my motivation. If it wasn't for my mentors, I don't think I would have passed. I was lucky to have people that supported me. It was a very rough [semester]. I appreciated any kind of help that was available to me. When I passed my first semester, I was so happy; I was thanking everyone. I still thank [my mentors] for it.

I asked Samuel to expand on his "rough" semester, and he stated,

I don't think I was expecting the kind of work when I first got to college. I never went to any AP classes. I was always just doing the bare minimum in high school. Getting here was really challenging and [I] worked really hard just to get a decent grade.

Samuel concluded that, in general, his relationship with his mentors was positive, saying, "Whenever I would spot them out, I would make an effort to go up to them and talk to them." He summarized his relationship with his mentors by saying, "I know any kind of help is appreciated. Even if it doesn't look like it is, any little involvement will get a person to move forward."

When Samuel was asked what kind of things, if any, would he change about the FAM program, he pointed out that commonality is something the program needed to facilitate academic help, but not necessarily how everyone related to each other. He began first with the academic concerns, explaining,

I would change, not the faculty mentor, but the peer mentor [should] have the same majoring [*sic*] to all students. If the peer mentor has the same major as the student, then the students could contact the peer mentor and talk to them. Then they have someone that has gone through the same [academic] experience. There would be more questions asked;

[that is] what happened to our FAM group. Our students didn't have the same major, and the faculty mentor had a different major, and our peer mentor had a different major; so all these different branches, we didn't have anything in common [academically].

I asked Samuel to elaborate more about the lack of academic commonality of the majors among the FAM mentors and mentees. Samuel explained that they did have fun with their shared social interaction and also added that they had similar experiences. Samuel's concerns were based on the academic aspect of mentoring, stating that participants within the group should have "the same passion and drive towards the same goal. Of course, we did have the same common [passion], just different goals."

While Samuel stated academic commonalities were necessary, I asked him if there were other commonalities he might prefer such as gender, race, or personality style. He explained that none of it mattered, and, in fact, he indicated having a mentor with a different personality than the mentee would be helpful. Samuel elaborated,

If we meet someone who is very quiet and someone who is very open, if they were crossed together, [we] might actually learn a little more. [We would learn] valuable lessons if we were able to talk. I think having different personalities is perfect for this kind of thing. [Having] different cultures and different genders [can help] get people to talk where they usually wouldn't. Bringing that together would make it easier for one another. Someone that doesn't have friends probably would find a friend.

Samuel further elaborated on the issue of personality, saying that having someone who is candid about academic advice was important to his academic success. He stated that "my academic mentor brought in a lot of reality questions." I asked if this academic mentor was someone outside the FAM program, to which he responded,

No, [this is] someone within [the] FAM [program]. When something was getting too hard, she would say, "Hey, you just have to do it this way. If you do it like this, it would be a lot easier." So, I took [the] advice, and it started to make sense. Everything is 100 times easier now. She was [also] encouraging me. I was like, "I don't [know] if I'm going to make it [in] this class," and she [said], "No, no, don't drop." She was telling me, "There's no reason to give up if you have all these things. You just have to try a little harder." I [gave] it my shot, and I actually passed all my classes. She was the one who didn't convince me to go, but she was the first person I met in FAM.

When Samuel was asked what kind of people, things, and opportunities have been most helpful to him during his time at the university, he stated that having meaningful and inspiring relationships was valuable to him. He began first talking about relationships that inspired him, explaining that he had an opportunity to speak to recent graduates of a doctoral program, saying,

At the time, I was talking to different people. They were young PhDs, and people who got their PhDs [at an] old age. Hearing stories about people being successful at such a young age is influential. It's even more inspiring to see someone who has gone through hardships, who has made a family, who has gone through a struggle, and [who] still [obtained] their PhD. That's way more influential to me.

Samuel added that talking to a professor in his major was also helpful because the professor had similar interests. He said that it "helps with relationship building." He revealed that, at one point, he worked up the courage to talk to his professor because he was doing poorly in class, and he needed help. He described the professor as being very concerned and that he received the help that improved his writing. As a result, he stated, "I feel more comfortable talking to her. It's a positive feeling. I think I can only move forward from that relationship."

Lastly, Samuel revealed that volunteering for community service was meaningful to him in several ways, stating,

I love working outside, building houses, working with my hands. It's one of my passions. I love building houses. Doing that kind of stuff for people is more meaningful. I can actually meet the person I'm building the house for, and that makes me feel good.

**Gloria.** At the time of the interview, Gloria was a sophomore accounting major. She had participated as a FAM mentee during her freshman year. She was a resident of San Antonio, Texas, and was from a low-income family.

Gloria was asked what prompted her to participate in the FAM program. In response, she stated that she received an email informing her about the program, in which she read about the difficulties that first-generation students have in graduating and staying academically on-track. She added that she was willing to try and explore it because she also found it appealing to belong to a group since it was her first year of college.

Gloria added that, in middle school and high school, she had a mentor and that receiving the information about the FAM program, in which she was going to have both a faculty and a peer mentor, confused her. She explained,

I wasn't sure how this one was going to work out since it said peer mentor and faculty mentor. I just, I didn't understand that portion of it. I thought it was just one person and then I come in, and they're like "Hello, I'm a student." Oh, I remember. I wrote my peer mentor thinking that they were a professor at school. She was like "No, I'm not a professor; I'm actually a student here." That's when it switched; I didn't feel like "Oh, it's going to be a professor. No, it's going to be someone my age. Some[one] I could relate to a bit more."



The shift in her perception of the program was significant for Gloria due to several reasons. She first revealed that she was a shy person, explaining that she had difficulty approaching adults as an adolescent. Being her first year of college, however, she stated,

Now I see it's more; I'm an adult, they're adults, [and] you're going to talk to them as an adult. And if you need to get educated, you have to ask. If you don't ask, you're not going to know what's going to happen.

Being an adult also meant overcoming Gloria's disappointment that the university was not her first choice to attend. In fact, she revealed,

It was also kind of difficult for me because I had applied to big schools—schools I really wanted to go to. I actually didn't get into any of them. So that was kind of, I guess I didn't want to accept it, that I hadn't gone into those other schools.

Gloria also revealed that she had just recently been hired as a tutor, further adding to her stress of transitioning from high school to college. Her peer mentor was supportive of her new job, and Gloria described how she now understood the significance of having two mentors. She explained,

I find it better having two different mentors because there's different, depending on your question. It defines who you're going to go to, whether it's your peer mentor or faculty mentor. I do like that that there's always two people there for you. It's not just one person.

As a result, Gloria expressed relief and stated, “I feel glad that I didn't [go to other colleges] and I feel like this program has helped me, maybe not academically but in a social [manner].”

In response to being asked how Gloria's relationships with her FAM peer mentor and faculty mentor impacted her academic experience, she explained a difference in how she related

to her peer mentor and faculty mentor. When it came to her choice of which mentor to approach first, she stated, "I would probably say the peer mentor first since they're closer to [my] age. It might be kind of embarrassing to let a professor know that you were having trouble." She explained that her peer mentor was an important link to campus, a motivation, and a knowledgeable source of campus resources such as the tutoring center. Gloria stated, "I feel that my FAM peer mentor did help out. I do not live on campus; I live off campus. It helped me make new alliances with other people on campus." She further elaborated,

I also have a part-time job. It's in the middle of the day, so it's difficult. My classes are all in the morning and then [I'm] going to work. I get home at 7 [pm], and sometimes we have training [at work], so I won't get home until 8 [or] 9 [pm] sometimes. Then I go home and hit the books. I don't have time. Well [I do] have the time, but other people don't have the same schedule as I do, so sometimes they might have classes in the afternoon, and I can't go and interact with other people.

Gloria further explained that, on some weekends, all the mentees get together to play soccer. She also pointed out that, other than the classes she was attending, if she didn't have a peer mentor, she wouldn't see a reason to be back on campus.

I asked Gloria about her faculty mentor, and she explained that she does visit her occasionally to ask questions because she is interested in obtaining her PhD. She explained that her mentor provided career advice, stating, "She was just telling me some routes I could take, but she did say experience would be best after my master's degree."

Gloria indicated that she was confident with her academic skills and, therefore, had suggested that she benefited in other ways. She did reveal that her mentors did not have the same major that she does. She pointed out that both mentors were environmental scientists, and that

one way that she benefited was that she learned more about environmental issues. Despite the difference in majors with her mentors, she explained, "If I did have questions, those would be my 'go to' people."

Gloria was then asked about the kinds of things, if any, she would change about the FAM program. In response, she stated that staying connected with her peers was important to her but indicated that there were obstacles that interfered with this. She elaborated that scheduling was an issue and stated,

Sometimes there are some events [such as] "FAFSA night" that I did want to go to, even though I know how to do my FAFSA. Then there are some other events like the "Flash FAM Friday" where they go off campus somewhere [with] the entire FAM group. That usually [occurs] during my work hours; that's kind of the downside to my work hours because I'd like to spend even more time with the whole group of FAM. There are some people I don't see, and I've really connected with these people. It's just nice to be able to see those people again, which I've had few opportunities to see again.

Gloria also said that not getting prompt communication made it difficult for her to plan to attend FAM events. Gloria stated that "having only one day's notice" was not enough time for her to arrange her schedule such that she could be with FAM participants. She also remarked on the accessibility of the FAM administrators and stated, "I guess it's just a lot of steps to actually get an appointment." Lastly, she also indicated that the number of FAM mentoring meetings were few. She explained she would like to see the program address this issue. She recommended that the FAM program

[Increase] the number of meetings, because there were just a few times [we met for mentoring]. [We] just [met] twice in the last semester, where all of us—including our

faculty mentor—just met up. So, maybe increasing group meeting[s]? Not just with the peer mentor but with the faculty mentor as well. The only time I would actually see my faculty mentor was when I had a class right next door to her office. So, I'd just drop in and visit with her to see how she was doing, or if I had a question with career advising, but I wouldn't really see her with all of us together.

When Gloria was asked about the kinds of things, people, experiences, or opportunities that were most helpful during her time at university, she indicated she valued the willingness of others to be useful and the impact that it can have on a person. She elaborated, "Those who offer [a] lending hand, I guess this is very redundant. If you need help, it doesn't matter if it's academically or personally, my mentor pushed you to something that would benefit you." She explained that she was angry at being rejected by the other universities and that attending this university was not her first choice. She elaborated,

I was kind of angry, and I guess [I needed] anger management. I really didn't want to accept that I needed to go talk to a psychologist here on campus . . . I just didn't want to admit that I needed to go talk to someone, but I talked to my peer mentor and she [told me], "there's nothing wrong. Just go talk to someone. They will find a way to try and help you out." It was just accepting that [I] needed certain help from other people. Not just relying on [myself], like saying "You can [do] everything yourself."

Gloria also added that her business professor was helpful, informing her of internship opportunities for the summer. She explained that he helped her complete her paper applications. She stated, "He saw some potential in me to go beyond. It helps having someone else who is not your parent say that they believe in you."

Gloria pointed out that she enjoyed her relationships as a result of participating in the FAM program, such as the group activities, which helped her perceive a sense of belonging. She explained,

Most of the events I have been to here on campus were proposed to me by my peer mentor from the FAM group, like Boo Bash, which is the Halloween thing here, so I went to that and enjoyed it, and I stayed afterwards to watch the movie. Then there was this other, Welcome to School, it was on the soccer field with face paintings. That also helped me.

Gloria revealed that helping others was also an enjoyable activity. She indicated that her accounting mentor told her about a volunteer opportunity. She explained,

She [told me], “Maybe you should look into this, and maybe this would help,” so, I would say that would be an opportunity from a career aspect. The VITA program, I really enjoy that. I enjoy doing other people's taxes on weekends, and I stay the whole day from 8 am to 6 pm.

Lastly, Gloria summarized her experiences, stating,

Opportunities to belong—I guess that’s the main point, that you belong somewhere. What I noticed at the retreat [is] that there’s other people like you that have, maybe not the same story, but have some similarities with some people. That you’re not alone, that you’re not the only one [whose] parents’ maybe didn’t go to high school. It’s just [nice] having a sense that you belong and that there are others like you.

**Camila.** Camila was asked what prompted her to participate in the FAM program. She immediately stated, “I was having a hard time coming into college.” She elaborated that her parents did not attend college, and that they did not understand the college process. For example,

she explained, "We were having trouble with [financial aid]." Further adding to her difficulties, she revealed having family problems, stating, "My dad [and I] don't communicate well." In spite of identifying her difficulties, she did not complete the application that she received in the mail. She revealed, "I got really lazy with the [FAM] application. I didn't turn it in until the [final due date]. I turned it in, but I didn't get in."

Camila experienced a difficult time during her first semester of college, revealing she was emotionally and physically isolated at the start of the semester. She explained her reliance on her family and that she was also shy, stating, "I'm very close to my family, and I have a hard time making friends, so I was alone for a while. I didn't make a friend until about two weeks into school, and I didn't have a roommate, so that made it harder." She added that she didn't get a roommate for about a month and a half.

Camila then indicated receiving notice that space had become available in the FAM program, saying, "When people were dropped from it, they sent out an email seeing if anyone else was still interested. I thought, what's the harm in going? So I joined it." She related being pleasantly surprised after making her decision to participate, stating, "I joined, and I set up an appointment with my peer mentor right away, and we hit it off very well, and she's great." I asked her to explain what made her mentor great, and she shared that her mentor was emotionally supportive. She described the following as an example of her peer mentor's support:

After Christmas break, I was really sad. I was just going through a really rough time. This year just has been really rough on me. [My mentor and I] met up. It was me and another girl from our group. The girl had to leave, and my mentor had to leave for FAM class.

[My mentor] ended up missing it, because we ended up talking for three hours. When she

told [the instructor] the reason why she missed it, she was excused. We just thought it was funny that she ended up missing [her class].

When asked about what ways, if any, Camila's relationship with her peer mentor and her faculty mentor impacted her academic experience, she responded that there was difficulty with her faculty mentor. She revealed that she was assigned a second faculty mentor, explaining, "The first [faculty mentor], she was hardly ever around on campus. She was just really hard to access. I didn't join until a month or two into school. I think the other three had already met her, but I didn't meet her up until November." She said that she had met the first faculty mentor at an etiquette dinner, a FAM activity, and that "we didn't get to talk much but I liked her." She also noted that she met her, perhaps, two or three times because her assigned mentor was an English professor, which also happened to be the department in which Camila worked. Concerning the difficulty of accessing her first faculty mentor, she hypothesized, "I don't know why she was hardly on campus. I know she has younger kids so I'd imagine that would be why."

Camila's experience with her peer mentor was different. She revealed, "My peer mentor helped me stay on track and helped me with resources." She elaborated that she had difficulty with time management, balancing her time between school and social activities. She also described how her peer mentor helped her with financial aid information. Her peer mentor referred her to the head of the department, and Camila explained that her peer mentor had also faced similar financial aid difficulties when she had returned from study abroad.

Camila also disclosed that her peer mentor was emotionally supportive and easily accessible. She said, "My peer mentor, she's great. She helped me a lot when I needed someone to talk to . . . She's there whenever I need her. If we bump into each other, we talk. We'll sit at meetings and talk; we'll go to Starbucks and talk."

When Camila was asked what aspects, if any, she would change about the FAM program, she reflected on her previous experience concerning the difficulty of accessing her faculty mentor. She proposed, "If the faculty mentor can't be around, don't force them into being a mentor. If they insist on quitting, then let them." She recounted a discussion that she had with her first faculty mentor, informing her,

She had been trying to drop FAM for a while because she felt like a horrible mentor because she could hardly be there for us. But [FAM administrators] said no, that she was fine. I know it would have been helpful to people to have their faculty mentor around.

When Camila was asked what elements, people, experiences, and opportunities have been most helpful to her during her time at the university, she admitted that networking had been the most beneficial. She elaborated that an advantage of being a work-study in the English department is that it facilitated getting to know several English professors who have reassured her in her choice of major. She stated, "I know that's where I belong because I'm an English major. I know that I picked the right major." She described the faculty members in the English department as being very helpful to her, pointing out, "I know if I need anything I can go to them. They're very resourceful. They know if I need help they can help me out, [like] if I need a letter of recommendation."

Reflecting on her shy personality, Camila also added that employment as a work-study has led her to know more people and explained, "It helps me to connect to people I normally wouldn't, [because] I know people from other departments that can help me out." Lastly, Camila elaborated that doing volunteer work has also been helpful, which also had an added benefit regarding her difficulty of making new friends. She revealed that she met her "first real friend at 'Continuing The Heritage,'" where she volunteered.



**Celeste.** When Celeste was asked what prompted her to participate in the FAM program, she revealed that, because her friends were not going to participate in the program, she was not going to join as well. As a result, she recalled seeing the email regarding the FAM program but had decided to disregard it when she made her decision not to complete the application. She elaborated that she was familiar with the university because she had cousins and friends who were already attending. She stated that she was a frequent visitor on campus during the summer because she was "fighting for a scholarship," and that is how she met many people at the university. When asked why she decided not to apply for the FAM program, she stated, "None of my friends were going to do it, but most of them aren't first-generation. So I was like, 'I don't need it.'"

Celeste described her frequent visits to the university to secure the scholarship she was pursuing. During her visits, she was often referred to the Assistant Vice President for Retention Management (VPRM) to acquire help with her scholarship. Unbeknownst to Celeste, this individual was also in charge of the FAM program. She stated,

Everybody just kept giving me her name, so I just contacted her. At first, it was not the same relationship that we have now. Back then it was like my mom yelling at [me], me yelling at her. She was real professional about that, and then she was my professor last semester.

Celeste elaborated that, during their meetings, she told the VPRM that she was the first in her family to go to college. As a result, the VPRM told her about the FAM program. Celeste indicated being persuaded by the information she heard, having been unfamiliar with the college process and remarked,

Yeah, she was the basic reason. I was like, “I want to do that stuff.” I didn’t know what I was coming into. My parents didn’t know. My brother is going to college, but he’s only going for like two classes, so he’s only part-time. So I’m the first official one coming to school.

When asked in what ways, if any, did Celeste’s relationship with her peer mentor and faculty mentor impact her academic experience, she stated that her faculty mentor and peer mentor have been very supportive and have provided resources and information. They were also encouraging.

Regarding access to her FAM faculty and peer mentor, Celeste explained,

Whenever we need any help, they’re always there. We can call them or just visit them in their office. For me, it’s harder because I have a job outside of school, work–study, and I take full classes. So I don’t have the same office hours as [faculty mentor]. So during her office hours, I can’t really go see her. But she does leave it open for us to call her.

Celeste added that both her mentors have been very encouraging of her, especially when she was having a difficult time with one of her classes. Celeste shared,

I wasn’t doing so well last year in my biology class. [My faculty mentor] encouraged me not to drop it, because I was going to drop it. She was like, “No, you can do it.” I ended up getting a B, so I went from having an F to a B. They were just there to help me.

When asked to clarify which mentor was encouraging of her, Celeste indicated both her faculty and peer mentors. Celeste further revealed that the support from her peer mentor was direct because, at times, they were enrolled in the same classes. She explained that, although her faculty mentor was supportive and encouraging, her peer mentor was someone who held her accountable and provided material support. Celeste described the difference and said that her

faculty mentor would tell her, “‘You can do it.’ But, like, my peer mentor, [he] was pushing me more into it.” She elaborated on her peer mentor’s motivation and explained that “[My peer mentor’s] first semester here was tough and they gave him motivation, so he wanted to do that for me. He gave me the information to do it, like ‘If I can do it, you can do it.’”

Holding Celeste accountable also meant reducing the likelihood of failure by providing direct material support, and she indicated that they were mutually supportive of each other. She said, “We studied together. One time I didn’t make it to one of the classes. [My peer mentor] took all his notes and [gave them] to me.”

Celeste, however, revealed that she wished for more frequent group meetings with her mentors and indicated there were difficulties in coordinating with each other. She said,

In the beginning, we would have more contact but not be able to do anything because everyone’s hours are completely different, like one-on-one. I get along with all the people in the group. I see them around campus, but we don’t really hang out. It’s more on our own time because everyone is completely different . . . I wish we had more time to see each other, so we can [meet] more one-on-one, instead of just calling or texting, but everyone in person. It’s more like group messages right now.

Celeste was then questioned as to what aspects, if any, she would change about the FAM program. She described her concern for academic similarity between the mentors and mentee and also maintaining and expanding relationships with other FAM program participants.

Concerning academic similarity, Celeste stated that having mentors in the same field is helpful, explaining,

I think maybe putting people by their major [would help]. But not just that major, but maybe something similar to it. [That way] you can get a different aspect about what's

going on, and if you need help, they know what you're doing. Maybe, partnering up with your faculty mentor with whatever degree they have [would also help] whenever we have questions. [My faculty mentor is] a psychologist, and I'm [in] education. I think it's different. They think more broad. . . . I want somebody else to count on [who] will help, that knows what I'm doing, more like a support.

Celeste also revealed wanting to maintain and expand relationships with other FAM participants to have different experiences with other people outside her mentoring group. She suggested,

Maybe if we combined groups. During activities, we're going to put four FAM groups together, and they are all going to go out and hang out. That way it's not just the same four [mentees], but you get a taste of everybody else. We did that on our trip that we went to. That was nice because everybody got to meet everybody. [But then] we all went back to our little groups. [I] see them around campus, but [I would like] for everyone to hang out again. That would be better. Not just one time. We don't get to hang out much together outside of FAM.

When asked what elements, people, experiences, and opportunities have been most helpful to Celeste during her time at the university, she revealed that her relationships with friends and faculty have been beneficial, especially when she was conflicted about how much time to devote to her friends. She related that her friends were enrolled in less coursework and had less homework than she had, explaining,

For me, last semester, everything was writing intensive. I had to read every night for every class. So it was a struggle because I'm a real social person and I like hanging out with my friends. So I would choose my friends over my homework. But then after a

while, they told me I need to go to my dorm, “You need to start doing your work.” They helped me get back on track.

Celeste added that her professor also took notice when she began to earn lower grades, and, out of concern, the professor asked her what was going on. She also indicated that before she participated in the FAM program, she was surprised that one of her advisors showed her how to balance her time, explaining,

It was already almost mid-semester, [and] I needed to start picking [my grades] up if I wanted to stay in the classes and if I wanted a good GPA. One of my advisors gave me a calendar and she [explicitly said to me], “This is when you are going to have classes, and this is when you are going to have time for friends, and this is when you're going to go to your room and do your homework.” She gave me a schedule of what to do. Everyone was telling me to do it, but no one actually gave me a schedule and was like “Sit down and do it.” I guess she really helped me out a lot. Everyone was [telling me], “Oh just do it,” but no one showed me how to do it.

Celeste described the positive impact of relationships. She spoke about a friend of hers who was also attending the university and was isolating himself in his dorm room and performing poorly academically. She revealed,

A lot of my friends are very anti-social. Like my best friend from high school did not come out of his room. Nobody even knew [that] he lived in there. Finally, he sat with us [when] we were watching [a] football game and everyone was like “Oh you are alive.” I guess he got encouraged to be more social and his grades [started] improving. I guess all our grades [started] improving once we realized we're all out there to help [each other]. No one is there to hurt you. You just have to figure out what's right and wrong.

**Emma.** When Emma was asked what prompted her to participate in the FAM program, she described being excited after receiving both an email and mail notification about the program. She explained a need for familiarity, belonging, support, and validation of her academic and career decisions. She described how she decided to be a part of the program. She said,

I was really excited about it. I thought it seemed like a great opportunity to be a part of, especially being a freshman, not really knowing what's out there or what I can be a part of here on campus. It was like, "Oh, I can be a part of FAM."

She revealed that familiarity was essential to her because she is not a resident of Texas, stating, "I'm an out-of-state student, so familiarizing myself with the people here was also part of the reason. That's why I felt like maybe I should really take this opportunity."

Emma also indicated that it was vital for her to get to know people because she was unsure of her academic major and wanted to have experience regarding her career choice. She stated, "I wanted to get to know people that would help me make a decision about my major and also with opportunities, to make sure I'm making the right decision as to what I want to do with my life."

Emma also revealed that her similarity with her faculty mentor facilitated how well they related. She indicated having a favorable view of her mentor:

Well, my faculty mentor, he's from Canada. We both kind of related in that aspect, we're foreign, I guess. Well not really. He's [from] further than I am. Just how different the environment is here and things like that. It's nice to know similarities. You can receive those with students as well, but seeing that from a faculty mentor is really nice.

In response to being asked, "In what ways, if any, did your relationship with your faculty mentor and peer mentor impact your academic experience?", Emma revealed she admired her peer mentor's accomplishments and viewed her as someone she wanted to emulate, saying,

She showed me what it's like to be there. Just because I'm a first-generation student, it's kind of like you can get these opportunities or be part of this and get so far in life to get what you want. . . . Being first-generation and also being able to see what it's like to progress as a student. She's a junior so it's like I can get there too. It's an example; I just need to stick to it—the process of what it's like being a student here.

Emma's positive regard for her peer mentor was tempered by the few opportunities that they had to meet as mentor and mentee, and she stated, "I wish we would have met more." She was being motivated by her and "just seeing her as a student." She realized, "We all struggle, so just seeing that aspect of [her was beneficial]."

In contrast, Emma had previously described relating more with her faculty mentor because of similar experiences with him, stating,

My faculty mentor, his wife is pregnant. For him [to tell] me that and [share] that part of his life with me . . . Professors don't always know what to do, or they're not so sure about everything, or they don't know everything. It was just so nice to see. As I'm going through new life experiences with college, he's going through new life experiences. Like, they don't know everything, and they haven't experienced everything there is. That was really interesting.

Emma explained that, through her faculty mentor, she had gained insight about what it is like to be a faculty professor, and, as a result, she empathized with them and revealed that this insight facilitated connecting with another faculty member on campus:

I gain a better knowledge of what it is like to be part of the faculty here at [this university]. It helped me relate to what my professors were going through, maybe [enabled me to be] more understanding of the stress that it takes to educate and advocate for [students] and learning, more than anything.

Emma concluded that her faculty mentor is attentive to her and emotionally supportive, revealing that, “He serves as a source for me to vent to as a student. I think it’s good to share my progress I’ve been making or what I struggle with. It’s just nice to have someone to talk to.”

When asked what features, if any, would Emma change about the FAM program, Emma stated a concern about how the program can facilitate relating for program participants. She primarily focused on the educational aspect of mentoring, in which she indicated wanting to have mentors with the same major that she had. She elaborated,

I feel like different majors struggle with different ways of learning. I’m a biology major, so reading my biology book was different than reading something based on theology or something more liberal arts. If the FAM program focused on really getting mentors that are specific to the person's major, it would benefit the learning process. It would be better for the faculty mentor to understand what the student is going through, education-wise. [My faculty mentor] can understand a lot of things, but [with] a concept [that] I want to better understand, he can't help me with [it]. So it's kind of difficult to relate to [personal learning experiences], “Oh this is what you're learning. Maybe I can help you with this,” or maybe “I understand that I struggled with this concept too,” or “This is what I did to learn it better, this is a learning technique.”

Reflecting on her previous desire to have more contact with her mentors, Emma reiterated wanting to have more frequent mentoring meetings but acknowledged the difficulty of



coordinating with everyone's schedules. Despite the difficulty in organizing, she explained the benefits of regular contact that would improve their relationships with one another, stating, "I think that it would be a better fit if we did more meetings as a group." Similarly, she also added wanting to have more activities that bring her more in contact with other groups within the program, remembering, "Last semester we volunteered as an entire FAM group, not just the four or five members."

Emma was asked what kinds of things, people, experiences, and opportunities have been most helpful to her during her time at the university. She explained that her experiences have been meaningful to her because they were purposeful and have helped her grow as a person. She indicated that she likes working with people at the university because they embrace and live the Marianist values, which foster a sense of purpose for her:

The people here are very welcoming and nurturing. I've [had] the opportunity to do my work–study at university ministry, and I've met wonderful people there. If I could say the one thing I value the most, [it] is the people I work with, the purpose [for which they] serve, [such as] university ministry [and] I'm sure other departments have that as well. I like that university ministry fosters faith in the students. They really take on [the] mission that we are Marianists, [which is] being hospitable and [having] that nurturing spirit that [this university] wants to be known for.

Similarly, Emma also revealed participating in organizations that give back to the community is genuinely important to her. She described being involved in the Social Justice Club, which provides her a venue for advocating, stating that,

Part of my mission at [this university] is advocating for things. The Social Justice Club advocates for social justice and informing students about the world around them. I think

that serves, as it has a great impact. To have a club like that on campus, it means something [to me] . . . I think that, since [this university] is really for volunteering, that's something that they really promote. Just seeing the help we can provide as a community, the difference that we can make, is really powerful.

Emma further elaborated that the impact she can have on others had a transformative influence on her because it informed her of who she is and who she wants to be, relating, "I believe that to be well off in the world you have to have a good sense of yourself. I think that helps me have a good sense of self because we pray together and [do] community service."

When asked what other things have helped, she stated that her resident assistant at the dorms was especially helpful because of the support system. She elaborated that coming into a new environment and living with an assigned roommate does not mean that everything will go accordingly. Because of the newness of it all, the resident assistant was there "for emotional support, [which is] something that I appreciate as a person."

Furthermore, Emma shared the benefits of the support, expressing that "struggling," or rather the challenges she faced with the addition of having a supportive system, has helped her grow as an individual, saying,

I think that's what makes us. It can either build us or break us. This university has really helped me to build my resiliency. [It] allowed me to build a support system. Again, it's a new environment. Back home I have my family, and I have a system already in place, and coming here, you are just by yourself. So, [the struggle] has helped me gain a better [sense] of who I am as a person; I'm growing up and all these things. It has helped me better define myself and determine what I want to do because I've overcome a lot of things during my first semester.

## **Themes and Subthemes**

Through the process of coding, the researcher identified five themes and 15 subthemes. The five main themes discussed along with their respective subthemes include 1) faculty and peer mentoring difference, 2) the influences of networking on the mentee, 3) mentees' need for resources and information, 4) the mentees' need to be meaningful and feel purposeful, and 5) the influence of role modeling. The results of each theme are summarized, and selected passages from the interviews are used to illustrate the subthemes.

### **Theme One: Faculty and Peer Mentoring differences**

Throughout the interview analysis, the researcher found distinct differences in how mentoring is approached with the mentee. Both a faculty and peer mentor have an inherent overlap because of what they do, which is mentoring incoming freshmen. The mentees articulated having had distinct experiences with their faculty mentors and their peer mentors. In fact, the mentees noted other mentees' experiences were different from their own.

Within this dynamic of mentoring difference between faculty and peer, four subthemes emerged. As shown in Table 20, the subthemes were:

Table 20

*Descriptions of Subthemes for Faculty and Peer Mentoring Differences*

Faculty and peer differences	Descriptions
Boundaries	Boundaries are intentional or imposed interaction limitations, such as the belief of the appropriateness of behaviors or request.
Coaxing	Intentional, proactive, and repeated verbal persuasion, including the use of emotions to display approval or disappointment.
Contact and accessibility	Contact is the ease of repeated contact inside or outside the context of mentoring. Accessibility is the facility by which a mentee perceives the least amount of obstacles that impede contact.
Negative and positive experiences	The contrast of factors that led to the perception of the quality of mentoring.

**Boundaries.** The first subtheme for faculty and peer mentor that emerged was boundaries. This subtheme refers to the approach taken by faculty and mentees on how they interact with each other. In some instances, faculty mentors were less interpersonally involved with mentees. Faculty mentors focused on academic and career-related support. They were also less inclined to provide emotional support and were less likely to have interpersonal activities outside mentoring. In contrast, mentees did not describe having a similar boundary with their peer mentors. The mentees recognized that the boundaries played a role in their experiences.

Lucia indicated that, in her discussions with other mentees, she heard them describe having a different experience from her own. In contrast to her personal experience, she understood that other faculty mentors were not as personally involved as her mentor. She

described their experiences as "professional," in which those mentors focused solely on the academic content of mentoring. She adds,

I wasn't very shy; I just went and asked her [anything]. But maybe for other students, it might be different. Because a lot of other [mentor] groups kept it very professional and [only] just talked about academics. We weren't like that at all, me and my group.

For some students, having two mentors was confusing. They expressed that they initially did not understand the purpose of having both a faculty mentor and a peer mentor. Laura explained how she made sense of having a faculty mentor and a peer mentor. She indicated that, according to her understanding, being mentored by faculty would be like an "adult-child relationship." She stated that a peer mentor "is like a student our age and we get a mentor, like a faculty mentor, which will help us in case we have extra questions or need support from an adult." In fact, she likened her relationships with her faculty mentor and peer mentor to relationships between family members. She said,

My peer mentor was kind of like my older brother. It was okay that I could count on him if I didn't know how to do this. For my faculty mentor, he was kind of like a fatherly figure. So I could lean back [on] him if I wasn't sure about a thing. It was reassuring to know that they knew when to help me out.

The barrier felt by the mentees can lead to distinct ways the mentees approached their faculty mentors. Aurora noted that, in her experience, she has been taught to respect adults, and interacting with an adult meant behaving and acting differently. She explained that respecting authority is something that is reinforced while in high school. She added that this type of relationship makes it difficult to communicate with teachers. She explained, "I guess that is

something that schools don't teach us to get over. As long as we have that mentality, that as long as they are teacher and I am student, it's hard to communicate with each other."

Gloria elaborated on how she felt about approaching her mentors with her problems. When it came to her choice of which mentor to contact first, she stated, "I would probably say the peer mentor first since they're closer to [my] age. It might be kind of embarrassing to let a professor know that you were having trouble."

Samuel, on the other hand, showed restraint in his approach with his mentor. For him, the faculty mentor had a traditional role and a boundary that he was not willing to cross. He explained, having had a positive view of his faculty mentor and peer mentor, there was a difference in the way he approached them with his problems. He stated,

The only story I shared with my faculty mentor was about my work hours, how my whole family worked, and, at the time, I had a full-time job. With my peer mentor, I told her the same story, but I also shared my financial situation. I had to pay off a debt for my family. That kind of left me moneyless, and I had to build it back up. She knew exactly the feeling when you lose out on something that you work hard for, but it was something that I did right, so we both agreed on that. [I told my peer mentor] just to feel good to know I did the right thing, [because] she just understood the feeling.

In contrast to faculty mentors, Aurora explained that having a peer mentor that is similar in age and background makes it easier to talk. She explained that, in comparison to an adult, with a peer, "We keep up with the same thing. We like the same fashion; we talked about guys. You would not talk to your faculty mentors about guys or fashion or anything like that . . . I guess it's been ingrained in our heads that you don't tell [them] this, but you can tell your friends this."

Lucia, on the other hand, was one of the first cohorts in the mentoring program, and no peer mentors were yet available. She described having had a close relationship with her faculty mentor. She was asked, if she did have a peer mentor, who she would have asked for advice, regarding the "drama" with her roommate. She said that she would go to her peer mentor because, more than likely, the peer mentor would have already faced a similar situation. Lucia explained,

I did notice that, talking with a lot of the other peer mentors, [I realized] that their experience was different. All these issues I had, I'd go to a peer mentor instead of [a faculty mentor], but I don't think it impacted me badly. If I did have any other mentor, it would have been different, just because having someone who just went through that, I'd ask them instead.

**Coaxing.** The second subtheme regarding the difference between the faculty mentor and peer mentor was a difference in the type of interaction the mentors had with their mentee. Coaxing meant having a more "hands-on" approach with the mentee, who recognized that their peer mentor showed interest, invested time, and reminded them about important things.

Aurora explained that her peer mentor made an effort to ensure her own success when she was having a difficult time with her class. She stated, "She really got on top of me for that class." She added that her peer mentor would also get her boyfriend to help Aurora with courses in her major because her peer mentor was not in the same major as she was.

Samuel also revealed a difference in the way he interacted with his mentors, specifically with his peer mentor, in which he indicated that she held him accountable. He stated,

My peer mentor is very great; she's always there. One time, I came up, and we're going to the same class [and] she gave me this look, and I knew I already did something wrong. I

missed a meeting. [She said to me,] “Why didn't you call me?” [I replied,] “I didn't have my phone.” [Then she answered,] “There's an email, you could have emailed me.” I was like, “you're right.” [She also said,] “You should have told me you just got a new phone.” I can say my peer mentor is always on me but in a good way. I love when I have someone like that backing me up, especially when I'm getting off track.

Gloria indicated that she valued the willingness of individuals to be helpful and the impact that it can have on a person. She stated, “Those who offer [a] lending hand, I guess this is very redundant. If you need help it doesn't matter if it's academically or personally, my mentor pushed you to something that would benefit you.” She explained that she was angry at being rejected by the other universities and that the university that she was attending was not her first choice. She elaborated,

I was kind of angry, and I guess [I needed] anger management. I really didn't want to accept that I needed to go talk to a psychologist here on campus . . . I just didn't want to admit that I needed to go talk to someone, but I talked to my peer mentor and she [told me] “There's nothing wrong. Just go talk to someone. They will find a way to try and help you out.” It was just accepting that [I] needed certain help from other people. Not just relying on [myself], like saying, “You can [do] everything yourself.”

Camila also expressed a similar experience with her peer mentor, which was different from the experiences with her faculty mentor. She revealed, “My peer mentor helped me stay on track and helped me with resources.” She elaborated that she had difficulty with time management, concerning balancing her time between school and social activities.

Celeste also indicated that her peer mentor held her accountable, which reduced the likelihood of academic failure. She stated that they were mutually supportive of each other. She



said, "We studied together. One time I didn't make it to one of the classes. [My peer mentor] took all his notes and [gave them] to me."

**Contact and accessibility.** The third subtheme emerging from the difference between faculty and peer mentor was contact and accessibility. Contact and accessibility meant that mentees described differences between the faculty mentor and peer mentor ease of access when they needed help. Differences between the faculty mentor and peer mentor emerged, such that the peer mentors were more readily visible on campus than the faculty mentors. Peer mentors were more likely to share classes or the same social circles with the mentee.

Samuel revealed that, in general, both mentors were helpful, but that mentor access shaped how he had related differently with each. He elaborated that, in contrast to the faculty mentor, the peer mentor had more time to see students. In fact, at one point Samuel and his peer mentor were taking the same class. As a result, he had more frequent interaction with his peer mentor than with his faculty mentor. He stated,

I feel like I haven't talked to him much. It's partly because I have such a busy schedule now. I barely have time to make any extracurricular meetings anywhere. He has been contacting me and telling me, "Hey, here's these things going on." And, I'll be like "Okay, I'll try to make it," but I've only talked to him like five times out of this semester.

Other students noted perceived obstacles to accessibility. Gloria also noted less frequent meetings with her faculty mentor, and she explained that she does visit her occasionally to ask questions because she is interested in obtaining her PhD. She also commented that the number of mentoring meetings was few, and she explained that she would like to see the program address this issue. She advised,

[There need to be an increase in] the number of meetings because there were just a few times [when we met for mentoring]. [We] just [met] twice in the last semester, where all of us, including our faculty mentor, just met up. So, maybe increasing group meeting[s]? Not just with the peer mentor but with the faculty mentor as well. The only time I would actually see my faculty mentor was when I had a class right next door to her office. So, I'd just drop in and visit with her to see how she was doing, or if I had a question with career advising, but I wouldn't really see her with all of us together.

Camila responded that there was difficulty with her faculty mentor. She revealed that she was assigned a second faculty mentor, explaining, "I didn't join until a month or two into school. I think the other three had already met her, but I didn't meet her up until November." She also noted that she met her two or three times because her assigned mentor was an English faculty member, which happened to be the same English department where Camila worked. Regarding the difficulty of accessing her first faculty mentor, she hypothesized, "I don't know why she was hardly on campus. I know she has younger kids so I'd imagine that would be why."

Aurora revealed that she had had two mentors in the program. She elaborated that the first assigned faculty mentor did not meet her expectations. She explained, "So, my [faculty] mentor, the mentor they assigned me with, I guess it depends on the luck of the draw; I think I didn't have a connection with her at all."

Mentees noted, however, experiencing easier accessibility to both mentors. Celeste also indicated having had a second faculty mentor and peer mentor. Concerning access to her mentors, Celeste explained,

Whenever we need any help, they're always there. We can call them or just visit them in their office. For me, it's harder because I have a job outside of school, work-study, and I

take full classes. So I don't have the same office hours as she does. So during her office hours, I can't really go see her. But she does leave it open for us to call her.

Camila noted how easily accessible her peer mentor is. She said, "My peer mentor, she's great. She helped me a lot when I needed someone to talk to . . . She's there whenever I need her. If we bump into each other, we talk. We'll sit at meetings and talk; we'll go to Starbucks and talk."

Emma's positive regard for her peer mentor was tempered by the few opportunities that they had to meet as mentor and mentee, and she stated, "I wish we would have met more."

**Negative and positive experiences.** The third subtheme emerging from the difference between faculty and peer mentors was negative and positive experiences in mentoring. The mentees described the factors that led them to experience positive and negative outcomes of mentoring.

One aspect that was noted by mentees was a lack of frequent meetings with their faculty mentors. These students explained that the relationship with their first faculty mentor failed to materialize.

Aurora revealed that she had had two mentors in the program. She elaborated that with her first assigned faculty mentor there were few meetings and no follow-ups from the mentor. She believed that they were not correctly matched and, as a result, this led her to stop attending the mentoring meetings. She explained,

We never actually did as much as I thought we would do. Like I think we went out to dinner once, and we went to the aquarium, but that's all we did. I did one thing with each mentor once and then after that; there was no follow-up with my mentor or anything.

Camila also responded that there was difficulty with her first faculty mentor. She revealed that she was assigned a second faculty mentor, explaining, "The first [faculty mentor], she was hardly ever around on campus. She was just really hard to access."

Aurora, in contrast to Camila, noted that the few meetings that she did have with her first faculty mentor were negative experiences. She believed that the mentor's personality and demeanor did not make her feel good about herself. She explained, "I just feel like sometimes there are just people that you can easily interact, and you meet them, and you can have a conversation, and everything is great." She added that she felt her mentor's attitude towards her was negative, disclosing that she was made to feel inadequate. Aurora said,

I always felt she was expecting more and more of me. I don't know how to explain. It was just really [difficult to] talk to her. I felt like every time I talked to her; I felt that I was disappointing her. I didn't feel like a [disappointment] to myself. When we went through the results, she just made me feel I wasn't adequate enough. Based upon my results, it said that I had poor communication skills. But, I don't think I have poor communication. I mean, I understand that I might be at a loss [for] words, but I don't think that reflected who I am or what I am. So it was difficult communicating with her personally.

Aurora, regarding her experience, compared her assigned mentor and her second mentor, who was not designated by the program administrators, and attributed her different experiences to their personalities. She described her assigned mentor as distant, disinterested, and dismissive of her concerns, which contrasted with her unofficial mentor. She stated,

I think it was [my assigned mentor's] personality. She didn't [have an] opening personality; she wasn't smiling; it wasn't inviting. Smiling, yes! She doesn't smile often. When we would talk about our problems and stuff, at one moment she was focusing on

me and but then at the next, I would feel like my problem had [not been] adequately addressed. She would move on already to the other mentees. I just didn't feel like I wasn't getting the attention. I didn't really appreciate how she would ask about how we are doing and if anything was wrong. [I would] tell her what's wrong, but [she would] brush it over and move on. [My] other mentor, if I tell him I was having a problem, we would talk about it, and we work through it and figure it out. [My unofficial mentor] was [a] much more happy, jolly fellow than [my assigned mentor].

Aurora elaborated on the circumstances that led her to meet her second faculty mentor. She indicated that this second mentor was never assigned to her, adding that she was drawn to him and stated,

It was not part of the program itself. He just opened his arms and invited me into his group. Actually, this Thanksgiving we are going to meet again . . . Like it's FAM family back again . . . The fact that, even though I was not assigned to him, I wasn't his responsibility at all, [and yet], he still reached out and invited me to go with them, I just personally feel like he didn't need to do that. The fact that he [did] do it is what really made an impact for me.

Another factor that can influence negative experiences in mentoring is a mismatch in expectation. It was indicated that some faculty mentors established a boundary in which mentoring took on a purely academic focus. These faculty mentors were described as emotionally distant and not interpersonally involved with the student outside of mentoring. Mentees were described as out of luck if they expected a more interpersonal relationship with their mentors. As a result, their mentoring experience was perceived as a negative one.

Aurora was inclined to express that the mentor's personality and matching to a mentee were random. She said, "So, my [faculty] mentor, the mentor they assigned me with, I guess it depends on the luck of the draw; I think I didn't have a connection with him at all." Lucia discussed her personal experience as a peer mentor, in which she did not have a connection with her mentee. She said, "I was really willing to do whatever and they paired me up with a student that just wanted to [only communicate through] email. [As a result,] we didn't ever really click, so I wanted to avoid doing stuff like that." Lucia further clarified,

[My assigned mentee's] definition of [mentoring] was different. All she wanted out of the program was someone who checked in on her about grades and emailed. That was it. She didn't really want to go out to the events. What she wanted out of the relationship and what I wanted were really different. So I kept trying to get her to come [to] our events and meet with me one and one, and she just wasn't having it, and that's fine. It's just, for me, that's not a mentoring relationship. For me, mentoring, it's going out, getting something to eat, you telling me what you're going through so I can help you, and that's just not what she wanted out of it.

As a result of the interviewees' own experiences and discussions with other mentees and fellow peer mentees, they described qualities that faculty mentors should consider to avoid their mentees' having a negative experience with them. Lucia cringed at the thought of mentees' having a negative experience and perceiving that mentoring is a bad thing. She wanted the mentees to understand that there is a point to mentoring. In fact, that is the reason why she has stayed in close communication with her mentees. As a mentee, she was also close with her faculty mentor because she understood that the support provided by her mentor had played a critical role in her decision to stay in college.

Lucia further elaborated that faculty mentors should have good intentions to mentor, must have time, and should demonstrate that they care for their mentees. She specified that mentors and mentees have to be clear as to why they want to participate in the program because it can influence the outcome of the mentees' experience. She stated,

They have good intentions; if it doesn't have proper structure or have people that are willing to put in the work, the students are not going to get anything out of mentoring. It isn't just assigning a faculty member to a student. Mentoring is taking the time to make sure that faculty knows how [to] answer the questions, knows how to help that student out, [and have] students that are willing to do it. I have seen it where students don't want to be [mentored] and that's fine. It needs to have willing participation from both sides.

Aurora explained that mentors should be motivated primarily to help the mentee, not themselves. She speculated that perhaps mentors might be motivated to participate in mentoring for the stipend provided by the program, and she flatly stated,

If [the] faculty mentor was just doing it for the stipend, then they should not be a mentor. I felt like the right reason would be because you really want to mentor [a] younger mind and to help them develop and help them flourish. I felt like you would have to really care about them.

Camila indicated that faculty mentors should have time to mentor. She reflected on her previous experience, concerning the difficulty of accessing her faculty mentor. She said, "If the faculty mentor can't be around, don't force them into being a mentor. If they insist on quitting, then let them." She recounted a discussion that she had with her first faculty mentor. She said,

She had been trying to drop FAM for a while because she felt like a horrible mentor because she could hardly be there for us. But [FAM administrators] said no, that she was fine. I know it would have been helpful to people to have their faculty mentor around.

Aurora elaborated further on the faculty mentor's available time. She reflected on her experiences and stated that, to be successful mentors, they should have the time to invest towards understanding the population that is being mentored. She explained,

I think one of the things that should definitely change is only having [a] faculty mentor [who is] willing to spend time and actually do it right, get to know the peer mentors, get to know the mentees, and to do [activities] with them. Because that's what I think the program is about: [learning] from each other and to gain insight and for them not to be so scared about being in college. It's a first-generation student [so] nobody has come to college before them. It's very daunting [for the mentee] because what if [they] don't succeed. Then what? The [mentors] should prioritize their time and focus on the mentees and not on everything else. Certainly, [if] they don't have the time then they should obviously not be a mentor.

The interviewees also indicated that mentors have to demonstrate genuine care for the mentee.

Samuel described his faculty mentor as showing he cared about his mentees. Samuel stated,

My faculty mentor [is a] very work-activity driven man who is always doing something, who is always encouraging people, always putting smiles on people's faces, so I respect that. The man is very great, always helping people out. He's always going out of his way to encourage people to keep doing what they're doing.

Aurora elaborated on the importance of "caring," which meant for her that a mentor should be able to talk to their mentee genuinely to help them improve. She explained,



I think a faculty mentor should be able to say the things that the mentee might not want to hear but needs to hear to improve themselves. They should be able to do that. They should not be in it for some personal gain or to make them feel better about themselves but because they really want to help that person. They really want to mentor that person and help them flourish to their best potential.

### **Theme Two: The Role of Relational Needs and the Influences on the Mentee's Experience**

Data analysis revealed that networking and linking influenced the mentee's experience. Frequently, mentees indicated a desire to build networks to find resources that would help them accomplish their goals. Similarly, linking also meant a willingness to meet new people for several reasons other than to receive help to achieve career or educational goals.

Within the role of networking and linking, two subthemes were clearly identified. As shown in Table 21, the subthemes were:

Table 21

*Descriptions of Subthemes for The Role of Forming Connections and the Influences on the Mentee's Experience*

Forming connections	Descriptions
Social Support	The mentee's need to find affiliations that influence their perception of being cared for or getting help or psychological and emotional support.
Linking	The need to have a social connection to a person (as an access point) that facilitates access to resources that is not explicitly provided by that person(s).
Networking	The need to connect to a person or persons to access resources that can only be provided by that person.

**Social Support.** The first subtheme that frequently emerged for the theme of linking and networking was social support. The majority of interviewees indicated a need to have a mechanism, a link that can facilitate a connection to others. Often discussed in the interviews was the need to connect with others for social support. Students discussed a need to find relationships that were helpful, caring, and emotionally supportive for them.

Sofia indicated that the peer mentor relationship was more than an academic affiliation. Because coming to the university was a big decision, the risk of failure made it essential for her to have a connection that was supportive. Her participation in the FAM program led her to connect with other people. She explained,

They're, like, I have friends, but they are in school; it's hard to explain. It's a big decision because the scholarship, moneywise, they are more of a connection academically. If I need anything academically they can help me and socially in school, too. It's kind of moving. I just don't know how to put it in words. When you feel something, it's hard to express it. Because [I have] never felt this way before.

Aurora also shared a similar experience in which she described that her experience in participating in FAM exceeded her expectations about connecting with people. She began to cry as she answered the questions. She stated,

When I applied for the program, I did not expect the family that we would create. Aside from the faculty mentor, we created a family ourselves. I wasn't expecting that. I guess since I am far from home, I expected a support system. If I was struggling, [I would want] for someone to be there, to be understanding someone to talk about it [with]. I was looking for people I could be with, so I could feel like myself and not feel like I wasn't good enough to be there.

Camila related that, before her participation in FAM, she was experiencing a tough time during her first semester of college, revealing she was emotionally and physically isolated at the start of the semester. Being away from home, she said, "I'm very close to my family, and I have a hard time making friends, so I was alone for a while. I didn't make a friend until about two weeks into school, and I didn't have a roommate, so that made it harder." She added that she did not get a roommate for about a month and a half. She related how making a connection for social support became an essential experience for her. She stated,

After Christmas break, I was really sad. I was just going through a really rough time. This year just has been really rough on me. [My mentor and I] met up. It was me and another girl from our group. The girl had to leave, and my mentor had to leave for FAM class. [My mentor] ended up missing it, because we ended up talking for three hours. When she told [the instructor] the reason why she missed it, she was excused. We just thought it was funny that she ended up missing [her class].

Lucia's own experience as a mentee led her to recognize the value of receiving social support. As a peer mentor, she feels that mentoring is about the relationship and the social support her mentees get from her. Mentoring has been about connecting with her mentees. She stated,

For me, mentoring means that I am willing to be there for you no matter what. I told my students that they have my numbers, my email, [and] my Facebook. No matter what happens, please call me, I will answer, and I did get calls at three in the morning with them crying and I was okay with that. That's what I promised, and that's what I was willing to do.

**Linking.** The second subtheme that emerged from forming connections was linking. Students described a "reason" for participating with other people. Linking is described as a reason for joining, in which the mentor serves as a link. It also meant having a connection to get referrals or someone who can guide them to other resources.

Gloria explained how vital the mentor was as a link for her to participate in activities. She described having a full schedule. She stated,

I also have a part-time job. It's in the middle of the day, so it's difficult. My classes are all in the morning and then [I'm] going to work. I get home at 7 [pm], and sometimes we have training [at work], so I won't get home until 8 [or] 9 [pm] sometimes. Then I go home and hit the books. I don't have time. Well [I do] have the time, but other people don't have the same schedule as I do, so sometimes they might have classes in the afternoon, and I can't go and interact with other people.

Gloria, however, added that, on some weekends, all the mentees gather to play soccer and that, other than the classes she was attending, if she did not have a peer mentor, she would not see a reason to be back on campus.

Sofia described the benefits of linking up with other people. She explained having benefitted from help with academics, networking, activities, and exploring her motivations for her career choice. She elaborated,

[My peer mentor] told me [about] the school activities, [which is the] good part because it [kept] me in school. Since I'm a commuter, I don't know anyone. I actually work outside of school too, so I don't have time to socialize. With [my peer mentor] being there, I've met more people, and she gives me encouragement. I actually talk to [mentors] personally about how I failed my first bio test, and it was crazy. [The mentors] talked to

me in a way, like, “Do you really want to major in biology?” They made me think in a different way. They didn't force me, but they got me to open up. [My mentors told me that] “You have to be a doctor because you want [it], not because your parents want it,” so they opened up for that part, so that's what I like about it. [The FAM program also conducts] activities, which I like because I can't afford to travel places, so they provide it for you. Going to the ranch and hanging with your friends, with the mentors, it's like a new experience for me and for other low-incomes who can't afford to travel.

**Networking.** The last subtheme for the role of forming connections was networking. Interviewees indicated valuing connecting with other people who can provide unique resources that could be helpful to them.

Camila indicated that networking had been the most helpful. She elaborated that an advantage of being a work–study in the English department is that it facilitated becoming acquainted with several English professors. She described the faculty in the English department as thoroughly helpful to her, pointing out, “I know if I need anything I can go to them. They're very resourceful. They know if I need help they can help me out, [like] if I need a letter of recommendation.”

Sofia explained that networking is about specific contacts that can facilitate job opportunities and internships. These relationships also open the possibilities of exploring what one wants to study in a career. She stated,

I think that networking, sometimes it's not what you know but who you know. So I feel like networking—we're college students right now—so if we invite alumnus or students from other schools, they can connect you for jobs and options. I think networking is

really helpful for internships. I think it's a good thing. It keeps you open to options and what's out there. [It helps in] figuring out who you are and what you want to do.

Sofia reiterated that the FAM program has been helpful in facilitating the majority of her experiences and opportunities. Through her participation, she indicated that she connected with new people and the faculty as well. She emphasized that these relationships created chances, such as receiving good academic advising and being able to speak candidly with faculty.

Other students discussed what other activities facilitated networking and led to helpful resources. Camila elaborated that being a work–study in the English department, which led her to meet several English professors who have reassured her in her choice of major. She stated, "I know that's where I belong because I'm an English major . . . It helps me to connect to people I normally wouldn't, [because] I know people from other departments that can help me out."

Sofia added to the benefits of networking, explaining that there should be more activities that facilitate this process. She stated,

I'd say more trips. I love traveling and networking. We already have good networking here at our school. I kind of want to go beyond that; I would like to go to other campuses, get to know more people and make more connections. Have a convention [and] combine all these FAM people. It's like all first-generation self-employed [students]. I think that would be great [to] build up connections.

### **Theme Three: Mentee's Need for Resources and Information**

Interview data analysis revealed the mentee's need for resources and information, regarding other resources, study strategies, and issues related to life skills. Repeatedly, students indicated that what influenced their decision to participate in mentoring was the need to find a centralized place to find information and resources.

Within the role of networking and linking, two subthemes were clearly identified. As shown in Table 22, the subthemes were:

Table 22

*Descriptions of Subthemes for Mentee's Need for Resources and Information*

Resources and information	Descriptions
Financial Information	The need for help with understanding, finding other financial resources, receiving guidance, and applying for financial resources.
Advice	The provision of multiple choices of resources or direction in which the recipient makes a decision and can decide whether or not to follow the given advice.
Academic Support	Providing strategies concerning learning method, study strategies, test-taking skills, time management. It also includes educational advising and anything else on improving academically.
Social support and encouragement	Providing empathy, attentiveness, caring behavior, showing interest, and being genuine. Validating and encouraging the student.

**Financial Information.** The first subtheme for the mentee's need for information and resources was the student's need for help in obtaining financial information, resources, and help with applications. This subtheme illustrates that, frequently, students needed help securing information. Samuel stated, "Perfect! I need something at least to get me through this college . . . Because we didn't know anything, we were first-time freshmen, we had no reference, [we didn't know] anybody." Similarly, Sofia indicated she needed information to pay for college and stated, "My mom is a single parent, and we don't have enough money to fund college."

Lucia indicated that her first initial concern was to be admitted to college and then figure out how to pay for it. She stated,

I was really worried about financial aid; how I was going to pay for next year and pretty much how things went. I had always told myself, “Just get into college, and you'll figure out the rest.” Then I got into college. So, I was at the point where I had to figure out the rest. I was like, “Oh crap, what do I do now?” So I was looking for [information]. I kept bugging Financial Aid, and the other offices and they kept just bouncing me back and forth. So when she told me about this program, I [thought that] maybe they can help me, and it was really helpful.

Laura related that she was having difficulty with her financial aid, and she turned to one of the administrators for help. She said,

I know at that beginning I had trouble with my loans [because I was] going to be a little behind. I got a little stressed at the beginning because I couldn't find a work–study [job and] that just got me really overwhelmed. But then, after going in and actually speaking to [the administrator], he [said,] ‘Oh, here are places you can find a job,’ and he [also] helped switching my loans around. So now I only have the loans that don't have interest right now until I graduate. So I feel that's a really big relief.

Camila also indicated having similar financial aid problems. She elaborated that her parents did not attend college, and that they did not understand the college process. For example, she explained, “We were having trouble with [financial aid].” Getting help with financial aid information was something that attracted Sofia to participate in the mentoring program. She explained, “My mom is a single parent, and we don't have enough money to fund college.”



Laura also indicated having similar problems. She added that one of the reasons she joined the mentoring program was to get information, mainly since she was from out-of-state. She explained,

From [what] I did understand, [mentoring] was going to help us with [our] first year out of high school. [That] was really important to me because my parents [didn't] really understand loans or work–study, or how exactly everything was going to work. So, I thought it would help me a lot, especially, since I was an out-of-state student.

**Advice.** Another type of information that students sought was advice. Mentees indicated a need for guidance with academic and personal problems, in which they had to decide whether or not to follow the advice given to them. Lucia noted receiving advice from her faculty mentor about what is and is not appropriate student behavior; furthermore, the mentor readily acknowledged when she did not know something but was willing to find an answer for her.

Lucia explained,

I had a really bad roommate my freshman year. She was awful and always lying about stuff. She faked three pregnancies. So I went to [my faculty mentor] to talk to her about all this, and it was just nice to have someone there to talk to someone who wasn't biased, who wasn't going to gossip because I didn't want to get my roommate in trouble. It was just nice having this person there was outside all of my circles, and I could just go to with all my questions and concerns that I [have].

Sofia sought advice on how to improve her grade after she had done poorly in one of her classes. Her mentors told her to attend the tutoring center and also recommended that she study with other biology majors in the FAM program. They also suggested that she study in groups. As a result, she happily mentioned that she accomplished a B+ on her following exam. She stated,

My peer mentor isn't actually a bio major. They're English, and stuff, which kind of makes me see things in a different way. They make you think in a way where you have to make a decision, but they're options [that were given to me].

Another type of information students sought was career advice. Emma's decision to participate in the mentoring program was motivated by wanting to understand her career choice. She stated, "I wanted to get know people that would help me make a decision about my major and also with opportunities to make sure I'm making the right decision as to what I want to do with my life."

Gloria also sought career advice from her faculty mentor, and she explained that she occasionally visited to ask questions of her mentor because she is interested in obtaining her PhD. She explained that her mentor provided career advice and stated, "She was just telling me some routes I could take, but she did say experience would be best after my master's."

Lastly, Lucia sought legal advice from the university. She explained that the university "has always been very immigration friendly. They've helped me out with all my papers and all that stuff. Having that opportunity to be in a place where you can ask someone all that, it really helped me stay [in college]."

Throughout the interview, financial and career resources were frequently discussed by the interviewees. Laura explained the value of resources that can help to prepare for one's career. She stated that organizations such as Civic Engagement helped students with resume development, volunteer opportunities, mock interviews, and internships. She revealed that, as a peer mentor, she often discussed the value of resources with her mentees. She stated that most students are not aware of the type of help that they can obtain from these resources. Laura said,

I think [it is good] knowing the resources that we have available here. [For instance,] some of my mentees don't know what the Civic Engagement is for. So I feel like knowing what resources are around is really, really helpful. Even at the library, most kids just go to the first floor and chill, and it's more like a hangout place than [a place] to sit and study . . . It's more than just Starbucks.

**Academic support.** The third subtheme to emerge was the need for academic help. This type of resource involved a “how to” approach, in which the mentee was provided with specific study strategies, test-taking tactics, and academic advice. Academic help also meant other types of assistance with academics, such as acknowledging insight on a professor's teaching approach, sharing class notes, studying with the peer mentor, or receiving a letter of recommendation from the faculty mentor.

Celeste explained her professor showed her how to improve her time management when she began having poor grades. She revealed being surprised that the professor taught her how to balance her time and expressed appreciation that she was given an example of how to manage her time. She explained,

It was already almost mid-semester, [and] I needed to start picking [my grades] up if I wanted to stay in the classes and if I wanted a good GPA. One of my professors gave me a calendar, and she [explicitly said to me], “This is when you are going to have classes, and this is when you are going to have time for friends, and this is when you're going to go to your room and do your homework.” She gave me a schedule of what to do.

Everyone was telling me to do it, but no one actually gave me a schedule and was like “Sit down and do it.” I guess she really helped me out a lot. Everyone was [telling me], “Oh just do it,” but no one showed me how to do it.

Sofia also indicated receiving academic help. She talked about the academic support she received from her mentors. She stated she underestimated the demands of college and realized that they were higher than high school. She revealed that she did poorly on one of her exams, which took a substantial emotional toll on her because her performance in the class threatened her career of choice. She revealed, "I mentioned that I wanted to be a biochem major and it scared me. Getting a 52 on my first bio test, [that] kind of tells you a lot." She described her mentor's help and stated,

They asked me how I studied, [and about] what I do in my free time, [and] what techniques I have to do. They walked me through a lot. "Just take it again," which I did better on the next one . . . They talked to me in detail, "What do you do for school? How long do you spend studying?" They told me to read my books, talk to my bio professors to see what I can do to raise my bio grade, [and they gave me] techniques on how to study more. Coming to the university [and] transitioning to higher standards was hard.

Samuel also indicated receiving help on how to study. He noted that his mentor asked him questions about his study approach, which made him realize the ineffectiveness of his plan for his academic work. He stated, "My academic mentor brought in a lot of reality questions." He noted that he was having a difficult time with his academic work and expressed an appreciation for being told how to be more effective.

When something was getting too hard, she would say, "Hey, you just have to do it this way. If you do it like this, it would be a lot easier." So, I took [the] advice, and it started to make sense. Everything is 100 times easier now.

**Social support and encouragement.** The final subtheme that emerged from information and resources was social support and encouragement. Several of the interviewees indicated

feeling confident of their academic abilities and, instead, stated that they needed help with social support and encouragement.

Laura indicated that social support was beneficial to her because she was from out-of-state. She noted that her peer mentor was helpful to her. She elaborated that the mentors were supportive of her when she would get stressed out, and, when she would talk to them, they would suggest ways that she could deal with her stress. She described herself as feeling stressed when she was overwhelmed by her classes. She explained,

At first, it was hard because I was a little homesick. So it was hard for me to accommodate to the college life. So my peer mentor and my group was like having another little family in college. And then supporting each other, I think that was really nice.

Emma also indicated that her faculty mentor was attentive to her and emotionally supportive and revealed, “He serves as a source for me to vent to as a student. I think it’s good to share my progress I’ve been making or what I struggle with. It’s just nice to have someone to talk to.”

Camila also indicated that her mentor provided social support. She noted that she was having a difficult time being away from home. It was mainly tough on her during the Christmas holidays because she was not able to go home. Her peer mentor supported her. She stated her mentor would talk to her for long periods of time and show support.

Emma elaborated on the difficulty of being in a new environment. She explained that her resident assistant was helpful to her because, even though she was assigned a roommate, it did not mean that a supportive relationship would emerge. Because of the newness of it all, the

resident assistant was there "for emotional support, [which is] something that I appreciate as a person."

Aurora also expressed experiencing emotional support from her peer mentor. In fact, she shared that the relationship with her mentor had transcended the peer mentor–mentee relationship. She explained,

I actually have a good relationship with my peer mentor because she was around. I think it was spring break and I hadn't gone home either. So we had this whole movie marathon going on. She is not in my major, but she is in my brother's major and so there is this whole weird connection thing going on there. We just talked a lot. She didn't really help me with, like, my school problems, really. But I don't have that many school problems. [I did have] one science class that I had problems with. She mostly helped me with [getting] over [it]. I think I was homesick and she really helped me get over that. She became my extended family. Then I started playing soccer with some friends, and her boyfriend played soccer, and so we started having that connection there. So, even if we never met officially like peer mentor and mentee, we always met together as friends just playing on the soccer field. So it was no longer like an obligated relationship with each other because of the FAM program. We just integrated each other into our lives, and so we became friends not just [with] mentoring stuff.

Another source of support that was frequently mentioned was receiving encouragement. Interviewees noted that it was vital for them to gain motivation. Samuel said that his faculty mentor was always helpful. He stated, "He's always going out of his way to encourage people to keep doing what they're doing."

Celeste also needed encouragement when she was having a difficult time with one of her classes. She explained,

I wasn't doing so well last year in my biology class. She encouraged me not to drop it because I was going to drop it. She was like, "No, you can do it." I ended up getting a B, so I went from having an F to a B. They were just there to help me.

Similarly, Samuel indicated having doubts about his chances of success in his class. He elaborated that his mentor encouraged him to persist. He stated,

[My mentor] was [also] encouraging me. I was like, "I don't [know] if I'm going to make it [in] this class," and she [said], "No, no, don't drop." She was telling me, "There's no reason to give up if you have all these things. You just have to try a little harder." I [gave] it my shot, and I actually passed all my classes.

Gloria also indicated being encouraged by her mentor to seek help. She explained that she was angry at being rejected by the other universities and that attending the university was not her first choice. She said that her mentor was helpful with a suggestion for counseling to help her deal with anger and resentment.

#### **Theme Four: The Mentee's Need for a Purposeful Role and Finding Meaning**

Interview data revealed the interviewees' need for a purposeful role and to find meaning in their lives. Mentees sought out to find a part to feel purposeful and to find meaning in their positions.

Within the mentee's need for a purposeful role and for finding meaning, two subthemes emerged. As shown in Table 23, the subthemes were:

Table 23

*Descriptions of Subthemes for The Mentee's Need for a Purposeful Role and Finding Meaning*

Purposeful role and finding meaning	Descriptions
Epiphany	The sudden discovery of meaning or purpose, the realization of one's essential nature through self or others.
Service	Being able to provide help to others by volunteering or contributing to others without the expectation of anything in return.

**Epiphany.** The first subtheme for a mentee is the need to find purpose and meaning through self-discovery, through activities, or from guidance they received. The mentees searched for clarity of their purpose, role, or motivation for their goals. Emma indicated that she was unsure of her academic major as well as the experiences she needed to have, regarding her career choice. She stated, "I wanted to get [to] know people that would help me make a decision about my major and also with opportunities to make sure I'm making the right decision as to what I want to do with my life."

Aurora similarly had described being initially resistant to her high school mentor's confidence in her. She shared that the goals that she wanted to achieve had no meaning to her and felt that she was just going through the motions to comply with her family. She would say things to him like, "Oh, I'm just going [to] become a doctor just, you know, because my sister is [going to be] a doctor. Whatever." Aurora went on to reveal that, because of her mentor, she was able to see that she had her motivations for pursuing medical school. She described how she came to her realization. She explained, "I want to be a doctor because I want to help [people], not because I wanted to be like my sister. [Medical school] is something I wanted to do."



Emma shared that the challenges of moving away from home and the mission of the university has helped her grow as a person and discover her purpose. She stated,

I think that's what makes us. It can either build us or break us. [This university] has really helped me to build my resiliency. [It] allowed me to build a support system. Again, it's a new environment. Back home I have my family, and I have a system already in place, and coming here, you are just by yourself. So, [the struggle] has helped me gain a better [sense] of who I am as a person; I'm growing up and all these things. It has helped me better define myself and determine what I want to do because I've overcome a lot of things during my first semester.

**Service.** The last subtheme to emerge from the mentee's need to find purpose and meaning was service. Providing service to others, to be helpful, and giving back to the community meant wanting to be in a role that would positively affect others. Lucia became a peer mentor because she wished for other mentees to have a positive experience and outcome from mentoring. She cringed at the thought of mentees having a negative experience, in which the mentee can come away with the perception that mentoring is a bad thing. She wanted the mentees to understand that there is a point to mentoring because she realizes that the support has played a critical role in her decision to persist in college.

Samuel, on the other hand, revealed that volunteering for community service was meaningful to him because he gave back to the community. He found meaning in being able to help others physically, and he stated,

I love working outside, building houses, working with my hands. It's one of my passions. I love building houses. Doing that kind of stuff for people is more meaningful. I can actually meet the person I'm building the house for, and that makes me feel good.

Emma also found a role by advocating for people in the community. She explained she was involved in the Social Justice Club, which provided her a venue to advocate. She stated, Part of my mission at [the university] is advocating for things. The Social Justice Club advocates for social justice and informing students about the world around them. I think that serves, as it has a great impact. To have a club like that on campus, it means something [to me] . . . I think that, since [the university] is really for volunteering, that's something that they really promote. Just seeing the help we can provide as a community, the difference that we can make, is really powerful.

Lastly, Gloria indicated that helping others was helpful in identifying her own long-term goals. She found that helping others was enjoyable. She noted that her accounting mentor told her about a volunteer opportunity. She explained,

She [told me], "Maybe you should look into this, and maybe this would help," so, I would say that would be an opportunity from a career aspect. The VITA program, I really enjoy that. I enjoy doing other people's taxes on weekends, and I stay the whole day from 8 am to 6 pm.

### **Theme Five: The Influence of Role Modeling on the Mentee**

Interview data showed that interviewees found it helpful to have a role model. Mentees recognized the usefulness of having an example of someone who was successful. In a way, these role models were a form of template that the mentee could imitate to become successful themselves.

Within the role of the influence of role modeling on mentees, three subthemes emerged. As shown in Table 24, the subthemes were:

Table 24

*Descriptions of Subthemes for The Influence of Role Modeling on the Mentee*

Role modeling	Descriptions
Inspiration	A psychological boost or resiliency in which the role model influences the other's perception of one's capacity or validates one's own ability to muster one's own will or motivation to perceive that they too can achieve accomplishments like their role model.
Becoming a mentor	Mentoring's generative influence on mentee's willingness to mentor others.

**Inspiration.** The first subtheme that emerged from role modeling was that the students drew inspiration from their role models. Mentees perceived a psychological boost from a role model similar to themselves that elevated the mentees and helped them realize that they too could succeed as their role model had. Aurora stated that her parents always compared her to others in her community with the intended goal of inspiring her to do better. Aurora said, "I feel like in Asian families, especially, there's always been a kind of rivalry between me and my sister, or, like, me and anybody else. It's like, 'If they can do it, then you can do it,' and therefore you should be able to motivate yourself and push yourself to go and accomplish those goals."

Samuel indicated that he drew inspiration from people that he met in the mentoring program. Seeing students who have succeeded was meaningful and inspiring to him. He explained that he had an opportunity to talk to recent graduates of a doctoral program. He stated,

At the time, I was talking to different people. They were young PhDs, and people who got their PhDs [at an] old age. Hearing stories about people being successful at such a young age is influential. It's even more inspiring to see someone who has gone through

hardships, who has made a family, who has gone through a struggle, and [who] still [obtained] their PhD. That's way more influential to me.

Emma similarly revealed admiring her peer mentor's accomplishments and viewed her as someone she wanted to emulate. She felt motivated by her and "just seeing her as a student." She realized, "We all struggle, so just seeing that aspect of [her was beneficial]." She further stated her peer mentor was a role model to her that made her feel that she too could achieve her goals. She said,

She showed me what it's like to be there. Just because I'm a first-generation student, it's kind of like you can get these opportunities or be part of this and get so far in life to get what you want. . . . Being first generation and also being able to see what it's like to progress as a student. She's a junior so it's like, I can get there too. It's an example I just need to stick to it, the process of what it's like being a student here.

**Becoming a mentor.** The last subtheme that emerged from role modeling was the generative influence on the mentee's willingness to mentor others. Aurora indicated that her relationship with her peer mentor had a powerful impact on her. She revealed that her relationship with her peer mentor was enjoyable and that it inspired her also to become a peer mentor. She explained,

One of the reasons that I still really, really like FAM and decided to become a peer mentor for FAM is [because of] my friend [who] is also in FAM. Her mentor actually took us everywhere and so they kind of just adopted me into the FAM program. And that's what made me really enjoy it.

Aurora further elaborated that, because of her experience, her motivation became to help other students. She revealed,

I've always wanted to be in a situation where I could help others. It's so much easier if you talk to somebody who has done it recently. It's much easier to connect with them. I just want to get back to the future mentees. My peer mentors really motivated me to become a mentor. Despite the fact that I have assigned faculty mentors, [they] did not motivate me to do so.

Interviewees' positive experience with mentoring made them aware that being a peer mentor meant being a role model to their mentees. They indicated understanding the responsibility of their position. Sofia revealed receiving academic help, advice, and role modeling from her mentors when she was a mentee, and she realized that, as a peer mentor, she is also a role model.

Lucia similarly indicated that she was motivated to become a mentor because of the help she received as a mentee. She stated,

I really, really, really, got hooked on FAM. When I joined it really helped me. All the things I was lacking, I was missing; it helped me with that. I had all these questions and [my mentor] answered every single question I had, so, once I found the program, I stuck with it. Because it did so much for me, I [would] want to make sure it stays a strong program and it can help others.

She added that because of the help she received, she too wanted to help others by becoming a peer mentor herself. As a peer mentor, Lucia felt that having mentees meant being held accountable as a role model and stated, "I have to keep doing well in school because I have these four people looking up to me. They definitely helped me stay here."

### **Synthesis of Quantitative and Qualitative Data**

Both quantitative and qualitative findings were integrated to form inferences. Inferences are the interpretations drawn from separate quantitative and qualitative data in mixed method research (Creswell & Plano Clark, 2011).

The synthesis of the quantitative and qualitative data involved five steps that were implemented and found to be useful in generating specific questions (Plano Clark, Garrett, & Leslie-Pelecky, 2010). Plano Clark et al. (2010) indicated that the first step was the separate analysis of the two data strands. The second was the identification of overlapping topics between the quantitative and qualitative findings. The third part of the processes was refining the analysis of the areas that overlap (Plano Clark et al.). The fourth step would be to compare side by side both quantitative and qualitative data to identify the extent to which each topic supported and illustrated each other. Finally, both findings in each data set would be used to corroborate, demonstrate, or generalize results from each other (Plano Clark et al.).

Table 25 shows a process model of quantitative and qualitative synthesis in the mixed methods design used in the current study (Plano Clark et al., 2010).

Table 25

*A Process Model of Quantitative and Qualitative Synthesis*

Technique	Example Question
1. Compare findings method by method for corroboration.	To what extent is the lack of statistical significance explained and supported by findings in the qualitative strand?
2. Develop a complete picture by presenting complementary sets of results	How is not having a mentor with the same major influence the relationship?
3. Identify divergence and alternative perspectives across the methods	Data diverged by demographics, relationship quality, and impact on outcomes. A divergence of data due to lack of corroboration from quantitative strand necessitated an exploration of quality of a relationship.

The lack of non-findings from the quantitative strand and the findings from the qualitative strand show that, although dealing with the same population, the research is, in fact, dealing with different samples. As a result, both strands show different views of the same event that do not necessarily represent a cohesive picture. The lack of cohesion would be analogous to taking a picture of a person only to find out that the final image consisted of several separate images, such as feet, legs, hands, and hair. The divergent results in the quantitative strand and qualitative strand were unexpected.

The different result in the non-parametric results and the qualitative findings suggests that students' participation in mentoring is not necessarily based on academic need. Students might have been participating in mentoring to receive the types of support that are not measured in the instruments. The results in the quantitative strands showed no difference between students in a high-quality relationship and medium-quality relationship. The qualitative findings indicated that the decision to participate in mentoring was not necessarily based on the need for academic help

and perhaps mentees were motivated to have other types of support, such as social support, linking and networking, advice, and financial information.

A linear regression analysis was conducted to identify trends in future research, and results showed that none of the subscores predicted the outcome measures. A higher number of mentees ( $n = 16$ ) indicated having had a higher quality relationship compared to the remaining mentees ( $n = 11$ ), which would suggest the possible predictive relationship. The inability to predict any association with mentoring outcomes might indicate that the mentees' academic needs were being met somewhere else. A qualitative example suggested that someone other than the mentor was helping the mentee academically. Moreover, the demographic data indicated that a majority of mentees indicated that their mentor did not have the same major as them. Therefore, there might have been less incentive to turn to a mentor who could not help specifically with the subject matter that was of interest to the mentee.

Another possibility for the lack of statistical significance might also be due to the other reasons to participate in mentoring, other than academic goals. During the interview, some students indicated that their motivation to join the FAM program was for social support instead of academic support. Therefore, if a majority of mentees joined for other reasons than academic support, then there might have been fewer mentees that were representative of students in academic need. The results, whether or not the mentee had a good or mediocre relationship with the mentor, might not necessarily have been detected by the measures used in the study.

Despite the fact that both quantitative and qualitative data diverge instead of converging, the data generated by the qualitative strand demonstrated that the quality of the relationship had an impact on the mentee. Within the framework of the study of relationship quality and the constructs presented by the RHI (Liang, Tracy, Taylor, Williams, et al., 2002), the data generated



in the qualitative strand exemplify the constructs of a high-quality mentoring relationship and the influences it has on mentees' outcomes. Therefore, the next section will provide interview exemplars of the constructs of empowerment, authenticity, and engagement that highlight a high-quality relationship.

### **Quality of Relationship**

The methodology of a convergent parallel design was to triangulate the data, which meant that the quantitative and qualitative data would complement or corroborate each other's findings (Jick, 1979). The lack of quantitative results, however, shapes the focus of this study, which is predominantly qualitative. The qualitative results are rich in detail but show an entirely different picture of mentoring than the one provided by the quantitative strand. In fact, the narrative that emerges from the quantitative strand suggests that mentoring is about maintaining boundaries, being a capable coach, being accessible, being a point of contact, providing resources, being an encourager, and helping students find their way in life and career. The primary goal of this investigation has been about the quality of relationship in mentoring and how differences in quality influence the outcomes. As a result, one can only be left to wonder about the lack of evidence on relationship quality.

The quantitative findings did not impart any information on the impact of quality of the relationship. The qualitative results, however, did show several examples of relationship quality and the effect that quality can have on the mentee. Within the framework of the Relational Health Indices (RHI), the qualitative findings have demonstrated examples of authenticity, empowerment, and engagement. Liang, Tracy, Taylor, Williams, et al. (2002) noted that authenticity is related to the liking of others and a motivation to be in a relationship. Authenticity allows for the persons in the relationship to be genuine, to be valued, and to feel comfortable

expressing oneself or sharing one's own experiences with one another. Authenticity is seen in theme 1 of Faculty and Peer Mentoring differences. For instance, Aurora's initial encounter with her soon-to-be second, unassigned mentor resulted in her surprise at her mentor's genuineness.

She said,

One of the very first events we did, [I was invited] to the haunted house and [that is the time] he [first] met me, and we just connected. We all had a lot of fun doing the haunted house. I can't believe [that the faculty mentor] went through the haunted house with us.

That was interesting. He was the reason [why] I am still in FAM. It works when the mentor really cares and extends his reach to people outside the [mentoring] group.

This moment of authenticity involving a shared experience was instrumental in Aurora's decision to continue to participate in the FAM program. The moment of authenticity showed Aurora that the faculty mentor was genuine in his interest of her. As a result, the quality of her interaction with her soon-to-be non-assigned mentor led her to gravitate towards a natural mentoring relationship that was outside the program's matching process.

Authenticity also means being comfortable enough to be genuine and to express oneself without the feeling of being judged (Liang, Tracy, Taylor, Williams, et. al., 2002), which can be seen, for instance, within the third theme of Resources and Information. Regarding her faculty mentor, Emma stated, "He serves as a source for me to vent to as a student. I think it's good to share my progress I've been making or what I struggle with. It's just nice to have someone to talk to." In contrast, the lack of authenticity on the part of the mentor can be problematic and detrimental to the relationship. Aurora, for example, had one explanation that led her to stop mentoring with her first-assigned mentor. She stated that her assigned mentor's personality was uninviting, as well as demonstrating a lack of interest in Aurora's personal problems.

The quality of interaction that Aurora had with her mentor led her to believe that she was not valued, and therefore, Aurora felt discouraged to be genuine in the relationship as well. As a result, the quality of her experience led her to stop mentoring altogether because she felt that her mentor did not care about her at all.

The second subscore of the RHI that underlies the quality of the relationship is empowerment. Liang, Tracy, Taylor, Williams, et al. (2002) expressed that empowerment means to feel strengthened, to be able to take action, and to be able to work through interpersonal conflicts, such as differences. Someone who is empowered feels uplifted, feels positive, and feels that they learned more about oneself. Feeling empowered also encourages one to emulate the other person's positive qualities (Liang, Tracy, Taylor, Williams, et al.). The themes that were within the concept of empowerment were Purposeful Role and Meaning, as well as the theme of Role Modeling.

The empowerment Emma felt was attributed to her peer mentor, who was a role model to her. She stated, "Being first generation and also being able to see what it's like to progress as a student. She's a junior so it's like I can get there too. It's an example; I just need to stick to it—the process of what it's like being a student here." As a result, Emma felt that she too can be successful because her peer mentor had been successful. Empowerment fostered confidence in Emma, and she strived to emulate the qualities of her peer mentor that would lead her to have the same academic success.

An outcome of feeling empowered was illustrated by Lucia, who was so moved by the positive relationship she had in mentoring that she was motivated to help and to give back to other students by becoming a peer mentor. She stated,

I really, really, really, got hooked on FAM. When I joined it really helped me. All the things I was lacking, I was missing, and it helped me with that. I had all these questions and [my mentor] answered every single question I had, so, once I found the program, I stuck with it. Because it did so much for me, I [would] want to make sure it stays a strong program and it can help others.

Lucia felt uplifted by her experience as a mentee. She felt so positively changed by her mentoring experience that she was inspired to give back to others who need help like she did when she was a first-year student. Giving back gave her a sense of meaning in her desire to positively influence the lives of others.

Lastly, Liang, Tracy, Taylor, Williams, et al. (2002) explained that engagement means to be mutually involved and committed to the relationship. Persons who feel that they are engaged in the relationship will have a desire to spend more time together. Engagement also means that each person within the relationship feels understood and wants growth in the relationship. Engagement can be shown by being attentive to another's emotions or feeling emotional support and providing encouragement (Liang, Tracy, Taylor, Williams, et al.).

For instance, Samuel found that both his faculty mentor and peer mentor always made an effort to engage all their mentees. He stated, "I know any kind of help is appreciated. Even if it doesn't look like it is, any little involvement will get a person to move forward." What this meant for Samuel was that both his faculty mentor and peer mentor made him feel valued because they showed that they cared for him, and that made him feel like he could count on someone.

Engagement and disengagement was an experience that Camila had with her mentors. Her faculty mentor was not as engaged with Camila as much as her peer mentor. Camila stated, "I don't know why [my faculty mentor] was hardly on campus. I know she has younger kids so

I'd imagine that would be why." In contrast, Camila felt that her peer mentor was engaging her, and she found that helpful. She stated, "My peer mentor helped me stay on track and helped me with resources. My peer mentor, she's great. She helped me a lot when I needed someone to talk to . . . She's there whenever I need her. If we bump into each other, we talk. We'll sit at meetings and talk; we'll go to Starbucks and talk." The distance and difficulty of accessing the faculty mentor contrasted to the closeness Camila felt with her peer mentor, who she described as "great."

In sum, the non-findings of the quantitative strand raised unexpected but interesting questions when integrated with the qualitative findings. First of all, did first-year students have enough time to develop a relationship with their mentors by the time the data were collected? Was the low level of participation due to relationship development, perceived benefits of mentoring, or inadequate time to reflect on the experience of mentoring? The fact that both findings showed that many mentors did not share the same or similar major as their mentees might have played a role early on to delay the development of the relationship. For instance, having the same major might have prompted academic conversations that might have facilitated other non-academic discussions. Also, related to the previous question, if a mentor and mentee do not share a major, does that diminish the mentee's expectation of academic support? Did the mentees seek academic help elsewhere? Finally, were there more students motivated to participate in mentoring for social support rather than academic support?

## CHAPTER V

### SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

The researcher sought to investigate how the quality of the mentoring relationship impacts undergraduate participants from the Faculty Academic Mentor (FAM) Program from a small religiously affiliated university. The researcher's interest was to examine how mentoring influenced the participants' academics and overall experiences and to better understand how aspects of the university community were helpful to the students. This chapter includes a summary of the study's significant findings and their implications for theory, program practice, and future research.

#### **Summary of the Study**

Mentoring as an intervention for undergraduate students has shown to have a positive influence. Specifically, undergraduate mentoring has been primarily implemented for first-year students because of their historically high attrition rate from one semester to the next. Among the group of first-year students are a subpopulation of freshmen undergraduate students who are the first in their family to attend college; because of that, this subpopulation, known as first-generation college students, is at a notably higher risk of attrition than non-first-generation students. There is a considerable achievement gap in which first-generation college students lag behind non-first-generation students. Mentoring has been a widely implemented strategy in many colleges because it has been shown to influence a student's academic performance, persistence, and graduation rate to close the achievement gap.

This researcher investigated the quality of the mentor–mentee relationship as it pertains to the outcome of the mentees' experiences. Concentrating on the relationship quality primarily focuses on the continuum of the quality within the mentoring relationship, in which at one end of

the continuum is the high-quality relationship and as a result, positive mentoring outcomes. At the other end of the continuum are poor to negative associations that are expected to be associated with adverse mentoring consequences. The study employed a mixed method strategy to have a broader range of possible mentee experiences to understand how the quality of relationship impacted mentees' outcomes. This study employed a convergent parallel design in which both quantitative and qualitative data were gathered concurrently. Using convenient and snowball sampling, an online survey was employed, in which the quantitative data collected was analyzed using non-parametric analysis for question 1 and regression analysis for question 2. Applying a phenomenological methodology, the qualitative data employed a hermeneutical approach for analysis. Collected data from both quantitative and qualitative findings were then merged for interpretation.

In regard to the quantitative research questions, there were no differences between the cohorts concerning their academic performance that can be associated with the quality of relationship with their peer and faculty mentors and the level of quality with their university community. Moreover, based on the second research questions, the data did not reveal which relational quality domain of engagement, empowerment, and authenticity was associated with influencing changes in student self-efficacy, academic and intellectual development, institutional and goal commitments, and academic success.

The different findings in the quantitative and qualitative strands were unexpected. Although the population was the same, the samples for the quantitative strand and qualitative strand were different. As a result, two different pictures emerged. The quantitative strand did not yield any significance that would indicate how quality influences the mentees' outcomes. The lack of statistical significance was due to the low level of participation. This conclusion is based

on results from the Cronbach alphas for all scales used, which were above .7, suggesting that a sufficient number of participants might have yielded different results.

The lack of statistical significance in itself, however, yielded some potential clues that are not immediately evident if the quantitative data were the only source of interpretation. The second source of data from the qualitative strand suggests insight into the lack of statistical significance from the quantitative data.

In regard to question 1 of the qualitative strand, the overall experiences of mentees in the mentoring program a vibrant picture was revealed. For the most part, the subthemes reveal that mentoring was a positive experience. Participants indicated feeling confident with how the mentors coached them into staying on track with their academic support, the direct social assistance, the provision of information and advice, aid for self-development, and the inspiration to become a peer mentor to help other students like themselves. Despite the positive outcomes, several mentees revealed having negative experiences in the FAM program. Students described that their negative experiences with their faculty mentors as due to misunderstanding, detached or uninterested mentor, and the mentor's omission of emotional support and encouragement.

The second research question exploring the aspects of the FAM program that helped the mentee academically revealed a mixed picture. These conflicting results are due to the different reasons that motivate students to participate in mentoring. Several students indicated confidence in their academic abilities and were driven to participate in the program out of the need for social support and information, such as financial aid or advice regarding their career choices. For these groups of students, social support, networking, advice, and encouragement were vital benefits of mentoring. In contrast, students who joined the FAM program out of an academic need revealed that coaxing, academic support, and encouragement were beneficial to them.



The third research question was in regard to the mentees' overall experiences at the university that were helpful to them, in which they revealed that different types of contacts with other faculty and administrators were beneficial. Participants acknowledged that mentoring was a gateway to other connections. Some students indicated that their relationships with their mentors facilitated relationships with non-mentoring faculty members and enabled their encouragement to participate with other campus organizations. Participants noted that other faculty members were role models that inspired them to join in organizations that provide community service. Students also found it helpful that non-mentoring faculty members also served as role models for their careers of choice. Other students found solace and direction from the religious services provided by the university, in which they found inspiration to help others through community service. Moreover, it inspired students to find meaning in their careers through the service they provided to others.

The synthesis of both quantitative and qualitative data reinforce the advantages of using a mixed methods approach to investigate mentoring. Based on both sets of data, the qualitative data informs the lack of statistical significance in the quantitative data. One possible reason might be that academic outcome measurements were inappropriate for the sample. The lack of significance might be attributed to an insufficient number of students seeking academic help, in which most mentees joined the FAM program out of the need for social support. In light of this, the lack of statistical significance bolsters the view that perhaps the sample taking the surveys was more representative of mentees joining FAM for social support. Alternatively, the demographic data revealed that most faculty and peer mentors did not have the same majors as their mentees. Therefore, it is also possible that mentees sought academic assistance elsewhere. It

is, therefore, reasonable to interpret that the outcome measures of mentoring did not coincide with the mentees' needs.

If the student participated in mentoring for the sole purpose of having social support, why was there no statistical significance in the quality aspects of the quantitative strand? Why was the quality of relationship evident in the qualitative strand? The divergent results between quantitative and qualitative strands might be due to timing. The number of first-year participants was quite large, and it is possible that first-year students did not have enough time to develop a relationship with their mentors, and, therefore, that was reflected in the non-significance. In contrast, in the qualitative strand, at least half of the nine participants had identified themselves as non-freshmen. The group that comprised of non-freshmen already had established relationships with their mentors and had more time to reflect on the quality of the relationship.

In contrast to the quantitative findings, the qualitative strand produced rich details of the mentees' experiences, including negative mentoring, which would not be explicitly evident in the quantitative findings. The results of the qualitative findings showed that five themes emerged from the interviews. The five themes were faculty and peer mentoring differences, the influences of networking on the mentee, the mentee's need for resources and information, the mentee's need to be meaningful and feel purposeful, and the impact of role modeling on the mentees. Overall, the findings showed that there was considerable overlap in the types of psychosocial support that was provided by faculty mentors and peer mentors. There were several instances where both faculty and peer mentors provided friendship and emotional support, and some students described their relationship with their mentors as that of a family-type. Faculty and peer mentors who were perceived by the mentees to relate as a family had frequent contact outside their mentoring responsibilities.

Both faculty and peer mentors provided encouragement and support to the mentees. At some point in their academic journey, mentees had indicated feeling demoralized by their academic work and reported feeling grateful because the peer and faculty mentors encouraged them to persist. Both mentors repeatedly communicated to their mentees to not give up and were supportive of their mentees. Mentors demonstrated care by providing extra time to sit down and chat with their mentees during chance encounters on campus. Mentors who were empathetic and attentive to their mentees' needs demonstrated an interest in their academics, which fostered genuineness in the relationship, in which the mentor was able to confront the mentees' distorted academic expectations.

An overlap in the types of instrumental support provided by the mentors to the mentees was evident. Mentees indicated receiving help with studying and test-taking strategies. Several students showed academic difficulties and needed help to improve their grades. One student had suggested that she was about to fail a course, and, with the support of her mentors, she passed her exams. Similarly, other mentees sought and received personal guidance. One student indicated needing advice regarding her roommate, while another dealt with emotional difficulties, for which her mentor referred her to counseling.

The findings also revealed emerging differences between the faculty and peer mentors for their mentees. In the theme of influences of networking, the peer mentor served as a link for the mentee to interact socially with other peers. In contrast, networking was sought out for career development, in which the faculty mentor was helpful. The faculty mentor, for example, provided career insight and resources, such as letters of recommendation and internship opportunities. Another difference that emerged was a negative mentoring relationship with the faculty mentor that was not found with the peer mentor. Findings showed that some faculty

mentors only focused on academic support but not social–emotional support. Mentees who sought emotional and social support from their faculty mentors felt that the mentor matching was the luck of the draw. Specifically, mentees who felt a need for social support were unsure whether or not the assigned faculty mentor would be able to provide that type of support. Mentees also indicated observing that some faculty mentors were not keen on developing the kind of relationship that would be perceived as friendship. Anecdotal evidence related by the interviewees noted that mentees who expected relational support but did not receive it would discontinue their relationship with their mentors and stop mentoring altogether.

The integration of both strands helped to identify content areas characterized in the quantitative and qualitative strand that were compared and contrasted to each other. Merging also helped in identifying differences within the results founded on dimensions within the other data strand. However, this study revealed different findings, in lacking any adequacy for both strands, as a whole and in parts, on how quality impacts both student mentoring and explains relationship quality, along with its association to mentoring outcomes. Despite the lack of quantitative findings on relationship quality, the qualitative strand showcases how quality varies from negative to positive. Because the measures of the Relational Health Indices define the constructs that are the basis of a quality relationship, a decision was made to conduct a secondary analysis of the themes within the framework of the RHI (Liang, Tracy, Taylor, Williams, et al., 2002). The primary goal of this study was to identify relationship quality and its association to mentoring outcomes. The findings failed to show how the quality of the relationship influences mentoring results. Therefore, to demonstrate this relationship, a second analysis was performed.

Within the framework of the RHI, the construct of empowerment was found to be described in the theme of Purposeful Role and Meaning and the theme of Role Modeling. Within

the construct of engagement, the theme of Resources and Information described how the mentor provided academic and social support, as well as encouragement to the mentee. Finally, the construct of authenticity was found in the theme of Resources and Information in which the mentor offered the student advice. Authenticity was also found in the theme of Forming Connection and the theme of Faculty and Peer Difference. The findings showed how authenticity in a relationship can encourage positive engagement in mentoring and how a lack of authenticity can diminish or discourage the mentoring relationship.

### **Implications of the Study Findings**

Participant experiences indicated that the interaction quality with faculty mentors could vary. Therefore, mentors should have supplemental training regarding interpersonal skill. The skills should also focus on creating awareness of the factors that promote personal growth and development. For instance, mentor training can be based on the relational-cultural theory's growth-fostering relationship. By increasing awareness of the quality of interaction, mentors can address incidents of poor-quality interaction and foster a high-quality relationship.

Findings showed that mentees desired to be involved in the matching process. Interviewees indicated a need to do more than complete a questionnaire and wait until they are assigned a mentor. The mentees stated a desire to be actively engaged in the selection and matching to their mentors, thereby making the process meaningful to the mentees. Identifying mentors' and mentees' likes and dislikes and identifying personality type can have a limited impact on the development of the relationship. The method of matching the mentors and mentees should involve shared activities that allow for a process of discovery of mutual interests and personality attraction. This approach can closely mimic a natural mentoring relationship that has the initial advantage of fostering improved rapport that can facilitate a high-quality relationship.

Part of the matching process should also allow the mentee to switch mentors. The qualitative findings showed that negative interactions do occur, and, as such, the mentees should be allowed to change if they do not feel comfortable with the mentors that do not meet the mentees' needs. For instance, interviewees recounted that the type of mentor is assigned by the luck of the draw. This approach to switching should have a time limit, akin to the practice of the twelfth class day, in which students at an institution are allowed to change their schedules right up to the twelfth class day.

The time frame in which mentees can switch to different mentors should be structured to encourage both mentor and mentee to have an opportunity to express their beliefs of mentoring. Several mentees indicated that they had particular views of mentoring. In some instances, mentees had previous mentoring experiences before entering the university. Additionally, students might also be unaware of the benefits of mentoring. Therefore, it is vital that mentors and mentees should have a clear understanding of what it means to be a mentor. A poor match of expectations and understanding of mentoring can potentially impact the relationship, in which the mentee might be discouraged from continuing the relationship. When a mentor and mentee have similar beliefs about mentoring, it can lead to effective mentoring. Therefore, the structured time should facilitate an exploration of beliefs that can result in a clear understanding of the mentor and mentee roles in the mentoring relationship.

Finally, activities that are programmed to facilitate the relationship should be structured to be meaningful to enhance the quality of a relationship. Mentoring interactions beyond scheduled events that are implemented by program participants can be meaningful. For instance, faculty mentors can invite a group of mentees to dinner. Such non-program activities demonstrate engagement and caring. Actively engaging and interacting the mentee can also

enhance the quality of the relationship when the mentors do not share similarities, such as personality or academic interests.

### **Recommendations for Mentoring Practice and Future Research**

**Mentoring Practice.** Throughout the themes, mentees indicated a need to engage, participate, and find meaning for career and developmental reason. Two of the study participants revealed having had a negative relationship with their faculty mentors, explaining that they were disengaged and distant. Furthermore, other interviewees provided anecdotal evidence of having witnessed that students who felt disconnected from their mentors were likely to stop participating in mentoring. Ceasing participation in the FAM program was particularly true for one of the interviewees, who decided to end the mentoring relationship. The mentee, however, was re-engaged by another, non-assigned faculty mentor, which led the mentee to have a positive experience. As a result, we suggest the following strategy that might address various issues that arose from the findings.

Mentoring programs should have a fluid matching process for all participants that will closely mimic a natural mentoring selection process. Matching the mentor and mentee is based on the answers of questionnaires. The findings showed that matching is imperfect despite the best efforts to carefully pair mentors and mentees who are similar to each other. Participants should be allowed to have a trial period, in which they are given an opportunity to engage each other and find out if they do or do not fit to facilitate a quality relationship. By having a trial period, mentors and mentees are asked to address some of the limitations that were found in the study.

First, within the trial period, both mentors and mentees can explore their boundaries within the mentoring relationship. By examining their limits, participants in mentoring can have

clear expectations from each other. For instance, findings showed that mentees appreciated being coaxed during mentoring, which they indicated helped them stay on track. In contrast, anecdotal evidence provided by a volunteer who served as a peer mentor at the time of the interview indicated having a mentee who preferred to communicate only through email. During a period where the mentor and mentee get to know each other, mentees can express whether or not they feel comfortable with a "hands-on" mentor. Similarly, mentors and mentees can explore contact and accessibility. Mentees can communicate if they need frequent contact with the mentor, and mentors can express whether or not they can meet their needs.

Second, during the trial period, mentors and mentees can express the types of support that can be provided by the mentor or needed by the mentee. Findings showed that some mentees participated in the mentoring program out of a need for social support only. Through engagement, mentors can explain to the mentees whether or not they feel comfortable providing social support only, or perhaps express that they can afford both social and academic support. Mentees can also communicate their needs as well. Mentees can also explore and express their networking needs and the resources that the faculty can provide, such as a need for internships, letters of recommendation, and a link to other academic professionals that can offer different types of resources.

Lastly, mentoring participants should be given the opportunities share their personal experiences in regard to the challenges of being first-generation. Mentees can relate the obstacles they encounter and can express what they understand and do not understand about the difficulties of being a first-year student. Mentors can share their own experiences as well. They can share their academic struggles and can also share their challenges. By sharing stories, mentees can relate to their mentors or gain insight and meaning, whether personal or professional.



**Future Research.** The most challenging aspect of data collection was participation. It has been previously noted that first-generation students are the least likely to participate (Terenzini et al., 1996). A possible solution is for the incorporation of research surveys as part of the requirement for participation in mentoring, such as entrance/exit questionnaires. However, the approach would limit the sample to the current participants. Another concern is the lack of participation from the male population, which might be mitigated by incorporating quota sampling.

Second, due to the low level of participation and the fact that results diverged instead of converged, an alternative research methodology should be employed, such as an explanatory design in which qualitative data are collected from a sample of the participants from the quantitative strand. Also, within the framework of testing interaction quality, another approach would be to do randomized assignments in which the experimental group would consist of mentors receiving supplemental training in interpersonal skills compared to a control group.

Finally, another challenge that needs to be addressed is controlling confounding variables, such as seeking academic assistance from other sources. This study did not take into account how other non-mentoring relationships might have confounded or undermined the ability to detect an association between mentoring and academic measures. Importantly, the goal of faculty academic mentoring is focused on influencing academic outcomes. For that reason, the fact that a majority of students did not have a mentor in the same major as the mentee merits further investigation, such as comparing mentors who have the same major as the mentee to mentors who do not.

## REFERENCES

- ACT. (2013). *2013 Retention/completion summary tables*. Retrieved from [http://www.act.org/research/policymakers/pdf/13retain\\_trends.pdf](http://www.act.org/research/policymakers/pdf/13retain_trends.pdf)
- Aderibigbe, S. A. (2013). Opportunities of the collaborative mentoring relationships between teachers and student teachers in the classroom: The views of teachers, student teachers and university tutors. *Management in Education, 27*(2), 70-74.  
<https://doi.org/10.1177/0892020612471698>
- Ajjawi, R., & Higgs, J. (2007). Using hermeneutic phenomenology to investigate how experienced practitioners learn to communicate clinical reasoning. *The Qualitative Report, 12*(4), 612-638.
- Al-Hussami, M., Saleh, M. Y., Hayajneh, F., Abdalkader, R. H., & Mahadeen, A. I. (2011). The effects of undergraduate nursing student-faculty interaction outside the classroom on college grade point average. *Nurse Education in Practice, 11*(5), 320-326.  
<https://doi.org/10.1016/j.nepr.2011.02.004>
- Allen, T. D., & Eby, L. T. (2003). Relationship effectiveness for mentors: Factors associated with learning and quality. *Journal of Management, 29*(4), 469-486.  
[https://doi.org/10.1016/S0149-2063\(03\)00021-7](https://doi.org/10.1016/S0149-2063(03)00021-7)
- Allen, T. D., Eby, L. T., Poteet, M. L., Lentz, E., & Lima, L. (2004). Career benefits associated with mentoring for protégée: A meta-analysis. *Journal of Applied Psychology, 89*(1), 127-136. <https://doi.org/10.1037/0021-9010.89.1.127>
- Allen, T. D., Poteet, M. L., & Burroughs, S. M. (1997). The mentor's perspective: A qualitative inquiry and future research agenda. *Journal of Vocational Behavior, 51*(1), 70-89.

- Alonso, M. A., Castaño, G., Calles, A. M., & Sánchez-Herrero, S. (2010). Assessment of the efficacy of a peer mentoring program in a university setting. *Spanish Journal of Psychology, 13*(2), 685-696.
- Alonso García, M. A., Sánchez-Ávila, C., & Calles Doñate, A. M. (2011). Satisfacción con el mentor: Diferencias por rol y sexo [Mentor satisfaction: Differences by role and gender]. *Revista Española de Pedagogía, 250*, 485-501.
- Anderson, D. D., & Shore, W. J. (2008). Ethical issues and concerns associated with mentoring undergraduate students. *Ethics & Behavior, 18*(1), 1-25.  
<https://doi.org/10.1080/10508420701519577>
- Anderson, E. M., & Shannon, A. L. (1988). Toward a conceptualization of mentoring. *Journal of Teacher Education, 39*(1), 38-42. <https://doi.org/10.1177/002248718803900109>
- Anderson, G. N., Dey, E. L., Gray, M., & Thomas, G. (1995, November). Mentors and protégés: The influence of faculty mentoring on undergraduate academic achievement. Paper presented at the Association for the Study of Higher Education, Orlando, FL. Retrieved from <http://files.eric.ed.gov/fulltext/ED400761.pdf>
- Arnett, J. J. (1994). Are college students adults? Their conceptions of the transition to adulthood. *Journal of Adult Development, 1*(4), 213-224.
- Astin, A. W. (1975). *Preventing students from dropping out*. San Francisco, CA: Jossey-Bass.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*(2), 191.
- Barefoot, B. O. (2000). The first-year experience. *About Campus, 4*(6), 12-18.
- Bednall, J. (2006). Epoche and bracketing within the phenomenological paradigm. *Issues in Educational Research, 16*(2), 123-138.

- Behar-Horenstein, L., Roberts, K., & Dix, A. (2010). Mentoring undergraduate researchers: An exploratory study of students' and professors' perceptions. *Mentoring & Tutoring: Partnership in Learning*, 18(3), 269-291.
- Berkner, L., & Choy, S. (2008). *Descriptive summary of 2003-04 beginning postsecondary students: Three years later*. NCES 2008-174. National Center for Education Statistics. Retrieved from <http://eric.ed.gov/?id=ED502174>
- Bernier, A., Larose, S., & Soucy, N. (2005). Academic mentoring in college: The interactive role of student's and mentor's interpersonal dispositions. *Research in Higher Education*, 46(1), 29-51.
- Beyene, T., Anglin, M., Sanchez, W., & Ballou, M. (2002). Mentoring and relational mutuality: Protégés' perspectives. *The Journal of Humanistic Counseling, Education and Development*, 41(1), 87-102.
- Biernacki, P., & Waldorf, D. (1981). Snowball sampling: Problems and techniques of chain referral sampling. *Sociological Methods & Research*, 10(2), 141-163.
- Bjorklund, S., Parente, J. M., & Sathianathan, D. (2002, November). *Effects of faculty interaction and feedback on gains in student skills*. Paper presented at the 32<sup>nd</sup> ASEE/IEEE Frontiers in Education Conference, Boston, MA.
- Bordes, V., & Arredondo, P. (2005). Mentoring and 1st-year Latina/o college students. *Journal of Hispanic Higher Education*, 4(2), 114-133.
- Bordes-Edgar, V., Arredondo, P., Kurpius, S. R., & Rund, J. (2011). A longitudinal analysis of Latina/o students' academic persistence. *Journal of Hispanic Higher Education*, 10(4), 358-368. <https://doi.org/10.1177/1538192711423318>

- Boyle, F., Kwon, J., Ross, C., & Simpson, O. (2010). Student-student mentoring for retention and engagement in distance education. *Open Learning: The Journal of Open and Distance Learning*, 25(2), 115-130.
- Boyle, P., & Boice, B. (1998). Systematic mentoring for new faculty teachers and graduate teaching assistants. *Innovative Higher Education*, 22(3), 157-179.
- Bozeman, B., & Feeney, M. K. (2007). Toward a useful theory of mentoring: A conceptual analysis and critique. *Administration & Society*, 39(6), 719-739.  
<https://doi.org/10.1177/0095399707304119>
- Brittian, A., Sy, S., & Stokes, J. (2009). Mentoring: Implications for African American college students. *The Western Journal of Black Studies*, 33(2), 87-97.
- Brooks, A., & Hesse-Biber, S. N. (2007). An invitation to feminist research. In S. N. Hesse-Biber & P. L. Leavy (Eds.), *Feminist Research Practice: A Primer* (pp. 1-24). Thousand Oaks, CA: Sage.
- Brost, J., & Payne, K. (2011). First-generation issues: Learning outcomes of the dismissal testimonial for academically dismissed students in the arts & sciences. *New Directions for Teaching and Learning*, 2011(127), 69-79. <https://doi.org/10.1002/tl.458>
- Budge, S. (2006). Peer mentoring in post-secondary education: Implications for research and practice. *Journal of College Reading and Learning*, 37(1), 73-87.
- Budny, D., Paul, C., & Newborg, B. B. (2010). Impact of peer mentoring on freshmen engineering students. *Journal of STEM Education: Innovations and Research*, 11(5-6), 9-24.

- Burk, H. G., & Eby, L. T. (2010). What keeps people in mentoring relationships when bad things happen? A field study from the protégé's perspective. *Journal of Vocational Behavior*, 77(3), 437-446. <https://doi.org/10.1016/j.jvb.2010.05.011>
- Caison, A. L. (2005). Determinants of systemic retention: Implications for improving retention practice in higher education. *Journal of College Student Retention: Research, Theory and Practice*, 6(4), 425-441.
- Campbell, D. E., & Campbell, T. A. (2000). The mentoring relationship: Differing perceptions of benefits. *College Student Journal*, 34(4), 516-523.
- Campbell, T. A., & Campbell, D. E. (1997). Faculty/student mentor program: Effects on academic performance and retention. *Research in Higher Education*, 38(6), 727-742.
- Campbell, T. A., & Campbell, D. E. (2007). Outcomes of mentoring at-risk college students: Gender and ethnic matching effects. *Mentoring & Tutoring*, 15(2), 135-148. <https://doi.org/10.1080/13611260601086287>
- Carden, A. D. (1990). Mentoring and adult career development: The evolution of a theory. *The Counseling Psychologist*, 18(2), 275-299.
- Carini, R. M., Kuh, G. D., & Klein, S. P. (2006). Student engagement and student learning: Testing the linkages\*. *Research in Higher Education*, 47(1), 1-32.
- Chan, Z. C., Fung, Y., & Chien, W. (2013). Bracketing in phenomenology: Only undertaken in the data collection and analysis process? *The Qualitative Report*, 18(30), 1.
- Chao, G. T., Walz, P., & Gardner, P. D. (1992). Formal and informal mentorships: A comparison on mentoring functions and contrast with nonmentored counterparts. *Personnel Psychology*, 45(3), 619-636.

- Chen, X., & Carroll, C. D. (2005). *First-generation students in postsecondary education: A look at their college transcripts*. Postsecondary education descriptive analysis report. NCES 2005-171. Retrieved from <http://eric.ed.gov/?id=ED485756>
- Cobb, S. (1976). Social support as a moderator of life stress. *Psychosomatic Medicine*, 38(5), 300-314. <https://doi.org/10.1097/00006842-197609000-00003>
- Cohen, N. H. (1995). The principles of adult mentoring scale. *New Directions for Adult and Continuing Education*, 1995(66), 15-32.
- Colley, H. (2002). A 'rough guide' to the history of mentoring from a Marxist feminist perspective. *Journal of Education for Teaching: International Research and Pedagogy*, 28(3), 257-273.
- Collier, P. J., & Morgan, D. L. (2008). "Is that paper really due today?": Differences in first-generation and traditional college students' understandings of faculty expectations. *Higher Education*, 55(4), 425-446. <https://doi.org/10.1007/s10734-007-9065-5>
- Colvin, J., & Ashman, M. (2010). Roles, risks, and benefits of peer mentoring relationships in higher education. *Mentoring & Tutoring: Partnership in Learning*, 18(2), 121-134. <https://doi.org/10.1080/13611261003678879>
- Corbett, F., Jr., & Paquette, K. R. (2011). An investigation of mentorship as perceived by university faculty, teaching associates, and graduate assistants. *Education*, 132(2), 285-295.
- Corella, A. K. (2010). *Identifying college student success: The role of first year success courses and peer mentoring* (Doctoral dissertation). Retrieved from [http://arizona.openrepository.com/arizona/bitstream/10150/195550/1/azu\\_etd\\_10965\\_sip1\\_m.pdf](http://arizona.openrepository.com/arizona/bitstream/10150/195550/1/azu_etd_10965_sip1_m.pdf)

- Cotten, S. R., & Wilson, B. (2006). Student-faculty interactions: Dynamics and determinants. *Higher Education, 51*(4), 487-519. <https://doi.org/10.1007/s10734-004-1705-4>
- Cox, E. (2005). For better, for worse: The matching process in formal mentoring schemes. *Mentoring & Tutoring: Partnership in Learning, 13*(3), 403-414. <https://doi.org/10.1080/13611260500177484>
- Cox, P. L., Schmitt, E., Bobrowski, P. E., & Graham, G. (2005). Enhancing the first-year experience for business students: Student retention and academic success. *Journal of Behavioral and Applied Management, 7*(1), 40-68.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Thousand Oaks, CA: Sage.
- Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research*. (2nd ed.). Thousand Oaks, CA: Sage.
- Crisp, G. (2010). The impact of mentoring on the success of community college students. *The Review of Higher Education, 34*(1), 39-60. <https://doi.org/10.1353/rhe.2010.0003>
- Crisp, G., & Cruz, I. (2009). Mentoring college students: A critical review of the literature between 1990 and 2007. *Research in Higher Education, 50*(6), 525-545.
- Cronan-Hillix, T., Gensheimer, L. K., Cronan-Hillix, W., & Davidson, W. S. (1986). Students' views of mentors in psychology graduate training. *Teaching of Psychology, 13*(3), 123-127.
- Darwin, A., & Palmer, E. (2009). Mentoring circles in higher education. *Higher Education Research & Development, 28*(2), 125-136.



- Davig, W. B., & Spain, J. W. (2003). Impact on freshmen retention of orientation course content: Proposed persistence model. *Journal of College Student Retention: Research, Theory & Practice*, 5(3), 305-323.
- Davis, D. J. (2007). Access to academe: The importance of mentoring to Black students. *Negro Educational Review*, 58(3/4), 217-231.
- Davis, D. J. (2008). Mentorship and the socialization of underrepresented minorities into the professoriate: Examining varied influences. *Mentoring & Tutoring: Partnership in Learning*, 16(3), 278-293.
- Davis, D. J. (2009). The academic influence of mentoring upon African American undergraduate aspirants to the professoriate. *The Urban Review*, 42(2), 143-158.
- DeBerard, M. S., Spielmans, G., & Julka, D. (2004). Predictors of academic achievement and retention among college freshmen: A longitudinal study. *College Student Journal*, 38(1), 66-80.
- Delaney, A. M. (2008). Why faculty-student interaction matters in the first year experience. *Tertiary Education and Management*, 14(3), 227-241.
- Delgado Bernal, D., Alemán, E., Jr., & Garavito, A. (2009). Latina/o undergraduate students mentoring Latina/o elementary students: A borderlands analysis of shifting identities and first-year experiences. *Harvard Educational Review*, 79(4), 560-585.
- Denhart, C. (2013). How the 1.2 trillion college debt crisis is crippling students, parents and the economy. *Forbes*. Retrieved from <http://www.forbes.com/sites/specialfeatures/2013/08/07/how-the-college-debt-is-crippling-students-parents-and-the-economy/>

- Dennis, J. M., Phinney, J. S., & Chuateco, L. I. (2005). The role of motivation, parental support, and peer support in the academic success of ethnic minority first-generation college students. *Journal of College Student Development, 46*(3), 223-236.
- Dimitriadis, K., von der Borch, P., Störmann, S., Meinel, F. G., Moder, S., Reincke, M., & Fischer, M. R. (2012). Characteristics of mentoring relationships formed by medical students and faculty. *Medical Education Online, 17*(1).  
<https://doi.org/10.3402/meo.v17i0.17242>
- Dooley, C., & Fedele, N. M. (1999). *Mothers and sons: Raising relational boys*. Stone Center, Wellesley College.
- DuBois, D. L., Portillo, N., Rhodes, J. E., Silverthorn, N., & Valentine, J. C. (2011). How effective are mentoring programs for youth? A systematic assessment of the evidence. *Psychological Science in the Public Interest, 12*(2), 57-91.  
<https://doi.org/10.1177/1529100611414806>
- Dyson, R., & Renk, K. (2006). Freshmen adaptation to university life: Depressive symptoms, stress, and coping. *Journal of Clinical Psychology, 62*(10), 1231-1244.  
<https://doi.org/10.1002/jclp.20295>
- Eagan, M. K., Sharkness, J., Hurtado, S., Mosqueda, C. M., & Chang, M. J. (2011). Engaging undergraduates in science research: Not just about faculty willingness. *Research in Higher Education, 52*(2), 151-177. <https://doi.org/10.1007/s11162-010-9189-9>
- Eby, L. T., & Allen, T. D. (2002). Further investigation of protégés' negative mentoring experiences patterns and outcomes. *Group & Organization Management, 27*(4), 456-479.

- Eby, L. T., Butts, M., Lockwood, A., & Simon, S. A. (2004). Protégés negative mentoring experiences: Construct development and nomological validation. *Personnel Psychology*, *57*(2), 411-447.
- Eby, L. T. D. T., Allen, T. D., Hoffman, B. J., Baranik, L. E., Sauer, J. B., Baldwin, S., ... Evans, S. C. (2013). An interdisciplinary meta-analysis of the potential antecedents, correlates, and consequences of protégé perceptions of mentoring. *Psychological Bulletin*, *139*(2), 441-476. <https://doi.org/10.1037/a0029279>
- Eby, L. T., Durley, J. R., Evans, S. C., & Ragins, B. R. (2006). The relationship between short-term mentoring benefits and long-term mentor outcomes. *Journal of Vocational Behavior*, *69*(3), 424-444. <https://doi.org/10.1016/j.jvb.2006.05.003>
- Eby, L. T., Durley, J. R., Evans, S. C., & Ragins, B. R. (2008). Mentors' perceptions of negative mentoring experiences: Scale development and nomological validation. *Journal of Applied Psychology*, *93*(2), 358-73.
- Eby, L. T., & McManus, S. E. (2004). The protégé's role in negative mentoring experiences. *Journal of Vocational Behavior*, *65*(2), 255-275.
- Eby, L. T., McManus, S. E., Simon, S. A., & Russell, J. E. A. (2000). The protégé's perspective regarding negative mentoring experiences: The development of a taxonomy. *Journal of Vocational Behavior*, *57*(1), 1-21.
- Edwards, T. M., Smith, B. K., Watts, D. L., Germain-Aubrey, C. C., Roark, A. M., Bybee, S. M., ... Guillette, L. J. (2011). Group-advantaged training of research (GATOR): A metamorphosis of mentorship. *BioScience*, *61*(4), 301-311. <https://doi.org/10.1525/bio.2011.61.4.10>

- Ensher, E. A., & Murphy, S. E. (1997). Effects of race, gender, perceived similarity, and contact on mentor relationships. *Journal of Vocational Behavior, 50*(3), 460-481.
- Erickson, S. L., & Stone, M. F. (2012). First year experience course: Insights from the first two years. *American Journal of Business Education (AJBE), 5*(2), 139-148.
- Ferber, R. (1977). Research by convenience. *Journal of Consumer Research, 4*(1), 57-58.
- Ferrari, J. (2004). Mentors in life and at school: Impact on undergraduate protégé; perceptions of university mission and values. *Mentoring and Tutoring, 12*(3), 295-305.
- Field, A. (2009). *Discovering statistics using SPSS*. Thousand Oaks, CA: Sage.
- Fletcher, J. K., & Ragins, B. R. (2007). Stone Center relational cultural theory. In B. R. Ragins & K. E. Kram (Eds.), *The Handbook of Mentoring at Work: Theory, Research, and Practice* (pp. 373-399). Thousand Oaks, CA: Sage.
- Freeman, K. (1999). No services needed?: The case for mentoring high-achieving African American students. *Peabody Journal of Education, 74*(2), 15-26.
- Frels, R. K., & Onwuegbuzie, A. J. (2012). Principles of play: A dialogical comparison of two case studies in school-based mentoring. *International Journal of Play Therapy, 21*(3), 131-148. <https://doi.org/10.1037/a0028536>
- Frey, L. L., Beesley, D., & Newman, J. L. (2005). The relational health indices: Reanalysis of a measure of relational quality. *Measurement and Evaluation in Counseling and Development, 38*, 153-163. <https://doi.org/10.1111/j.1471-6402.2006.00298.x>
- Galbraith, M. W., & Cohen, N. H. (1995). *Mentoring: New strategies and challenges*. San Francisco, CA: Jossey-Bass.

- Gardiner, M., Tiggemann, M., Kearns, H., & Marshall, K. (2007). Show me the money! An empirical analysis of mentoring outcomes for women in academia. *Higher Education Research & Development, 26*(4), 425-442.
- Gardner, S. K., & Holley, K. A. (2011). "Those invisible barriers are real": The progression of first-generation students through doctoral education. *Equity & Excellence in Education, 44*(1), 77-92. <https://doi.org/10.1080/10665684.2011.529791>
- Garrett, M. D., & Zabriskie, M. S. (2003). The influence of living-learning program participation on student-faculty interaction. *Journal of College and University Student Housing, 32*(2), 38-44.
- George, D., & Mallery, M. (2003). *Using SPSS for Windows step by step: A simple guide and reference. 11.0 update* (4th ed.). Boston: Allyn & Bacon.
- Ghosh, R., Dierkes, S., & Falletta, S. (2011). Incivility spiral in mentoring relationships: Reconceptualizing negative mentoring as deviant workplace behavior. *Advances in Developing Human Resources, 13*(1), 22-39. <https://doi.org/10.1177/1523422311410639>
- Ghosh, R., & Reio, T. G. (2013). Career benefits associated with mentoring for mentors: A meta-analysis. *Journal of Vocational Behavior, 83*(1), 106-116. <https://doi.org/10.1016/j.jvb.2013.03.011>
- Giordana, S., & Wedin, B. (2010). Peer mentoring for multiple levels of nursing students. *Nursing Education Perspectives, 31*(6), 394-396.
- Girves, J. E., Zepeda, Y., & Gwathmey, J. K. (2005). Mentoring in a post-affirmative action world. *Journal of Social Issues, 61*(3), 449-479.
- Gliem, J. A., & Gliem, R. R. (2003). *Calculating, interpreting, and reporting Cronbach's alpha reliability coefficient for Likert-type scales*. Paper presented at the 2003 Midwest

Research-to-Practice Conference in Adult, Continuing, and Community Education, the Ohio State University, Columbus, Ohio.

Gloria, A. M. (1993). *Psychosocial factors influencing the academic persistence of Chicano/a undergraduates* (Unpublished doctoral dissertation). Arizona State University, Tempe, AZ.

Gloria, A. M., & Robinson Kurpius, S. E. (2001). Influences of self-beliefs, social support, and comfort in the university environment on the academic nonpersistence decisions of American Indian undergraduates. *Cultural Diversity and Ethnic Minority Psychology*, 7(1), 88-102.

Godshalk, V. M., & Sosik, J. J. (2000). Does mentor-protégé agreement on mentor leadership behavior influence the quality of a mentoring relationship? *Group & Organization Management*, 25(3), 291-317.

Grant, M., & Hazel, J. (1973). *Gods and mortals in classical mythology*. Dorset, NY: G. & C. Merriam.

Griffin, K. A., & Reddick, R. J. (2011). Surveillance and sacrifice: Gender differences in the mentoring patterns of Black professors at predominantly White research universities. *American Educational Research Journal*, 48(5), 1032-1057.

<https://doi.org/10.3102/0002831211405025>

Hagedorn, L. S. (2005). How to define retention. *Transfer And Retention Of Urban Community College Students (TRUCCS)*, 90-105.

Hall, L. (1997). *Athena: A biography*. Reading, MA: Addison-Wesley.

- Hallam, P. R., Chou, P. N., Hite, J. M., & Hite, S. J. (2012). Two contrasting models for mentoring as they affect retention of beginning teachers. *NASSP Bulletin*, *96*(3), 243-278. <https://doi.org/10.1177/0192636512447132>
- Halldórsdóttir, S. (2000). The Vancouver school of doing phenomenology. In B. Fridlund & C. Halding (Eds.), *Qualitative Research Methods in the Service of Health* (pp. 47-81). Lund, Sweden: Studentlitteratur.
- Hamilton, J., Stevens, G., & Girdler, S. (2016). Becoming a mentor: The impact of training and the experience of mentoring university students on the autism spectrum. *PloS One*, *11*(4), e0153204.
- Hamlin, R. G., & Sage, L. (2011). Behavioural criteria of perceived mentoring effectiveness: An empirical study of effective and ineffective mentor and mentee behaviour within formal mentoring relationships. *Journal of European Industrial Training*, *35*(8), 752-778. <https://doi.org/10.1108/03090591111168311>
- Hawley, T. H., & Harris, T. A. (2005). Student characteristics related to persistence for first-year community college students. *Journal of College Student Retention: Research, Theory and Practice*, *7*(1), 117-142.
- Higgins, M. C., & Kram, K. E. (2001). Reconceptualizing mentoring at work: A developmental network perspective. *Academy of Management Review*, *26*(2), 264-288.
- Hoffman, M., Richmond, J., Morrow, J., & Salomone, K. (2002). Investigating “sense of belonging” in first-year college students. *Journal of College Student Retention: Research, Theory & Practice*, *4*(3), 227-256.

- Hoover, E. (2011, July 14). Recession reshaped college enrollment patterns, but the sky didn't fall. *Chronicle of Higher Education*. Retrieved from <https://www.chronicle.com/article/Recession-Reshaped-College/128223>
- Hu, S., & Ma, Y. (2010). Mentoring and student persistence in college: A study of the Washington State Achievers Program. *Innovative Higher Education*, 35(5), 329-341. <https://doi.org/10.1007/s10755-010-9147-7>
- Ishitani, T. T. (2003). A longitudinal approach to assessing attrition behavior among first-generation students: Time-varying effects of pre-college characteristics. *Research in Higher Education*, 44(4), 433-449.
- Ismail, A., Shariff, A., Jui, M. K. K., & Hamid, N. S. (2012). Linking mentoring program to self-efficacy as predictor of mentee outcomes. *International Business Management*, 6(2), 131-139. <https://doi.org/10.1002/jcop.21491>
- Jacobi, M. (1991). Mentoring and undergraduate academic success: A literature review. *Review of Educational Research*, 61(4), 505-532.
- Jenkins, A. L., Miyazaki, Y., & Janosik, S. M. (2009). Predictors that distinguish first-generation college students from non-first generation college students. *Journal of Multicultural, Gender and Minority Studies*, 3(1), 1-9.
- Jenkins, S. R., Belanger, A., Connally, M. L., Boals, A., & Durón, K. M. (2013). First-Generation undergraduate students' social support, depression, and life satisfaction. *Journal of College Counseling*, 16(2), 129-142. <https://doi.org/10.1002/j.2161-1882.2013.00032.x>
- Jick, T. D. (1979). Mixing qualitative and quantitative methods: Triangulation in action. *Administrative Science Quarterly*, 24(4), 602-611.



- Johnson, R. B., Onwuegbuzie, A. J., & Turner, L. A. (2007). Toward a definition of mixed methods research. *Journal of Mixed Methods Research, 1*(2), 112-133.  
<https://doi.org/10.1177/1558689806298224>
- Johnson, W. B. (2002). The intentional mentor: Strategies and guidelines for the practice of mentoring. *Professional Psychology: Research and Practice, 33*(1), 88-96.  
<https://doi.org/10.1037//0735-7028.33.1.88>
- Johnson, W. B. (2003). A framework for conceptualizing competence to mentor. *Ethics & Behavior, 13*(2), 127-151.
- Johnson, W.B., & Nelson, N. (1999). Mentor-protégé relationships in graduate training: Some ethical concerns. *Ethics & Behavior, 9*(3), 189-210.
- Johnson-Bailey, J., & Cervero, R. (2004). Mentoring in black and white: The intricacies of cross-cultural mentoring. *Mentoring & Tutoring, 12*(1), 7-21.  
<https://doi.org/10.1080/1361126042000183075>
- Jones, R., & Corner, J. (2012). Seeing the forest and the trees: A complex adaptive systems lens for mentoring. *Human Relations, 65*(3), 391-411.  
<https://doi.org/10.1177/0018726711430556>
- Jordan, J. V. (1997). A relational perspective for understanding women's development. In J. V. Jordan (Ed.), *Women's growth in diversity: More writings from the Stone Center* (pp. 9-24). New York, NY: Guilford Press.
- Jordan, J. V. (2000). The role of mutual empathy in relational/cultural therapy. *Journal of Clinical Psychology, 56*(8), 1005-1016.
- Jordan, J. V. (2010). *Relational-cultural therapy*. Washington, DC: American Psychological Association.

- Jordan, J. V., Kaplan, A. G., Miller, J. B., Stiver, I. P., & Surrey, J. L. (1991). *Women's growth in connection: Writings from the Stone Center*. New York, NY: Guilford Press.
- Kafle, N. P. (2011). Hermeneutic phenomenological research method simplified. *Bodhi: An Interdisciplinary Journal*, 5(1), 181-200.
- Karcher, M. J., Nakkula, M. J., & Harris, J. (2005). Developmental mentoring match characteristics: Correspondence between mentors' and mentees' assessments of relationship quality. *The Journal of Primary Prevention*, 26(2), 93-110.  
<https://doi.org/10.1007/s10935-005-1847-x>
- Keene, O. N. (1995). The log transformation is special. *Statistics in Medicine*, 14(8), 811-819.
- Kerr, L. M. (2009). *Community college faculty member's perspectives regarding formal faculty-student mentoring* (Doctoral dissertation). Retrieved from ProQuest Dissertations Publishing. (3498666)
- Kerssen-Griep, J., Trees, A. R., & Hess, J. A. (2008). Attentive facework during instructional feedback: Key to perceiving mentorship and an optimal learning environment. *Communication Education*, 57(3), 312-332.
- Keup, J. R. (2005). The impact of curricular interventions on intended second year re-enrollment. *Journal of College Student Retention: Research, Theory and Practice*, 7(1), 61-89.
- Kim, Y. K., & Sax, L. J. (2009). Student-faculty interaction in research universities: Differences by student gender, race, social class, and first-generation status. *Research in Higher Education*, 50(5), 437-459.
- Kinnunen, P., & Malmi, L. (2006). Why students drop out CS1 course? In *Proceedings of the second international workshop on Computing education research* (pp. 97-108). Retrieved from <http://dl.acm.org/citation.cfm?id=1151604>

- Kostovich, C. T., & Thurn, K. E. (2006). Connecting: Perceptions of becoming a faculty mentor. *International Journal of Nursing Education Scholarship*, 3(1).
- Kram, K. (1985). *Mentoring at work*. Glenview, IL: Scott, Foresman, & Co.
- Kram, K. E. (1988). *Mentoring at work: Developmental relationships in organizational life*. Lanham, MD: University Press of America.
- Kram, K. E., & Isabella, L. A. (1985). Mentoring alternatives: The role of peer relationships in career development. *Academy of Management Journal*, 28(1), 110-132.
- Kram, K. E., & Ragins, B. R. (Eds.). (2007). *The handbook of mentoring at work: Theory, research, and practice*. Thousand Oaks, CA: Sage.
- Kuh, G. D., Cruce, T. M., Shoup, R., Kinzie, J., & Gonyea, R. M. (2008). Unmasking the effects of student engagement on first-year college grades and persistence. *The Journal of Higher Education*, 79(5), 540-563.
- Kuh, G. D., & Hu, S. (2001). The effects of student-faculty interaction in the 1990s. *The Review of Higher Education*, 24(3), 309-332.
- Lange, S., Sauerland, S., Lauterberg, J., & Windeler, J. (2017). The range and scientific value of randomized trials: Part 24 of a series on evaluation of scientific publications. *Deutsches Ärzteblatt International*, 114(38), 635.
- Langer, A. M. (2001). Confronting theory: The practice of mentoring non-traditional students at Empire State College. *Mentoring & Tutoring: Partnership in Learning*, 9(1), 49-62.
- Langer, A. M. (2010). Mentoring nontraditional undergraduate students: A case study in higher education. *Mentoring & Tutoring: Partnership in Learning*, 18(1), 23-38.
- <https://doi.org/10.1080/13611260903448318>

- Lankau, M. J., Riordan, C. M., & Thomas, C. H. (2005). The effects of similarity and liking in formal relationships between mentors and protégés. *Journal of Vocational Behavior*, 67(2), 252-265.
- Lark, J. S., & Croteau, J. M. (1998). Lesbian, gay, and bisexual doctoral students' mentoring relationships with faculty in counseling psychology: A qualitative study. *The Counseling Psychologist*, 26(5), 754-776. <https://doi.org/10.1177/0011000098265004>
- Larose, S., Cyrenne, D., Garceau, O., Harvey, M., Guay, F., & Deschênes, C. (2009). Personal and social support factors involved in students' decision to participate in formal academic mentoring. *Journal of Vocational Behavior*, 74(1), 108-116.  
<https://doi.org/10.1016/j.jvb.2008.11.002>
- Larose, S., Cyrenne, D., Garceau, O., Harvey, M., Guay, F., Godin, F., ... Deschênes, C. (2011). Academic mentoring and dropout prevention for students in math, science and technology. *Mentoring & Tutoring: Partnership in Learning*, 19(4), 419-439.  
<https://doi.org/10.1080/13611267.2011.622078>
- Lee, L. M., & Bush, T. (2003). Student mentoring in higher education: Hong Kong Baptist University. *Mentoring & Tutoring: Partnership in Learning*, 11(3), 263-271.  
<https://doi.org/10.1080/1361126032000138319>
- Lee, R. M., & Robbins, S. B. (1995). Measuring belongingness: The social connectedness and the social assurance scales. *Journal of Counseling Psychology*, 42(2), 232.
- Lee, W. Y. (1999). Striving toward effective retention: The effect of race on mentoring African American students. *Peabody Journal of Education*, 74(2), 27.
- Levinson, D. J., Darrow, C. N., Klein, E. B., Levinson, M. H., & McKee, B. (1978). *The seasons of a man's life*. New York, NY: The Random House.

- Liang, B., Tracy, A. J., Taylor, C. A., & Williams, L. M. (2002). Mentoring college-age women: A relational approach. *American Journal of Community Psychology, 30*(2), 271-288.
- Liang, B., Tracy, A., Taylor, C. A., Williams, L. M., Jordan, J. V., & Miller, J. B. (2002). The relational health indices: A study of women's relationships. *Psychology of Women Quarterly, 26*(1), 25-35.
- Locher, B., & Prügl, E. (2001). Feminism and constructivism: Worlds apart or sharing the middle ground? *International Studies Quarterly, 45*(1), 111-129.
- Luna, V., & Prieto, L. (2009). Mentoring affirmations and interventions: A bridge to graduate school for Latina/o students. *Journal of Hispanic Higher Education, 8*(2), 213-224.
- Mangold, W. D., Bean, L. G., Adams, D. J., Schwab, W. A., & Lynch, S. M. (2002). Who goes who stays: An assessment of the effect of a freshman mentoring and unit registration program on college persistence. *Journal of College Student Retention, 4*(2), 95-122.
- McGuire, G. M., & Reger, J. (2003). Feminist co-mentoring: A model for academic professional development. *NWSA Journal, 15*(1), 54-72.
- McMillan, W. (2013). Transition to university: The role played by emotion. *European Journal of Dental Education, 17*(3), 169-176. <https://doi.org/10.1111/eje.12026>
- McQuillin, S., Smith, B., & Strait, G. (2011). Randomized evaluation of a single semester transitional mentoring program for first year middle school students: A cautionary result for brief, school-based mentoring programs. *Journal of Community Psychology, 39*(7), 844-859. <https://doi.org/10.1002/jcop.20475>
- Mehta, S. S., Newbold, J. J., & O'Rourke, M. A. (2011). Why do first-generation students fail? *College Student Journal, 45*(1), 20-35.

- Mertler, C. A., & Vannatta, R. A. (2005). *Advanced and multivariate statistical methods: Practical application and interpretation* (3<sup>rd</sup> ed.). Glendale, CA: Pyrczak.
- Miller, J. B. (1976). *Toward a new psychology of women* (2nd ed.). Boston, MA: Beacon Press.
- Miller, J. B., & Stiver, I. P. (1997). *The healing connection: How women form relationships in therapy and in life*. Boston, MA: Beacon Press.
- Morgan, D. L. (1997). *Focus groups as qualitative research*. Thousand Oaks, CA; Sage.
- Morton, S., Mergler, A., & Boman, P. (2014). Managing the transition: The role of optimism and self-efficacy for first-year Australian university students. *Australian Journal of Guidance and Counselling*, 24(01), 90-108. <https://doi.org/10.1017/jgc.2013.29>
- Moustakas, C. (1994). *Phenomenological research methods*. Thousand Oaks, CA: Sage.
- Mui, Y. Q., & Khimm, S. (2012, May 28). College dropouts have debt but no degree. *Washington Post*. Retrieved from [http://www.washingtonpost.com/business/economy/college-dropouts-have-debt-but-no-degree/2012/05/28/gJQAnUPqwU\\_story.html?hpid=z1](http://www.washingtonpost.com/business/economy/college-dropouts-have-debt-but-no-degree/2012/05/28/gJQAnUPqwU_story.html?hpid=z1)
- Myers, R. D. (2003). *College success programs*. Washington, DC: Pathways to College Network.
- Nicpon, M. F., Huser, L., Blanks, E. H., Sollenberger, S., Befort, C., & Kurpius, S. E. R. (2006). The relationship of loneliness and social support with college freshmen's academic performance and persistence. *Journal of College Student Retention: Research, Theory & Practice*, 8(3), 345-358.
- Noe, R. A. (1988a). An investigation of the determinants of successful assigned mentoring relationships. *Personnel Psychology*, 41(3), 457-479.

- Noe, R. A. (1988b). Women and mentoring: A review and research agenda. *The Academy of Management Review*, 13(1), 65. <https://doi.org/10.2307/258355>
- Nora, A., & Crisp, G. (2007). Mentoring students: Conceptualizing and validating the multi-dimensions of a support system. *Journal of College Student Retention: Research, Theory and Practice*, 9(3), 337-356.
- Nunez, A., & Cuccaro-Alamin, S. (1998). *First-generation students: Undergraduates whose parents never enrolled in postsecondary education* (Postsecondary Education Descriptive Analysis Reports). Retrieved from <https://nces.ed.gov/pubs98/98082.pdf>
- O'Brien, K. E., Biga, A., Kessler, S. R., & Allen, T. D. (2010). A meta-analytic investigation of gender differences in mentoring. *Journal of Management*, 36(2), 537-554.
- O'Connor, K. (2003). Dialectic. In *The University of Chicago Theories of Media Keyword Glossary*. Retrieved from <http://csmt.uchicago.edu/glossary2004/dialectic.htm>
- Oseguera, L. (2005). Four and six-year baccalaureate degree completion by institutional characteristics and racial/ethnic groups. *Journal of College Student Retention: Research, Theory & Practice*, 7(1), 19-59.
- Packard, B. W. (2004). Mentoring and retention in college science: Reflections on the sophomore year. *Journal of College Student Retention: Research, Theory and Practice*, 6(3), 289-300.
- Packard, B. W., Walsh, L., & Seidenberg, S. (2004). Will that be one mentor or two: A cross-sectional study of women's mentoring during college. *Mentoring and Tutoring*, 12(1), 71-85.

- Padgett, R. D., Johnson, M. P., & Pascarella, E. T. (2012). First-generation undergraduate students and the impacts of the first year of college: Additional evidence. *Journal of College Student Development, 53*(2), 243-266. <https://doi.org/10.1353/csd.2012.0032>
- Pagan, R., & Edwards-Wilson, R. (2003). A mentoring program for remedial students. *Journal of College Student Retention, 4*(3), 207-226.
- Page, D., & Hanna, D. (2008). Peer mentoring: The students' perspective. *Psychology Learning & Teaching, 7*(2), 34-37.
- Pascarella, E. T. (1980). Student-faculty informal contact and college outcomes. *Review of Educational Research, 50*(4), 545-595.
- Pascarella, E. T., Pierson, C. T., Wolniak, G. C., & Terenzini, P. T. (2004). First-generation college students: Additional evidence on college experiences and outcomes. *Journal of Higher Education, 75*(3), 249-284.
- Pascarella, E. T., & Terenzini, P. T. (1978). Student-faculty informal relationships and freshman year educational outcomes. *The Journal of Educational Research, 71*(4), 183-189.
- Pascarella, E. T., & Terenzini, P. T. (1979). Student-faculty informal contact and college persistence: A further investigation. *The Journal of Educational Research, 72*(4), 214-218.
- Pascarella, E. T., & Terenzini, P. T. (1980). Predicting freshman persistence and voluntary dropout decisions from a theoretical model. *The Journal of Higher Education, 51*(1), 60-75.
- Pearl, D. C. (2013). *Support and retention: Exploring the role of mentoring relationships and social capital between college students and student affairs professionals* (Doctoral dissertation). Retrieved from <http://csusm-dspace.calstate.edu/handle/10211.8/329>



- Pfister, V. R. (2004). *Effects of faculty and peer mentoring on perceived stress and social support of college student athletes* (Doctoral dissertation). Retrieved from <http://scholarcommons.usf.edu/cgi/viewcontent.cgi?article=2194&context=etd>
- Pfund, C., Pribbenow, C. M., Branchaw, J., Miller Lauffer, S., & Handelsman, J. (2006). The merits of training mentors. *Science, New Series, 311*(5760), 473-474.
- Phinney, J. S., Torres Campos, C. M., Padilla Kallemeyn, D. M., & Kim, C. (2011). Processes and outcomes of a mentoring program for Latino college freshmen. *Journal of Social Issues, 67*(3), 599-621.
- Pike, G. R., & Kuh, G. D. (2005). First-and second-generation college students: A comparison of their engagement and intellectual development. *The Journal of Higher Education, 76*(3), 276-300.
- Pitney, W. A., & Ehlers, G. G. (2004). A grounded theory study of the mentoring process involved with undergraduate athletic training students. *Journal of Athletic Training, 39*(4), 344.
- Pittman, L. D., & Richmond, A. (2008). University belonging, friendship quality, and psychological adjustment during the transition to college. *The Journal of Experimental Education, 76*(4), 343-362.
- Plano Clark, V. L., Garrett, A. L., & Leslie-Pelecky, D. L. (2010). Applying three strategies for integrating quantitative and qualitative databases in a mixed methods study of a nontraditional graduate education program. *Field Methods, 22*(2), 154-174.
- Pryce, J. (2012). Mentor attunement: An approach to successful school-based mentoring relationships. *Child and Adolescent Social Work Journal, 29*(4), 285-305.  
<https://doi.org/10.1007/s10560-012-0260-6>

- Purdie, J. R., & Rosser, V. J. (2011). Examining the academic performance and retention of first-year students in living-learning communities and first-year experience courses. *College Student Affairs Journal, 29*(2), 95-112.
- Putsche, L., Storrs, D., Lewis, A. E., & Haylett, J. (2008). The development of a mentoring program for university undergraduate women. *Cambridge Journal of Education, 38*(4), 513-528.
- Quinn, F., Muldoon, R., & Hollingworth, A. (2002). Formal academic mentoring: A pilot scheme for first-year science students at a regional university. *Mentoring & Tutoring: Partnership in Learning, 10*(1), 21-33.
- Ragins, B. R. (2010). Relational mentoring: A positive approach to mentoring at work. In K. Cameron & G. Spreitzer (Eds.), *The Handbook of Positive Organizational Scholarship* (pp. 1-42). New York, NY: Oxford University Press.
- Ragins, B. R., & Cotton, J. L. (1999). Mentor functions and outcomes: A comparison of men and women in formal and informal mentoring relationships. *Journal of Applied Psychology, 84*(4), 529-550.
- Ragins, B. R., Cotton, J. L., & Miller, J. S. (2000). Marginal mentoring: The effects of type of mentor, quality of relationship, and program design on work and career attitudes. *Academy of Management Journal, 43*(6), 1177-1194.
- Ragins, B. R. & McFarlin, D. B. (1990). Perceptions of mentor roles in cross-gender mentoring relationships. *Journal of Vocational Behavior, 37*(3), 321-339.
- Reddick, R. J. (2011). Intersecting identities: Mentoring contributions and challenges for Black faculty mentoring Black undergraduates. *Mentoring & Tutoring: Partnership in Learning, 19*(3), 319-346. <https://doi.org/10.1080/13611267.2011.597121>

- Reilly, R. C., & D'Amico, M. (2011). Mentoring undergraduate university women survivors of childhood abuse and intimate partner violence. *Journal of College Student Development*, 52(4), 409-424. <https://doi.org/10.1353/csd.2011.0046>
- Rhodes, D. L. (2007). *Effect of mentoring on the academic, cognitive, and social development of freshmen in small colleges* (Doctoral dissertation). Retrieved from ProQuest Dissertations Publishing. (3259225)
- Riley, S., & Wrench, D. (1985). Mentoring among women lawyers. *Journal of Applied Social Psychology*, 15(5), 374-386.
- Roberts, A. (2000). Mentoring revisited: A phenomenological reading of the literature. *Mentoring & Tutoring: Partnership in Learning*, 8(2), 145-170. <https://doi.org/10.1080/713685524>
- Robinson, E., & Niemer, L. (2010). A peer mentor tutor program for academic success in nursing. *Nursing Education Perspectives*, 31(5), 286-289.
- Rodger, S., & Tremblay, P. F. (2003). The effects of a peer mentoring program on academic success among first year university students. *Canadian Journal of Higher Education*, 33(3), 1-17.
- Saldaña, J. (2009). *The coding manual for qualitative researchers*. Thousand Oaks, CA: Sage.
- Salinas, A., & Llanes, J. R. (2003). Student attrition, retention, and persistence: The case of the University of Texas Pan American. *Journal of Hispanic Higher Education*, 2(1), 73-97.
- Salinitri, G. (2005). The effects of formal mentoring on the retention rates for first-year, low achieving students. *Canadian Journal of Education*, 28(4), 853-873.

- Sanchez, R. J., Bauer, T. N., & Paronto, M. E. (2006). Peer-mentoring freshmen: Implications for satisfaction, commitment, and retention to graduation. *Academy of Management Learning & Education, 5*(1), 25-37.
- Santos, S. J., & Reigadas, E. T. (2002). Latinos in higher education: An evaluation of a university faculty mentoring program. *Journal of Hispanic Higher Education, 1*(1), 40-50.
- Santos, S. J., & Reigadas, E. T. (2004). Understanding the student-faculty mentoring process: Its effects on at-risk university students. *Journal of College Student Retention: Research, Theory and Practice, 6*(3), 337-357.
- Schneider, M. (2010, October). *Finishing the first lap: The cost of first year student attrition in America's four year colleges and universities*. Retrieved from [http://www.air.org/sites/default/files/AIR\\_Schneider\\_Finishing\\_the\\_First\\_Lap\\_Oct101.pdf](http://www.air.org/sites/default/files/AIR_Schneider_Finishing_the_First_Lap_Oct101.pdf)
- Schockett, M. R., & Haring-Hidore, M. (1985). Factor analytic support for psychosocial and vocational mentoring functions. *Psychological Reports, 57*(2), 627-630.
- Schwiebert, V. L. (2000). *Mentoring: Creating connected, empowered relationships*. Alexandria, VA: American Counseling Association.
- Seidman, I. (2006). *Interviewing as qualitative research: A guide for researchers in education and the social sciences* (3rd ed.). New York, NY: Teachers College Press.
- Shotton, H. J., Oosahwe, E. S. L., & Cintrón, R. (2007). Stories of success: Experiences of American Indian students in a peer-mentoring retention program. *The Review of Higher Education, 31*(1), 81-107.

- Simon, S. A., & Eby, L. T. (2003). A typology of negative mentoring experiences: A multidimensional scaling study. *Human Relations, 56*(9), 1083-1106.
- Smith, B. (2007). Accessing social capital through the academic mentoring process. *Equity & Excellence in Education, 40*(1), 36-46.
- Smith-Jentsch, K. A., Scielzo, S. A., Yarbrough, C. S., & Rosopa, P. J. (2008). A comparison of face-to-face and electronic peer-mentoring: Interactions with mentor gender. *Journal of Vocational Behavior, 72*(2), 193-206.
- Spillane, J. P., Pareja, A. S., Dorner, L., Barnes, C., May, H., Huff, J., & Camburn, E. (2010). Mixing methods in randomized controlled trials (RCTs): Validation, contextualization, triangulation, and control. *Educational Assessment, Evaluation and Accountability, 22*(1), 5-28. <https://doi.org/10.1007/s11092-009-9089-8>
- Solberg, V. S., O'Brien, K., Villareal, P., Kennel, R., & Davis, B. (1993). Self-efficacy and Hispanic college students: Validation of the college self-efficacy instrument. *Hispanic Journal of Behavioral Sciences, 15*(1), 80-95.
- Soria, K. M., & Stebleton, M. J. (2012). First-generation students' academic engagement and retention. *Teaching in Higher Education, 17*(6), 673-685.  
<https://doi.org/10.1080/13562517.2012.666735>
- Stewart, A. J., & Cole, E. R. (2012). Narratives and numbers: Feminist multiple methods research. In S. N. Hesse-Biber (Ed.), *The Handbook of Feminist Research: Theory and Praxis* (Vol. 2, pp. 327-724). Thousand Oaks, CA: Sage.
- St-Jean, E., & Audet, J. (2013). The effect of mentor intervention style in novice entrepreneur mentoring relationships. *Mentoring & Tutoring: Partnership in Learning, 21*(1), 96-119.  
<https://doi.org/10.1080/13611267.2013.784061>

- Storrs, D., Putsche, L., & Taylor, A. (2008). Mentoring expectations and realities: An analysis of metaphorical thinking among female undergraduate protégés and their mentors in a university mentoring programme. *Mentoring & Tutoring: Partnership in Learning*, 16(2), 175-187.
- Strayhorn, T. L., & Saddler, T. N. (2008). Gender differences in the influence of faculty-student mentoring relationships on satisfaction with college among African Americans. *Journal of African American Studies*, 13(4), 476-493.
- Strayhorn, T. L., & Terrell, M. C. (2007). Mentoring and satisfaction with college for Black students. *The Negro Educational Review*, 58(1), 69-83.
- Terenzini, P. T., Springer, L., Yaeger, P. M., Pascarella, E. T., & Nora, A. (1996). First-generation college students: Characteristics, experiences, and cognitive development. *Research in Higher Education*, 37(1), 1-22.
- Terrion, J. L., & Leonard, D. (2007). A taxonomy of the characteristics of student peer mentors in higher education: Findings from a literature review. *Mentoring & Tutoring: Partnership in Learning*, 15(2), 149-164.
- Terrion, J. L., & Leonard, D. (2010). Motivation of paid peer mentors and unpaid peer helpers in higher education. *International Journal of Evidence Based Coaching and Mentoring*, 8(1), 85-103.
- Tinto, V. (1987). *Leaving college: Rethinking the causes and cures of student attrition*. Chicago, IL: University of Chicago Press.
- Tolar, M. H. (2012). Mentoring experiences of high-achieving women. *Advances in Developing Human Resources*, 14(2), 172-187. <https://doi.org/10.1177/1523422312436415>

- Torres Campos, C. M., Phinney, J. S., Perez-Brena, N., Kim, C., Ornelas, B., Nemanim, L., ... Ramirez, C. (2009). A mentor-based targeted intervention for high-risk Latino college freshmen: A pilot study. *Journal of Hispanic Higher Education*, 8(2), 158-178.
- Ullah, H., & Wilson, M. A. (2007). Students' academic success and its association to student involvement with learning and relationships with faculty and peers. *College Student Journal*, 41(4), 1192.
- Umbach, P. D., & Wawrzynski, M. R. (2005). Faculty do matter: The role of college faculty in student learning and engagement. *Research in Higher Education*, 46(2), 153-184.
- Upcraft, M. L., & Gardner, J. N. (1989). *The freshman year experience: Helping students survive and succeed in college*. San Francisco, CA: Jossey-Bass.
- Upcraft, M. L., Gardner, J. N., & Barefoot, B. O. (Eds.). (2004). *Challenging & supporting the first-year student: A handbook for improving the first year of college*. San Francisco, CA: Jossey-Bass.
- Wallace, D., Abel, R., & Ropers-Huilman, B. (2000). Clearing a path for success: Deconstructing borders through undergraduate mentoring. *The Review of Higher Education*, 24(1), 87-102.
- Weinberg, F. J., & Lankau, M. J. (2011). Formal mentoring programs: A mentor-centric and longitudinal analysis. *Journal of Management*, 37(6), 1527-1557.  
<https://doi.org/10.1177/0149206309349310>
- Welton, A. D., Mansfield, K. C., Lee, P., & Young, M. D. (2015). Mentoring educational leadership doctoral students: Using methodological diversification to examine gender and identity intersections. *NCPEA International Journal of Education Leadership Preparation*, 10(2). Retrieved from <http://files.eric.ed.gov/fulltext/EJ1083100.pdf>

- Wenzel, A. J., & Lucas-Thompson, R. G. (2012). Authenticity in college-aged males and females, how close others are perceived, and mental health outcomes. *Sex Roles, 67*(5-6), 334-350. <https://doi.org/10.1007/s11199-012-0182-y>
- Wilson, R. E., & Kittleson, J. (2013). Science as a classed and gendered endeavor: Persistence of two white female first-generation college students within an undergraduate science context. *Journal of Research in Science Teaching, 50*(7), 802-825. <https://doi.org/10.1002/tea.21087>
- Wintre, M. G., & Bowers, C. D. (2007). Predictors of persistence to graduation: Extending a model and data on the transition to university model. *Canadian Journal of Behavioural Science/Revue Canadienne Des Sciences Du Comportement, 39*(3), 220-234.
- Witkow, M. R., Huynh, V., & Fuligni, A. J. (2015). Understanding differences in college persistence: A longitudinal examination of financial circumstances, family obligations, and discrimination in an ethnically diverse sample. *Applied Developmental Science, 19*(1), 4-18.
- Wittenberg, I. (2001). Being at university: A time of growth or unbearable stress. *Psychoanalytic Studies, 3*(3-4), 307-312.
- Wohlgemuth, D., Whalen, D., Sullivan, J., Nading, C., Shelley, M., & Wang, Y. R. (2007). Financial, academic, and environmental influences on the retention and graduation of students. *Journal of College Student Retention: Research, Theory & Practice, 8*(4), 457-475.
- Wolfe, A. J., Retallick, M. S., Martin, R., & Steiner, C. (2008). Mentoring functions practiced by undergraduate faculty in agriculture. *Journal of Agricultural Education, 49*(3), 99-108.



- Woo, J., Green, C., & Morgan, M. (2012). *Profile of 2007-08 First-Time Bachelor's Degree Recipients in 2009* [Data tables]. National Center for Education Statistics. Retrieved from <https://nces.ed.gov/pubs2013/2013150.pdf>
- Woosley, S. A., & Shepler, D. K. (2011). Understanding the early integration experiences of first-generation college students. *College Student Journal, 45*(4), 700-714.
- Wright, S. L., Jenkins-Guarnieri, M. A., & Murdock, J. L. (2013). Career development among first-year college students: College self-efficacy, student persistence, and academic success. *Journal of Career Development, 40*(4), 292-310.  
<https://doi.org/10.1177/0894845312455509>
- Yim, L., & Waters, L. (2013). The role of interpersonal comfort, attributional confidence, and communication quality in academic mentoring relationships. *Educational Research and Perspectives: An International Journal, 40*, 58-85.
- Zalaquett, C., & Lopez, A. (2006). Learning from the stories of successful undergraduate Latina/Latino students: The importance of mentoring. *Mentoring & Tutoring, 14*(3), 337-353.
- Zimmerman, B. B., & Paul, D. (2007). Technical communication teachers as mentors in the classroom: Extending an invitation to students. *Technical Communication Quarterly, 16*(2), 175-200.

## **Appendices**

## Appendix A

### Reprint Permission from Copyright Clearance Center



**RightsLink®**

**Title:** Designing and conducting mixed methods research  
**Article ID:** 9781412975179 (pbk.)  
**Publication:** Publication1  
**Publisher:** CCC Reproduction  
**Date:** Jan 1, 2011  
 Copyright © 2011, CCC Reproduction

Logged in as:  
 Gustavo Salazar  
 Account #:  
 3001358302

#### Order Completed

Thank you for your order.

This Agreement between Gustavo Salazar ("You") and SAGE College ("SAGE College") consists of your order details and the terms and conditions provided by SAGE College and Copyright Clearance Center.

License number	Reference confirmation email for license number
License date	Oct, 30 2018
Licensed content publisher	SAGE College
Licensed content title	Designing and conducting mixed methods research
Licensed content date	Jan 1, 2011
Type of use	Thesis/Dissertation
Requestor type	Academic institution
Format	Print, Electronic
Portion	chart/graph/table/figure
Number of charts/graphs/tables/figures	1
The requesting person/organization	Gustavo Salazar
Title or numeric reference of the portion(s)	Figure 3.3 Flowchart of the Basic Procedures in Implementing a Convergent Design
Title of the article or chapter the portion is from	Chapter 3. Choosing a Mixed Methods Design, page 79
Editor of portion(s)	n/a
Author of portion(s)	n/a
Volume of serial or monograph	n/a
Page range of portion	79
Publication date of portion	November 2018
Rights for	Main product
Duration of use	Life of current edition
Creation of copies for the disabled	no
With minor editing privileges	no
For distribution to	Worldwide
In the following language(s)	Original language of publication
With incidental promotional use	no
Lifetime unit quantity of new product	Up to 499
<b>Title</b>	<b>THE IMPACT OF FACULTY ACADEMIC MENTORING ON FIRST-GENERATION UNDERGRADUATE STUDENTS: A MIXED METHOD DESIGN</b>
<b>Institution name</b>	<b>St. Mary's University, San Antonio Texas</b>
<b>Expected presentation date</b>	<b>Nov 2018</b>
<b>Requestor Location</b>	<b>Gustavo Salazar 1314 Kimberly Dr.  Laredo, TX 78045 United States Attn:</b>
<b>Billing Type</b>	<b>Invoice</b>
<b>Billing address</b>	<b>Gustavo Salazar 1314 Kimberly Dr.</b>

## Appendix B

### Relational Health Indices (RHI)

(Liang, Tracy, Williams, Taylor, Jordan, & Miller, 2002)

#### PEER MENTOR (RHI-P)

Next to each statement below, please indicate the number that best applies to your relationship with your peer mentor. Think about how you're related to her/him and how the peer mentor affected you.

- 1) Even when I have difficult things to share, I can be honest and real with my peer mentor.

1=Never    2=Seldom    3=Sometimes    4=Often    5=Always

- 2) After a conversation with my peer mentor, I feel uplifted.

1=Never    2=Seldom    3=Sometimes    4=Often    5=Always

- 3) The more time I spend with my peer mentor, the closer I feel to him/her.

1=Never    2=Seldom    3=Sometimes    4=Often    5=Always

- 4) I feel understood by my peer mentor.

1=Never    2=Seldom    3=Sometimes    4=Often    5=Always

- 5) It is important to us to make our friendship grow.

1=Never    2=Seldom    3=Sometimes    4=Often    5=Always

- 6) I can talk to my peer mentor about our disagreements without feeling judged.

1=Never    2=Seldom    3=Sometimes    4=Often    5=Always

- 7) My peer mentor inspires me to seek other friendships like this one.

1=Never    2=Seldom    3=Sometimes    4=Often    5=Always

- 8) I am uncomfortable sharing my deepest feelings and thoughts with my peer mentor.

1=Never    2=Seldom    3=Sometimes    4=Often    5=Always

9) I have a greater sense of self-worth through my relationship with my peer mentor.

1=Never 2=Seldom 3=Sometimes 4=Often 5=Always

10) I feel positively changed by my peer mentor.

1=Never 2=Seldom 3=Sometimes 4=Often 5=Always

11) I can tell my peer mentor when he/she has hurt my feelings.

1=Never 2=Seldom 3=Sometimes 4=Often 5=Always

12) My friendship causes me to grow in important ways.

1=Never 2=Seldom 3=Sometimes 4=Often 5=Always

### **FACULTY MENTOR (RHI-M)**

Next to each statement below, please indicate the number that best applies to your relationship with your faculty mentor. Your mentor is the faculty member that was assigned to you. Think about how you're related to her/him and how the mentor affected you.

1) I can be genuinely myself with my faculty mentor.

1=Never 2=Seldom 3=Sometimes 4=Often 5=Always

2) I believe my faculty mentor values me as a whole person (e.g., professionally/academically and personally).

1=Never 2=Seldom 3=Sometimes 4=Often 5=Always

3) My faculty mentor's commitment to and involvement in our relationship exceeds that required by his/her social/ professional role.

1=Never 2=Seldom 3=Sometimes 4=Often 5=Always

4) My faculty mentor shares stories about his/her own experiences with me in a way that enhances my life.

1=Never 2=Seldom 3=Sometimes 4=Often 5=Always

- 5) I feel as though I know myself better because of my faculty mentor.  
1=Never 2=Seldom 3=Sometimes 4=Often 5=Always
- 6) My faculty mentor gives me emotional support and encouragement.  
1=Never 2=Seldom 3=Sometimes 4=Often 5=Always
- 7) I try to emulate the values of my faculty mentor (such as social, academic, religious, physical/athletic).  
1=Never 2=Seldom 3=Sometimes 4=Often 5=Always
- 8) I feel uplifted and energized by interactions with my faculty mentor.  
1=Never 2=Seldom 3=Sometimes 4=Often 5=Always
- 9) My faculty mentor tries hard to understand my feelings and goals (academic, personal, or whatever is relevant).  
1=Never 2=Seldom 3=Sometimes 4=Often 5=Always
- 10) My relationship with my faculty mentor inspires me to seek other relationships like this one.  
1=Never 2=Seldom 3=Sometimes 4=Often 5=Always
- 11) I feel comfortable expressing my deepest concerns to my faculty mentor.  
1=Never 2=Seldom 3=Sometimes 4=Often 5=Always

### **UNIVERSITY COMMUNITY (RHI-C)**

Next to each statement below, please indicate the number that best applies to your relationship with or involvement in the St. Mary's community. The St. Mary's community can be anyone within the university such as administrators (library staff, testing center, etc.), organizations such as clubs fraternities and sororities, dormitory resident assistants, etc.

- 1) I feel a sense of belonging to St. Mary's community.  
1=Never 2=Seldom 3=Sometimes 4=Often 5=Always

- 2) I feel better about myself after my interactions with St. Mary's community.  
1=Never 2=Seldom 3=Sometimes 4=Often 5=Always
- 3) If members the St. Mary's community knows something is bothering me, they ask me about it.  
1=Never 2=Seldom 3=Sometimes 4=Often 5=Always
- 4) Members of the St. Mary's community are not free to just be themselves.  
1=Never 2=Seldom 3=Sometimes 4=Often 5=Always
- 5) I feel understood by members of the St. Mary's community.  
1=Never 2=Seldom 3=Sometimes 4=Often 5=Always
- 6) I feel mobilized to personal action after meetings within the St. Mary's community.  
1=Never 2=Seldom 3=Sometimes 4=Often 5=Always
- 7) There are parts of myself I feel I must hide from the St. Mary's community.  
1=Never 2=Seldom 3=Sometimes 4=Often 5=Always
- 8) It seems as if people in the St. Mary's community really like me as a person.  
1=Never 2=Seldom 3=Sometimes 4=Often 5=Always
- 9) There is a lot of backbiting and gossiping in the St. Mary's community.  
1=Never 2=Seldom 3=Sometimes 4=Often 5=Always
- 10) Members of the St. Mary's community are very competitive with each other.  
1=Never 2=Seldom 3=Sometimes 4=Often 5=Always
- 11) I have a greater sense of self-worth through my connection with the St. Mary's community.  
1=Never 2=Seldom 3=Sometimes 4=Often 5=Always
- 12) My connections with the St. Mary's community are so inspiring that they motivate me to pursue relationships with other people outside this community.

1=Never 2=Seldom 3=Sometimes 4=Often 5=Always

13) The St. Mary's community has shaped my identity in many ways.

1=Never 2=Seldom 3=Sometimes 4=Often 5=Always

14) The St. Mary's community provides me with emotional support.

1=Never 2=Seldom 3=Sometimes 4=Often 5=Always



## Appendix C

### College Self-Efficacy Instrument

(Solberg, O'Brien, Villareal, Kennel, & Davis, 1993)

#### Prompt for Pre-FAM

This section of the questionnaire seeks information regarding your degree of confidence in completing tasks at the first week of your first semester at St. Mary's University (pre-FAM). You will be asked to respond to a series of statements by selecting the answer which best represents your attitude or opinion before mentoring. Remember this is not a test and there is no right or wrong answers.

Before participation in the FAM program, and at the start of your first semester at St. Mary's University, how confident were you in successfully completing the following tasks:

#### Prompt for Present-Time

How confident are you that you could successfully complete the following tasks:

Not at all confident										Very confident
0	1	2	3	4	5	6	7	8	9	

How confident are you that you could successfully complete the following tasks:

1. Make new friends at St. Mary's.
2. Talk to your professors/instructors.
3. Take good class notes.
4. Divide chores with others you live with.
5. Research a term paper.
6. Join an intramural sports team.
7. Understand your textbooks.

8. Get a date when you want one.
9. Ask a professor or instructor a question outside of class.
10. Get along with others you live with.
11. Write a course paper.
12. Socialize with others you live with.
13. Do well on your exams.
14. Talk with a school academic and support (e.g. advising) staff.
15. Manage your time effectively
16. Join a student organization.
17. Ask a question in class.
18. Divide space in your residence (if applicable).
19. Participate in class discussions.
20. Keep up to date with your school work.

## Appendix D

### The Persistence/Voluntary Dropout Decisions Scale

(Pascarella & Terenzini, 1980)

*Scale IV: Academic and Intellectual Development*

- 1) I am satisfied with the extent of my intellectual development since enrolling in this university.  
5=Strongly agree    4=Tend to agree    3=Neutral    2=Tend to disagree    1=Strongly disagree
- 2) My academic experience has had a positive influence on my intellectual growth and interest in ideas.  
5=Strongly agree    4=Tend to agree    3=Neutral    2=Tend to disagree    1=Strongly disagree
- 3) I am satisfied with my academic experience at this university.  
5=Strongly agree    4=Tend to agree    3=Neutral    2=Tend to disagree    1=Strongly disagree
- 4) Few of my courses this year have been intellectually stimulating.  
5=Strongly agree    4=Tend to agree    3=Neutral    2=Tend to disagree    1=Strongly disagree
- 5) My interest in ideas and intellectual matters has increased since coming to this university.  
5=Strongly agree    4=Tend to agree    3=Neutral    2=Tend to disagree    1=Strongly disagree
- 6) I am more likely to attend a cultural event (for example, a concert, lecture, or art show) now than I was before coming to this university

5=Strongly agree    4=Tend to agree    3=Neutral    2=Tend to disagree    1=Strongly disagree

7) I have performed academically as well as I anticipated I would.

5=Strongly agree    4=Tend to agree    3=Neutral    2=Tend to disagree    1=Strongly disagree

*Scale V: Institutional and Goal Commitments.*

1) It is important for me to graduate from college.

5=Strongly agree    4=Tend to agree    3=Neutral    2=Tend to disagree    1=Strongly disagree

2) I am confident that I made the right decision in choosing to attend this university.

5=Strongly agree    4=Tend to agree    3=Neutral    2=Tend to disagree    1=Strongly disagree

3) It is likely that I will register at this university next fall.

5=Strongly agree    4=Tend to agree    3=Neutral    2=Tend to disagree    1=Strongly disagree

4) It is not important to me to graduate from this university.

5=Strongly agree    4=Tend to agree    3=Neutral    2=Tend to disagree    1=Strongly disagree

5) I have no idea at all what I want to major in.

5=Strongly agree    4=Tend to agree    3=Neutral    2=Tend to disagree    1=Strongly disagree

6) Getting good grades is not important to me.

5=Strongly agree    4=Tend to agree    3=Neutral    2=Tend to disagree    1=Strongly  
disagree

**Appendix E**  
**Demographic Questionnaire**

Please provide the information as accurately as possible.

- 1) What is your gender?
  - a. Female
  - b. Male
  
- 2) What is your ethnicity:
  - a. Hispanic or Latino
  - b. Non-Hispanic or non-Latino
  
- 3) What is your relationship status (You may choose more than one)?
  - a. Single
  - b. Married
  - c. Divorced
  - d. Separated
  - e. Widowed
  - f. In a committed relationship
  
- 4) What is your employment status (Please check all that apply)
  - a. Work Study on-campus employment: For what department?: \_\_\_\_\_
  - b. Non-work study on campus employment
  - c. Off campus employment
  - d. Not currently employed
  
- 5) How many hours are you currently enrolled?
  - a. 1 to 3 hours

- b. 3 to 9 hours
  - c. 12 to 18 hours
  - d. 21 hours
- 6) Did you enroll in college courses while you were in high school?
- a. Yes
  - b. No
- 7) In what school year did you participate as a mentee in the FAM Program?
- a. 2010-2011
  - b. 2011-2012
  - c. 2012-2013
  - d. Fall 2013
- 8) If you did attend college while in high school, how many hours did you complete?
- a. 1 to 3 hours
  - b. 3 to 9 hours
  - c. 12 to 18 hours
  - d. 21 to 27 hours
  - e. 28+
  - f. Not Applicable
- 9) Have you or are you participating as a peer mentor in the FAM program?
- a. No, I have never been a peer mentor in the FAM program
  - b. Yes, in the past I was a peer mentor in the FAM program
  - c. I am participating peer mentor in the FAM program for the fall 2013
- 10) If you have participated as a peer mentor, please indicate how many times?:\_\_\_\_\_

- 11) If you have participated as a peer mentor, have you mentored anyone besides a FAM participant?
  - a. Yes
  - b. No
- 12) What is your classification?
  - a. Freshman (completed less than 30 hours)
  - b. Sophomore (completed over 30 hours, but less than 60 hours)
  - c. Junior (completed over 60 hours, but less than 90 hours)
  - d. Senior (completed over 90 hours)
- 13) Did you enter St. Mary's as a transfer student?
  - a. Yes
  - b. No
- 14) What is your major? : \_\_\_\_\_
- 15) Are you a recipient of the Federal Pell Grant?: Yes \_\_\_\_\_ No \_\_\_\_\_
- 16) Did you receive an academic scholarship in your first year at St. Mary's?: Yes \_\_\_ No \_\_\_
- 17) Are you or were you in the AEP (Academic Enrichment Program): Yes \_\_\_ No \_\_\_
- 18) What was/is/will be your Grade Point Average (GPA) at the end of FAM Program? \_\_\_\_\_
- 19) For 2013-14 your residence is:
  - a. On-campus
  - b. Off-campus
- 20) What is/was your expected number of informal contacts with faculty who are not mentors (per month, ten minutes or more outside of class)?



- a. 0
  - b. 1-3
  - c. 4-7
  - d. 8-11
  - e. 12+
  - f. Other (please specify):\_\_\_\_\_
- 21) What is your parents' combined annual income?
- a. \$20,000 or less
  - b. \$21,000 – \$30,000
  - c. \$31,000 - \$40,000
  - d. \$41,000 – \$50,000
  - e. Over \$50,000
- 22) What's the highest degree you expect to obtain?
- a. Bachelors
  - b. Masters
  - c. PhD or other terminal degree (M.D., J.D., etc.)
  - d. Other (please specify):\_\_\_\_\_
- 23) Attending St. Mary's University was your...
- a. 1st choice
  - b. 2nd choice
  - c. 3rd choice
  - d. 4th choice
  - e. Other (please specify):\_\_\_\_\_

- 24) What is/was the gender of your FAM faculty mentor?
- a. Female
  - b. Male
  - c. I don't remember
- 25) Is or was your FAM faculty mentor's degree in the same major as yours at the time of mentoring?
- a. Yes
  - b. No
  - c. I don't know
- 26) What is/was the gender of your FAM peer mentor?
- a. Female
  - b. Male
  - c. I don't remember
- 27) Is or was your peer mentor's major the same major you are in?
- a. Yes
  - b. No
  - c. I don't know

## Appendix F

### E-mail letter to present and past FAM participants

Hello! My name is Gustavo “Gus” Salazar II and I am a doctoral student in the Counselor Education and Supervision program here at St. Mary’s University.

I am conducting my dissertation research and I am seeking volunteers who are present and past participants of St. Mary’s Faculty Advisor Mentoring Program (aka “FAMERS!”). I am interested in how mentoring has impacted you academically and in other non-academic areas.

I am collecting data in two forms: First, there is a 15-20 minute web-based survey that you can access anywhere there is an internet connection. Secondly, I will be holding focus groups to get FAM participant feedback about their experiences with the program. The focus groups will last no longer than two hours.

If you are interested in volunteering, please read the following information below, which describes the study in full detail.

At the end of this email there are two links. You can choose to participate in the web-based survey, the focus groups or you can participate in both.

The first link will direct you to the web-based survey. The second link will direct you to group interview consent form. If you chose to select this link, you will be asked to provide your name and email at the bottom of the consent form. By providing your contact information, the Office of Student Retention will contact you in order to schedule a group interview with you at a convenient time. Should you choose to participate in both, you can simply start with the survey and at the end of the survey you will be prompted to go to the focus group link.

If you have any questions you may contact me at [gustavo.salazar@tamiu.edu](mailto:gustavo.salazar@tamiu.edu) for any questions or concerns. Thank you for your time.

---

COVER LETTER FOR PARTICIPATION IN A RESEARCH PROJECT

---

Web-based Survey Link

[https://www.Qualtrics.com/s/stmarytx\\_FAM\\_web-based\\_survey](https://www.Qualtrics.com/s/stmarytx_FAM_web-based_survey)

Group Interview Link

[https://www.Qualtrics.com/s/stmarytx\\_focus\\_group\\_consent](https://www.Qualtrics.com/s/stmarytx_focus_group_consent)

Office of Student Retention

<http://www.stmarytx.edu/retention/index.php?site=forFacultyStaff>

## Appendix G

### **E-mail Reminder letter to present and past FAM participants**

Dear FAM Program participants:

This is a reminder that there is still a chance to participate in the study. If you have already participated, I would like to thank you again for your participation. If you decided not to participate, I would also like to thank you for your consideration.

If you missed the previous email, let me reintroduce myself. My name is Gustavo “Gus” Salazar II and I am a doctoral student in the Counselor Education and Supervision program here at St. Mary’s University.

Presently, I am conducting my dissertation research and I am seeking volunteers who are present and past participants of St. Mary’s Faculty Advisor Mentoring Program (aka “FAMERS!”). I am interested in how mentoring has impacted you academically and in other non-academic areas.

I am collecting data in two forms: First, there is a 15-20 minute web-based survey that you can access anywhere there is an internet connection. Secondly, I will be holding focus groups to get FAM participant feedback about their experiences with the program. The focus groups will last no longer than 2 hours.

If you are interested in volunteering, please read the following information below, which describes the study in full detail.

At the end of this email there are two links. You can choose to participate in the web-based survey, the focus groups or you can participate in both.

The first link will direct you to the web-based survey. The second link will direct you to group interview consent form. If you chose to select this link, you will be asked to provide your name and email at the bottom of the consent form. By providing your contact information, the Office of Student Retention will contact you in order to schedule a group interview with you at a convenient time. Should you choose to participate in both, you can simply start with the survey and at the end of the survey you will be prompted to go to the focus group link.

If you have any questions you may contact me at [gustavo.salazar@tamiu.edu](mailto:gustavo.salazar@tamiu.edu) for any questions or concerns.

Thank you for your time.

Sincerely,

Gustavo “Gus” Salazar II

-----  
COVER LETTER FOR PARTICIPATION IN A RESEARCH PROJECT  
-----

Web-based Survey Link

[https://www.Qualtrics.com/s/stmarytx\\_FAM\\_web-based\\_survey](https://www.Qualtrics.com/s/stmarytx_FAM_web-based_survey)

Group Interview Link

[https://www.Qualtrics.com/s/stmarytx\\_focus\\_group\\_consent](https://www.Qualtrics.com/s/stmarytx_focus_group_consent)

Office of Student Retention

<http://www.stmarytx.edu/retention/index.php?site=forFacultyStaff>

## Appendix H

### University Cover Letter for Participation in a Research Project

Dear FAM Participant:

I am requesting your participation in a research project entitled “The Impact of Faculty Academic Mentoring on First-Generation Undergraduate Students: A Mixed Method Design”

1. The purpose of this study is to investigate how the quality of the peer and faculty mentoring relationships impact undergraduate students who participated in the Faculty Academic Mentor (FAM) Program. This study wishes to examine how the quality of the mentoring relationship impacts its participants. Specifically, we are interested in how the quality of your mentoring relationship impacted your academic performance, persistence, interaction with your peers and other faculty members, as well as your self-efficacy (the confidence to carry out academic and social interactions). We are equally interested in knowing if mentoring impacted you in other ways.
2. I will be using the following research procedures: Participants of the FAM program will be recruited via email from the Office of Student Retention. Current and past FAM participants will be recruited on October 1, 2013. The emails sent to all potential volunteers will contain an invitation to participate in a study written by the primary researcher and the “Cover Letter for Participation in a Research Project.” Email recipients will have the choice to choose or not to choose to volunteer in a web-survey or focus group interviews, both or none if they wish. Recipients will be provided with two links. The first link is a consent form to participate in a web-based survey. The second link is a focus group contact consent form in to schedule volunteers for focus group interview via email and phone. Scheduling for group interviews will be conducted

through the Office of Student Retention. An additional email reminder will be sent to students on October 15, 2013.

The web-based survey will be conducted through St. Mary's Qualtrics program, which is private company that provides users the support and assistance to create individualized surveys. Qualtrics adheres to IRB guidelines by providing secure web-based transmission of information between its servers and users, facilitates the implementation of informed consent, and provides database and server security. Potential volunteers who choose to click on the web-based survey link will be directed to the "Consent by Participant for Participation in a Research Project" form. In order to participate in the web-survey, volunteers must select "I Agree to Participate" and click the "Next" button to continue to the demographic and survey questions. If the potential volunteer chooses "I Do Not Agree to Participate" and clicks "Next" or finishes or exits the survey, the participants be directed to a "thank you for participation" letter from the researcher. Students will also be reminded that they can participate in participate in focus group interview by clicking the "Focus Group Contact Consent" Link.

Choosing the focus group link will direct potential volunteer to the Focus Group Contact Consent form. In order to participate in the focus group interview, potential volunteers must submit their name, email and phone number in order to arrange a schedule for the interviews. Students who choose not to participate by exiting the consent form will be directed to a "thank you for participation" letter from the researcher. Students will be reminded that they can participate in participate in web-survey by clicking the web-survey link. Students who report to the focus group interviews will sign an in-person consent form in order to participate in the interviews.



All three consent forms will have the following common information: Title and purpose of the study, participant's right to choose whether or not to participate, participant's right to choose or not to choose to answer any questions or decide how much or how little to discuss, participants right to withdraw from the survey or group interviews at any time once they have begun. The consent forms will indicate that participation will not result in direct benefit, no financial compensation, and no consequence if the participant chooses to withdraw or exit. The consent forms indicate that the data collected will be used for academic and publication purposes, that data generated by them will be encrypted and password protected at three levels: first data will be encrypted and password protected using WinRAR 4.20 archival program. The archived data will then be burned unto a CD Rom using SecurDisc 3.0 that will encrypt and password protected the content of the CD. Additionally, encrypted and password protected archived data will be located in an encrypted hard drive partition in a laptop that can only be accessed by password. Signed consent forms will be sealed, locked in a cabinet, in a locked office at the Counselor Education and Family Life Center.

The consent forms vary in the following procedures: The consent form will indicate that the length of time to complete the survey will be approximately 15 to 20 minutes. Participants choosing to volunteer in the web-survey will have to click "I agree to participate" in order to proceed to the demographic questionnaire, which is followed by the surveys. All individual surveys will contain a prompt that will describe the purpose of the questions. Specifically, the CSEI will be administered twice; the prompt will ask the volunteer to reflect on their experiences prior to mentoring and will be asked to complete the survey from a retrospective experience. Consequent CSEI survey will

prompt the volunteer to reflect their current experiences after mentoring. If the participant wishes to exit at any time, they will be directed to press the exit button at the top right corner of their screen. At the end of the surveys or if the student exits, they will be immediately directed to a “thank you for participation” and will also be invited to sign up for the focus group interviews (if they have not done so already) by clicking the “Focus Group Contact Consent” Link.

Participants who click the focus group contact consent will have to submit their name, email, and phone number. The consent form will state that volunteers will be contacted by the Office of Student Retention in order to arrange a schedule for the group interviews. The consent form also states that groups will be no larger than 10 students and that a team of 3 researchers will be participating. One of the team members will be asking questions and facilitating the group and the other two will be taking notes of the discussion. The focus group interviews will be audio-recorded in order to insure accuracy. The questions asked during the interview will be semi-structured and open-ended. The content of the questions will focus on the student’s experience in participating in the FAM program. Students who attend the interviews will be asked to sign an in-person consent form.

The volunteers who attend the focus group interview will have the following procedures: Participants will be handed a hard copy of in-person consent form. Research team member will verbally review the consent form. The consent form will state that the interview will be no longer than 2 hours. It will be indicated to the participants that groups will be no larger than 10 students and that a team of 3 researchers will be participating. One of the team members will be asking questions and facilitating the

group and the other two will be taking notes of the discussion. The focus group interviews will be audio-recorded in order to insure accuracy. The questions asked during the interview will be semi-structured and open-ended. Participants will be reminded that the procedures, questions, and group participants should be kept confidential. After the verbal review, participants will be asked to sign the consent form in order to proceed to the interview. Consent forms will be collected by the research team and will be placed in an envelope and sealed, signed, and dated by the primary research. The packet of consent forms will turn in within 48 hours to the researcher supervisor, who will keep them in a locked cabinet in a locked office. At the end of the interviews, participants will be thanked and will be verbally reminded to participate in the survey if they haven't done so already. In addition, participants will be provided with refreshments after the interview. The location of the interviews will be at the St. Mary's University Center so as to facilitate participation. In the event of unforeseen scheduling conflict and/or availability, alternative classrooms locations in campus will be reserved

3. The estimated time to complete the surveys is approximately 15 to 20 minutes. The group interviews will not exceed 2 hours.
4. PLEASE NOTE THAT THE WEB-BASED SURVEY WILL NOT ALLOW SELF-IDENTIFYING REMARKS. THE TWO LINKS PROVIDED ARE INDEPENDENT OF ONE ANOTHER AND ARE NOT LINKED
5. There is no foreseeable risk for the student should potential volunteers wish to participate in this study
6. I do not foresee that participants will receive any direct, personal benefit as a result of their participation in this project; however, volunteering to participate will allow social

scientists to better understand how the quality of the mentoring relationship influence first generation student outcomes such as academic performance (GPA), retention (reenrollment the following year and persistence), resilience (interaction with faculty, peers, university community, and self-efficacy), and other aspects of the students' lives outside the context of education.

7. Prospective participants have three choices regarding non-participation in this project:
  - a. Participants may decide not to participate at all;
  - b. Participants may decide not to answer some of the questions;
  - c. Participants may decide to terminate their participation even after they have begun.
8. Any of these choices is an option, and participants will not suffer any penalty nor will it negatively impact student grades and campus employment.
9. In order to assure the confidentiality of project participants, only an electronic consent is being requested and the Qualtrics is designed to prevent any other opportunity to leave identifying remarks. The student's name and email number will serve as a participant's consent to participate in a focus group interview. In addition, volunteers will be required to sign another consent form at the time of the interviews. The Office of Student Retention will provide aggregate GPA data, enrollment totals, and SAT or ACT average cohort scores that do not have any individual identifying information.
10. The data collected from this study will be used for education and publication purposes; however, it will not identify students personally. Survey data will be digitally encrypted and stored at the Qualtrics servers. Only the primary researcher and committee members will have access to the records. At no time will faculty mentors and peer mentors have

access to these records. Any audio and video data collected as a result of the interviews, will be encrypted and password protected.

11. Any questions about this research or any related problems may be directed to the Principal Investigator, Gustavo Salazar II, M.A, Academic Coordinator for TRiO Student Support Services at Texas A&M International University, Laredo, Texas 78041, at phone number (956) 326-2718. In addition, any further questions can be directed to Dr. Rosalind Alderman, Office of Student Retention at St. Mary's University, at phone number (210) 436-3995
12. ANY QUESTIONS REGARDING PARTICIPANT RIGHTS AS A RESEARCH VOLUNTEER MAY BE ADDRESSED TO THE ST. MARY'S UNIVERSITY INSTITUTIONAL REVIEW BOARD HUMAN SUBJECTS (210-436-3315). ALL RESEARCH PROJECTS THAT ARE CARRIED OUT BY INVESTIGATORS AT ST. MARY'S UNIVERSITY ARE GOVERNED BY REQUIREMENTS OF THE UNIVERSITY AND THE FEDERAL GOVERNMENT.

## Appendix I

### Focus Group Contact Consent Form

#### CONSENT BY PARTICIPANT FOR PARTICIPATION IN A RESEARCH PROJECT

Title: The Impact of Faculty Academic Mentoring on First-Generation Undergraduate Students: A Mixed Method Design

Principal Investigator: **Gustavo Salazar II**, M.A, Doctoral candidate at St. Mary's University  
Academic Coordinator, TRiO Student Support Services/University College, Texas A&M  
International University, 5201 University Blvd., Laredo, Texas 78041

Tel: (956) 326-2712, Email: [gustavo.salazar@tamiu.edu](mailto:gustavo.salazar@tamiu.edu)

Committee Chair: Dr. Dana L. Comstock, Department of Counseling and Human Services  
[dcomstock@stmarytx.edu](mailto:dcomstock@stmarytx.edu), (210) 438-6400

Committee member: Dr. Julie Strentzsch, Department of Counseling and Human Services  
[jstrentzsch@stmarytx.edu](mailto:jstrentzsch@stmarytx.edu), (210) 438-6400

Committee member: Dr. Rosalind Alderman, Office of Student Retention  
[ralderman@stmarytx.edu](mailto:ralderman@stmarytx.edu), (210) 436-3995

2. You are being invited to participate in the above mentioned project.
3. Your participation in this study is entirely voluntary, and you may refuse to participate or may decide to cease participation once begun. Should you withdraw from the study, which you may do at any time, or should you refuse to participate in the study, your decision will involve no penalty or loss of benefits to which you are otherwise entitled.
4. You are being asked to read the consent form carefully and by submitting your name, email, and phone number you consent to be contacted by the Office of Student Retention in order to arrange an interview schedule. The purpose of this study is to investigate how the quality of

the peer and faculty mentoring relationships impact undergraduate students who participated in St. Mary's Faculty Academic Mentor (FAM) Program.

5. You are being invited to participate in a focus group interview in order to investigate the quality of mentoring relationship and its impact on student outcomes such as academic performance, persistence, resilience, and its impact in other areas.

In order to be contacted to participate in the focus group interviews you will have to submit your name, email, and phone number in this electronic consent form. At the time of the scheduled interview, you will be asked to sign a "consent for participation" form in order to insure confidentiality of group participants, interview procedures, and questions asked.

If you agree to participate you will be in a group of no more than 10 students. A team of researchers consisting of the primary investigator and 2 experts will be present during the interview process. One of the team members will be asking questions and facilitating the discussion. The other two team members will take notes of the terms and ideas expressed during the interview.

If you agree to participate, an audio-recorder will be used to capture the discussion of the group interview in order to insure accuracy. As a volunteer, you can request to pause the recording. It will be your choice how much or how little you want to talk during the interview. You will also have the choice not to refer each other by name in order to insure confidentiality.

During the interview you will be asked questions relating to your mentoring experience. The questions during the interview will inquire about your experience with the FAM program and about how it impacted your college experience. Additional questions will

explore the mentoring relationships you have had in the FAM program and inquire as to how you might improve the FAM program for future participants.

Interview data generated will be secured using 2 levels of digital encryption and two physical security measures. First, the digital audio recording will be downloaded into an mp3 format. These digital copies will be password encrypted in WinRAR 4.20 an archival program. The archived encrypted audio recordings will be stored in two password protected mediums: Compact Disc ROM and a laptop hard drive. The compact disc medium will employ SecurDisc 3.0, a program that will encrypt and password protects any information recorded on CD. The laptop hard drive will have an encrypted partition that is password protected. In addition, the laptop used is password protected. Encrypted CD media will be stored in a safety box that will require a key for access. The safety box will be located at the primary researcher's home, which is locked at all times. Notes taken by the two team members will be scanned into Adobe Acrobat 9.0 file format and will be password protected. These scanned digital files will be additionally encrypted in WinRAR 4.20 and will be copied to CD media using SecurDisc 3.0 and will be encrypted and password protected. The original hard copy notes will be shredded to insure physical security. Only the primary researcher and the 3 committee members of this study will have access to the digital records. At no time will faculty mentors or peer mentors have access to these records.

6. If you agree to participate, the total anticipated time commitment will not exceed 2 hours.
7. You are advised that while there are no physical risks associated with participation in this project, you may experience some discomfort in reviewing your personal feelings and opinions. The data generated by you will not be presented to your mentors, peers, or faculty members.



8. If you agree to participate, you will receive no direct benefit from this study. However, your participation will indirectly help supplement the goals and initiatives of the Faculty Academic Mentor Program by refining the processes that lead to future successful student outcomes. Your participation will add to our understanding of how to improve persistence, retention, social, and academic integration. Results of the study will be used to enhance training procedures for mentors, implement new strategies for mentoring. In addition, this study addresses the lack of studies investigating the quality of the mentoring relationship and how varying qualities within the mentoring relationship influence student outcomes differently. Lastly, the results will provide further evidence to explore how the quality of the mentoring relationship plays a role in student outcomes.
9. If you agree to participate, every effort will be made to maintain the confidentiality of your study records. The information gathered in this study will be encrypted and password protected to insure your privacy and confidentiality. All electronic media generated by the interview will be encrypted and password protected. Only the primary investigator and the 3 committee members of this study will have access to the interview data.
10. If you agree to participate, the data collected from the study will be used for educational and publication purposes; however, you will not be identified by name. The confidentiality of the data will be maintained within allowable legal limits.
11. If you agree to participate, you are understand that no financial compensation will be offered for participation in the study. However, it has been made clear that drinks and snacks will be provided at the group interviews.
12. If you agree to participate, you have the right to withdraw from this study at any time without consequence. If you choose to withdraw from the study, you have the option to simply not

show up for your scheduled interview or you may contact the Office of Student Retention and cancel your scheduled appointment. You may also refuse to answer certain questions during the focus group and you have the right to cease participation in the focus group by exiting at any time.

13. I understand I can contact the primary investigator if I have additional questions. If you have additional questions during the course of this study about the research or any related problem, you may contact the Principal Investigator, Gustavo Salazar II, M.A., LPC, at Texas A&M International University, 5201 University Blvd, Laredo, Tx 78041. The principal investigator can be reached at (956) 326-2712 and [gustavo.salazar@tamiu.edu](mailto:gustavo.salazar@tamiu.edu)
14. In the event of injury resulting from this research, St. Mary's University is not able to offer financial compensation nor to absorb the costs of medical treatment; however, necessary facilities, emergency treatment and professional service will be available to research participants just as they are to the general public. Available services can be obtained at the:
- Student Psychological and Testing Services
  - <https://www.stmarytx.edu/campuslife/student-services/testing-services/>
  - 210-436-3135
  - The Counselor Education and Family Life Center
  - <https://www.stmarytx.edu/academics/graduate/masters/counseling/student-resources/family-life-center/?print=1>
  - 210-438-6411
15. By providing your name, email, and phone number, I acknowledge my voluntary participation in this research project. Such participation does not release the investigator(s),

institution(s), sponsor(s) or granting agency(ies) from their professional and ethical responsibility to me.

16. I HAVE READ THE INFORMATION PROVIDED ABOVE AND HAD MY QUESTIONS ANSWERED TO MY SATISFACTION. I VOLUNTARILY AGREE TO BE CONTACTED BY THE OFFICE OF STUDENT RETENTION IN ORDER TO SCHEDULE MY PARTICIPATION IN THIS STUDY.

ELECTRONIC CONSENT

1. Please type your name below

2. Please type your St. Mary's student email

3. Please type your phone number

ANY QUESTIONS REGARDING YOUR RIGHTS AS A RESEARCH PARTICIPANT MAY BE ADDRESSED TO THE ST. MARY'S UNIVERSITY INSTITUTIONAL REVIEW BOARD HUMAN SUBJECTS (210-436-3315). ALL RESEARCH PROJECTS THAT ARE CARRIED OUT BY INVESTIGATORS AT THE UNIVERSITY ARE GOVERNED BY REQUIREMENTS OF THE UNIVERSITY AND THE FEDERAL GOVERNMENT.

**[https://www.Qualtrics.com/s/stmarytx focus\\_group\\_consent](https://www.Qualtrics.com/s/stmarytx_focus_group_consent)**

## Appendix J

### Web-survey Electronic Consent Form

#### CONSENT BY PARTICIPANT FOR PARTICIPATION IN A RESEARCH PROJECT

Title: The Impact of Faculty Academic Mentoring on First-Generation Undergraduate Students: A Mixed Method Design.

Principal Investigator: **Gustavo Salazar II**, M.A, Doctoral candidate at St. Mary's University Academic Coordinator, TRiO Student Support Services/University College, Texas A&M International University, 5201 University Blvd., Laredo, Texas 78041

Tel: (956) 326-2712, Email: [gustavo.salazar@tamiu.edu](mailto:gustavo.salazar@tamiu.edu)

Committee Chair: Dr. Dana L. Comstock, Department of Counseling and Human Services  
[dcomstock@stmarytx.edu](mailto:dcomstock@stmarytx.edu), (210) 438-6400

Committee member: Dr. Julie Strentzsch, Department of Counseling and Human Services  
[jstrentzsch@stmarytx.edu](mailto:jstrentzsch@stmarytx.edu), (210) 438-6400

Committee member: Dr. Rosalind Alderman, Office of Student Retention  
[ralderman@stmarytx.edu](mailto:ralderman@stmarytx.edu), (210) 436-3995

2. You are being asked to participate in the above mentioned project.
3. Your participation in this study is entirely voluntary and you may refuse to participate or may decide to cease participation once begun. Should you withdraw from the study, which you may do at any time, or should you refuse to participate in the study, your decision will involve no penalty or loss of benefits to which you are otherwise entitled. In addition, you can choose or not choose to answer any or all questions in the survey.
4. You are being asked to read the consent form carefully. You will be prompted to select a choice. If you select "I Agree to Participate" and click the "next" button, you voluntarily

agree to participate in this survey. At the end of the survey or If you select “I Do Not Agree to Participate” and click the “next” button, you will exit the survey. Immediately following your choice, you will be thanked for your participation and will be invited to participate in group interviews by clicking the focus group contact consent link. You understand that the purpose of this research is to investigate how the quality of the mentoring relationship impacts undergraduate participants from the St. Mary’s Faculty Academic Mentor (FAM) Program.

5. You are being asked to participate in a web-based survey in order to investigate the quality of mentoring relationship and its impact on student outcomes such as academic performance, persistence, resilience, and its impact in other areas. In order to participate, you will have to select “I Agree to Participate” and click the “next” button. The survey will consist of demographic questions and is followed by surveys that ask questions about your relationship with your peer mentor (if you had one), your faculty mentor and about your relationship with the University community in general (Relational Health Indices). It is your choice to choose or not to choose to answer any or all questions in the demographic questionnaire or the surveys. Additional surveys will ask questions about your interaction with non-mentor peers, non-mentor faculty, interaction with the St. Mary’s community (as it pertains to your commitment and the impact the community has had on you. Other survey questions will inquire about, your self-efficacy (CSEI), which asks questions about your confidence with academic work and social interaction before mentoring as well as how you feel now, as well as your intellectual and academic development, and your goal commitments (Persistence/Voluntary Drop-Out Decision Scale). These surveys will not require you to provide any identifiable information such as name, mailing address, email address or phone

number, but will require you to select “I Agree to Participate” and click the “next” in order to proceed to the demographic and survey questions. At the end of the surveys or if you select “I Do Not Agree to Participate,” you will be thanked for your participation and will be reminded that you are invited to participate in group interviews by clicking the focus group contact consent link.

6. You have been advised that the total anticipated time commitment is approximately 15 to 20 minutes to complete.
7. You have been advised that while there are no physical risks associated with participation in this project, you may experience some discomfort in reviewing your personal feelings and opinions. The data generated by you will not be presented to your mentors, peers, or faculty members. Data collected from the survey will be encrypted and password protected at three levels: first data will be encrypted and password protected using WinRAR 4.20 archival program. The archived data will then be burned onto a CD Rom using SecurDisc 3.0 that will encrypt and password protected the content of the CD. Encrypted and password protected archived data will be located in an encrypted hard drive partition in a laptop that can only be accessed by password.
8. You have been advised that you will receive no direct benefit from your participation in this study. However, your participation will indirectly help supplement the goals and initiatives of the Faculty Academic Mentor Program (FAM) by refining the processes that lead to future successful student outcomes. Your participation will add to our understanding on how to improve persistence, retention, social, and academic integration. Results of the study can be used to enhance training procedures for mentors, implement new strategies for mentoring. In addition, this study addresses the lack of studies investigating the quality of the mentoring

relationship and how varying qualities within the mentoring relationship influence student outcomes differently. Lastly, the results will provide further evidence to explore how the quality of the mentoring relationship plays a role in student outcomes.

9. Every effort will be made to maintain the confidentiality. You understand that the information gathered in this study will be encrypted and password protected to insure your privacy and confidentiality. In addition, it has been explained to me that the web-based survey program utilizes Secure Sockets Layer Encryption (3.0), and the data is password protected. Only the primary investigator will have access to data hosted by the web-based survey program.
10. You have been advised that the data collected from the study will be used for educational and publication purposes; however, you will not be identified by name. The confidentiality of the data will be maintained within allowable legal limits.
11. You are aware that no financial compensation will be offered for participation in the study. However, it has been made clear that drinks and snacks will be provided during the group interviews.
12. You understand that you have the right to withdraw from this study at any time without consequence.
13. I understand that I can contact the primary investigator should I have any questions. Should you have questions during the course of this study about the research or any related problem, you may contact the Principal Investigator, Gustavo Salazar II, M.A., LPC, at Texas A&M International University, 5201 University Blvd, Laredo, Tx 78041. In addition, the principal investigator can be reached at (956) 326-2712 and [gustavo.salazar@tamiu.edu](mailto:gustavo.salazar@tamiu.edu)

14. In the event of injury resulting from this research, St. Mary's University is not able to offer financial compensation nor to absorb the costs of medical treatment; however, necessary facilities, emergency treatment and professional service will be available to research participants just as they are to the general public.
15. By selecting "I Agree to Participate" and click the "next" button, below acknowledges my voluntary participation in this research project. Such participation does not release the investigator(s), institution(s), sponsor(s) or granting agency(ies) from their professional and ethical responsibility to me.
16. I HAVE READ THE INFORMATION PROVIDED ABOVE AND HAD MY QUESTIONS ANSWERED TO MY SATISFACTION. I VOLUNTARILY AGREE TO PARTICIPATE IN THIS STUDY.

ELECTRONIC CONSENT: Please select your choice below

I AGREE TO PARTICIPATE     I DO NOT AGREE TO PARTICIPATE

ANY QUESTIONS REGARDING YOUR RIGHTS AS A RESEARCH PARTICIPANT MAY BE ADDRESSED TO THE ST. MARY'S UNIVERSITY INSTITUTIONAL REVIEW BOARD HUMAN SUBJECTS (210-436-3315). ALL RESEARCH PROJECTS THAT ARE CARRIED OUT BY INVESTIGATORS AT THE UNIVERSITY ARE GOVERNED BY REQUIREMENTS OF THE UNIVERSITY AND THE FEDERAL GOVERNMENT.

**Next**

**<https://www.Qualtrics.com/s/stmarytx> FAM web-based survey**



## Appendix K

### Focus Group Interview In-Person Consent Form

#### CONSENT BY PARTICIPANT FOR PARTICIPATION IN A RESEARCH PROJECT

Title: The Impact of Faculty Academic Mentoring on First-Generation Undergraduate Students: A Mixed Method Design

Principal Investigator: **Gustavo Salazar II**, M.A, Doctoral candidate at St. Mary's University

Academic Coordinator, TRiO Student Support Services/University College,

Texas A&M International University, 5201 University Blvd., Laredo, Texas 78041

Tel: (956) 326-2712, Email: [gustavo.salazar@tamiu.edu](mailto:gustavo.salazar@tamiu.edu)

Committee Chair: Dr. Dana L. Comstock, Department of Counseling and Human Services  
[dcomstock@stmarytx.edu](mailto:dcomstock@stmarytx.edu), (210) 438-6400

Committee member: Dr. Julie Strentzsch, Department of Counseling and Human Services  
[jstrentzsch@stmarytx.edu](mailto:jstrentzsch@stmarytx.edu), (210) 438-6400

Committee member: Dr. Rosalind Alderman, Office of Student Retention  
[ralderman@stmarytx.edu](mailto:ralderman@stmarytx.edu), (210) 436-3995

2. You are invited to participate in the above mentioned project.
3. Your participation in this study is entirely voluntary, and you may refuse to participate or may decide to cease participation once begun. Should you withdraw from the study, which you may do at any time, or should you refuse to participate in the study, your decision will involve no penalty or loss of benefits to which you are otherwise entitled.
4. You are being asked to read the consent form carefully and by printing and signing your name will be proof of your consent to participate. You understand that the purpose of this

research is to investigate how the quality of the mentoring relationship impacts undergraduate participants from the St. Mary's Faculty Academic Mentor (FAM) Program.

5. You are being asked to participate in a focus group interview in order to investigate the quality of mentoring relationship and its impact on student outcomes such as academic performance, persistence, resilience, and its impact in other areas.

In order to participate in the focus group interviews you will have to print your name and sign this consent form at the time of the scheduled interview in order to insure confidentiality of group participants, interview procedures, and questions asked.

If you agree to participate you will be in a group of no more than 10 students. A team of researchers consisting of the primary investigator and 2 experts will be present during the interview process. One of the team members will be asking questions and facilitating the discussion. The other two team members will take notes of the terms and ideas expressed during the interview.

An audio-recorder will be used to capture the discussion of the group interview in order to insure accuracy. If you volunteer to participate you can request to pause the recording at any time. It will be your choice how much or how little you want to talk during the interview. You will also have the choice not to refer each other by name in order to insure confidentiality.

During the interview you will be asked questions relating to your mentoring experience. The questions during the interview will inquire about your experience with the FAM program and about how it impacted your college experience. Additional questions will explore the mentoring relationships you have had in the FAM program and inquire as to how you might improve the FAM program for future participants.

Interview data generated will be secured using 2 levels of digital encryption and two physical security measures. First, the digital audio recording will be downloaded into an mp3 format. These digital copies will be password encrypted in WinRAR 4.20 an archival program. The archived encrypted audio recordings will be store in two safe mediums: Compact Disc ROM and a laptop hard drive. The compact disc medium will employ SecurDisc 3.0, a program that will encrypt and password protects any information recorded on CD. The laptop hard drive will have an encrypted partition that is password protected. In addition, the laptop used is password protected. Encrypted CD media will be stored in a safety box that will require a key for access. The safety box will be located at the primary researcher's home. Notes taken by the two team members will be scanned into Adobe Acrobat 9.0 file format and will be password protected. These digital files will be additionally encrypted in WinRAR 4.20 and will be copied to CD media using SecurDisc 3.0 and will be encrypted and password protected. The original hard copy notes will be shredded to insure physical security. Only the primary researcher and the 3 committee members of this study will have access to the digital records. At no time will faculty mentors or peer mentors have access to these records.

6. You understand that the total anticipated time commitment will not exceed 2 hours.
7. You understand that while there are no physical risks associated with participation in this project, you may experience some discomfort in reviewing your personal feelings and opinions. The data generated by you will not be presented to your mentors, peers, or faculty members.
8. You understand that your participation in this study has no direct benefit to you. However, your participation will indirectly help supplement the goals and initiatives of the Faculty

Academic Mentor Program (FAM) by refining the processes that lead to future successful student outcomes. Your participation will add to our understanding of how to improve persistence, retention, social, and academic integration. Results of the study will be used to enhance training procedures for mentors, implement new strategies for mentoring. This study addresses the lack of studies investigating the quality of the mentoring relationship and how varying qualities within the mentoring relationship influence student outcomes differently. Lastly, the results will provide further evidence to explore how the quality of the mentoring relationship plays a role in student outcomes.

9. You understand that very effort will be made to maintain the confidentiality of your study records. You have been specifically told that the information gathered in this study will be encrypted and password protected to insure your privacy and confidentiality. In addition, you understand that all electronic media generated by the interview be encrypted and password protected. Only the primary investigator and 3 committee members of this study will have access to the focus group feedback.
10. You understand that the data collected from the study will be used for educational and publication purposes; however, you will not be identified by name. The confidentiality of the data will be maintained within allowable legal limits.
11. You understand that no financial compensation will be offered for participation in the study. However, it has been made clear that drinks and snacks will be provided at the group interviews.
12. You understand that you have the right to withdraw from this study at any time without consequence. If you choose to withdraw from the study, you have the option to simply not show up for your scheduled interview or you may contact the Office of Student Retention

and cancel your scheduled appointment. You may also refuse to answer certain questions during the focus group and you have the right to cease participation in the focus group by exiting at any time.

13. I understand that I can contact the primary investigator if I have additional questions. If you have additional questions during the course of this study about the research or any related problem, you may contact the Principal Investigator, Gustavo Salazar II, M.A., LPC, at Texas A&M International University, 5201 University Blvd, Laredo, Tx 78041. The principal investigator can be reached at (956) 326-2712 and [gustavo.salazar@tamiu.edu](mailto:gustavo.salazar@tamiu.edu)
14. In the event of injury resulting from this research, St. Mary's University is not able to offer financial compensation nor to absorb the costs of medical treatment; however, necessary facilities, emergency treatment and professional service will be available to research participants just as they are to the general public. Available services can be obtained at the: Student Psychological and Testing Services
- <https://www.stmarytx.edu/campuslife/studentservices/testingservices/>
  - 210-436-3135
  - The Counselor Education and Family Life Center
  - <https://www.stmarytx.edu/academics/graduate/masters/counseling/student-resources/family-life-center/?print=1>
  - 210-438-6411
15. By signing below, I acknowledge my voluntary participation in this research project. Such participation does not release the investigator(s), institution(s), sponsor(s) or granting agency(ies) from their professional and ethical responsibility to me.

16. I HAVE READ THE INFORMATION PROVIDED ABOVE AND HAD MY QUESTIONS ANSWERED TO MY SATISFACTION. I VOLUNTARILY AGREE TO PARTICIPATE IN THIS STUDY. AFTER IT IS SIGNED, I WILL RECEIVE A COPY OF THIS CONSENT FORM FROM THE OFFICE OF STUDENT RETENTION.

*(Interview consent)*

_____	_____
Name (Please print)	Date
_____	_____
Signature of Research Participant	Date
_____	_____
Signature of Witness	Date
_____	_____
Signature of Principal Investigator	Date

ANY QUESTIONS REGARDING YOUR RIGHTS AS A RESEARCH PARTICIPANT MAY BE ADDRESSED TO THE ST. MARY'S UNIVERSITY INSTITUTIONAL REVIEW BOARD HUMAN SUBJECTS (210-436-3315). ALL RESEARCH PROJECTS THAT ARE CARRIED OUT BY INVESTIGATORS AT THE UNIVERSITY ARE GOVERNED BY REQUIREMENTS OF THE UNIVERSITY AND THE FEDERAL GOVERNMENT.

**Appendix L**  
**IRB Approval Letter**

ST. MARY'S UNIVERSITY



October 7, 2013

Gustavo Salazar  
Dept of Counseling  
St. Mary's University

DELIVERED BY EMAIL TRANSMISSION

Dear Mr. Salazar:

The IRB has approved your proposed study, The quality of the mentoring relationship and its impact on first-generation undergraduate participants: A mixed method study on St. Mary's Faculty Academic Mentoring Program for the period of 10/7/2013 to 07/01/2014. The proposal is determined to have adequate protection of human subjects for expedited review under 45 CFR §46.110. Any research participants with questions or concerns about this research should contact the ST. MARY'S UNIVERSITY INSTITUTIONAL RESEARCH BOARD AT 210-436-3736.

Dan Ratliff, PhD  
IRB Chair  
St. Mary's University

You may proceed to collect data from human subjects according to the approved research protocol. The above approval must appear on any Information or Informed Consent Form approved by the IRB (jpeg attached).

The IRB determined that your protocol meets the criteria for a waiver of the documentation requirements for informed consent under CFR 46.117(c). You may use the online consent procedures you indicated in your proposal review.

If, at any time, you make changes to the research protocols that affect human participants, you must file a "Changes to Approved IRB Protocol and/or Unanticipated Problems" form. Changes must be reviewed and approved by IRB before proceeding with data collection.

Sincerely,

ATTACHMENT: Approval Stamp jpeg file

CC: Dana Comstock, Ph.D., Faculty Sponsor; Ray Wooten, Ph.D., Dept Chair

## VITA

### EDUCATION AND DEVELOPMENT

#### Doctorate of Philosophy (PhD)

#### Counselor Education and Supervision

St. Mary's University, San Antonio, TX (12/2018)

Defense Completed 7/20/2017

#### Master of Arts (MA)

#### Counseling Psychology

Texas A&M International University, Laredo, TX (May 1999)

Master's Thesis: *A Retrospective Study of the Prevalence of Nonadult-Adult Sexual Experiences: Comparison of Male and Female in a Mexican American Border Region.*

#### Bachelors of Arts (BA)

#### Psychology

University of Texas at San Antonio, TX (May 1996)

### LICENSES & CERTIFICATES

**Texas State Board of Examiners of Professional Counselors.** LPC License Number: 64539

**National Board for Certified Counselors, Inc.** NCC Number: 222121

### PUBLICATIONS

Comstock, D.L., Hammer, T., Strentzsch, J., Cannon, K., Parsons, J. & Salazar, G. (2008).

Relational-Cultural Theory: Integrating Contextual and Relational Considerations in the Counseling Profession. *Journal of Counseling and Development*. Alexandria, VA: American Counseling Association.

Salazar, G., & Russell, T.T. (2003). Understanding the Motivation of Rural Hispanic College

Students: A Worldview Perspective. *National Forum of Teacher Education Journal*, 13(2), 96-102.

Russell, T.T., Salazar, G., & Negrete, J.M. (2000). A Mexican American Perspective: The

Relationship Between Self-Esteem and Family Functioning. *Texas Counseling Association Journal*, 28, 86-92.

### GRANTS

Valle, M.L. & Salazar, G. (2015). TRiO Student Support Services, U.S. Department of Education. Texas A&M International University.

Valle, M.L., Salazar, G., & Frey, A. (2009). TRiO Student Support Services, U.S. Department



of Education. Texas A&M International University.

### PRESENTATIONS

Valle, M.L., Salazar, G., (July, 2012). *Knowledge is Power! Achieving Success as a First-Generation College Student*. Presentation for the National Council of La Raza: Lideres Summit, Las Vegas, Nv.

Parsons, J. and Salazar, G. (November, 2007). *Smooth Sailing by Integrating Counseling with Neurofeedback*. Presentation for the Texas counseling Association 51<sup>st</sup> Annual Professional Growth Conference, Corpus Christi, Tx.

Gutierrez, M., Russell, T.T., and Salazar G. (January 2006). *Mediatherapy: building Family Bonds*. Presentation to foster and adoptive parents, CPS and Child Placing Agency staff for the Winter Growth Conference, Corpus Christi, Tx.

Gutierrez, M., Russell, T.T., and Salazar G. (January 2006). *Crazy-Making Kids: Managing Your Anger with Difficult Children*. Presentation to foster and adoptive parents, CPS and Child Placing Agency staff for the Winter Growth Conference, Corpus Christi, Tx.

Russell, T.T., and Salazar, G. (November 2004). *What Every Counselor Needs to Know About Curanderismo: Cultural relevance in clinical Practice*. Present the Texas counseling Association 48<sup>th</sup> Annual Professional Growth Conference in Fort Worth, Tx.

Russell, T.T., and Salazar, G. (November 2004). *Cultural and Clinical Considerations in Counseling the Bilingual Client*. Presented at the Texas counseling Association 48<sup>th</sup> Annual Professional Growth Conference in Fort Worth, Tx.

Salazar, G., and Palmer, K. (February 2004). *Helping Hispanic At-Risk First Time Freshmen Succeed: An Evolution of Retention Model*. Presented at the 23<sup>rd</sup> Annual Conference on the First Year Experience, Dallas, Tx.

Russell, T.T., and Salazar, G. (November 2002). *Preventing Relationship Violence Among Hispanic Adolescents*. Presented at the Texas counseling Association 46<sup>th</sup> Annual Professional Growth Conference in Fort Worth, Tx.

Russell, T.T., and Salazar, G. (November 2002). *Strategies for Providing Bilingual Supervision for Bilingual Counselors*. Presented at the Texas counseling Association 46<sup>th</sup> Annual Professional Growth Conference in Fort Worth, Tx.

### COLLEGE TEACHING EXPERIENCE

Spring 2018                      PSYC 3304 261: Learning and Memory. Texas A&M International University

Spring 2018                      PSYC 3304 262: Learning and Memory: Writing Intensive Course. Texas A&M International University

Fall 2008	EDCU 5309 101: Counseling Diverse Populations. Texas A&M International University
Fall 2005	Techniques of counseling I. Sul ross State University. Teaching Assistant
Spring 2005	Marriage and Family therapy. Sul Ross State University. T/A
Fall 2004	First year Experience. Texas A&M International University. Instructor